Sustaining Nurses in A Disaster:

A Constructivist Grounded Theory

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A thesis submitted in fulfilment of the requirements for

the degree of Doctor of Philosophy in Nursing

Division of Health Sciences, University of Warwick

October 2019
To abah, Ahayalimudin Manlud and mama, Hamidah Umar Baki, for the unconditional love and support.

In remembrance of the deceased of:

my ‘special’ niece, Nurin Insyirah binti Nadzmi (25th March 2006 – 31st May 2014)

my respondent, SNX-35 (01st December 2016)

and

my good friend, NoorShamrizi Abd Razak (10th October 2019)
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ACKNOWLEDGEMENT

My ultimate gratitude is to the Almighty Allah SWT for giving me the courage, determination and perseverance to transform these experiences into a ‘masterpiece’. Despite the ups and downs, as well as the ‘little test’ and the hiatus for a year due to a medical reason (21st November 2017 – 20th November 2018), I finally come to the end of this journey, and without You, I am nobody.

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To all staff and friends of Warwick University and IIUM that were involved in this journey; from the beginning to the end, a heartfelt thanks to everyone for the assistance and support.

Being in the ‘new environment’ was not pleasant at the beginning, but I have been there for three years and I made it! I am grateful to acknowledge the Malaysian community in Coventry for the relationship we had, especially my closest buddies. You know who you are!
To all respondents, I dedicate this ‘masterpiece’ to all of you and to my nursing counterparts as well. I wish it will be a starting point to further introduce disaster nursing in our motherland, Malaysia.

Finally, I am indebted to the greatest supporters of my life; my parents, my siblings, my beloved nieces and nephews and other family members. Thank you very much indeed for everything, and only Allah SWT can repay for all of your good deeds, your dua’s, and your prayers in witnessing this journey comes to the end.

~ My success can only come from Allah. In Him I trust, and unto Him I look. 11:88 ~
DECLARATION

This thesis is submitted to the University of Warwick and it is exclusively my own work. It has been composed between October 2014 until October 2019 by NURUL`AIN AHAYALIMUDIN, except where stated, under the supervision of Professor Kate Seers and Professor Sophie Staniszewska. No part of this thesis has been previously submitted to any previous degree or any other institution.

NurulAin Ahayalimudin

NURUL AIN AHAYALIMUDIN

OCTOBER 2019
ABSTRACT

Introduction: With signs of climate change and global warming recently, Malaysia, as one of the tropical countries in the world, is vulnerable to wide-scale disasters such as floods, tsunamis and earthquakes. Thus, it requires a response from healthcare organisations; including nurses, who are the largest population within the healthcare profession. They play a significant role in helping the affected population. Other disasters such as mass casualty incidents, pandemics and armed intrusion also require a response from the healthcare disaster response team. Within Malaysia’s local context, studies of nurses’ experiences during a disaster are rare. Therefore, this study aimed to explore nurses’ experiences of working in a disaster situation and to identify factors that contribute to and that hinder the nurses’ response.

Methodology and Methods: This is a qualitative study using a constructivist grounded theory approach. Thirty nurses were recruited from nine hospitals across seven states in Peninsular Malaysia, between January and September 2016. Five emergency physicians were also interviewed about nurses’ involvement in disasters. Semi-structured, in-depth one-to-one interviews were used to gain rich data on the nurses’ experiences.

Findings: ‘Ensuring individual sustainability when in a hostile environment’ was identified as the core category, overarching the three categories of 1) establishing competencies and responsibilities, 2) managing emotions and 3) getting support. These categories formed the foundation of a model named ‘Being A Disaster Nurse’. The findings revealed that a concern of the nurses in this study was ‘being unprepared’ for a disaster response.

Conclusion: This study adds to the current body of knowledge on nurses’ experiences during disaster responses, in particular amongst Malaysian nurses. This study adopted constructivist grounded theory, which is a relatively new approach amongst researchers that have an interest in disaster nursing. In addition, this study identifies the role of religion as a coping mechanism for the nurses who have been involved in disaster response. By offering them the competencies, support needed and actions that could assist them to manage their emotions, it could lead to nurses being more prepared and able to cope with disaster situations, enabling the provision of appropriate disaster management. Therefore, it is vital for healthcare administrators to ensure the sustainability of the nurses while responding to disaster events.

Keywords: Disaster; Nurses; Experiences; Sustainability; Malaysia; Constructivist Grounded Theory
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<th>TERMINOLOGY</th>
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<td>9-11</td>
<td>Denote the incident of the attack of the World Trade Center on September 11, 2001</td>
</tr>
<tr>
<td>9-21</td>
<td>Denote the incident of 1999 Jiji Earthquake in Taiwan on September 21, 1999</td>
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<tr>
<td>A&amp;E</td>
<td>Accident &amp; Emergency</td>
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<tr>
<td>ABC</td>
<td>Airway, Breathing, Circulation</td>
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<tr>
<td>AED</td>
<td>Automated External Defibrillator</td>
</tr>
<tr>
<td>ANA</td>
<td>American Nurses Association</td>
</tr>
<tr>
<td>BSREC</td>
<td>Biomedical And Scientific Research Ethics Committee Of The University Of Warwick</td>
</tr>
<tr>
<td>CBD</td>
<td>Continuous Bladder Drainage</td>
</tr>
<tr>
<td>CBRN</td>
<td>Chemical, Biological, Radiological And Nuclear</td>
</tr>
<tr>
<td>CINAHL</td>
<td>Cumulative Index to Nursing and Allied Health Literature</td>
</tr>
<tr>
<td>CNE</td>
<td>Continuous Nursing Education</td>
</tr>
<tr>
<td>CRED</td>
<td>Centre for Research on the Epidemiology of Disasters</td>
</tr>
<tr>
<td>DRSABC</td>
<td>Danger, Response, Send for help, Airway, Breathing and Circulation</td>
</tr>
<tr>
<td>ED</td>
<td>Emergency Department, literally known as A&amp;E (Accident and Emergency) for some people in Malaysia</td>
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<tr>
<td>EPs</td>
<td>Emergency Physicians</td>
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<td>ESRF</td>
<td>End Stage Renal Failure</td>
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<td><em>et al</em></td>
<td>and others</td>
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<td><em>etc</em></td>
<td><em>et cetera</em></td>
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<td>GT</td>
<td>Grounded Theory</td>
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<td>H1N1</td>
<td>Swine Flu</td>
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<td>HOD</td>
<td>Head of Department</td>
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<td><em>i.e.</em></td>
<td><em>id est</em> or in other words</td>
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<td>ICN</td>
<td>International Council of Nurses</td>
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<td>TERMINOLOGY</td>
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<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
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<td>INCMCE</td>
<td>International Nursing Coalition For Mass Casualty Education</td>
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<tr>
<td>IPA</td>
<td>Interpretative Phenomenological Analysis</td>
</tr>
<tr>
<td>ISI</td>
<td>Institute for Scientific Information</td>
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<tr>
<td>JPAM</td>
<td>Jabatan Pertahanan Awam Malaysia or currently known as Angkatan Pertahanan Awam Malaysia (Malaysia Civil Defense Force)</td>
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<tr>
<td>JSTOR</td>
<td>Journal Storage</td>
</tr>
<tr>
<td>KED</td>
<td>Kendrick Extrication Device</td>
</tr>
<tr>
<td>KSKB</td>
<td>Kolej Sains Kesihatan Bersekutu (College of Allied Health Sciences)</td>
</tr>
<tr>
<td>MA(s)</td>
<td>Medical Assistant(s). It is an allied health professional who undergoes three years of Diploma training, equivalent to a physician assistant in some countries</td>
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<tr>
<td>MERS-CoV</td>
<td>Middle East Respiratory Syndrome-Corona Virus</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<td>MREC</td>
<td>Ministry of Health Malaysia Research and Ethical Committee</td>
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<td>NADMA</td>
<td>National Disaster Management Agency</td>
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<td>NBM</td>
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<td>NGOs</td>
<td>Non-Governmental Organisations</td>
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<td>National Nurses Associations</td>
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<td>OPD</td>
<td>Outpatient Department</td>
</tr>
<tr>
<td>OT</td>
<td>Operation Theatre</td>
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<tr>
<td>PBSM</td>
<td>Persatuan Bulan Sabit Merah or Malaysia Red Crescent Society</td>
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<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
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<tr>
<td>PHN</td>
<td>Public Health Nurse</td>
</tr>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td><strong>PPK</strong></td>
<td><em>Pembantu Perawatan Kesihatan</em> (Healthcare Assistant) is one of a profession in healthcare</td>
</tr>
<tr>
<td>PTSD</td>
<td>Post-Traumatic Stress Disorder</td>
</tr>
<tr>
<td><strong>RM</strong></td>
<td><em>Ringgit Malaysia</em></td>
</tr>
<tr>
<td>RN</td>
<td>Registered Nurse</td>
</tr>
<tr>
<td>RPM</td>
<td>Respiration, Perfusion and Mental Status</td>
</tr>
<tr>
<td>SARS</td>
<td>Severe Acute Respiratory Syndrome</td>
</tr>
<tr>
<td>SOB</td>
<td>Shortness Of Breath</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
</tr>
<tr>
<td>SPICE</td>
<td>Settings, Perspectives, Intervention/Interest, Comparison And Evaluation</td>
</tr>
<tr>
<td>START</td>
<td>Simple Triage and Rapid Treatment</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>TNA</td>
<td>Training Needs Analysis</td>
</tr>
<tr>
<td>U.S.</td>
<td>United States</td>
</tr>
<tr>
<td>VIP</td>
<td>Very Important Person</td>
</tr>
<tr>
<td>vs</td>
<td><em>versus</em></td>
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<td>WHO</td>
<td>World Health Organization</td>
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CHAPTER 1: INTRODUCTION

1.0 Background

Disasters occur every year and everywhere across the world and, more frequently, in the last few decades (Veenema, 2006; Guha-Sapir et al., 2011). Some disasters can be anticipated through the advanced technologies available, allowing time for evacuation or taking safety precautions, whereas others happen unexpectedly. Disasters may lead to the death of some people, damage to properties and affect the economy of the countries concerned. Countries that often experience disasters such as Japan, the United States (U.S.) and China are more likely to be prepared to face them. Several incidents that have happened in Malaysia in the past few decades drew the attention of multiple agencies including non-governmental bodies. However, the expansion of a disaster discipline at that time was rather sluggish. The incidence of the Sumatra Andaman earthquake that led to the tsunami incident in 2004 became the highlight for the Malaysian government about the importance of disaster management amongst multi-government agencies including the Ministry of Health Malaysia (MOH).

The Ministry of Health Malaysia (2008) has proposed its Strategic Plan 2006 – 2010 and one of its goals was focusing on ‘Managing Crisis and Disasters Effectively’ (see Appendix 1.1). Its aims is to provide adequate and appropriate emergency care services and facilities, including improving the training provision for healthcare personnel. Following the massive flooding that occurred in the states of the east coast of Malaysia between 2012 to 2014, the government is now actively encouraging the relevant agencies to conduct research and training to assist in Malaysia’s overall disaster preparedness. However, it is important to note that this claim, by the researcher, was based on information gathered informally from emails, flyers and blogs, not through evidence-based studies.

Nurses, as healthcare providers, are a critical component of disaster management. Nurses are often deployed to disaster areas to assist the affected population. Therefore, it is crucial for them to be equipped with the appropriate knowledge and skills. Indeed, there has been more of a focus on ‘narrative storytelling’
rather than evidence-based research. Hence, preparing nurses adequately will require fundamental research into what are the relevant training needs. In order to achieve this, research on exploring nurses’ experiences during a disaster should now be given priority. Although a large number of studies about ‘disaster and nurses’ have been conducted across the world, there is still a lack of research, particularly qualitative studies that focus on nurses’ experiences. According to Roach, (1992), experience comprises one of the elements for working competencies of nurses apart from knowledge, judgement, skills, energy and motivation. Experience is important especially when it comes to the unforgettable situation such as a disaster.

1.1 Research problem

The state of disaster management, in particular, disaster nursing in Malaysia, still lags far behind that of other countries frequently struck by disasters. This is, perhaps, due in part to the fact that Malaysia experiences relatively few disasters in comparison with the U.S., Australia, Japan and China and, even our neighbouring country, Indonesia. Malaysia lies outside of the ‘Pacific Ring of Fire’ unlike neighbouring countries such as Indonesia and Philippines which are repeatedly struck by earthquakes, tsunamis and typhoons (Chan, 2012). Although somewhat free from the largest and most cataclysmic disasters, Malaysia is vulnerable to other disasters such as flooding, landslides (Chan, 2012) droughts, wildfires, epidemics, and man-made disasters (Parker and Chan, 1997; Asian Disaster Reduction Center, 2008).

The earliest catastrophic disaster recorded in Malaysia (formerly known as Malaya) was a ‘Great Flood’ in 1926 (Williamson, 2016)(see Appendix 1.2). Much more recently, the disaster profile collected by the Centre for Research on the Epidemiology of Disasters (CRED) for Malaysia from 2000 to 2014 indicates that the total estimated damage from disasters in Malaysia is roughly $1,501,000,000 with 736 deaths and about 556,497 people affected within those fifteen years (Guha-Sapir, Hoyois and Below, 2014) (see Appendix 1.3). Despite this statistical information, the priority given by the Malaysian government to health disaster research and training remains low. Consequently, little research has been conducted in Malaysia with regard
to health in the context of disasters and the Malaysian healthcare personnel have had relatively little exposure to disaster management training.

Inspired by the personal motivation of having been involved in disaster humanitarian assistance during the 2004 Indian Ocean earthquake and the tsunami in Aceh, Indonesia, the researcher began an interest in disaster nursing, although even the terminology was so peculiar amongst Malaysian nurses at that time. Indeed, it is still in its infancy. Her own clinical experience of working in the context of emergencies and disasters, from 1999 until 2009, has made her realise the limited nature of nurses’ involvement in, and contribution to, disaster response planning, research and training.

In comparison with disaster medicine, it was hard to find any research conducted amongst nurses, particularly in Malaysia, concerning disaster experience. Instead, according to Arbon (2004), there has been a greater focus given to research into clinical nursing. Thus, there is a need for more research into nursing in the context of disasters, as nurses are often involved in responding to disasters and delivering direct care to the affected population. Yet, it was identified that they were lacking the knowledge and skills required to perform their roles effectively during disaster responses (Li et al., 2015). From the nurses’ point of view, healthcare authorities should provide appropriate training to enhance nurses’ preparedness in regard to knowledge and skills. In addition, Jose and Dufrene (2014) found a scarcity of articles which discussed methodologies, in particular concerning data collection and data analysis. They suggested that future researchers could focus more precisely on research in this discipline.

To date, an accurate assessment of the amount of training conducted by Ministry of Health (MOH) is unavailable since every organisation independently organises their own training exercises. Although there has been underreporting of such training events, relatively low numbers of nurses have been educated in disaster management (Ahayalimudin, 2012). Nevertheless, emergency physicians have developed an extant syllabus for disaster training in Malaysia instead of nurses
themselves being primarily involved. This raises the question: ‘does the syllabus of
the disaster training suit nurses’ needs?’ Therefore, prior to answering that question,
this study has explored nurses’ ‘real’ experiences during disasters. The findings could
inform the Malaysian healthcare authorities on what nurses’ actual needs are in order
to prepare them when responding to a disaster. Indeed, the findings could also assist
other healthcare practitioners with their future planning.

1.2 Research questions

1. “What are the experiences of nurses during disaster response?”

2. “What are the factors that contribute to, and hinder, nurses’ effectiveness while
responding to disaster events?”

1.3 Significance of the study

Nurses commonly work under extreme conditions during a disaster with insufficient
resources: knowledge, skills and equipment, yet, they are required to deliver optimal
care to disaster victims. It is hoped that this study will equip nurses to enable them to
be better prepared for disaster responses ahead of time. In addition, this study seeks
out and addresses the factors that contribute to and hinder nurses in playing their roles
effectively during disaster response. Thus, this study contributes significant findings
to the nursing profession and society. Several recommendations could assist the
authorities in adopting those necessary measures for remodelling the disaster training
syllabus through understanding nurses’ experiences.

1.4 Synopsis of the research

This study explored Malaysian nurses’ experiences whilst being a disaster team
member, following the response to disasters. Utilising the constructivist grounded
theory approach introduced by Charmaz (2006) enabled this study to answer the
research questions. The process of grounded theory methodology was started from the
beginning of this study until the write-up was completed. This study obtained rich data from one-to-one, in-depth interviews conducted amongst nurses and emergency physicians, and from field notes taken during data collection. The findings were constructed to develop a theoretical model to underpin recommendations for key authorities, relating to nursing practice, nursing education, nursing research and nursing policies.

1.5 Organisation of the thesis

This thesis is divided into six chapters and they are reviewed as follows:

*Chapter 1: Introduction* – This chapter introduces the current situation on disaster management worldwide in general and then specifically about nurses’ involvement during disaster responses in Malaysia. The initial steps such as identifying the research problems, research questions and significance of this study being carried out are also explained in this chapter. The chapter also provides a synopsis and organisation of the thesis.

*Chapter 2: Literature review* – This chapter examines the literature that fits the aims of this study. It focuses on literature related to disaster preparedness amongst nurses, their willingness to be involved in a disaster response, the competencies needed while rendering care to the affected population, training/education-related to disaster management and nurses’ experiences while working in the precarious situation. The further literature was reviewed at the end of the research process to ensure all are up-to-date as well as maintaining the best understanding of the current information.

*Chapter 3: Methodology and Methods* – This chapter describes the chosen methodological approach and methods used to facilitate this study in order to achieve the objectives. Grounded theory was adopted, still in its infancy in Malaysia. The philosophical paradigm of constructivist grounded theory introduced by Charmaz (2006) was chosen over other qualitative approaches, i.e. phenomenology study and narrative study. In addition, the methods applied facilitated this study throughout.
Procedures such as theoretical sampling, three step coding; initial coding, focused coding and theoretical coding, theoretical saturation, constant comparison, theoretical sensitivity, memoing and rigour were all taken into account while conducting this study.

Chapter 4: Findings – This chapter presents the findings through a series of one-to-one, in-depth interviews with all respondents, including field notes written throughout the session. Three categories were identified which emerged from the study; 1) establishing competencies and responsibilities, 2) getting support and 3) managing emotions. All of the categories built on the core category of ‘ensuring individual sustainability when in a hostile environment’. In the end, it formed a model named ‘Being A Disaster Nurse’.

Chapter 5: Discussion – This chapter was divided into four parts; 1) explanation of the three categories, 2) discussion of the core category, 3) contribution to the body of knowledge and 4) reflection on the research through personal and professional ways. Overall, this chapter discusses the findings, the methodology that influenced this study, i.e.: rigour and reflexivity, the strengths and limitations identified as well as personal and professional reflections.

Chapter 6: Conclusion, Implications and recommendations – Chapter 6 concludes this study by highlighting the implications of the study as well as providing recommendations to be extended and proposed to the authorities; i.e. Ministry of Health and Ministry of Education (Higher Education) in order to improve and strengthen the future situation of nurses’ experiences of disaster management. Finally, this chapter provides the conclusion to the thesis.

1.6 Summary

This study intends to explore nurses’ experiences during disaster response and those factors that contribute to, and hinder them, while performing their roles effectively in providing care to populations affected by the disaster. According to Landesman (2001)
in Gebbie and Qureshi (2002) “*No two emergencies or disasters are alike*”. Therefore, it is essential for nurses, as well as other healthcare personnel, to be educated in advanced to face and manage disaster victims. This study concentrates on registered nurses who have been involved in disaster response in Malaysia, regardless of the type of disaster, from 2004 until recently. Moreover, this study gains further feedback through interviews with emergency physicians. The researcher investigates their views since they were involved in formulating the extant syllabus and preparing the training for disaster response.
CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In conducting any research, it is a prerequisite for researchers to embark on a review of previous literature prior to developing a research question. This chapter relates to the occurrence of disasters worldwide and nurses’ front line involvement in them, as part of healthcare disaster response. Worldwide research pertaining to disaster and nurses’ roles is expanding following the incident of the World Trade Center attack on September 11 (9-11), 2001, in New York (United States). Since then, more studies have been carried out and more articles have been written based on nurses’ experiences of different types of disaster.

This chapter further discusses disaster management worldwide and specifically in Malaysia, nurses’ involvement in the disaster, nurses’ experiences while performing their roles and the outcomes from the literature. This chapter investigates any relevant articles, to be specific, ones that comprise similar studies on qualitative research as well as using the methodology of grounded theory, that have been written while this study was being carried out, from 2015 until September 2019. The themes identified from the literature review were examined which led to identifying the knowledge gap in the field of disaster nursing, particularly in Malaysia.

2.1 Search strategies and process

The aims of the search strategy were to find both published and unpublished studies, including grey literature. There were limits applied during the search process:

1. Studies carried out from 2000 until 2019, as of 03rd August 2019 (More research has been carried out since the incident of 9-11 in 2001), to look on the trend.
2. English language or Malay language studies., as the researcher could only understand Malay and English.

3. Databases: CINAHL, Medline, Warwick Library Classic Catalogue, ISI Web of Knowledge, JSTOR, ProQuest, Science Direct and Google Scholar as well as ‘grey literature’ such as theses and ‘white papers’.

The process of searching the literature for the topic began with identifying keywords from the developed research questions of the topic. The researcher had identified a few keywords as well as synonyms (see Appendix 2.1) according to the ‘SPICE’ (Settings, Perspectives, Intervention/Interest, Comparison and Evaluation) framework for qualitative study proposed by Booth (2006). ‘SPICE’ is an alternative mnemonic which is used to help to formulate a search for a qualitative study (Jones et al., 2010).

2.2 Overview of the findings of the literature search

The researcher searched the literature based on the keywords that were identified earlier and the findings during the literature search that explore a similar focus to this study will be further discussed in the next section. The literature was classified into two stages:

1) for identifying the extant literature and

2) for further input when data collection began.

Through the literature search, this study identified the key points that helped to understand nurses experiences of working in a disaster area which were 1) disaster preparedness, 2) disaster nursing competencies, 3) willingness to be involved in a disaster response, 4) disaster-related training/education and 5) experiences of nurses in a disaster. Apart from that, the literature review also explored about the roles of nurses while responding at disaster area.
2.3 Research related to ‘disaster and nurses’

During a disaster, healthcare personnel are the key persons in relation to the safety and health of the people. Nurses, as front-line personnel, play crucial roles in assisting the affected community. Nurses comprise the largest proportion of healthcare professionals in healthcare institutions across the world (Veenema, 2006; Pattillo and O’Day, 2009; Kurtzman et al., 2010; Rebmann and Mohr, 2010; Johnstone and Turale, 2014). Nurses play a critical role to ensure all age groups receive better healthcare during these calamitous events. There are demands for nurses to respond actively during a disaster. Furthermore, the Asia Pacific Emergency and Disaster Nursing Network (2012) has recommended that healthcare administrators must recognise the importance of nurses participating more actively in disaster management and involving them more in the development of disaster action plans, thus leading to the establishment of disaster nursing as a speciality.

Disaster nursing is one of the current disciplines in the nursing field, which also includes: emergency, intensive care, medical-surgical and paediatric care. Recently, the term has been used quite frequently following an increasing number of catastrophic events around the world. Prior to that, most of the nurses’ roles during disasters were mainly played by emergency nurses, as according to Hammad et al. (2012), the emergency department provides the day-to-day functions which are involved: triage, primary and secondary assessment, treating and managing all types of patients regardless of age. Indeed, it has been claimed that disaster nursing has been established since the era of Florence Nightingale during the Crimean War in the 19th century (Gebbie and Qureshi, 2006).

Currently, the emergence of disaster experts predominantly in the field of nursing can be observed in the 21st century. One could mention names such as: Tener Goodwin Veenema (Veenema, 2013) and Kristine Qureshi (Gebbie and Qureshi, 2002) from the United States of America; Kristen Moore Gebbie (Gebbie and Qureshi, 2002) and Paul
Arbon (Arbon, 2004) from Australia; Hiroko Minami (Princess Srinagarindra Award Foundation, 2009) and Aiko Yamamoto (Yamamoto, 2013) from Japan; all of whom are renowned worldwide for their contributions in promoting disaster nursing as a specialty. They are amongst the people that are most closely engaged in developing disaster nursing training in their home countries. Before the researcher further discusses nurses’ involvement in disasters, this study will briefly provide an overview of how disaster preparedness began for nurses worldwide.

2.3.1 Overview of disaster preparedness for nurses

Disaster preparedness is a component part of the disaster management continuum. As stated by World Health Organization (2002), preparedness is a ‘secondary mitigation’ that aims to alleviate the effects of a hazard, and it provides “the measures that ensure the organized mobilization of personnel, funds, equipment and supplies within a safe environment for effective relief” (p.21). Whereby, according to the United Nations Office for Disaster Risk Reduction (2019), it is measures taken to lessen and minimise the adverse impacts of a hazardous event. The International Council of Nurses (2019) produced a position statement on ‘Nurses and disaster risk reduction, response and recovery’ (formerly known as Nurses and disaster preparedness). The position statement recommended that nurses be involved at all phases of disaster management as well as promoting strategies for equity and social justice for the affected population. The national nursing associations should actively collaborate with their respective governments to strengthen their healthcare providers, to include nurses, in helping during any type of disaster. According to the World Health Organization (2008), non-governmental, inter-governmental and international agencies should regularly initiate disaster education and training as part of disaster preparedness. However, it remains unevenly distributed and, in some parts of the world, it is deficient.

In addition, the findings of the World Health Organization’s (WHO) statement showed that only half of all countries in the world reported having simulation exercises,
logistic platforms and emergency information systems (World Health Organization, 2008). The World Health Organization (2008) indicated that one-third of the countries do not include any training nor a capacity building in their emergency/disaster preparedness and response programmes. Although some countries possess the programmes, only half reported such training being based on training needs analyses and competency standards. In relation to the WHO 2008 report, just under two-thirds (63%) reported availability and less than half (44%) reported using audits to assess the effectiveness of emergency preparedness and response programmes. Henceforth, from the report, it could be concluded that nurses should be educated and trained to perform their roles effectively during a disaster.

Disaster nursing education and/or training were not prevalent in developed countries until the incident of the September 11 (9-11) terrorist attack in 2001 (Littleton-Kearney and Slepski, 2008; Y. Yang et al., 2010). The incident of 9-11 attacks in New York drew attention to the need for disaster training and exercises (Hsu et al., 2013) and since then they have dramatically increased. Referring to The Johns Hopkins and The International Federation of Red Cross and Red Crescent Societies (2008), disaster training and education provide skills and knowledge to healthcare providers for handling disasters and their consequences on the affected communities. There were several studies targeting nurses and their education on disaster management.

Duong (2009) conducted a study to examine knowledge and understanding of disaster responses amongst 152 emergency nurses in South Australia. She explored four major areas which were: disaster education, disaster awareness, confidence to respond to a disaster event and previous experience of a disaster. The results showed that the nurses perceived themselves to have a decreased level of emergency preparedness and also stated that limited education opportunities and previous disaster response experience may be responsible for diminished confidence and disaster awareness among them. However, there is no further explanation for the lack of educational opportunities provided to the nurses in the study setting. Duong (2009) highlighted that emergency nurses are an
important element of the hospital disaster response in which the preparedness and confidence to respond in a disaster event can be directly affected by a combination of previous disaster experience and education/training. She recommended that having a standard disaster education and its availability will increase awareness and help nurses feel less vulnerable.

Meanwhile, O’Sullivan et al. (2008) conducted a survey among 1,543 nurses from emergency departments and intensive care across Canada on their perceptions of emergency and disaster preparedness. They found that nurses believed they were unprepared to respond to a large scale disaster particularly a chemical, biological, radiological and nuclear (CBRN) event. O’Sullivan et al. (2008) also revealed that nurses were unaware of the existence of a hospital emergency plan for a large-scale infectious disease outbreak. It was noted that they were unable to adequately access the resources for a disaster response. Indeed, they felt a lack of confidence in preparing for a disaster response. The authors suggested developing the capacity for disaster preparedness and providing frequent training to nurses to enhance their effectiveness when responding to a disaster. More importantly, however, nurses should first know what should be done and what should be avoided as it could help them to know their roles and adopt the competencies needed when responding to a disaster.

The researcher conducted a preliminary research study during her master degree focusing on nurses’ knowledge, attitude and practices (KAP) with this dissertation entitled ‘Disaster Management: A Study on Knowledge, Attitude and Practices of Emergency Nurses and Community Health Nurses in Selangor’. This quantitative study design was conducted between 2011 – 2012 and was awarded as ‘best research’ amongst master candidates for Master of Community Health Sciences (National University of Malaysia), 2012. The questionnaire used in this study was developed by the researcher in order to fit with the Malaysian setting, and was entitled ‘Nurses’ KAP on Disaster Management’. This questionnaire has been widely used by several new researchers from Malaysia and Indonesia, not merely for nurses but other healthcare profession as well.
Through this Master’s study, the researcher uncovered nurses’ KAP on disaster management. The univariate statistical findings indicated that nurses’ have inadequate knowledge and practices on disaster management, despite having a positive attitude towards disaster management field. This study also investigated the factors that could predict the three domains of knowledge, attitude and practice. Emergency nurses reported that those who attended training were more likely to have adequate knowledge and practice when they were involved in a ‘real disaster’. Whereas, community health nurses whom attended training related to disaster were more likely to demonstrate adequate knowledge and practice, including portraying a positive attitude to disaster management. The nurses’ workplace (e.g. emergency nurses, community nurses) was identified as a predictor for the adequacy of disaster management practice. From the overall findings, through the multiple logistic regression analysis, it was found that adequacy of knowledge and practice, and portraying a positive attitude were driven by being involved in a disaster response and attending disaster-related education.

2.3.2 Nurses’ roles and competencies in disaster

The literature indicates that nurses play significant roles during a disaster, predominantly during preparedness and response states (Gebbie and Qureshi, 2002; Pang, Chan and Cheng, 2009; Gulzar, Faheem and Somani, 2012; Usher et al., 2015). However, Cole (2005) identified that their roles in disaster planning and response are less certain. A few nursing organisations have established guidelines to enlist nurses’ roles during a disaster. For instance, Fowler (2010) mentioned that a ‘Code of Ethics for Nurses’ emphasises the role of nurses in collaborating with other healthcare professionals and the public, nationally and internationally. It discusses the role of nurses in assisting public education regardless of the situation; ensuring health and wellbeing as well as the safety of the people and supporting them with regard to their basic needs such as food and sanitation.

The roles of nurses were described not merely for disaster response but including before and after disaster occurrence. The International Council of Nurses (ICN) identified
that nurses are playing crucial roles during disaster preparedness and response to ensure the sustainability of the population’s health by delivering care and focusing on humanitarian issues during disasters (International Council of Nurses, 2006). The International Council of Nurses (2006) suggests National Nurses Associations (NNAs) worldwide should actively involve nurses in disaster planning and management. Furthermore, Gebbie and Qureshi (2002) emphasise about “who needs to know how to do what” (p.47). Thus, nurses need to know what are their roles in disaster management and how they should act.

So, what are nurses’ roles in disasters? The WHO revealed the fact that there is a huge gap in emergency and disaster response due to the lack of involvement in disaster training (International Council of Nurses and World Health Organization, 2009). Following this statement, a Consultation on Nursing and Midwifery in Emergencies was established in November 2006 with the aim of gathering all disaster nursing experts to yield an understanding of those nurses’ roles and competencies needed. Nurses need to focus on knowledge and skills from lifesaving and emergency care to public health, to enable them to adapt to the disaster context and situation. On the other hand, nurses are likely to work within “the parameters of the practice of laws of the nation, region or state where they are working” (International Council of Nurses and World Health Organization, 2009, p.16).

Since 2000 onwards, the involvement of nurses in disaster management is expanding subsequent to the emphasis given by nursing organisations on the roles of nurses in disasters. Indeed, the ‘ICN Framework of Disaster Nursing Competencies’ was established in 2009 to help all nurses that take up opportunities in disaster management regardless of phase and to expand their capabilities in translating the knowledge and skills in disaster nursing especially when at a disaster scene (International Council of Nurses and World Health Organization, 2009). Nurses require a common set of disaster nursing competencies for them to work in a variety of disaster situations. Gebbie and Qureshi (2002) reinforced the necessity for nurses to have basic competencies in disaster
preparedness, although at that time the training was not part of undergraduate nursing curricula at most of the nursing schools in the United States (U.S.).

Competencies work as tools to promote the ability of nurses to self-assess their knowledge and skills. It also encourages consistency in knowledge and skills regardless of the disaster events, regions and disciplines. The International Council of Nurses and World Health Organization (2009, p.35) listed that competencies:

1) “facilitate deployment of nurses globally,
2) create consistency in the care given,
3) facilitate communication,
4) build confidence,
5) facilitate a more professional approach,
6) promote share aims,
7) allow for a unified approach,
8) enhance the ability of nurses to work effectively within the organizational structure and
9) assist nurses to function successfully as members of the multidisciplinary team”.

In support of that, the ICN outlined the competencies based on the disaster management continuum: 1) mitigation/prevention competencies, 2) preparedness competencies, 3) response competencies and 4) recovery/rehabilitation competencies. The competencies begin from:

1. Mitigation/prevention competencies: using epidemiological data to identify risks and effects, understanding the principles of infectious disease management, participating in healthcare needs of the community, policy development and disaster planning.
2. Preparedness competencies: applying rules and regulations in emergencies and disasters, a chain of command, familiarising the principle of communication in crisis and team working, and participating in disaster training.

3. Response competencies: assessing and identifying injuries and illnesses, prioritising care to the affected communities, not merely the victims but families and vulnerable populations, transporting and referring victims to the respective agencies, understanding the psychological impacts on survivors as well as the healthcare providers and identifying people requiring additional mental health support.

4. Recovery/rehabilitation competencies: Developing plans, short and long-term to fulfil survivors’ needs, assisting local healthcare facilities in recovery and collecting relevant data related to disaster response for later evaluation.

The competencies framework developed by the ICN does not target speciality areas of advanced practice such as emergency or critical care but the ‘Generalist Nurse’. It has been developed from existing frameworks in the specialities of public health, mental health, healthcare workers, emergency managers, nursing and disaster nursing (International Council of Nurses and World Health Organization, 2009). The ICN assumes disaster nursing competencies will cater to the needs of general nurses as the nature of disasters requires nurses to be prepared with similar competencies. In fact, during disaster events, all nurses, irrespective their specialities, are involved in disaster responses in order to provide nursing care to the affected people. It also explains the roles of nurses leading to the expansion of disaster nursing training and education regardless of their specialities. However, are they willing to be involved in disaster response even though they are required to fulfil their responsibilities?
2.3.3 The willingness of nurses to be involved during a disaster

Disaster zones are insecure and can endanger the health and safety of the responders (Brewer, 2010). The effects of disasters vary depending on the type of onset (The Johns Hopkins and the International Federation of Red Cross and Red Crescent Societies, 2008). Disasters create health-related problems involving physical and psychological effects, i.e.: communicable diseases and post-traumatic stress disorder. This is where the healthcare providers, predominantly nurses, play a vital role in ensuring the health-related consequences are prevented at an early stage of the disaster aftermath. Due to some of these factors, not all nurses are willing to be involved, especially at the disaster scene.

A study by Arbon et al. (2013) conducted across Australia on 451 emergency nurses, examined their willingness to attend their workplace during a disaster. They found the emergency nurses preferred to be involved in what they describe as *conventional disasters*: earthquake, fire or flood rather than *unconventional disaster* events such as pandemics and CBRN incidents. This study identified several demographic factors that influenced nurses’ willingness to attend their workplace during a disaster. It showed that males were more willing to respond during disasters. Besides the sociodemographic data, other factors were: the type and amount of disaster knowledge, the method of working such as full-time nurses and their workplace which in this study refers to an emergency room. In contrast, the inadequacy of hospital disaster preparedness and a high risk of ill health to their families were factors that made them less willing to attend their workplace during a disaster.

In Israel, a study by ben Natan et al. (2013) investigated the factors affecting Israeli nurses’ willingness to report for duty during an earthquake in Israel. The questionnaire was distributed to 200 nurses and 200 student nurses. The results illustrate that 57% of respondents had a high willingness to report for duty if there was an earthquake. The factors associated were “perceived self-efficacy, level of knowledge” (ben Natan et al., 2013, p.931). Devnani (2012) conducted a review on factors associated with
the willingness of healthcare personnel to work during an influenza outbreak and found the factors were “being male, being a doctor or nurse, working in clinical or emergency department, working full-time, prior influenza education and training, prior experience working during an influenza emergency, the perception of value in response, the belief in duty, the availability of personal protective equipment (PPE) and confidence in one’s employer” (p.551).

Overall, the literature revealed that there were a few factors contributing to the willingness of nurses to report to duty for a disaster: being a male nurse, working in emergency and prior education and training. It is crucial to understand the factors contributing to nurses’ willingness to work during a disaster and the needs for training as it leads to efficient emergency planning and preparedness as well as disaster training opportunities.

2.3.4 Nurses and disaster-related training or education

Disaster training is an axis to disaster preparedness and it is an important element in a nursing specialty as it determines the competency of the nurse. Dickerson et al. (2002) highlights the urgent need for disaster training. Training needs analysis (TNA) is a crucial process prior to the development of any course or training. Identifying the needs of the course to be introduced are considered. Analysis of training needs prior to the development of any courses is a prerequisite to ensure the programme can meet those needs. A review was carried out by Nazli, Sipon and Radzi (2014) on the needs for training in disaster management. TNA is a “systematic process prior to designing a training programme which involves determining the training needs at the organisational, operational or individual level, identifying what kind of training is needed, and finally identifying who are the individuals that need to be trained or retrained” (Nik Nazli, Sipon and Radzi, 2014, p.576).
The International Federation of Red Cross and Red Crescent Societies (2006) suggests decision-makers should plan effectively and need to know the criteria and gather necessary information prior to the development of any programme. Training becomes a key feature of handling disasters. There are several types of training in disaster education available. According to Brown (2010), Emergency Management Institute in the U.S. offers a wide range of seminars and workshops from simple approaches of discussion-based programs, for instance, seminars, drills and table top exercise to more complex operation-based programs namely functional exercises and full-scale exercises. In a study conducted by Su et al. (2013), there was a higher number of participants who chose lecture (n=1121, 73.5%) and practical training (n=775, 50.8%) as their preferred methods of learning rather than systemic study, disaster movies or videos and academic reports. The participants also recommended that disaster medicine should be a required course for public health professionals.

With regard to the training, Öztekin et al. (2014) conducted research about the educational needs concerned with disaster preparedness and responses of undergraduate nursing students in Istanbul, Turkey and Miyazaki, Japan. From the response, this study identified that, at their second year of the programme, the nursing students seldom participated in disaster preparedness and response. However, the nursing students had a preference for mock disaster drills as the effective teaching method in learning about disaster response. This study also recommended incorporating emergency and disaster management skills into the nursing curricula as a medium for enhancing their participation in disaster response.

Meanwhile, for the emergency nurses of Tabriz’s educational hospitals in Iran, almost half have no special training for handling disaster situations (Hasankhani et al., 2012). This descriptive cross-sectional study found that the emergency nurses were not well prepared to respond during a disaster and the mean scores of items listed were between moderate to low. It was suggested that disaster training should be offered as continuing education, in contrast to the recommendation by Öztekin et al. (2014) to offer
disaster training in undergraduate curricula. Overall, both studies propose that nurses and nursing students should be educated in disaster training, regardless of the appropriate time to teach the subject.

Apart from that, Cicero et al. (2009) did a survey on the impact of disaster courses on the knowledge of the residents of paediatric and emergency medicine. After a series of tests: pre-test, immediate post-test and delayed post-test, the study found that the residents preferred to receive didactic training on paediatric emergency medicine exercises in the future. The residents increased their knowledge over time by keeping moderately the knowledge they gained despite a situation where some of them were lacking paediatric disaster medicine training, though, they were requesting disaster training exercises to be included.

The studies above have proposed the significance of offering training to healthcare professionals, in particular nurses, to help them to manage crisis or disaster situations. All the studies found that the personnel felt the need to be taught the fundamental knowledge and skills, at least, related to disaster management. Prior to carrying out the nurses’ training needs analysis, the experience of nurses in disaster responses must be examined. From there, the content of disaster training could then address the drawbacks from their exposure to a real disaster.

2.3.5 Studies related to nurses’ experience, focusing on qualitative studies

“Learning is the process whereby knowledge is created through the transformation of experience” (Kolb, 2012, p.38). Experience in disaster events may affect the communities and nurses involved in physical, psychological, social and economic ways (Kako and Ikeda, 2009). The increase in disaster occurrence around the world has led to the emergence of more research in the field, including disaster health and disaster nursing. To date, throughout the literature search, the researcher has identified that there is more focus on quantitative studies and a lack of studies concerning nurses’ experience during
a disaster response from a qualitative perspective. By using such keywords as ‘disaster’, ‘nurse’, ‘experience’ and ‘qualitative’, the researcher found studies on the experience of disasters using a qualitative approach.

Through the search, from 2010 onwards, the researcher had discovered few qualitative studies that concerned nurses’ experience during disasters, regardless of their speciality, type of disasters and the various kinds of methodological approach underpinning these studies. These studies were then simplified in a table (see Appendix 2.2). It should be noted that the papers reviewed below were mostly published after this Ph.D. began.

a. Pourvakhshoori et al. (2017). Title: Nurse in limbo: a qualitative study of nursing in disasters in Iranian context

This qualitative study by Pourvakhshoori et al. (2017) was conducted encompassing different nursing levels in various types of disasters. There were fifteen nurses involved in purposive sampling: seven nursing managers and eight nurses. The data was gathered from semi-structured interviews by the same interviewer until it reached saturation point. The interviews were conducted in Persian and underwent a translation-retranslation procedure. This study used inductive qualitative content analysis and the analysis was guided by Graneheim and Lundman's (2004) five-stage content analysis method.

To ensure rigour, this study adopted Polit and Beck's (2014) four criteria: creditability, transferability, dependability and confirmability. Member checking, an external check method, as well as a variation of the sampling, assisted this study to reach the said criteria. Utilising member checks is controversial as there are two different opinions discussing the pros and cons. Lincoln and Guba (1985) claimed that member checking is the crucial step to safeguard credibility. On the contrary, Morse et al. (2002) informed that the member checking approach could interfere with the authenticity of the data collected. In their articles, Morse et al. (2002) claimed that member checks can
nullify the researchers’ works. Furthermore, they described that returning the results for verification is not an appropriate action, except in case study research or some narrative inquiries. If amendments are made to the data, there will be a lack of rigour, which is crucial in a qualitative approach. The researcher doubted the approach of member checking for this study, in accordance with the stance taken by Morse et al. (2002). Indeed, the drawbacks outweigh the positive aspects of member checking: for instance, it may lead to amendments to the earlier data collected, the respondents may change their minds and it could affect the original assessment. Morse et al. (2002) only allow member checking for a case study approach and some narrative inquiry. With regard to the methodology, the authors were not guided by any philosophical stance.

The findings of the study informed the necessity to provide care for a longer period during a disaster. The nurses were scared of the possibilities of the event recurring, facing many situations such as ethical challenges, emotional conflict while serving the people and expressing their family members’ concern during the event. All findings are similar to the findings of this current study except for one – the role of religion as a coping mechanism for nurses who respond to disasters. This current study adds to the body of knowledge on nurse’s experiences in which some respondents have mentioned that religious practices helped them to calm and soothe while facing such catastrophic events.

b. Li et al. (2017). Title: Chinese nurses’ disaster nursing experiences responding to the Sichuan Ya’an earthquake

This qualitative descriptive study was conducted amongst nurses involved in a disaster response following the 2013 Sichuan Ya’an earthquake. Out of thirty nurses who were initially approached, this study involved sixteen nurses who were selected through purposive sampling. The data were collected through semi-structured interviews and observation notes, after which qualitative content analysis was performed. This study translated the transcripts back-to-back from Putonghua to English and vice versa. A pilot study was conducted and minor changes have been made to the interview guide.
Regarding methodological considerations, this study was not guided by any philosophical stance, even though the article mentioned ‘methodological considerations’. It focused merely on the methods, rather than methodology. The study followed the qualitative content analysis and, upholding rigour, used the set of criteria introduced by Guba and Lincoln (1989). Several steps were carried out to ensure the trustworthiness of this study; e.g. member checking and audit-trail. The argument concerning member checking approaches has been explained by the researcher in the previous article by Pourvakhshoori et al. (2017).

The findings of this study have mentioned three major themes: the hospitals’ preparation for the disaster scene, the roles of the respondents when working in a disaster area and the hurdles they face at the scene. The current study, discussing the situation of the nurses, stated that they were unprepared, in contrast to the findings by Li et al. (2017), where the nurses were personally prepared prior to the deployment. The respondents were also informed that their hospital had sufficient relief materials for the disaster, such as having a special warehouse for emergency supplies. These findings contradict those by the current study and this situation triggered the researcher to explore the situation in Malaysia.

c. Li et al. (2015). Title: A grounded theory study of ‘turning into a strong nurse’: Earthquake experiences and perspectives on disaster nursing education

A recent study, conducted by Li et al. (2015), employed the grounded theory (symbolic interactionism) by Strauss to explore Chinese nurses’ experience during the Wenchuan earthquake in China. The study aimed to assist in the future development of disaster training for nurses by applying the developed substantive theory. The reason for choosing grounded theory in this study was that it permitted the exploration of social processes through human interaction, thus developing the related theory. Li et al. (2015) explained that they sought a literature review only for identifying the gap in disaster nursing, as it was known that Strauss, together with Corbin, gives the leeway to have an early review
of relevant literature (Dunne, 2011), in contrast to Glaser’s approach. Glaser (1978) emphasised that early exposure to the literature creates a problem and he reinforced the proposal that researchers should reject the existing literature before access into the field, opposing Strauss’ approach.

Li et al. (2015) utilised grounded theory to better understand the situations and to give meaning to the nurses’ views throughout their disaster experience. They used convenience sampling, which has been criticised by Sbaraini and Carter (2011), who suggested that initial sampling must begin with purposive sampling, as in other qualitative studies. The value of purposive sampling is to yield cases rich with data related to the phenomenon (Patton, 2001; Palinkas et al., 2013). In this study, Li et al. (2015) gave reasons, such as difficulty in accessing the institutions and time constraints. Therefore, finally, only fifteen nurses participated in this study, which is supposed to achieve the ‘theoretical saturation’ stage while collecting data in grounded theory. Creswell (2007) suggested that there should be 20 – 60 participants, ideally, to achieve theoretical saturation.

In this study, data was collected through interview and document review which took place concurrently with data analysis (constant comparison). Li et al. (2015) utilised Strauss’ views in this study; however, some parts of the study embrace Glaser’s opinions. The results suggested that nurses need to be prepared in advance of a disaster response to conduct their work better. The study by Li et al. (2015) discovered that nurses involved in a disaster response did not possess the mental-health knowledge or skills prior to deployment to the disaster area. Disaster nurses work in difficult situations and at a higher risk of subsequent disasters, such as earthquake aftershocks and floods, and may sacrifice themselves to fulfil their duty. Li et al. (2015) recommend revealing the severity and nature of psychological trauma among nurses who have been engaged in a disaster response, as the issue is not being appropriately addressed.
The findings of this study recommend the development of disaster nursing education and training in China. Henceforth, this study highlights the need to conduct future research using both qualitative and quantitative approaches to assess nurses in another region. The researcher’s study utilised the grounded theory to discover nurses’ experiences during disaster responses and aimed to identify the factors that contribute to or hinder nurse’s performance in their tasks, similar to the study by Li et al. (2015). The similarity of the findings included being unprepared prior to deployment, lacking related skills and knowledge for responding to a disaster situation and the support gained from other disaster team members. However, this study is different to the researcher’s study, considering the need to be able to manage emotions and the role of religion as a coping mechanism for the nurses at the disaster site. Apart from that, the current study mentioned the feeling of excitement to be part of the disaster response team and many things the nurses learnt while on duty.

d. Wenji et al. (2015). Title: Chinese nurses’ relief experiences following two earthquakes: Implications for disaster education and policy development

This was a study utilising Reissman’s narrative inquiry (Wenji et al., 2015). Narrative research best fits the “detailed stories of life experiences of a single life or the lives of a small number of individuals” (Creswell, 2013, p.73). It can be recorded in a journal or diary. Wenji et al. (2015) intended to develop individual stories and themes, as well as a socio-cultural theory, which aimed to describe the experiences of nurses engaged in disaster relief in addition to inquiring about their views, in line with the chosen methodology. The study by Wenji et al. (2015) focused on nurses who had worked for at least 24 hours in a disaster area (Wenchuan or Yushu earthquake relief): they did not declare the reason for choosing 24 hours. This would have been helpful to know.

Generally, this study adhered to the principle of narrative inquiry for its methods, though not for methodology. The data was collected through narrative analysis in which the important and meaningful events were selected, as well as gaining data through in-
depth interviews amongst twelve registered nurses, as it achieved saturation. The field notes were also written and the findings were analysed. The transcripts were repeatedly read and interpreted based on the framework selected by Wenji et al. (2015), as well as referring to the research questions. The data was checked by other members to validate the quality of the study (member checks) which adhered to the view of Morse et al. (2002). Wenji et al. (2015) developed themes before identifying similarities and differences.

Subsequently, Wenji et al. (2015) employed back-to-back English and native language translation by using bilingual translators, as well as constantly checking with the experts. Similar to a study by Wenji et al. (2015), the researcher’s study adopted a similar principle of back-to-back translation in both languages - Malay and English - to ensure the messages were clearly received without jeopardising the true meaning intended by the respondents. Wenji et al. (2015) hold onto the audit trail throughout the analysis to keep a record of all the documents as evidence. This is another method to ensure the rigour of the study in which the researcher conducted her study, using memoing, as in the grounded theory approach.

Wenji et al. (2015) found that the nurses have to face challenges such as working at the higher altitude of the disaster site, aftershocks and several other events following an earthquake. There were five themes identified by Wenji et al. (2015) from their study: 1) the nurses put aside their personal feelings and the risk of any further danger; 2) the characteristics required of a disaster nurse; for instance, having professional skills and good health; 3) the importance of being prepared for mental trauma; 4) poor planning for disaster response; and 5) urgent need for disaster education. The similarities between this study and the current study were acknowledged as above; however, this study has not mentioned the role of religion as a coping mechanism for the respondents.
e. Day (2015) undertook her PhD, entitled ‘Planning for chaos: developing the concept of emergency preparedness through the experience of the paramedic.

She explored their understanding of emergency preparedness’ concept through lived experience. Day (2015) used interpretative phenomenological analysis (IPA) in order to develop understanding of the paramedic’s experience. Her study involved thirteen paramedics from West Midlands, United Kingdom and used in-depth, semi-structured interviews to gain data.

She found the paramedics valued their role working in uncertain and changing situations, and their resilience. The respondents in this study also emphasised some elements such as risk, threat and control amongst the important concepts for individual preparation. They also reported the importance of practice-based knowledge and control. From overall findings, Day (2015) identified three major themes: self-determination, control, and experience-based practice. Then, from the themes, this study developed the conceptual model of ‘The Dimensions of individual Emergency Preparedness’ (DiEP model) that informed the experiences of the paramedics.

f. Kayama et al. (2014). Title: Experiences of municipal public health nurses following Japan’s earthquake, tsunami, and nuclear disaster

This study by Kayama et al. (2014) involved thirty-two public health nurses (across the discipline in public-health nursing) who participated in three consecutive disasters: an earthquake, a tsunami and the nuclear power plant explosion which occurred in March 2011 (Great East Japan earthquake). The respondents were interviewed two years after the disasters, similar to the researcher’s adaptation in her study, where respondents were interviewed up to fifteen years after the incident. A focus group discussion was carried out but the authors did not mention in what language it was conducted. The authors informed the use of focus group discussion in gathering all required data, using a semi-structured interview guide developed by the team.
The data was analysed using a qualitative, descriptive method and the transcripts were read to develop categories. The actual words were kept; however, the study did not mention the language used. No further explanation of the process of translation is mentioned in the article. Unfortunately, Kayama et al. (2014) did not explain the methodological stance that underpinning the study and the procedure to ensure the trustworthiness of the data. With regard to ethical considerations, Kayama et al. (2014) requested ethical approval from the respondents, as well as the institution involved.

This study found two major themes: 1) the experiences of the public health nurses (PHNs) in dealing with difficulties and dilemma; and 2) the professional challenges in their field and the meaning of excellence as PHNs. The conflict that they experienced was identified as uncertainty concerning their roles and responsibilities to be engaged with the communities, their role as a civil servant and private citizen to protect their families during disasters and the need to be accountable to the communities in disseminating information about the catastrophic event. The findings of the current study showed similarity regarding the aspect of giving priority and protection to family members during a disaster. This study revealed their uncertainty concerning their roles and responsibilities: however, the current study shows that the respondents hold huge responsibility and that they know what should be done once they arrive at a disaster scene.

### g. Bahrami, Aliakbari and Aein (2014). Title: Iranian nurses’ experience of essential technical competencies in disaster response: A qualitative content analysis study

This conventional, qualitative, content analysis study by Bahrami, Aliakbari and Aein (2014) investigated the experiences of the technical competence of Iranian nurses. It involved in-depth interviews with thirty-five nurses who worked at the health centre associated with the Isfahan University of Medical Sciences. This study used semi-structured interviews with thirty respondents and had already achieved saturation, yet another five respondents remained to confirm the categories. This study gathered the data simultaneously using qualitative content analysis, which is defined by Berelson (1952) as
“a research technique for the objective, systematic and quantitative description of the manifest content of communication” (p.18). The study’s data was then transcribed manually, word-by-word, then followed by line-by-line and, finally, the main ideas were labelled as codes, these steps being similar to the coding process by Charmaz (2006). This study applied peer checking and variation of the sampling which confirmed the conformability and credibility of the findings.

The findings discussed on five themes revealed from the study which was focusing on different dimensions of nurses’ competencies while responding to a disaster: 1) management, 2) legal and ethical, 3) team working, 4) personal and 5) specific technical competencies. The current study mentioned about competencies, however, it only informed about general competencies, without dividing it into different aspects of competencies needed during the disaster response such in the study by Bahrami, Aliakbari and Aein (2014).

h. Sato et al. (2014). Title: Remote community-based public health nursing during a disaster: An ethnographic case study in Japan

Sato et al. (2014) carried out an ethnographic case study approach to examine one public health nurse (hereinafter called T.PHN) in Tohuku, Japan, during the Great East Japan earthquake in 2011. The experiences of T.PHN were recorded via an in-depth interview using semi-structured questions, participant observation and statistical documents. Sato et al. (2014) observed one public health nurse’s experience, regarding “how people think and act in their natural setting” (p.107). This study focused on a community-based public health nurse (PHN), which was appropriate as, during the disaster and its aftermath, PHNs were playing vital roles in the communities as providers of “acute-phase care, psychological support, and coordination with relevant organisations” (Sato et al., 2014, p.107). Sato et al. (2014) explored T.PHN’s experiences two years post-disaster, about the situation, her feelings and her activities during the disaster.
This study adopted the method that the researcher planned to use, in collecting nurses’ experiences a few years after disasters occurred, but the researcher employed a different methodological approach: constructivist grounded theory. Besides T.PHN, a nutritionist and a local resident were also interviewed about the meaning of T.PHN’s presence for them during a disaster. The term ‘case study’ in Sato et al. (2014) applies to studying a case that “attempt[s] to understand a specific issue” (Creswell, 2013, p.98), focusing on one public health nurse’s experience during a disaster.

In the study by Sato et al. (2014), the interview transcript by T.PHN was verified with the other two collateral informants (the nutritionist and local resident) to confirm the account given by T.PHN. The respondents were asked to check the transcription and modify, if necessary, but no further explanation was given as to whether any of them made any such changes. As mentioned earlier within the article by Pourvakhshhoori et al. (2017), Morse et al. (2002) gave ‘immunity’ for case studies to apply member checks to ensure credibility. The transcripts of the interviews were analysed by three experts in qualitative research and read repeatedly and carefully, which increased the stability of the data. However, Sato et al. (2014) did not mention the language that they used for the interviews, nor how they ensured the credibility of the translation back-to-back if they used their native language.

In this study, Sato et al. (2014) identified their limitation of using only one public health nurse and suggested that it would be helpful to integrate other public health nurses’ experiences and contextualise this experience within this particular region and its culture. This would deepen the knowledge and the practices of the public health nurse’s experiences in a remote area during the disaster. From the researcher’s understanding, this study focused on examining one case concerning the specific person who was the T.PHN, and utilised an ethnographic approach for the methods, as mentioned earlier. However, relying only on one public health nurse in this study was inadequate to better understand the in-depth issues, commensurate with Creswell (2013), stating that it is insufficient to provide a good qualitative case study.
The findings show that the PHN was overwhelmed by the duties since she was the only nurse at the disaster site and survived all the activities alone. She also thought about her family members affected by the disaster. This finding was parallel to the findings by the current study which had mentioned the nurses’ worry for their family members and for some, created a dilemma. As the PHN was worried, the supervisor allowed her to drive back home to ensure their situation: this was important to assure her good mental health status, despite the calamity. The findings focused merely on the role of a PHN and her experiences in dealing with a disaster event.

i. Sloand, Ho and Kub (2013). Title: Experiences of nurse volunteers in Haiti after the 2010 earthquake

Sloand, Ho and Kub (2013) conducted an exploratory descriptive study to explore the experiences of nurse volunteers involved in responding to the Haiti earthquake. It involved an in-depth interview using semi-structured interviews with twelve American nurses: some were conducted in person and others via the phone. The interview sessions were conducted by four interviewers and this action could raise an issue on the uniformity of interview skills, as well as the dissimilarity of data obtained through different interviewers. All transcripts were validated by the respective interviewers. The issue of dissimilarity of data gathered through different interviewers could be avoided if any one of the interviewers become the final individual to validate all twelve transcripts.

The data was analysed according to Corbin and Strauss (2008), involving open coding. Prior to the theme development, serial discussions and multiple readings were conducted by the researchers to explore the underlying meaning of the data. This study adopted the horizontal and vertical comparisons between the transcripts in order to produce the interrelated and interconnected themes that suggest the ‘story’. Memos and field notes added to the analysis and triangulated the multiple data to capture the nurses’ most complete experiences. Lincoln and Guba (1986) listed criteria to ensure that trustworthiness was employed: credibility, transferability, dependability and
confirmability were utilised, as well as horizontal and vertical comparison, peer debriefing, audit trail and reflexivity.

Findings revealed six themes that focused on being adaptable to the situation, overwhelmed with the duties that should be carried out and experiencing limitation in supplies, especially medicines. The respondents were also wondering whether they did their best in helping out the population affected and coping with the situation, carrying out their responsibilities and competencies and how they discussed their mixed emotions about the experiences. These six themes could also be found in the current study, where the nurses have echoed the respondents in Sloand, Ho and Kub's (2013) research. However, the role of religion as a coping mechanism was not mentioned in Sloand, Ho and Kub (2013), differing from the current study.

j. Y. Yang et al. (2010). Title: Chinese nurses’ experience in the Wenchuan earthquake relief

Y. Yang et al. (2010) focused on Gadamer’s philosophical hermeneutics as a framework. Gadamer’s hermeneutics is amongst the most well-known qualitative research on the interpretive method. This approach highlighted discovering the meaning of individual experiences by understanding human interpretation (Regan, 2012) and studying the individual’s lived experience (Creswell, 2007). It was conducted among ten registered nurses who experienced China’s Wenchuan earthquake, to identify their roles and attributes engaged in disaster response and also identified enablers and barriers that nurses faced during disaster relief. This study was entirely guided by Gadamer’s philosophical hermeneutics approach, methodology and methods. The data was collected through face-to-face in-depth interviews, as well as written reports and field diaries.

The selection of the methodology in this study was to interpret the phenomenon of ‘nurse self-practice’ at the on-site disaster relief, in line with the research question which intended to identify enablers and barriers that the nurses perceived. In this study,
Y. Yang et al. (2010) allowed the participants to recheck their transcripts and modify them as necessary (member checks). The results from the respondents were analysed and summarised so they would no longer be able to identify their own responses (Sandelowski, 1986; Morse, 1998; Morse et al., 2002). Stern (1994) also identified several drawbacks to the utilisation of member checking, such as the potential to create conflict between the researchers and respondents, as both have different views and some may request the earlier data be erased. Since the researcher adopted the constructivist grounded theory, member checks that she believed could influence the data collected and the outcome of analysis, as well as interfere with the development of categories or theory, would not be applied in her study.

The findings of this study discussed the feelings of being unprepared prior to deployment, the challenges and how nurses cope with them, and the meaning of being involved in providing care to the affected communities. Their findings are similar to those in the current study, except that the coping strategies for managing their psychological trauma were through on-site psychological counselling. This current study emphasises the role of religion as a coping mechanism and has not mentioned on-site psychological counselling services.

**k. Broussard and Myers (2010). Title: School nurse resilience: Experiences after multiple natural disasters**

A qualitative, descriptive study amongst school nurses in Louisiana, United States, was carried out by Broussard and Myers (2010) to describe their experiences of being repeatedly affected by hurricanes. This study used open-ended questions when interviewing five school nurses and adopted an interpretive hermeneutic phenomenology methodology in examining their experiences. Analysis through hermeneutic inquiry was carried out with the intention of gaining an explicit understanding of the meanings of the nurses’ experiences in developing resilience. Theoretical sampling and constant comparison were utilised for the analysis.
According to Kim, Sefcik and Bradway (2017), qualitative descriptive is “to describe studies of health and nursing-related phenomena” (p.23), a view which is supported by Polit and Beck (2009, 2014). From the article, it was said that this study was a qualitative descriptive design: however, it was merely guided by the principles of interpretive hermeneutic phenomenology for methods, without the involvement of that approach for the methodology to underpin the study. On the other hand, this study involved only five school nurses, which seems inadequate to represent the population. Referring to the article by Mason (2010), qualitative study research, other than ethnography, ethnoscience, grounded theory and phenomenology, should involve fifteen acceptable samples (Guest, Bunce and Johnson, 2006). Meanwhile, the use of theoretical sampling and constant comparison by this study was synonymous with a grounded theory approach, corresponding to the researcher’s study in Malaysia.

This study revealed three themes: 1) anticipating the disaster, 2) returning after the event and 3) making the decision to stay as a result. The study found how the nurses developed resilience, starting from pre-disaster phase until they decided to stay, helping out the affected community. The themes were similar to the findings by the current study from the aspect of getting support, deciding to stay to help people and dealing with the situation.

1. Few other studies (before 2010)

There were few studies related to nurses’ experiences during a disaster, yet there were different approaches in methodology, such as grounded theory, interpretive hermeneutic phenomenology and Heideggerian phenomenology. Some studies were solely qualitative and there was also a mixed-method approach adopted. These studies were selected as some of the similar methods were employed by the researcher in her study.

Shih et al. (2002) examined 46 Taiwanese nurses to share their experiences of the most remarkable moment during the initial stage of 72 hours of the 9-21 (September 21,
1999) Taiwan earthquake. However, this study gave no further information on the reason for selecting 72 hours. The data were collected through semi-structured interviews, in Mandarin or Taiwanese language, and were later translated into English, followed by the process of back-to-back translation. This procedure was similar to the process used by the researcher in her study. A grounded theory technique was implemented for the interviews, but this study did not mention the steps of grounded theory taken up to complete the interview process. Indeed, there was no grounded theory methodology given; simply classical, Straussian or constructivist. This study was guided by the principles of grounded theory for the methods section in assisting data collection and analysis. Shih et al. (2002) employed a mixed-methods approach for this study and applied a few strategies to increase the rigour of the findings. The data was audiotaped in the nurses’ mother tongue, which is Mandarin and Taiwanese with Chinese writing. The data was translated back-to-back from Chinese to English then back to Chinese. In addition, two insider-outsiders reviewed the transcript to ensure the accuracy of the data. The researcher adapted the techniques of back-to-back translation and transcript reviewed by the insider-outsiders’ acquaintance with Malay and English language, which were used by Shih et al. (2002). Shih et al. (2002) suggested another researcher should focus on the positive experience of nurses during a disaster (salutogenesis). Salutogenesis is the concept of a focus on health, despite a disease (Kelly, 2015) and it refers to a scholarly orientation focusing attention on the study of the origins of health and assets for health, rather than the origins of disease and risk factors. In this study, the nurses survived their testing experience and found the ability to deal with it, thus developing strength, understanding, increased awareness and the use of a buffer system against the trauma from the disaster events. Further research should explore the stress-coping mechanisms in stress-related problems (Shih et al., 2002).

Dickerson et al. (2002) discovered nurses’ perceptions, feelings and common experiences after the 9-11 World Trade Centre tragedy (New York, 2011) using narrative analyses of seventeen nurses who were selected by invitation through posting flyers during a convention. This study employed a Heideggerian hermeneutics approach; an
interpretive phenomenological approach to examine text to reveal the context of the experience. The respondents were interviewed via telephone and, later, the data was interpreted using a seven-stage hermeneutical process. Dickerson et al. (2002) explained that the step begins with each researcher examining the data to develop an overall understanding of the transcript until the final step, in which the principal investigator establishes the final summary. However, this study was lacking explanation about how to ensure the trustworthiness of the data obtained.

There were some small studies on disaster experience conducted descriptively and only a few studies utilised any methodological approach to underpin their research. Some of the methods have similarities to the researcher’s study, as mentioned in the text. From these reviewed articles, the researcher has identified the gaps in understanding nurses’ experience during disaster response.

2.4 Gaps in the literature

Although the gaps in knowledge highlighted in disaster planning and readiness have been gradually addressed, disaster experiences among nurses have been given less attention and, according to Stangeland (2010), they remain unclear. During the literature search, there was a scarcity of research conducted which focused on the methodological approach underpinning the study on exploring nurses’ experience during disaster response. Most of the studies were focused on ‘lessons learned’ (Williams, Nocera and Casteel, 2008) and ‘own experience’ rather than utilisation of the methodology. This has led to a lack of the scientific evidence which is crucial to promote high-quality research.

Nurses are closely engaged in disaster responses in Malaysia, for instance, floods, pandemics, mass casualty incidents, landslides and many more, yet their experiences have not been well studied. In fact, not one of the articles and studies was found to have come from Malaysia during the literature search. This is, perhaps, due to the fact that a research culture of publication among Malaysian nurses is yet to be evolved or that the studies
remain unpublished. Many studies, though, have been conducted all over the world, in particular, disaster-prone countries, for instance, the United States (U.S), Japan and China.

Research being done in other countries may or may not be transferable to the Malaysian setting because of differences in geographical location and diversity in the type of disasters occurring as well as resource availability in each country. In addition, the outcomes need also to be applicable to disaster education and training in Malaysia. Thus, the researcher has carried out this study in the Malaysian setting in order to discover the experience of nurses that have been involved in various type of disasters, to suit our working culture and practices. Furthermore, the findings from this study could facilitate and assist in shaping the ‘landscape’ of disaster nursing education and training in Malaysia as well as identifying contributing and hindering factors to Malaysian nurses’ engagement in disaster response. It may also help in steering the development of the disaster nursing curriculum, commensurate to the remark by Whetzel et al. (2013) and Li et al. (2015) to incorporate such content into the undergraduate curriculum as well as to those who are currently working in the clinical area.

2.5 Justification of the study

In order to understand the perspectives of those involved in healthcare in disaster situations, a study focusing on those perspectives appears to be appropriate (Goltz, 1984). The difficulty of paper by paper presentation is that it is harder to see this emerging, that is, the case for this study. There is a small body of work being explored in this field but the gap is being addressed in regards to the experiences of different working background of nurses involved in different type of disaster. Furthermore, the affected communities, as well as the healthcare providers, experience a wide range of emotions such as fear, loss, anxiety and, in some circumstances, exhibit “a human dread of disasters” (Long, 2009, p.6) but can prepare for the unknown by studying how others in the past have coped with the unforeseeable and unpredictable (Patton, 2001). When disaster strikes, nurses are
deployed to disaster areas and they are among the groups at greater risk of suffering from illness and harm both physically and psychologically. Thus, the community groups involved are predominantly the vulnerable such as children, older people as well as maternal women who require nurses to be prepared beforehand about disaster management in order to assist them during and after disaster events.

Yin et al. (2012) claimed that there is a scarcity of literature related to the involvement of nurses in disaster training, the qualification of the nurses, the staffing ratios and their practices as well as experiences in disaster response. Working in a vulnerable situation such as in a disaster requires nurses to utilise limited resources carefully which may cause distress and fatigue. It may cause, not merely a physical burden but also psychological ones and, according to Sato et al. (2014), the effects both physical and psychological of nurses working in disaster areas often occur 3 to 7 days after the event. Sato et al. (2014) identified that, after the Great East Japan Earthquake, approximately 70% of support nurses had mental and physical difficulties which were partially due to hearing other survivors’ stories.

Discovering and understanding nurses’ experiences of working in a disaster situation will provide insight into the development of nurses’ practices and their knowledge, predominantly in a complex situation such as disaster events and preparing them physically and psychologically. It becomes of primary interest to understand the working phenomena of the nurses. Their experiences could steer the revision and modification of the current syllabus of disaster nursing training/education to accommodate nurses’ needs and enable them to perform their duty effectively during disaster events which, thus, could lower the potential risk of injuries and illnesses, physical and psychological. Indeed, it can inculcate the mental health aspects into the training syllabus provided.

What makes this proposed study different from others? It explores new areas which have not yet been widely covered by the existing literature. Indeed, the use of
constructivist grounded theory in exploring the experiences of these nurses could be considered as different from other studies. Most studies are focusing on story-telling about their own experience (autoethnographic) and some are conducted as descriptive qualitative studies without any specific methodological approaches underpinning their study. Apart from that, this study contributes to the Malaysian nurses’ perspectives in responding to different types of disaster. In fact, studies of nurses’ experience gives voice to the nurses and helps them understand and be prepared for future disasters. Therefore, the researcher took this opportunity to undertake a grounded theory, in particular, a constructivist approach to study nurses’ experiences during disaster response identifying the factors contributing to and hinder their responses.

Furthermore, this study contributes to the Malaysian nurses’ perspectives in responding to different types of disaster. This, in turn, leads to future planning for disaster nursing education and prepares them effectively and efficiently for performing their task during disaster events. It corresponds to Williams, Nocera and Casteel (2008) who claimed that it is crucial to establish evidence-based planning and training which will later help in improving nurses’ performance during disasters. In fact, understanding and discovering how nurses respond during a disaster and the likelihood of revealing the factors contributing and hindering them responding well to a disaster is the initial step for the development of a disaster nursing curriculum (Fung, Lai and Loke, 2009).

2.6 Contribution to the body of knowledge

The principle of conducting research is to discover more knowledge and to add to the current body of knowledge. In the field of disaster nursing research predominantly in exploring nurses’ experiences, there is a dearth of research identified in the literature. Though, the qualitative approach studies focus merely on descriptive without application of any philosophical stance, it is important to have a worldview in order to shape the direction of the research. One of the contribution of this study, however, is by the methodology adopted. The researcher has utilised the constructivist grounded theory
approach to explore nurses’ experiences with the aim of discovering those factors that contribute or hinder them while responding in the context of catastrophic events. The main goal of utilising grounded theory is to explore the social interaction of the participants within their social world and yield new concepts or theory, which may serve as the fundamental basis which will be employed for further research.

The end results will provide a depth of insight and assist the researcher to plan for appropriate action to be taken, in regard to disaster education. Furthermore, it will help to understand the role of nurses in managing disaster victims effectively and efficiently, without panic and distress, in the context of their own experiences. It will also steer the revision of the current syllabus of disaster nursing training to cover all aspects of physical, mental and social well-being of society in general and nurses in particular. The results could inform the current undergraduate nursing training programme in Malaysia where there is no standardisation to address disaster nursing as a speciality.

2.7 Summary

The literature review identifies what was known and unknown about nurses’ experiences during their deployment in disaster areas. This literature search drew on the principles of grounded theory on how it was conducted in relation to its aim. Intention to identify the gap of knowledge of which substantive area should be given a specific focus. The research questions for this study are thus:

1. “What are the experiences of nurses during disaster response?”

2. “What are the factors that contribute to, and hinder, nurses’ effectiveness while responding to disaster events?”
Whereas, the study aims are:

1. To explore the experiences of nurses during disaster response
2. To recognise the factors that contribute to, and hinder, nurses’ effectiveness while responding to disaster events.
CHAPTER 3: METHODOLOGY & METHODS

3.0 Introduction

In this section, the methodology and methods underpinning this study are discussed. The explanation begins with the methodology chosen for the study and outlines the process for selecting the appropriate methodology to guide this study. This is then followed by a discussion of those methods which explain the study context, obtaining ethical approval, the recruitment process and the process of gathering and analysing the data.

Choosing a suitable methodological approach is essential for a novice researcher. The ‘right’ methodology could successfully answer the research question and support the researcher along the process of conducting the study (Holloway and Wheeler, 2002; McPherson and Leydon, 2002; Holloway and Todres, 2003). Corbin and Strauss (2008) and Birks and Mills (2015) define methodology as an idea or way of thinking that informs the conduct of the study. This chapter is divided into two parts: Part One for Methodology and Part Two for Methods.

PART ONE: METHODOLOGY

3.1 Embracing the appropriate methodology

It is important to choose the appropriate methodology to guide the study for answering the objective(s). A brief overview of methodology is presented before outlining the selected methodology for this study and it begins with reflections on qualitative research design.
3.1.1 Signifying qualitative as an approach to the study

Qualitative research describes and explores phenomena. It is a part of the social inquiry that emphasises how people understand, make sense of their experiences and the way they are (Hancock, Ockleford and Windridge, 2009). The approach of qualitative research brings the researchers and participants closer together (Guba and Lincoln, 1988; Creswell, 2003). A theoretical approach and a broad orientation in qualitative research are necessary to discern the contribution of the study to the body of knowledge.

3.1.2 Philosophical assumptions and research paradigm

The decision to undertake qualitative research is underpinned by philosophical assumptions (Creswell, 2007) and it is also crucial to understand the research paradigm (Lincoln and Guba, 2000; Holloway and Wheeler, 2002; Creswell, 2003). Paradigm is defined as “a basic set of beliefs that guide action” (Guba, 1990, p.17). Understanding philosophical assumptions and research paradigms have assisted this study in the selection of a suitable approach. Philosophical assumptions comprise the researcher’s stance towards the way of being (ontology), a way of knowing (epistemology) and what underpins the study (methodology) (Creswell, 2003, 2007).

Ontology is related to the “nature of reality and its characteristics in which researchers are embracing the idea of multiple realities, different from one another” (Creswell, 2013, p.20). Denzin and Lincoln (2005) mentioned that ontology “raises basic questions about the nature of reality and the nature of the human being in the world” (p.183). There is a continuum between realism and relativism (anti-realism) however, both realism and relativism are different entities. Realism is “committed to the existence of a real world, which exists and acts independently of our knowledge or beliefs about it” (Benton and Craib, 2001, p.120). By contrast, referring to Hugly and Sayward (1987) embracing a relativist ontological stance means “there is no objective truth to be known” (p.278).
Critical realism is an example of realist ontology in which they believe the truth can be achieved through reasoning, not through observation (Levers, 2013). In other words, critical realism is associated with “antipositivist movement in the social sciences” (Denzin and Lincoln, 2005, p.13). A British philosopher Roy Bhaskar (Bhaskar, 2008) introduced the critical realism approach and this idea emerged when he wanted to emphasise the basic question in the philosophy of science “what properties do societies and people possess that might make them possible objects for knowledge?” (Danemark et al., 2002, p.5). Opposed to that belief, relativist ontology came into the picture and was defined as “a finite subjective experience” (Levers, 2013, p.2). It can also be described as “to understand the subjective experience of reality and multiple truths” (Levers, 2013, p.2) and it is open to multiple interpretations (Levers, 2013). This stance of relativism had been adopted by Charmaz (2006) to underpin her constructivist grounded theory, with regard to ontology.

Epistemology, according to Keddy, Sims, Sharon and Stern (1996, p.449), is exploring the theory of knowledge in relation to certain questions such as “who can know, how does one know and what is or is not legitimate knowledge”. Alternatively, for Denzin and Lincoln (2005), “epistemology asks ‘How do I know the world’?” (p.183). It intends that the researcher becomes closer to a participant’s life in the ‘field’ (Creswell, 2007). Epistemology is focusing on the relationship between researcher and knowledge, and there are two opposed beliefs which are objectivism and subjectivism. Objectivism is a statement that considered as true and fact, whereas subjectivism is a belief, not a fact. Objectivism, defined by Crotty (1998), is “the belief that truth and meaning reside within an object and is independent of human subjectivity” (Levers, 2013, p.3). It can be further explained that no one being influenced by others, given the situation that the observer or the person is being observed in the study. Whereas, subjectivism “is a belief that knowledge is always filtered through the lenses of language, gender, social class, race, and ethnicity” (Denzin and Lincoln, 2005, p.21). In this epistemology, subjectivism allows both entities to be influenced by each other; “observations are influenced by the observer and the observer is influenced by the observed” (Levers, 2013, p.3). Subjective research aims to develop understanding as well as awareness of the issues related to the ethical and moral (Denzin and Lincoln, 2005).
Paradigms or worldview refers to the idea that one uses to generate knowledge that involve a set of assumptions. “To ensure a strong research design, researchers must choose a research paradigm that is congruent with their beliefs about the nature of reality” (Mills, Bonner and Francis, 2006b, p.2). Guba and Lincoln (1994) introduced the four basic beliefs of ontology, epistemology and methodology, which are: positivism, postpositivism, constructivism and critical theory (see Appendix 3.1). As listed by Denzin and Lincoln (2005), the researcher explains the philosophical assumptions and research paradigms influenced the selection of a suitable research methodology and identified the best one to suit the nature of this study. It requires acknowledgement of the ‘multiple truth’ from the participants and the researcher through their knowledge, experience and everything around them. Indeed, the intention of the researcher to develop a theory about this study amongst Malaysian nurses also influenced the selection.

Positivism is associated with the philosophical theory where certain knowledge is based on experience in natural science and focuses on facts where they gathered through observation and experience. It covers knowledge dealing with logical and mathematical proof. Denzin and Lincoln (2005) identified that: “positivism asserts that objective accounts of the real world can be given” (p.15). Postpositivism is built on the basis of objectivist epistemology and critical realist ontology. This worldview believes that truth and universal law exist and “objective investigation will bring us closer to the truth” (Levers, 2013, p.3). According to Denzin and Lincoln (2005), “postpositivism holds that only partially objective accounts of the world can be produced, for all methods for examining such accounts are flawed” (p.27).

Apart from positivism and postpositivism, Denzin and Lincoln (2005) also discuss constructivism and critical theory. Constructivism is the foundation of creating knowledge from an experience which frequently is determined by the learner’s prior knowledge and experience. Constructivism has its own beliefs and ‘multiple truths’ that are socially constructed (Charmaz, 2006) and it is acceptable amongst the observed and the observer (Levers, 2013). Jean Piaget (1896-1980) and Lev Vygotsky (1986-1934) were believed to be amongst the founders of constructivism in educational psychology. Whereas, critical theory is where they try to understand those
people who are dominated and burdened and assist in overcoming that social structure. This paradigm refers to the Frankfurt school theorists such as: Max Horkheimer, Theodor Adorno and Herbert Marcuse (Kincheloe and McLaren, 2008).

Of all the paradigms that have been mentioned, the researcher considered the best philosophical and paradigm that suits the nature of this study, which aims to explore the experience of nurses within their interaction within social context, is constructivism. Several methodological approaches had been considered prior to making the selection of which one best suits the objective. Thus, this study briefly discusses potential approaches that focus on ‘experience’: phenomenological study, narrative study and grounded theory.

3.1.3 Comparing the diverse approaches of qualitative research

There are many qualitative research approaches from which to choose. As reported by Creswell (2007), the process of selection of the suitable approach should begin with the outcome. In this study, an in-depth understanding of nurses’ experiences is significant in answering the aim(s). The outcomes of this study should recognise their situation while responding to disasters. It begins with short descriptions about the phenomenological study, then followed by a narrative study and grounded theory (see Appendix 3.2). These three approaches: phenomenological study, narrative study and grounded theory may be amongst the best methodological approach to represent nurses’ situations and experiences during disaster response. Nevertheless, in the end, one approach that best suits the study’s aims were chosen. The brief explanation of these three approaches will be narrated in the next section and begins with phenomenological study.

a. Phenomenology study

Phenomenology is a qualitative research methodology that describes a particular phenomenon experienced by human beings. It is described as: any study focusing on the meanings from the experience and real life. The philosophical assumptions of
phenomenological study lie on studies related to lived experience (van Manen, 1990) and generate the nature of the experiences (Moustakas, 1994). The phenomenological study refers to an individual’s lived experience concept or phenomenon and what are its similarities (Creswell, 2007). It focuses on a lived phenomenon within a specific group.

Edmund Husserl and Martin Heidegger are commonly associated with phenomenology studies. Husserl, the German philosopher, was the modern founder of phenomenology and Heidegger, known as Husserl’s student, created his own approach of phenomenology, extended from Husserl’s hermeneutic approach. Phenomenology is acknowledged for its philosophical approaches as well as its methodology. It studies numerous “types of experience ranging from perception, thought, memory, imagination, emotion, desire, and volition to bodily awareness, embodied action, and social activity, including linguistic activity” (Smith, 2013, para 6). Phenomenology is associated with a naturalistic paradigm, which is informed by the concept that humans live in their own world by constructing their knowledge and appreciation of the reality (McNamara, 2005).

The researcher investigated phenomenological study since it could contribute to an understanding of a person’s reality and experience. Phenomenology might offer insights into the nurses’ lived experiences when being in a disaster area. However, it does not offer the opportunity to construct the concept that underlies the situation of the nurses that would lead to a new contribution to the field of disaster nursing in Malaysia. The next option considered was a narrative research.

b. Narrative Research

Narrative research also discusses ‘experience’. The terminology of ‘narrative’ is used interchangeably with the word ‘story’ that make senses of human lives. It focuses on stories as expressed by individuals (Polkinghorne, 1995) and it is arranged in chronological order (Czarniawska, 2004; Creswell, 2007). Czarniawska (2004) delineates that narrative is “a spoken or written text giving an account of an
event/action or series of events/actions, chronologically connected” (p.17). It recognises people’s experiences over time and the connections between personal experiences.

It ‘scratches beneath the surface’ and gains extensive information about the respondents (Creswell, 2007). Narratives involve a systematic process of collecting the ‘stories’ by gathering, analysing and representing within “an organised interpretation of a sequence of the events” (Murray, 2003, p.113). This is in accordance with Sikes and Gale (2006 from Tully, 2012), who define that “human beings as storying creatures making sense of the world and the things that happen to us by constructing narratives to explain and interpret events both to ourselves and to other people” (p.6).

According to Polkinghorne (1995), “narrative is the type of discourse that draws together diverse events, happenings and actions of human lives” (p.5). Moen (2006), in accordance with Elbaz-Luwisch (2005), “narratives are both personal and collective. They are shaped by the knowledge, experiences, and feelings of the narrator as well as by the interlocutors and the cultural, historical and institutional settings in which they occur” (p.5). The narrative approach is “an interdisciplinary study of the activities involved in generating and analysing stories of life experiences (e.g. life histories, narrative interviews, journals, diaries, memoirs, autobiographies, biographies) and reporting that kind of research” (Schwandt, 2007, p.204).

Narrative generates data in the form of stories and their typology. It focuses on the person that is mentioned in the ‘telling’ event and their role in ‘telling’ the event. This approach could be adopted for this study, however, it does not fit well with the intention to explore experience of nurses while responding to a disaster, in regards to the social interaction with the situation they faced. Some might argue both phenomenological study and narrative study could be used to answer the objective(s). However, it is often about which one is suitable, not about rejecting the other approaches. As both phenomenological study and narrative study are unlikely to answer the objectives set for this study, the third option should be considered which is grounded theory.
c. Grounded theory

Grounded theory is an inductive approach of qualitative research aiming at the development of new themes that could establish a theoretical framework. It discusses in-depth similarities and diversities of the concepts emerging from the data obtained. By definition, grounded theory “is a qualitative research design in which the inquirer generates a general explanation (a theory) of a process, action, or interaction shaped by the views of a large number of participants” (Creswell, 2007, p.248-249). Grounded theory is interested in theory generation which is ‘grounded’ within the systematically collected and analysed data.

The methodological process of a grounded theory begins with an open-ended and explanatory design which later progresses to become more specific (Hadley, 2017). Grounded theory methodology consists of several main ideas: theory generation, comparative analysis, theoretical sampling, theoretical sensitivity and theoretical saturation. These key tenets will be further explained when the discussion on the selection of grounded theory methods takes place later in the methods section. “Grounded theory provides a methodology to develop an understanding of social phenomena that is not pre-formed of pre-theoretically developed with existing theories and paradigms” (Engward, 2013, p.38).

As an exploratory research approach, grounded theory is suitable to examine social processes where previous research is lacking either in breadth or in-depth (Milliken, 2010) and this approach would be able to answer the objectives of this study. Social processes that occurred within the interaction of the nurses with their environment are important in this study and this is what the researcher is trying and wanting to understand besides developing a theory or concept as the key aim. Indeed, since little was known about nurses’ involvement during disaster responses in Malaysia, grounded theory, therefore, appeared to be an appropriate methodology to use.
Grounded theory is able to answer the objective of addressing the experiences of nurses about whose experiences little is known and, from this study, it could generate a general theory about the field of disaster nursing which is known to be lacking amongst nurses in Malaysia. The restricted understanding on the context of experience during disaster response from the scarcity of available literature could be addressed by grounded theory due to its suitability in exploring complex social phenomena in the relatively unexplored area such as in a disaster, as advocated by Glaser and Strauss (1967).

The reasons of choosing grounded theory were:

1. Grounded theory focuses on investigating the scenario that requires people to adjust to the situation and their environment (Benoliel, 1996; Stern and Covan, 2001; Corbin and Strauss, 2008). The adaptation of nurses in this study during a ‘unique’ situation or disaster event, requires them to be involved and know what are the core processes while carrying out their duties in the disaster area.

2. Grounded theory can be used to predict, identify, describe and explain the phenomenon of the respondents’ circumstances which “involve interactions and experiences of the people being studied” (Benoliel, 1996, p.413). How do they interact with their circumstances while performing their role, what are their experiences and what are the factors that contribute to and hinder them? By utilising grounded theory, it could ‘study’ how nurses interact and experience the situation and what they would do within given circumstances.

3. Using grounded theory enables an in-depth understanding of the nurses’ experiences, thoughts, views and perceptions as well as exploring what is happening during their period of disaster response regardless of the disaster category. Hence, this can assist in developing theories or concepts related to their interactions during disaster occurrences. This study reaches the deep insights of the nurses while they were deployed to the disaster area and how they responded to the phenomena.
4. The grounded theory provides a potential area to study nurses’ experiences which give its emphasis on context, emergent theory and the social construction of realities (Goulding, 1998) while examining the nurses’ experiences responding to the disaster area.

This study emphasises the scenario beyond nurses’ experiences. It intends to help in the better preparation of nurses when being deployed to disaster areas while informing the related organisation on their current policy. Li et al. (2015), in their study, explain that grounded theory allows them to better understand the situations and gather meaning from the nurses’ experiences which helps to form their views. Following the argument and justification above, grounded theory is the preferred methodology to examine nurses’ experiences and their interactions that occur when responding to a disaster. Indeed, it answers the aim of the researcher to develop a theory that could assist her as well as facilitate related parties to improve the current situation with the outcome of this study. However, the concern is to choose which approach, amongst diverse methods of grounded theory, best suits the aim of this study.

3.1.5 Deliberating the methodological diversity of grounded theory

Glaser (2002) and Evans (2013) assert that pure induction is what grounded theory researchers should adopt as a key process for generating theory grounded from the available data. The decision to apply grounded theory was only the beginning to the whole process. The major challenges are navigating the way to choose the most suitable version of grounded theory among classical (Glaserian), Straussian and constructivist approaches (Fernandez, 2012; Evans, 2013). Grounded theory was developed by Glaser and Strauss following their collaborative research about hospital patients dying (Glaser and Strauss, 1967).

These three versions are the main grounded theory methodologies that are widely used in academic research and frequently debated amongst grounded theory researchers. Regardless of their different ontology and epistemology, grounded theorists suggest similar concepts as guides for novice researchers. Amongst those are:
the construction of the theory, constant comparison, theoretical sampling, theoretical sensitivity as well as theoretical saturation. Kenny and Fourie (2015) in their review on three approaches of Glaserian, Straussian and constructivism have illustrated the commonalities and dissimilarities in the characteristics of the classic, Straussian and constructivist grounded theory approaches (see Appendix 3.3). Other than that, grounded theorists advise for collecting data and analysing them iteratively, focusing on the analysis of ‘actions’ and ‘processes’, the emergence of categories as well as searching for variation in the outcomes. Deliberating the similarities and differences of these three widely used approaches, as mentioned earlier, helps this study in selecting the best way to provide answers to the discussion.

**a. Classical (Glaserian) grounded theory**

The classical grounded theory or also known as Glaserian is the version developed by Glaser after he separated from Strauss due to some disagreement on the application of grounded theory method (Glaser and Strauss, 1967). Glaser remains faithful to the original approach of grounded theory on the approach to procedure in data analysis. He had a strong background of positivism and “*seem to echo post-positivist presuppositions*” (Rieger, 2018, p.3). Glaser focused more on a systematic analysis and the concept of ‘emergence of the data’ as he claimed that categories and theories were derived from the data collected, despite using specific categories (Bugday, 2012). It is best described as ‘discovery’ of the theory from the data gathered through the participants.

**b. Straussian grounded theory**

Strauss, after he separated from Glaser developed his work together with Corbin prior to his death in 1996. He reformulated the original version as he realised that there was a gap in the original book produced by himself and Glaser on *The Discovery of Grounded Theory*. Strauss went on to publish another two books with the intention of ensuring clarity of the process of data analysis (Strauss and Corbin, 1990). Strauss was trained to look at the role of the people who he studied and he recognised the
understanding and richness of qualitative research from social aspects. Strauss focuses more on the thorough steps to execute a good theory for the outcome to ensure quality and to generate theory through open, axial and selective coding.

c. Constructivist grounded theory

The final approach offered in grounded theory studies is constructivism, which was introduced by Charmaz (2006). The constructivist approach goes beyond how individuals view their circumstances and the social interaction between them and their activities with the environment. Constructivism has been utilised for a long time and the focal thoughts of constructivist grounded theory are eliciting the participants’ own words. The key thing to include is recognising multiple truths. These are then ‘constructed’ into the categories or theory. Further explanation of constructivist grounded theory will be presented in the next section.

d. Summary of deliberating the methodological diversity of grounded theory

In summary, Glaser (1978) focuses on the emergence of the data from coding (discovery) and Strauss and Corbin (1990) are more interested in the systematic design of the data analysis to develop the logic of the theory generated. From all three different approaches of Glaserian, Straussian and constructivist (by Charmaz), the aims of this study correspond to the approach of a constructivist grounded theory which will be further explained in the next section. It has an impact on learning theories, in this case, how nurses give meaning to the interaction between their experience and ideas when performing their roles during disaster responses and how the information may be being socially constructed.

3.1.6 The position of a literature review in grounded theory

At what time the literature should come into the picture is often controversial. When grounded theory was first developed, Glaser and Strauss (1967) suggested suspending undertaking a literature review in the substantive area where the research will be
conducted. Glaser and Strauss (1967) opposed conducting a literature review at the early stage of research and this initiated a debate which continues today. Their view on deferring the use of literature review was reinforced by Dunne (2011) who believed that conducting a literature review at the early stage of a specific area of research would potentially restrain the process of developing a grounded theory which would draw away from the quality of the research and its originality. It avoids the contamination of ideas prior to entering the field and helps “to allow categories to emerge naturally from the empirical data during analysis, uninhibited by extant theoretical frameworks and associated hypotheses” (Dunne, 2011, p.114). His opinion is also supported by Stern, Allen and Moxley (1982, 1984), Lincoln and Guba (1985), Strauss and Corbin (1994), Stern (1994), Keddy, Sims, Sharon and Stern (1996) and Hickey (1997) who also believed that emergent theory could be developed significantly by refraining from doing a literature review at the early stage of the research.

Prior to reviewing the literature on disaster response and nurses’ experiences, the researcher elucidates the role of literature review in a grounded theory approach and the opinions of researchers using grounded theory, in particular, constructivist grounded theory, in conducting the literature review. Birks and Mills (2015), researchers from Australia, imbued grounded theory in their studies explaining that literature is being significantly used at all stages within qualitative research and the use of extant literature could “enhance theoretical sensitivity; as a data during analysis; and as a source of theoretical codes” (p.22). There is a controversy about the use of literature in grounded theory as compared with the traditional approach of other methodologies and Yarwood Ross and Jack (2015) mentioned that the debate has run for over 20 years. According to Dunne (2011), novice researchers who choose grounded theory commonly face the issue of “how and when to engage with existing literature” (p.111) and it becomes challenging for them to position a literature review in a grounded theory study.

Over time and with the emergence of subsequent versions of grounded theory, for instance, Strauss and Corbin (1990) and Charmaz (2003), grounded theorists need diverse opinions on the role of the literature review. Hutchinson (1993) expresses his
opinion that literature review should be conducted before starting data collection and analysis, with the intention of identifying knowledge gaps. However, it should not be too extensive until the researcher has already begun to develop tentative conceptual and theoretical links which are inappropriate for any researcher adopting constructivism as their philosophical paradigm (Cutcliffe, 2000) as it is contradicted by the recommendation by Charmaz (2006). During an interview session by Puddephatt (2006), Charmaz expressed the view that researchers should avoid going to the field with a tabula rasa as it could divert them from their intention for the study and it can literally refrain researchers from imitating other previous studies. Indeed, Charmaz (2006) encouraged the use of extant literature and this method could avoid inhibiting the development of the theory. Besides which, the extant literature will support knowledge and understanding, as well as identifying important findings between current inquiry and previous studies (Charmaz, 2006; Yarwood-Ross and Jack, 2015).

In this study, the researcher employs constructivist grounded theory, therefore, Charmaz’s opinion on carrying out extant literature searching prior to conducting a study is reinforced. The use of extant literature could clarify ideas and make comparisons as this ensures clarity of the focus of the research. Likewise, Hallberg (2010) agreed with the approach of conducting an early literature review to figure out the studies that have been published before and to avoid duplication. In a summary, there are two camps:

1. Explore literature review with limitations on the substantive area (Glaser and Strauss, 1967) and
2. Defer the application of literature review with minimum exploration of the literature (by using extant literature) until researchers can fill the knowledge gaps (Charmaz, 2003).

The focus is on how comprehensive and when the literature search should be carried out (Cutcliffe, 2000; McGhee, Marland and Atkinson, 2007; Dunne, 2011) rather than whether it should be conducted or not. It can be concluded that a literature
review is still needed by novice researchers using grounded theory, to be specific constructivist grounded theory. Nevertheless, the issues most of the grounded theorists argue about are: when to begin it; and the depth of the literature to be explored.

The search of the literature focuses on the research questions: 1) what are the experiences of nurses during disaster response and 2) what are the factors that contribute and hinder nurses carrying out their role while responding during a disaster event? Therefore, the researcher’s intention is to explore literature to identify and fill the knowledge gaps as well as recognise the appropriate methodology to be utilised in this research.

3.1.7 Opting constructivist grounded theory as a methodological imperative

Various disciplines give different meanings for constructivism depending on how one sees and approaches the learning process through their experiences (Harlow, Cummings and Aberasturi, 2007). Bruning et al. (2004) identify that the learners construct their knowledge and learn by experiences from what they know. Constructivism places its main concern on “the phenomena of the study and sees both data and analysis as created from shared experiences and relationships with participants and other sources of data” (Charmaz, 2006, p.130). Whereas Puddephatt (2006) and Charmaz (2014) use the term ‘constructivist’ to recognise the effort shown by the researchers in the construction and interpretation of the data. Charmaz’s stance on social constructivism was influenced by Vygotsky (1962) and Lincoln (1995) who focus on “social context, interaction, sharing viewpoints, and interpretive understandings” (Charmaz, 2014, p.14). Both of them perceive the concept of knowing and learning as a part of social life.

Shaping by ontological relativism and epistemological subjectivism (Mills, Bonner and Francis, 2006; Charmaz, 2014), Charmaz (2006) developed constructivist grounded theory in contradiction to the original approach by Glaser and Strauss (1967) and Strauss and Corbin (1990). This stance of grounded theory allows for ‘interactive relationships’ to happen between both parties; researcher and participants, which was
the main intention to achieve the objectives. Charmaz (2006) agrees for ‘constructing’ the interaction that exists between both entities or, in other words, “assumes the relativism of multiple social realities, recognises the mutual creation of knowledge by the viewer and viewed, and aims toward an interpretive understanding of subjects’ meanings” (Charmaz, 2003, p.250).

‘Truth’ is always being discussed by qualitative researchers, including grounded theorists. As briefly mentioned in this earlier section, constructivist grounded theory allows for ‘multiple truths’ derived from both entities: the participants and the researcher. This was identified as amongst the uniqueness of constructivism introduced by Charmaz (2006) apart from ‘social construction’ and ‘reviewing extant literature’. Without a doubt, in her stance, she introduced the concept of ‘multiple truths’ that arise from the various backgrounds, experiences, knowledge and others around the participants which create variation in the data collected. Indeed, the involvement of five emergency physicians in this study enhances the findings from the perspectives of different professions. With regard to reviewing literature for the grounded theory approach, Charmaz (2006) allows researchers who adopt constructivism to explore the extant literature so as to give an overview of the studied population and its current situation. Charmaz (2006) also emphasised the use of ‘gerund’ in her version of the grounded theory which is exclusive. From the researcher’s exploration of the various approaches of grounded theory, the aim of this study was best achieved via constructivist grounded theory as described by Charmaz.

3.1.8 Summary of the methodology section

Despite three methodologies available to be chosen for this study: phenomenology, narrative study and grounded theory, grounded theory is the best solution to fulfil the objective of this study. Having reviewed grounded theory, the constructivist grounded theory drives the methodology that underpins this study by utilising the constructivist approach of Charmaz. This study adhered to Charmaz’s steps for conducting grounded theory study at all stages until its completion. Constructivist grounded theory positions
the researcher amongst the respondents and clarifies the area of what can be known. The constructivist grounded theory approach by Charmaz is most likely to answer the aim of this study: to explore the experiences of nurses during disaster response, hence, knowing the factors that contribute to, and hinder, nurses’ effectiveness while responding to disaster events.

**PART TWO: METHODS**

### 3.2 Introducing methods employed for the study

Corbin and Strauss (2008) and Birks and Mills (2015) define methods as a technique and procedures for collecting and analysing data. Methods extend and broaden the studied phenomenon where the respondent’s ‘life’ is seen from the ‘inside’ by the researcher, through the methods applied. The focus of this study was the nurses that had participated in disaster response teams, in order to explore their experiences during catastrophic events.

Apart from nurses as a core sample, this study involves emergency physicians, to discover their opinions, thoughts and views about nurses’ involvement during disaster responses. The inclusion of the emergency physicians could help this study to better understand the nurses’ situations from the point of view as physicians. As disaster management is under the purview of the emergency department, their opinion is respected. It could also help in transforming the current state of some hospitals impending involvement of nurses in disaster, including all stages from the beginning of pre-disaster (mitigation and preparedness) phase, disaster phase (response phase) until post-disaster (recovery) phase.

This section introduces study setting and population, ethical consideration process, means of data gathering that abides by the constructivist approach of grounded theory according to Charmaz (2006) until the process of analysing the data. Finally, as proposed by Charmaz (2006), to ensure quality and trustworthiness, the method’s: credibility, originality, resonance and usefulness adopted throughout this
study. The discussion of the methods starts with a brief presentation on the geographical location of the study.

### 3.2.1 Study setting

Malaysia, located in the South East Asia region, is divided into two parts: West Malaysia (also known as Peninsular Malaysia) and East Malaysia (a part of Borneo Island) which are separated by the South China Sea. Figure 3.1 is a map of Malaysia, divided into regional areas: central, northern, eastern, southern and East Malaysia. This study focuses on hospitals located mainly across Peninsular Malaysia.

![Figure 3.1: Regional divisions of Malaysia](http://www.mlit.go.jp/kokudokeikaku/international/spw/general/malaysia/index_e.html)

Source: Ministry of Land, Infrastructure, Transport and Tourism, JAPAN (MLIT). From: 
There was a total of nine hospitals within Kuala Lumpur, Kelantan, Terengganu, Pulau Pinang, Kedah and Johor, one hospital from each of the states, respectively, with another three hospitals were located in Selangor. Initially, ten hospitals responded to invitations to participate in this study, two of which were from Johor. However, only one of these two, decided to participate when the researcher paid a visit as no nurses responded to the call for being respondents in this study.

There are a total number of 138 government hospitals under the purview of the Ministry of Health, Malaysia (as of December 2018). Hence, theoretically, the number of selected hospitals in this study as compared with the total number of hospitals in Malaysia is unable to represent the holistic situation in Malaysia. Nonetheless, the nine hospitals were chosen as they were heavily affected by various major disasters such as tsunamis, landslides, floods and pandemics as well as man-made disasters, such as mass-casualty incidents, in comparison with the other 129 hospitals. Some hospital buildings and staff were directly affected by the disasters. In addition, the nine hospitals are led by emergency physicians and they are actively organising disaster training. The list of hospitals involved can be seen in Table 3.1 and it also explains the type of disaster responded to by the selected hospitals.

Table 3.1: List of hospitals selected for the study

<table>
<thead>
<tr>
<th>Study sites</th>
<th>Location</th>
<th>Hospital Involved</th>
<th>Disaster type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern region</td>
<td>Pulau Pinang and Kuala Muda, Kedah</td>
<td>2 hospitals</td>
<td>Tsunami</td>
</tr>
<tr>
<td>Central region</td>
<td>Selangor and Kuala Lumpur</td>
<td>4 hospitals</td>
<td>Landslides, Mass casualty incidents &amp; Pandemics</td>
</tr>
<tr>
<td>Southern region</td>
<td>Batu Pahat and Kota Tinggi, Johor</td>
<td>2 hospitals</td>
<td>Floods</td>
</tr>
<tr>
<td>East coast region</td>
<td>Kuala Krai, Kelantan and Kemaman, Terengganu</td>
<td>2 hospitals</td>
<td>Floods</td>
</tr>
</tbody>
</table>

None of the hospitals in East Malaysia were involved in this study as it requires air transportation for the researcher to reach the locations. Furthermore, the two states
located in East Malaysia are hardly affected by disaster except for earthquake at Mount Kinabalu, Sabah in June 2015. As the proposal of this study was prepared in early 2015, prior to the incident, the event was exempted. This limitation will be further explained in chapter five. Despite this scenario, there was one respondent who had been involved during the armed intrusion in the state of Sabah, in East Malaysia in February/March 2013. This experience was included in the data gathering and was analysed accordingly.

3.2.2 Ethical approval

This study sought approval from the Biomedical and Scientific Research Ethics Committee of the University of Warwick (BSREC) and the Ministry of Health, Malaysia Research and Ethical Committee (MREC). The BSREC approved the application on 1st February 2016 and was given an identification code: REGO-2016-1742 (see Appendix 3.4). Prior to obtaining approval from the Ministry of Health, this study also sought permission from the Head of the Emergency Department of each hospital participating as well as each Hospital Director. The study also required approval from the State Health Department (Jabatan Kesihatan Negeri) of seven states of the respective hospitals under their purview, which in the end, had them all.

Once permission was granted by all of the institutions, the researcher then had to enter the information required via electronic forms in the Ministry of Health website of the MREC’s system before permission was given by the Ministry of Health, Malaysia for the study to be carried out. In addition, the MREC authorised this study to be conducted in Malaysia by issuing a letter dated 7th January 2016 (as in Appendix 3.5). The process of applying approval from the Ministry of Health, Malaysia began when the Investigator’s agreement-Head of Department-Institutional Approval (IA-HOD-IA) was filled in by the Head of Division of Health Sciences, Warwick Medical School (as in Appendix 3.6). Following the step, the selection process of the participants then started when the permission to access the hospitals was granted by the Ministry of Health, Malaysia, which agreed in principle if the ‘gatekeepers’ had given permission to carry out the study on their premises (as in Appendix 3.7). Apart
from that, approval to conduct the study also obtained from the Economic Planning Unit, Malaysia due to the researcher is currently studying abroad (as in Appendix 3.8). The way in which respondents were selected is discussed next.

a. Process of getting consent

Within the clause stated in Declaration of Helsinki and Nuremberg Tribunal, the participants must be notified and informed consent must include “duration, methods, possible risks, and the purpose or aim of the study” (Soble, 1978, p.40). The respondents were informed about this study and the researcher explained concisely about the intention prior to the interview session. Therefore, ahead of their involvement, the participants were provided with a ‘Participant Information Sheet’ (Appendix 3.9; a & b) and Consent form (Appendix 3.10) that required their signature as a proof of agreement of participation. The researcher had prepared both documents in both languages: English and Malay. Considering having two groups of participants: nurses and doctors, therefore, this study offered a separate document for both groups, respectively.

The researcher verbally read them the consent form and asked for agreement from the participants before signing the consent form and commencing the interview. The researcher then ensured that all participants understand what this research was all about. When they signed, it was assumed that the respondents were willing to participate in this study. Green and Thorogood (2009) and Christians (2005) discuss that the decision to be involved should be accepted voluntarily by the participants and there should not be any form of coercion. The respondents were informed and it was emphasised that the respondents could withdraw from the study at any time, without any implications. They were permitted to make the decision to withdraw from this study at any point of time they wished and they were informed that they had the ‘right’ to do so.
b. Assistance from psychiatrists

Implementation of ethical principles was important and the researcher was concerned about the risk of uncovering that participants had developed psychological trauma post-disaster. Unlike countries that have more advanced social support groups, for instance, the United Kingdom (U.K.), the United States (U.S.), Japan and Australia, Malaysia is lacking non-governmental organisational (NGOs) support with regard to psychological matters relating to post-disaster scenarios. Therefore, there are fewer support groups or charities that might provide psychological support. Such support would have to be provided by medical doctors in the Malaysian context. The researcher assisted those respondents that might have required psychological support by offering them a psychiatrist consultation at any point in time if they developed any symptoms of distress. This is seen as appropriate practice in the Malaysian context.

For this purpose, the researcher has made an arrangement with a psychiatrist from the researcher’s home university and would refer them immediately to him. The researcher also received support from other psychiatrists who are his colleagues, if referral were needed. The plan was, if there are any issues raised, the researcher should cease the interview. At any point of time, if they need a psychiatrist consultation, the researcher would immediately give a call to the psychiatrist and he would make a referral to a psychiatrist in the particular hospital where the respondent currently works. If necessary, the interview would be discontinued or rescheduled, depending on the decision of the respondents themselves. In fact, there were no cases of distress or traumatic event post-disaster throughout the interviews. Consequently, there were no psychiatric referrals.

In this study, the principle of ethics was upheld in respect of: autonomy, non-maleficence, confidentiality and anonymity. The U.S. National Commission for the Protection of Human Subjects in Biomedical and Behavioural Research was established in 1978 to guide the standards of research conducted involving human subjects. It demands “respect for persons, beneficence and justice” (Christians, 2005,
and require researchers to show respect and treating the individuals that involve in the study to be treated as independent.

c. Record keeping and preserving the confidentiality

The interviews were recorded *via* voice recorder with permission from the respondents. The voice recording data were kept in a secret file in the personal laptop. The interview transcripts and any related documents were kept strictly confidential and private inside a locked drawer. In addition, the anonymity of the respondents was preserved. While the study was done at the Warwick Medical School, all documents were kept in locked drawers provided at the University. At the time when the researcher returned to Malaysia, all related documents were kept in a locked drawer in the postgraduate room that was only accessible to the authorised personnel at the Faculty of Nursing of the researcher’s home university. Since the process of transcribing was solely done by the researcher, confidentiality was maintained. During the process of back translation, the confidentiality of all documents was protected since the work was done solely by the researcher. Indeed, during the process of proofreading, the proofreaders were also abided to their professionalism in ensuring the confidentiality of the information.

Codes of ethics require all studies safeguard the participants’ identities and that personal data must be preserved confidentially (Kaiser, 2009). Hence, pseudonyms were used to conceal the identity of the individuals and preserved their privacy. They are ‘coded’ in any citations within this thesis and any future publications to mask their identity, for example, SNX-45 and DRY-07. It represents their designation and gender as well as their study number. Not in any of the documents involved revealed the actual name of the respondents, except where is needed such as in the consent form.

d. Summary of a section of ethical matters

This study obtained approval from all parties prior to its commencement and ethical considerations were observed throughout the process of getting the participants. The
researcher has taken steps to explain the study to the participants, ensured that support from the psychiatrist was available during the period of the interview as well as preserving all records related to the study in a safe place and kept anonymity. This study acted in accordance with all requirement in regards to ethical principles. Once the confidentiality was assurred, the study has began to recruit the potential respondents and the method of theoretical sampling was applied.

3.2.3 Applying theoretical sampling method

In grounded theory studies, sampling begins from the very first respondent (Foley and Timonen, 2015). The strategy of gathering data and focusing on the category and its properties are known as theoretical sampling. Grounded theorists came into a consensus that, in any grounded theory studies, theoretical sampling is applicable. This study applies a grounded theory approach for the sampling strategy: theoretical sampling. Glaser and Strauss (1967) define theoretical sampling as “the process of data collection for generating theory whereby the analyst jointly collects, codes and analyses data and decides what data to collect next and where to find them, in order to develop the theory as it emerges” (p.45). While Strauss and Corbin (1998) defined theoretical sampling “as a means to maximise opportunities to discover variations among concepts and to densify categories in terms of their properties and dimensions” (p.201).

From Charmaz's (2006) point of view, theoretical sampling begins when researchers have some preliminary categories to develop. Theoretical sampling is “always purpose-driven; the sample is selected for the purpose of explicating and refining the emerging theory” (Breckenridge and Jones, 2009, p.118). The sampling strategy assists this study by progressively developing theoretical sensitivity which is essential for grounded theorising. Theoretical sampling seeks relevant data to generate an emerging theory and it begins when researchers have some preliminary categories to develop (Charmaz, 2006). “It may involve the purposeful selection of an initial starting point before moving into theoretical sampling when data analysis begins to yield theoretical concepts” (Breckenridge and Jones, 2009, p.119). It is also a process
of choosing “incidents, slices of life, time periods, or people on the basis of their potential manifestation of representation of important theoretical constructs” (Patton, 2001, p.238)

Theoretical sampling differs from purposive sampling even though both techniques are looking at the specific characteristics of the participants. Purposive sampling is a technique in which the participant is selected based on the criteria or qualities they have that suit the objective of the study (Etikan, Musa and Alkassim, 2016). The purposeful sampling technique chooses the participant sampling criteria before conducting the study whilst the grounded theory (theoretical sampling) technique occurs as the data progress. As a preliminary step, those respondents were chosen who conformed to the listed inclusion criteria. Consecutively, it progressed according to theoretical sampling technique until it achieved saturation.

In conclusion, theoretical sampling in this study was a situation where the study had chosen respondents that fulfilled the criteria to represent the importance of theoretical constructs. The appropriate sampling decisions in this study ‘built’ throughout the whole process. The process was repeated and was ongoing until the data reach theoretical saturation. In this study, no new data emerged and there was no repetition of the data provided by the respondents when the study had interviewed thirty nurses and five emergency physicians.

3.2.4 Recruiting the respondents and mapping them geographically

This study focused on nurses as they are actively involved during disaster response working alongside doctors, assistant medical officers and other auxiliary staff in the healthcare professions. Indeed, nurses make up the largest proportion of healthcare providers (Kurtzman et al., 2010), not only in Malaysia but worldwide. As nurses frequently deploy to the disaster area, therefore, knowing their experience could ‘shape the landscape’ of disaster nursing management in Malaysia. This study addressed a person or groups of individuals, in this case nurses, who are knowledgeable about or have a similar experience (Creswell and Clark, 2011; Palinkas
et al., 2013) and were willing to be involved in the study. They had to be accessible as well as able to communicate their opinions and experience (Spradley, 1979; Bernard, 2002; Palinkas et al., 2013). Creswell and Clark (2011) and Palinkas et al. (2013) suggest targeting a person or groups of individuals who are knowledgeable and have comparable experiences. In addition, Spradley (1979), Bernard (2002) and Palinkas et al. (2013) recommend focusing on those respondents that are willingly involved in the study, approachable and have the ability to communicate their opinions and experiences.

This study approached nurses with experience, who worked in hospitals that actively responded during disasters. Indeed, this study comprises a diverse background of the target population. Creswell (2007) proposes that the number of participants require to reach theoretical saturation is likely between 20 – 60 individuals. However, Charmaz (2006) suggests 20 – 30 participants. Even with a ‘small’ sample, grounded theory studies, in particular, the constructivist grounded theory gains a large amount of data. Malaysian nurses who have been involved in disaster response, for instance, epidemics, floods, tsunamis, landslides, mass casualty events etc. were invited to participate in this study. Selection of the respondents is essential as they are capable of producing significant information as well as provide rich-information data. In this study, the participants were nominated by the gatekeepers of each hospital, according to their knowledge of the topic proposed (Ploeg, 1999) while taking the exclusion criteria into consideration. The inclusion and exclusion criteria for selecting the participants were tabulated in Table 3.2 below.

*Table 3.2: Inclusion and exclusion criteria*

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>All nurses involved in any disaster response after the 2004 Andaman earthquake and who consent to take part.</td>
<td>- Nil -</td>
</tr>
<tr>
<td>Currently working at a hospital that has given permission to carry out the study at their facility.</td>
<td></td>
</tr>
</tbody>
</table>
The process was established by identifying nurses who met the inclusion criteria, who could then provide rich-information data pertaining to their experiences during disaster response. The subsequent selection took into consideration the theoretical sampling methods explained in the earlier section. This study sought assistance from the matrons in-charge as gatekeepers at the hospitals, to assist in getting potential participants. The gatekeepers explained the process of selection to the respondents and, whenever nurses expressed interest, the researcher was informed and set up a date, time and venue for a preliminary meeting. The matrons were not being coerced in helping the researcher to get the potential respondents as they were given preliminary briefing by the researcher prior to conducting the interviews. Once the researcher had arrived at the hospital after receiving information about a prospective respondent from the gatekeeper, the researcher asked the respondent whether they knew any of their nursing colleagues at that hospital that had also been involved in any disasters. This method helps in collecting rich and significant information by assembling the respondents with relevant experiences of disasters. This study also used a snowball sampling after the primary respondents being identified by the gatekeepers.

In addition to the registered nurses (RNs) as a core sample, this study involved emergency physicians (EPs) as the experts in disaster management that had actively engaged in disaster response activities at their own institutions and departments. The EPs were selected through a purposeful sampling method. All of them were located at the hospitals in the state of Selangor.

The selection of five EPs based on the need for getting their opinions and views about nurses’ involvement during the disaster response as well as their views on current phenomena that are impeding nurses in actively participating in disaster management, which has relevance for this study. The five EPs were sufficient to have achieved the saturation of the data gathered as most of them had similar views and opinions with regard to the nurses’ involvement in disaster management.
Once the study had achieved saturation, the analysis and the sampling of the data ceased and finally, culminated in thirty nurses and five EPs having been engaged in this study. This study offered no monetary rewards to the participants but they were given a box of chocolates, bought from the supermarket in the U.K., where the researcher is currently studying, as a token of thanks for their time.

Geographically, more than half of respondents were situated in hospitals within the central region, and others were scattered within the east, north and south of the country. This study has no coverage of the other five states: Perlis, Perak, Negeri Sembilan, Melaka and Pahang including two states from East Malaysia, as these states have fewer reports of disaster incidents. Figure 3.2 illustrates the distribution of respondents across Peninsular Malaysia.

Figure 3.2: Geographical mapping of respondents' region of work
The figure demonstrates that many respondents involved were from the central region. This is due to the active participation, in the disaster response team, of those hospitals within the region. Furthermore, there are many emergency physicians currently based in the region, which is Selangor and Kuala Lumpur. Kuala Lumpur is the capital city of Malaysia, whereas Selangor is the most developed state in Malaysia. It offers sophisticated infrastructure such as highways and transport as well as having the highest density of population. It is, however, recognised as a disaster-prone area, compounded by huge numbers of high-rise buildings, industrial areas, highways and the airport/seaport that is located within the state.

### 3.2.5 Gathering rich data through interview and field notes

This study gathered data about nurses’ experiences during disaster responses including a wide range of their views, perceptions, opinions and thoughts. Glaser (2002) and Charmaz (2006) emphasised the importance of data by saying that all information drawn in the study should be considered as data. Qualitative research generally utilises semi-structured or unstructured interviews to collect the data from the participants. This study allowed the interviewers to elicit respondents’ interpretations of their experiences during disaster response. The interviews provide the data to develop a robust analysis and thus generate a strongly grounded theory (Charmaz, 2006). In addition, Birks and Mills (2015) emphasise that, in a grounded theory study, the diversity of the data leads to the value of the theory produced.

Rich-information data offers a concrete structure to establish a significant analysis. Charmaz (2006) states that, “rich data are detailed, focused and full. They reveal participants’ views, feelings, intentions and actions as well as the contexts and structures of their lives” (p.14). Geertz (1973) expresses that, to get rich data, one should seek for the density of the description of the study. According to Charmaz (2006), rich data may be collected through field notes and interviews. This study achieved the quality of data and evaluated the sufficiency of the data by understanding the contexts of obtaining ‘rich data’. The process of gathering rich-information in this study involved the collection of data pertaining to the substantive area then progressed.
to the analysis of the write-up as well as reflecting on the complete process. Besides, use of field notes helped the researcher to enrich the data gathered from the respondents.

The journey of the undertaking of this study began from the data gathered through in-depth interviews which allows for rich-information data to be extracted. Likewise, the researcher enhanced the quality of the data by learning how to obtain good data through the exercise and improving the skill of interviewing. This study gathered the rich data through field notes from the interview which helped in forming the theory or codes.

Due to the nature of this study, in-depth, individual qualitative semi-structured interviews were utilised to gain rich data. Indeed, semi-structured interviews fitted well with a grounded theory which seeks in-depth information and generally focuses on experiences, values and decisions. However, this study focused on interviews including field notes to gather and obtain rich data that were detailed and focused through it. Writing up field notes and memoing helped the researcher to gain more information about the participants and their contexts with regard to their character, gesture and anything that could be ‘an information’ to the researcher while carried out the interviews. The procedures for conducting the semi-structured interviews will be explained in the next section.

a. Carrying out qualitative interviews and their procedures

Researchers divide interviews mostly into structured, semi-structured and unstructured (Bryman, 2001). In addition, Gall, Borg and Gall (2003) introduced a classification of the interview and divided them into the informal conversation, general interview guide approach and standardised open-ended interviews. Out of these three categories, this study employed the general interview guide approach to lead the whole process of the qualitative interviews which are also known as a semi-structured form of interview. In grounded theory studies, in-depth interviews are needed. The in-depth qualitative interview requires enough time and is useful in exploring issues in-depth
and for knowing about a person’s thoughts and behaviours (Boyce and Neale, 2006). It also builds up intimacy for mutual self-disclosure. It also seeks ‘deep’ information, commonly focusing on experiences, values, and decisions and so on. The interview elicits participants’ interpretations of their experiences during disaster response.

b. Preparing the interview

Grounded theory study allows researchers to create open-ended, non-judgmental questioning to stimulate interviewees to recount their experiences. In this study, the researcher formulates open-ended, non-judgmental questioning with prompts, where necessary (see Appendix 3.11; a & b). However, grounded theory study encourages minimal structure of the questioning in order to let the data emerge naturally. The interview preparation begins when the interview guide was formulated in advance with minimal structure of the question as it is vital in assisting the researcher to pose questions referring to the objectives. A general interview guide approach is compliant for this study as it is more organised, compared with an informal conversation interview and slightly less firm than a standardised open-ended interview.

The interview guide leads to the required information to address the objectives of this study being obtained. It provides beneficial guidelines to expedite the process of interviewing and minimises ambiguous questions. The sequence of the questions can be non-linear and the necessity to pose questions depends on the answers given by the respondents. It allows freedom for the respondents to express their ideas as, for some interviews, the respondents had discussed their responses ahead of the questions. In addition, the ambience of the informal situation allows these interviews to further enhance the conversation and, according to Turner (2010), it permits building up a good rapport which increases the information shared during the interview.

Many researchers recommend several steps to prepare interviewers prior to the interview session. For example, the eight principles as suggested by McNamara (2005) which generally outlines the necessity to prepare a conducive environment: explain the study including anonymity, confidentiality and privacy; the time taken for the
interview session and address any concerns about the study. These criteria are important to encourage respondents to share and express their experiences during disaster responses. Prior to the actual interview being carried out, the research had piloted the topic guide to ensure the topic guide would take account of the information required.

c. Piloting the interview

In order to ensure the topic guide interview achieves the objective of this study, a pilot study was performed, testing the interview questions and prompts with three nurses. The main purpose of the pilot test is to identify the drawbacks and weaknesses (Kvale, 2007) of the interview guide, prepared beforehand. Furthermore, pilot testing facilitated improvement and modification of the questions. In relation to the respondent, this study identified a similar character to the actual respondent and they were included in the study since there was no amendment needed to the interview topic guide.

d. Summary of qualitative interview section

The data collection took nine months and involved thirty-five interviews to reach saturation. Apart from the thirty nurses, five emergency physicians with the subspeciality of disaster medicine were interviewed. Information was collected through encrypted, digitally recorded interviews, for respondents to share their experiences. All respondents, except the emergency physicians, requested the interview be carried out in the Malay language despite speaking English since most Malaysian nurses have adopted the Malay language as a medium of interaction. In this situation, they could easily express their notions using their own native language. The interviews with the emergency physicians were conducted in the English language as per request. Once agreed, the respondent signed the consent forms (as mentioned earlier in section 3.2.2) and the researcher then carried out the interview at a convenient place and time.
The interviews were conducted in an average of forty-five minutes (range: from thirty minutes to one hour) within the hospital environment, for all except one respondent, who chose to be interviewed in a park. The range of thirty minutes to one hour of interviews allowed the respondents to express their notions about their experiences during disaster responses and helped in gathering rich-information data. Achieving the objective of attaining rich-information data meant the researcher employed Charmaz’ approach for both gathering rich data and analysing the data as explained in the next section.

3.2.6 Adding field notes to gain rich data

In addition to the interview, this study involved taking field notes for achieving the rich-data. Field notes are common data produced during fieldwork (Montgomery and Bailey, 2007). According to them, understanding the functions of field notes and memoing would enable researchers to evolve the data to a higher interpretative level. It is more likely an observational memo would be made during the interview period when the researcher observed and took a few notes about the studied population. It includes physical appearance such as gestures, facial impressions and the environment where the interview were conducted. Field notes assist and facilitate the researcher to add to the other types of data other than the interview transcripts. Field notes are important as, sometimes, important information could not be captured by the voice recorder. Such example, in this study, there was a situation where the researcher could see tears in the interviewee’s eyes but she remained calm during the interview. There were no changes to her voice and these additional data would not be recorded by the voice recorder.

3.2.7 Process of analysing and giving meaning to the data

In the grounded theory process introduced by Charmaz (2006), analysis of the data begins promptly, following data collection from each participant prior to the interview with the next respondent. The processes of data collection and analysis are ongoing steps throughout the study. The researcher simultaneously and iteratively collected as
well as analysed the data gathered from nurses’ experiences in order to generate a theory from the categories identified. The reason for this is to ensure the effectiveness of theoretical sampling implementation (Charmaz, 2015) and to keep the originality of the data. The researcher analysed the findings gradually and steadily.

The interviews were conducted in the Malay language, as requested by the nurse participants. The field notes were written mixed up in both languages, though mainly in Malay. Thus, it is essential to preserve the entire statement in that particular language. The data in this study were analysed and organised conventionally: thoroughly and systematically without using any computerised data analysis software. Prior to the analysis stage, all raw data obtained from the voice recorder were transcribed using ‘Transcribe Wreally’ software (https://transcribe.wreally.com). This software provides clear audio, which can be slowed down and it is much faster than other traditional methods such as media player and a word processor. All data were keyed-in in the Malay language, except the emergency physician’s transcripts as they were already in English. Once all the transcripts had been captured into the software, it was saved in a specific file in the driver. Any potentially identifying sections of the transcript were removed (for example, names of other staff).

The researcher checked the Malay transcripts as she is a native speaker of the language. Later, the transcripts were translated into English by the researcher and this process was followed by obtaining assistance from a translator to approve and validate the translation of all transcripts, professionally. The translation accuracy was checked and then was audited (back-to-back translation, Malay-English-Malay) by the researcher to ensure the meaning remains as it is after going through the process of re-translation. Any words that were difficult and unable to be translated accurately into English were preserved as they were, in order to avoid misinterpretation as well as to safeguard the essence of their words.

In this study, all of Malay words were translated precisely into English words and the meaning was accurately interpreted. The translation was given the same meaning as expressed by the respondents. The researcher ensured the meaning of the
translated words were equivalent and close to the Malay word. Finally, the themes which emerged from the analysis were preserved in English, emulating the steps demonstrated by Shih et al. (2002). The nurses in their study (Shih et al., 2002) were interviewed in their native language: Mandarin or Taiwanese using Chinese handwriting and, to ensure the accuracy of the data, the authors conducted translate-retranslate from Chinese to English and back to Chinese. Once all the data had been translated, the researcher began the next step of analysing the data. While analysing the data in grounded theory study, there are a few procedures to be followed: applying theoretical sensitivity and memo-writing/memoing, employing coding, initial coding, focused coding, theoretical coding and implementing constant comparison until data saturation is reached. The explanation of this procedure will begin with theoretical sensitivity.

a. Applying memo-writing/memoing to develop theoretical sensitivity

Memo-writing, also known as memoing is a key activity of grounded theory studies which is concerned with the codes and categories emerging from the data and the analysis. Memos are used as a technique to enhance the outcome of the data throughout the study (Birks, Chapman and Francis, 2008). Literally, it is not restricted to theoretical-methodological codes and it provides links between categories. Memo-writing prompts researchers to analyse the data and codes earlier in the process which makes researchers keep up their involvement in the analysis (Charmaz, 2006).

According to Birks, Chapman and Francis (2008), memoing permits a researcher to integrate, examine and probe these interpretations along the process of engagement with the data, leading to theory construction (Birks and Mills, 2015). Memos serve as a record of the research and analytical progress. They record thoughts, feelings, insights and ideas along the research process (Birks and Mills, 2015). Thus, Birks and Mills (2015), Charmaz (2006), Corbin and Strauss (2008) and Goulding (2001) all encourage researchers to keep all the memos so they can be revisited, revised and reviewed later. It is also useful in guiding researchers to make “conceptual
Revising memos helps to highlight the missing gaps within this study where more data are needed to reinforce the categories (Charmaz, 2006) until theoretical saturation is achieved. Memoing assists and prompts in and throughout the study by recording the opinions, feelings, understandings, perceptions and thoughts of nurses’ experiences involved in disaster responses. It also provides adequate evidence and assists in identifying those gaps in data analysis for constructing the theory in exploring nurses’ experiences during the events. Data collected from this study were recorded at the earliest time with no concern for grammatical errors or even spellings as to minimise the risk of ‘block’. The researcher kept the memos until the end of the study as every single word said by the respondents is considered as ‘data’ and may be needed later on.

Theoretical memo facilitates theoretical coding process. Subsequently, this study used ‘sticky labels’ to sort and link concepts which emerged from the data. Revising memos highlights the gaps in this study which need to be filled and they require more work to reinforce the categories (Charmaz, 2006). Once realising the weakness of the data, it is then essential to the researcher to search for more data until it achieves theoretical saturation.

b. Theoretical sensitivity

Theoretical sensitivity is one of the most important characteristics in grounded theory studies. Noble and Mitchell (2016) have said that theoretical sensitivity is an ability to sort out which data are relevant and give meaning, as well as understanding the data. It responds to the research questions, thus leading to theory formation and construction in relation to disaster experiences. As informed by Charmaz (2006), “to gain theoretical sensitivity, we look at studied life from multiple vantage points, make comparisons, follow leads, and build on ideas” (p.244) in this study, the researcher has taken several steps to have a better understanding of the topic which was 1) reading
the related literature, 2) through professional and personal experience as an emergency/disaster nurse and 3) analysing the data, hence, helping to build up the data.

Theoretical sensitivity is a pivotal point in generating concepts gained from the data (Glaser and Holton, 2004). As suggested by Glaser and Strauss (1967), to develop theoretical sensitivity, researchers should defer the reading of the literature or articles in relation to the topic, until the analysis is nearly completed. However, in this study, the researcher proceeded with a preliminary reading on the literature as recommended by Charmaz (2014) since this study took constructivism as its methodology. Indeed, having an experience as an emergency and disaster nurse allowed the researcher to develop an early idea about nurses’ experiences amidst their duty in responding to disasters. Though, this situation was not interfered with the data obtained from the respondents since the researcher is aware her stance as an ‘outsider’ and further explanation on this matter is available in section 5.6.4 on reflexivity.

c. Employing coding in analysing the data

Coding is the initial step required to process the data in grounded theory methods. Coding is defined as the process of interpreting what the data are all about, which is the initial step beyond concrete statement and naming segments of data as well as concurrently categorising, summarising and accounting for every piece of data gathered (Charmaz, 2006). Grounded theory coding is a pillar to the development of a theory which shapes the researchers’ analytic frame (Charmaz, 2006). The way of coding depends on the selection, separation and sorting of data prior to analysing it.

Grounded theory coding, which is flexible, provides the researcher with preliminary ideas that can be explored and analysed systematically and it is not only a matter of sifting, sorting and synthesising data (Charmaz, 2006). Charmaz identifies three forms of coding: initial, focused and theoretical coding (Evans, 2013). Charmaz (2006) explains the process of coding as beginning from opening the data for investigation until a selective process is used to integrate grounded theory in the
theoretical coding. This helps to clarify, refine the analysis and interpretation of the data as the researcher codes the data obtained from the respondents. The example of coding was enclosed (see Appendix 3.12).

**Initial coding**

Initial coding concentrates on “fragments of data – words, lines, segments and incidents which is closed for their analytic import and prompt you to realise areas that showing incomplete data” (Charmaz, 2006, p.42). The researcher began the procedure by briefly read the script word-by-word, followed by line-by-line. Charmaz (2006) explained thoroughly the process of initial coding begins when the researcher will “open the data for exploration, stay close with data, keeping codes as simple and precise, construct shortcodes, preserve actions, compare data with data and move quickly through the data” (Charmaz, 2006, p.49) besides doing it word-by-word, line-by-line coding or doing it from incident to incident coding.

The researcher did the line-by-line coding rapidly and, later on, continued to write memos concurrently. All data from the interviews are considered important. The researcher kept all information and highlighted which are needed. The selectivity of the data is important and it creates large numbers of codes in the scripts. This is the phase in which the mine of ‘large’ amounts of data is available and the researcher has sorted and synthesised the data further to the focused coding. During initial coding, the researcher remained ‘open’ to any potential data that are significant to the study and used focused coding to point out which data should remain.

**Focused coding**

Apart from the first step of coding, Charmaz (2006) introduces a focused coding, the next process after initial coding, which is a method of selecting what are to be the most useful initial codes and to test them. This type of coding is a continuation of initial coding. The codes are selective, directed and more conceptual as compared with the initial coding (Glaser, 1978; Heath and Cowley, 2004). At this stage, the researcher started to read the script repeatedly until the useful initial code was acquired from the
‘initial coding’ process and given ‘focus’ to the code to make it ‘valuable’ and relevant.

Focused coding uses the most remarkable and/or common codes and requires a decision to be made of the most analytic sense to categorise the data completely (Charmaz, 2006). This phase permitted the researcher to be more selective and to sort and separate the ‘large’ amounts of data. Generally, this process allowed the researcher to re-analyse and keep the most useful initial codes as identified earlier during the initial coding process and then move forward to the next stage of coding: theoretical coding.

Theoretical coding

Charmaz (2006) describes the last form of coding as theoretical coding, which is an intricate level of coding and the resulting codes may assist in the analytical story that has consistency. Analysis of the data in this study have taken into account the data obtained thus it can create several coding ‘families’ and be able to discover the general context. Hernandez and Andrews (2012) describe theoretical coding as a part of the selection process used to integrate the grounded theory and it helps to clarify, as well as refine, the analysis and thus interpret the data (Charmaz, 2006).

On the other hand, Charmaz (2006) emphasises the dissimilarities of grounded theory coding from another qualitative encoding. It focuses on the codes for social and social psychological processes and not the topics. The emphasis is on actions with actions embedded in the codes, uses gerunds, makes coding processes iterative, aims for specificity, allows for imaginative interpretations, compares data with data, prompts the researcher to remain active in the process – kinaesthetic and rejects requirements for agreement among coders (Charmaz, 2006).

Theoretical coding is the final stage of coding introduced by Charmaz and this is the most crucial stage as it assists in developing a ‘theory’ that leads the discussion on nurses’ experiences. It required the researcher to do thorough and ‘back-to-back’
reading in order to develop codes that contribute to the theory development, in relation to nurses’ experiences during disaster responses. The researcher mapped the themes accordingly and the process happened back and forth a few times until the final themes emerged.

**Summary of the coding for this study**

The process of coding in this study began with transcribing the scripts into different stages of coding as proposed by Charmaz (2006), then keeping the memos along with the process of data collection. The codes were repeatedly used to recognise the similarity of the concept and patterns of the respondent’ experiences (Birks and Mills, 2015). The researcher wrote notes on the extended codes, which are called memos along with the data collection process.

As a summary, the process of coding in this study begins with initial coding (word-by-word and line-by-line,) which allows for potential theoretical directions (Charmaz, 2006) and keeping the codes simple before proceeding with focused coding. Focused coding is a non-linear process and, during focused coding, the prominent categories were identified from the initial coding and then moved on to theoretical coding. Theoretical coding later provided a framework to enhance the data and underpinned the theory developed as well as incorporating the emerging substantive theory from the data.

**d. Implementing constant comparison**

Generating theories ‘grounded’ from the data requires systematic yet flexible ways, which involves a concurrent and iterative process of data collection. It helps in constantly comparing all the scripts and reached a similar code(s). This step is applied to develop a ‘theory’ in grounded theory studies. Constant comparison is a technique where the researcher establishes the key notions from the data previously collected and compares them with recent data to the later coding (Taylor and Bogdan, 1998; Kolb, 2012). It is a necessary approach for establishing grounded theory separately
from theoretical sampling (Strauss and Corbin, 1990; Locke, 1996; Taylor and Bogdan, 1998; Creswell, 2007; Kolb, 2012). The constant comparison requires the amalgamation of “systematic data collection, coding and analysis with theoretical sampling in order to generate a theory that is integrated, close to the data, and expressed in a form clear enough for further testing” (Conrad, Haworth and Neuman, 1993, p.280).

In this study, the researcher compared newly collected data with previously collected data among respondents from the beginning of the data collection. The data were then analysed using constant comparison technique as proposed by Charmaz (2006) prior to the emergence of the theories. The process is ongoing until theories are formed and confirmed throughout the research using coding and no more emerging data. This study utilised the constant comparison steps provided by Glaser and Strauss (1967) thus, the researcher could strengthen the production of the theory through the theoretical sampling process, subsequently sorting out the data, analysing and coding (Kolb, 2012). This process was carried out until it reached saturation.

e. Theoretical saturation

Charmaz (2015) emphasised that theoretical sampling seeks significant data to generate emerging theories until theoretical saturation is reached. The term theoretical saturation was introduced by Glaser and Strauss (1967) to explain the stage when grounded theory researchers should conclude their theoretical sampling (Saunders et al., 2018). This stage is a core element of the methodological approach in grounded theory. Wiener (2007) and Birks and Mills (2015) stated that saturation happens at the point of time when there are no more data needed.

Scholars define theoretical saturation as a process where the data are at a stage where no further codes or categories emerge during data analysis (Strauss and Corbin, 1990; Wiener, 2007; Birks and Mills, 2015). Morse (2015) suggests that saturation is “the most frequently touted guarantee of qualitative rigour offered by authors” (p.587) and it is a “gold standard by which purposive sample sizes are determined in health
Inability to reach saturation could have impact on the quality of the research conducted (Fusch and Ness, 2015). In this study, the saturation of the data was achieved when there were no more newly emerge data mentioned by the nurses during the interview. The researcher analysed the data following the principle of constructivist grounded theory until they reached theoretical saturation as previously explained. It ended when there were no new data added to the findings and the data were no longer available to be constructed.

3.2.8 Ensuring rigour

In qualitative research, credibility, transferability, dependability and confirmability are essential to ascertain the quality of the research which is similar to internal and external validity, reliability and objectivity for quantitative research (Guba, 1981). The quality and credibility spring from the data gathered in this study. The concept of rigour is similar to quality. Rigour maintains the ‘genuineness’ of the data from this study. Amidst grounded theorists, there were debates on the standard of rigour. Since this study adhered to the constructivist paradigm it, therefore, engaged with the version of Charmaz (2005) to guide this novice researcher on the application of grounded theory. Charmaz (2005) suggests nineteen items on the criteria for constructivism grounded theory which emphasise four criteria: credibility, originality, resonance and usefulness (see Appendix 3.13).

Rigour is crucial and, throughout the process of conducting research, the researcher had ensured the trustworthiness of the outcomes regardless of the philosophical and methodological approach by implementing reflexivity, through an audit trail with the supervisors and double-checking the data. Reflexivity is the process where the researchers pose inquiries on the research experience, decisions and interpretations and to what extent the researcher's interests, positions and assumptions influenced the inquiry. “A reflexive stance informs how the researcher conducts his or her research, relates to the research participants, and represents them in written reports” (Charmaz, 2006, p.188). In order to achieve the four criteria offered by Charmaz, this study integrates all the proposed measures.
Credibility guarantees the ‘true’ idea about the social representation of the respondents and it measures the expectations of this study. It includes establishing the ‘relationship’ of the context by engaging with evidence-based analysis from the study when the data collection was completed. The sufficiency of data gathered from thirty-five interviews gives value to the findings in this study. On the other hand, originality aims for new insights about the experience. It also examines whether the data “challenge, extend, or refine current ideas, concepts, and practices” (Charmaz, 2006, p.182). Taking into account that this qualitative study, with a focus on grounded theory perspectives, is the first ever conducted in Malaysia (as of August 2019), as presumed by the researcher, therefore, originality is observed. It is commensurate to the phrase of Charmaz (2006), “let the world appear anew through the data” (p.14).

Charmaz pays attention to resonance: the findings are required to represent the ‘lived’ experience of the respondents and the findings should be coherent to the respondents which this study believes that they were, as evidenced from the findings in this study. The diversity of background of respondents as well as their involvement in various types of disaster leads to the significance of this study having been conducted in Malaysia. The last criterion of usefulness is applied to a current scenario in Malaysia as it contributes to the ‘state-of-the-art’ of knowledge concerning disaster experiences which later could be applied by other researchers, not only in Malaysia but, perhaps in neighbouring countries or even beyond them, in the future. The findings could be useful in influencing the future planning of disaster nursing in Malaysia. These four principles by Charmaz (2006) help to “address the implicit actions and meanings in the studied phenomenon and help you analyse how it is constructed” (p.338).

3.3 Summary of the chapter

This study employed a constructivist grounded theory approach; from the methodology which informed the methods to guide along the process until the development of the model. The whole process of data collection and analysis in this study was done iteratively as it kept moving back and forth to ensure rich-information
data collected. The decision to use constructivist grounded theory as adopted in this study was to generate a theory based on the collected data, which reflects the nurses’ experiences during disaster responses. The process of collecting and analysing the data paralleled the methods proposed by Charmaz (2006) as adopted throughout the interviews.

For the purpose of facilitation throughout the procedure, the researcher has enrolled on seminars or courses relating to qualitative interviewing to enhance the researcher’s interview skills to help to gather appropriate rich-information data. The researcher also undertook a mock interview with supervisors and strengthened the data analysis by reading and watching related videos to support this process. In the following section, this study presents and discusses the findings emerging from the interviews.
CHAPTER 4: FINDINGS

4.0 Introduction

This chapter describes the respondents’ experiences of their involvement in a disaster response team. The findings explain how the nurses understood their journey of engaging with a disaster when they were deployed to various disaster areas across the Peninsular Malaysia. The chapter opens with a discussion of the sociodemographic background of the respondents and their geographical location, followed by the main findings. These are divided into categories and subcategories, which ultimately leads to the emergence of the core category of this study.

4.1 Describing the study context

The following section describes the sociodemographic background and geographical mapping of the respondents involved in this study.

4.1.1 Sociodemographic background of respondents

This section introduces the sociodemographic background of the respondents from nine hospitals in Malaysia. All of the respondents work in these nine hospitals. The ages of the thirty respondents involved in this study range from twenty-six to forty-four years, while their duration of working experiences ranges from three to twenty-two years. As women dominate the nursing profession in Malaysia, a greater number of females than males participated in this study; thus, of the thirty nurses who participated in this study, only four are male.

Of the thirty respondents, five were ward sisters, which is a ward manager or head nurse position in the nursing division of a government hospital in Malaysia. Most of the respondents work in the emergency department and have responded to various types of disaster, namely landslides, floods, tsunamis, mass casualty incidents, pandemics and conflicts (armed intrusion). In the context of Malaysian hospitals,
emergency department serves as the front line in handling disaster situations, regardless of the type. Table 4.1 contains additional facts about the respondents, whereby Table 4.2 informs about the emergency physicians that involved in this study. The actual identities of the respondents remain confidential and each respondent is given a pseudonym.
Table 4.1: Sociodemographic background of the nursing participants

<table>
<thead>
<tr>
<th>No</th>
<th>Pseudonym</th>
<th>Age</th>
<th>Gender</th>
<th>Working experience</th>
<th>Involved in training</th>
<th>Current workplace</th>
<th>Region</th>
<th>Designation</th>
<th>Disaster involvement</th>
</tr>
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<td>16 years</td>
<td>√</td>
<td>Postnatal Ward</td>
<td>Central</td>
<td>Sister</td>
<td>Pandemic</td>
</tr>
<tr>
<td>2</td>
<td>Azrinda</td>
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<td>Female</td>
<td>16 years</td>
<td>✗</td>
<td>Intensive Care Unit</td>
<td>Eastern</td>
<td>Staff Nurse</td>
<td>Flood</td>
</tr>
<tr>
<td>3</td>
<td>Ezlna</td>
<td>33</td>
<td>Female</td>
<td>10 years</td>
<td>√</td>
<td>Emergency Department</td>
<td>Northern</td>
<td>Staff Nurse</td>
<td>Mass Casualty Incident</td>
</tr>
<tr>
<td>4</td>
<td>Faizal</td>
<td>31</td>
<td>Male</td>
<td>8 years</td>
<td>√</td>
<td>Emergency Department</td>
<td>Central</td>
<td>Staff Nurse</td>
<td>Mass Casualty Incident</td>
</tr>
<tr>
<td>5</td>
<td>Fatimah</td>
<td>41</td>
<td>Female</td>
<td>18 years</td>
<td>√</td>
<td>Ministry of Health</td>
<td>Central</td>
<td>Sister</td>
<td>Mass Casualty Incident</td>
</tr>
<tr>
<td>6</td>
<td>Hasmawati</td>
<td>39</td>
<td>Female</td>
<td>16 years</td>
<td>✗</td>
<td>Administration Office</td>
<td>Eastern</td>
<td>Sister</td>
<td>Flood</td>
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<td>Imran</td>
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<td>Male</td>
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<td>Southern</td>
<td>Staff Nurse</td>
<td>Conflict (armed intrusion)</td>
</tr>
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<td>Male</td>
<td>7 years</td>
<td>√</td>
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<td>Central</td>
<td>Staff Nurse</td>
<td>Flood</td>
</tr>
<tr>
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<td>Laila</td>
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<td>√</td>
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<td>Staff Nurse</td>
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<td>Female</td>
<td>8 years</td>
<td>√</td>
<td>Emergency Department</td>
<td>Northern</td>
<td>Staff Nurse</td>
<td>Flood</td>
</tr>
<tr>
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<td>Pandemic</td>
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<tr>
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<td>Noofrazira</td>
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<td>Female</td>
<td>15 years</td>
<td>✗</td>
<td>Emergency Department</td>
<td>Eastern</td>
<td>Staff Nurse</td>
<td>Flood</td>
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<tr>
<td>13</td>
<td>Noraini</td>
<td>39</td>
<td>Female</td>
<td>16 years</td>
<td>√</td>
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<td>Eastern</td>
<td>Staff Nurse</td>
<td>Mass Casualty Incident</td>
</tr>
<tr>
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<td>Norasyrah</td>
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<td>5 years</td>
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<tr>
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<td>Norhazrina</td>
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<td>Female</td>
<td>16 years</td>
<td>√</td>
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<td>Northern</td>
<td>Staff Nurse</td>
<td>Flood</td>
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<tr>
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<td>Norila</td>
<td>33</td>
<td>Female</td>
<td>10 years</td>
<td>√</td>
<td>Emergency Department</td>
<td>Central</td>
<td>Staff nurse</td>
<td>Mass Casualty Incident</td>
</tr>
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<td>17</td>
<td>Norkiah</td>
<td>32</td>
<td>Female</td>
<td>9 years</td>
<td>✗</td>
<td>Paediatric Ward</td>
<td>Eastern</td>
<td>Staff Nurse</td>
<td>Flood</td>
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<tr>
<td>18</td>
<td>Nurulhuda</td>
<td>26</td>
<td>Female</td>
<td>3 years</td>
<td>√</td>
<td>Infectious Disease Ward</td>
<td>Central</td>
<td>Staff Nurse</td>
<td>Pandemic</td>
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<tr>
<td>19</td>
<td>Rahimah</td>
<td>44</td>
<td>Female</td>
<td>22 years</td>
<td>√</td>
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<td>Central</td>
<td>Staff Nurse</td>
<td>Fire</td>
</tr>
<tr>
<td>20</td>
<td>Ramliha</td>
<td>34</td>
<td>Female</td>
<td>11 years</td>
<td>√</td>
<td>Emergency Department</td>
<td>Central</td>
<td>Staff Nurse</td>
<td>Flood</td>
</tr>
<tr>
<td>21</td>
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<td>Female</td>
<td>7 years</td>
<td>✗</td>
<td>Surgical Ward</td>
<td>Eastern</td>
<td>Staff Nurse</td>
<td>Pandemic</td>
</tr>
<tr>
<td>22</td>
<td>Roslinda</td>
<td>36</td>
<td>Female</td>
<td>13 years</td>
<td>✗</td>
<td>Intensive Care Unit</td>
<td>Eastern</td>
<td>Staff Nurse</td>
<td>Flood</td>
</tr>
<tr>
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<td>Ruznah</td>
<td>40</td>
<td>Female</td>
<td>16 years</td>
<td>√</td>
<td>Postnatal Ward</td>
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<td>Staff Nurse</td>
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<tr>
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<td>Sabrina</td>
<td>36</td>
<td>Female</td>
<td>13 years</td>
<td>√</td>
<td>Emergency Department</td>
<td>Central</td>
<td>Staff Nurse</td>
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<td>Sharmita</td>
<td>31</td>
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<td>8 years</td>
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<td>Central</td>
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<td>Landslide</td>
</tr>
<tr>
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<td>Suriyah</td>
<td>42</td>
<td>Female</td>
<td>18 years</td>
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<td>Clinical Research Centre</td>
<td>Central</td>
<td>Sister</td>
<td>Landslide</td>
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<td>Syamsul</td>
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<td>Male</td>
<td>5 years</td>
<td>√</td>
<td>Infectious Disease Ward</td>
<td>Central</td>
<td>Staff Nurse</td>
<td>Pandemic</td>
</tr>
<tr>
<td>28</td>
<td>Yusnita</td>
<td>40</td>
<td>Female</td>
<td>16 years</td>
<td>✗</td>
<td>Operation Theatre</td>
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<td>Zalina</td>
<td>35</td>
<td>Female</td>
<td>12 years</td>
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<td>Tsunami</td>
</tr>
<tr>
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<td>Zarhana</td>
<td>31</td>
<td>Female</td>
<td>8 years</td>
<td>√</td>
<td>Emergency Department</td>
<td>Northern</td>
<td>Staff Nurse</td>
<td>Flood</td>
</tr>
</tbody>
</table>
Table 4.2: Sociodemographic background of the emergency physicians

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Pseudonym</th>
<th>Age</th>
<th>Gender</th>
<th>Working experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>DRY-01</td>
<td>Wong</td>
<td>39</td>
<td>Male</td>
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</tr>
<tr>
<td>2.</td>
<td>DRX-02</td>
<td>Shariza</td>
<td>46</td>
<td>Female</td>
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<tr>
<td>3.</td>
<td>DRY-03</td>
<td>Razwan</td>
<td>47</td>
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<td>4.</td>
<td>DRY-04</td>
<td>Izzul</td>
<td>36</td>
<td>Male</td>
<td>10</td>
</tr>
<tr>
<td>5.</td>
<td>DRY-05</td>
<td>Azman</td>
<td>47</td>
<td>Male</td>
<td>21</td>
</tr>
</tbody>
</table>

Although the majority of the respondents were from hospitals located in the central area, some of them were deployed to the East Coast region to assist their counterparts during floods. This accounts for the higher number of respondents from the central region participating in disaster response teams compared to those from other regions. Table 4.3 illustrates the mobilisation of the respondents during disaster response. The following section focuses on an analysis of the data gathered from the interviews during the journey across seven states.
Table 4.3: Regional mobilisation during disaster response

<table>
<thead>
<tr>
<th>Number</th>
<th>Code</th>
<th>Name</th>
<th>Pseudonym</th>
<th>Workplace (by region)</th>
<th>Deployment area (by region)</th>
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<td>02*</td>
<td>SNY-02</td>
<td>Kumaran</td>
<td></td>
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<td>SNX-03</td>
<td>Fatimah</td>
<td></td>
<td>Central (Kuala Lumpur)</td>
<td>Central (Kuala Lumpur)</td>
</tr>
<tr>
<td>04</td>
<td>SNX-06</td>
<td>Rahimah</td>
<td></td>
<td>Central (Kuala Lumpur)</td>
<td>Central (Kuala Lumpur)</td>
</tr>
<tr>
<td>05</td>
<td>SNX-07</td>
<td>Faizal</td>
<td></td>
<td>Central (Selangor)</td>
<td>Central (Selangor)</td>
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<tr>
<td>06*</td>
<td>SNX-08</td>
<td>Laila</td>
<td></td>
<td>Central (Kuala Lumpur)</td>
<td>Eastern (Kelantan)</td>
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<tr>
<td>07*</td>
<td>SNX-09</td>
<td>Ramlah</td>
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<tr>
<td>08</td>
<td>SNX-10</td>
<td>Marlina</td>
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<td>Northern (Pulau Pinang)</td>
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<tr>
<td>11*</td>
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<td>Norhazzina</td>
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<td>Eastern (Kelantan)</td>
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<tr>
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<td>SNX-14</td>
<td>Rohani</td>
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<td>Azrinda</td>
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<td>Eastern (Kelantan)</td>
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<tr>
<td>16</td>
<td>SNX-22</td>
<td>Rosilinda</td>
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<td>Eastern (Kelantan)</td>
<td>Eastern (Kelantan)</td>
</tr>
<tr>
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<td>SNX-24</td>
<td>Yusmita</td>
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<td>Eastern (Kelantan)</td>
<td>Eastern (Kelantan)</td>
</tr>
<tr>
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<td>Eastern (Terengganu)</td>
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<td>Norkiah</td>
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<td>Central (Selangor)</td>
</tr>
<tr>
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<td>Nor Asyirah</td>
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<td>Central (Selangor)</td>
<td>Central (Selangor)</td>
</tr>
<tr>
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<td>SNY-31</td>
<td>Mohd Syamsul</td>
<td></td>
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<td>Central (Selangor)</td>
</tr>
<tr>
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<td>SNX-32</td>
<td>Nurul Huda</td>
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<td>Central (Selangor)</td>
</tr>
<tr>
<td>24*</td>
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<td>Mazlinda</td>
<td></td>
<td>Central (Selangor)</td>
<td>Central (Kuala Lumpur)</td>
</tr>
<tr>
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<td>Norila</td>
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<td>Central (Selangor)</td>
<td>Central (Selangor)</td>
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<td>Suriani</td>
<td></td>
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<td>Central (Selangor)</td>
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<td>SNX-36</td>
<td>Ruzniyah</td>
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<td>Central (Selangor)</td>
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<td>28</td>
<td>SNX-37</td>
<td>Sharmila</td>
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<td>Central (Selangor)</td>
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<td>29*</td>
<td>SNY-40</td>
<td>Imran</td>
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<td>Southern (Johor)</td>
<td>Eastern (Kelantan)</td>
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<td>30**</td>
<td>SNX-41</td>
<td>Zalina</td>
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<td>Central (Selangor)</td>
<td>Northern (Pulau Pinang)</td>
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* Indicates that a respondent has been deployed to another region.

4.2 Explaining the main findings

This study explored the experiences of the respondents within a disaster situation. Three categories emerged from the analysis of the interviews with thirty respondents involved in disaster response in Malaysia. The categories of ‘establishing competencies and responsibilities’, ‘managing emotions’ and ‘getting support’ led to the emergence of the core category of ‘Ensuring Individual Sustainability when in a Hostile Environment’. Within the findings, gaps were observed in the respondents’ discussion of their experience of being involved in a disaster response team. These
gaps will be discussed together under the category to which they relate. This section begins with an explanation of the three categories developed, followed by the core category.

4.2.1 Category 1: Establishing competencies and responsibilities

Nurses require competencies to enable them to perform a task successfully and adequately. In this study, the term competencies refer to the ability to perform nursing care in an unpredictable and chaotic situation. In certain circumstances, this may require respondents to complete a task that is beyond their experience of working within the four walls of a hospital, particularly amongst those who work in hospital wards or units other than the emergency department. During a disaster, they are required to perform tasks that may be outside of the norm in the context of their daily work practices. The next section presents six subcategories that underpin ‘establishing competencies and responsibilities’, as illustrated in Figure 4.1.

![Figure 4.1: Subcategories of establishing competencies and responsibilities](image-url)
i. Being ready

A wide range of respondents discussed the importance of ‘being ready’ prior to deployment to a disaster area. For the respondents, being ready covers physical, psychological and emotional elements. It includes making themselves available at any time, having the requisite information about the situation at the disaster area and attending any disaster training and education.

Nurses have to be ready and prepared prior to being deployed to a disaster area, and training was identified as one of the core elements in ensuring someone is ready. The training relevant to disaster preparedness is provided by the organisation, specifically in the emergency department.

“In our ED [emergency department] setting, when we send them for training, we usually send them for training in a team. So, nurses are part of the members of the team.” (52-53)

Wong (DRY-01)

The disaster training includes lectures, workshops, tabletop exercises and drills. A tabletop exercise is a meeting to discuss a simulated emergency situation and the actions that the participants would take in a particular emergency, thereby testing their emergency plan in an informal, low-stress environment (University of Wisconsin Police Department, 2012).

“We do conduct; every year we do conduct a workshop. This is generally for all the nursing staff of the hospital. For the workshop, we usually conduct lectures but not the practical part.” (81-83)

Wong (DRY-01)

“So far, we did the drill once, for last year and a few years back.”

(215)

Ezlina (SNX-11)

1 The number at the end of every quote refers to the line in the script of the Malay language version (English for the EP) and is used from this page onwards.
“Tabletop exercises are regularly conducted by the emergency department but they have not happened every month.” (237)
Ruzniah (SNX-36)

The organisation, specifically the emergency department, routinely organises tabletop exercises and simulations as these constitute the simplest, cheapest and effective means of training as compared to other methods such as functional exercises and disaster mock drills, which involve many organisations or external agencies.

“… we conducted tabletop exercise and simulation because it is the easiest method to carry out and also cheaper. It would not disrupt services provided by the department, it is faster and quicker, and everybody can see the whole picture from the beginning until the end.” (116-118)
Azman (DRY-05)

The type of training conducted depends on the nurses’ working experience or background.

“I think in terms of disaster; it depends on what are they involved in. If we work at the emergency department and have to go to the scene, the focus of the training should be a workshop with the practical station. But if you work in the hospital, then theory together with a tabletop exercise would be more than enough. But if you are the team to be sent to the site, the training must be included in the practical workshop.” (70-74)
Wong (DRY-01)

However, the nurses lacked the training needed to adequately prepare them for a disaster response. Evidence of this is contained in the following quote from the perspective of an emergency physician.

“… they are not specifically trained for that [disaster] because I think the nursing curriculum [basic] had just a small component of the disaster topic. So, sometimes in practice, the readiness may not be as what we want.” (22-24)
Wong (DRY-01)
The emergency physician mentioned little exposure to disaster amongst nurses during their basic training, which could mean they lack the necessary readiness to respond.

“There is very minimal exposure and I think, in fact, one of our staff did a small survey and they found that in the nursing college, there is less exposure to disaster. So, I think probably we need more coverage of the disaster topic in the curriculum training so that they are prepared when they work later on. It may or may not be a workshop for them. Hence, before they graduate they should already have some experience. Because when disaster happens, as a nurse, you still have to respond. So, I think the curriculum should include more training and so far I have been involved in [teaching at] KSKB [Kolej Sains Kesihatan Bersekutu], to deliver a talk. From the feedback, I also do not think it covers many [of the] components of a disaster. Perhaps the disaster management curriculum should be increased, if possible.” (175-183)

Wong (DRY-01)

The nurses are exposed to different roles during disaster training in a bid to obtain the requisite competencies for disaster response. An individual can be placed in any position, including the triaging of casualties.

“I joined the [name²] bridge disaster drill. I was placed at the scene where we learnt how to perform triage on a patient. Within the actual disaster situation, we have no opportunity to feel that experience of triaging a patient. However, during the training, I was able to get experience being a triage officer. I learnt how to triage patients based on the scenario given during training.” (231-235)

Ezlina (SNX-11)

Some of the senior nurses and matrons provide support whenever requested by the emergency physician, such as releasing their nurses to perform activities away from the hospital. This enables the nurses to receive appropriate training and exposure during a disaster, which aids with their preparation.

“... we have nurses who are very much active and involved in disaster response. Also, many of our out-of-hospital [pre-hospital] works, such as medical standby and I, do receive great support from

² The actual place name is not disclosed; instead, it is replaced with “[name]”.

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the senior nurses and the matrons in terms of providing the nurses for these types of activities.” (29-32)

Shariza (DRX-02)

Disasters can happen anywhere, at any time. Thus, the training includes water and air rescue to help prepare them and provide opportunities for them to practise their skills.

“... if in case any random crashes have occurred during the event. The hospital organises training on rescuing victims from the water [water rescue]. They taught us how to familiarise ourselves with rescuing victims from water, including air rescue using a helicopter.” (243-246)

Norhazrina (SNX-13)

The emergency department frequently supports other nurses from different departments across the hospital by offering opportunities to join in with the training. This helps them in handling a disaster and being ready to carry out their responsibilities.

“Our department regularly organises training. Our department [ED] invited nurses from other wards or units for disaster training, and they were taught on handling disasters. We organise disaster drill three times a year, and other courses a few times as well.” (215, 217-219)

Ramlah (SNX-09)

The hospitals they work in also organise disaster training.

“... there were many exposures provided, involving various cases occurring which would commonly reflect the current situation at that point in time. For example, information about the Zika virus. We were given a briefing and many types of cases were discussed. Yesterday, there was a briefing. It was organised every week, and they shared the information.” (266-370)

Zalina (SNX-41)

Based on their post-training feedback, the nurses claimed that the training was useful in terms of developing their readiness.
“... they said it was quite useful for them, especially some of them who have no exposure. So, when they have this kind of exposure, most of them welcomed it and we request the training to be conducted at least once a year.” (130-132)
Wong (DRY-01)

In order to ensure the nurses’ readiness, the hospital works in partnership with other agencies, including the fire and rescue services.

“Mostly, we organise a joint venture with other agencies, such as fire and rescue services and the airport team. We were appointed as their backup team. Even though we assisted them, we still need to be involved in emergency management.” (216-218)
Ezlina (SNX-11)

The fire and rescue services offer a range of disaster response training. The content of the training provided by the fire and rescue services drew the interest of several of the respondents.

“I like the way in which the fire and rescue services organised a national drill for disaster since they organised the various types of disaster scenarios. They prepared the scene of a collapsed building, a chemical explosion, a building on fire, and much more as for every scene, our duties would be different from one to another.” (225-228)
Ezlina (SNX-11)

The fire and rescue services also provide the opportunity to participate in training that covers psychological aspects, thus further adding to the nurses’ readiness.

“The training I participated in included the psychology aspect as well. We were taught how to handle outsiders, our team, how to manage a panic attack, not merely by ourselves but panic that is caused by our team members and also at the department. Then, we were exposed to strategies on how to cope with the situation.” (337-341)
Ramlah (SNX-09)

Nonetheless, some of the nurses emphasised the importance of being psychologically prepared, yet not all of the training includes this aspect, as mentioned by this
emergency physician. It is however essential in enhancing their competencies and responsibilities to ensure their readiness.

“The psychological aspect has not been given emphasis, especially in the emergency department. We do have things like debriefings but we do not offer the input of a counsellor or psychiatrist, especially to look into the psychological aspect of our responders.” (100-103)  
Izzul (DRY-04)

“There is a topic delivered by a psychologist in our training that mentions the psychological effects of a disaster and things like that, but it focuses mainly on relatives who are distraught. But, to be honest, we have not discussed anything on the psychological aspects of the responder. It is maybe something that we should consider.” (297-300)  
Shariza (DRX-02)

The Ministry of Health (MOH) organises more generalised training that can be applied to any type of disaster and encompasses pandemics such as MERS-CoV (Middle East Respiratory Syndrome-Corona Virus).

This is to ensure that healthcare personnel are ready to face all types of disaster.

“The training solely organised by our department was related to MERS-CoV, the case of influenza transmission amongst pilgrims who returned from Mecca. We did a simulation in handling this illness. Sometimes the patients came one by one, whilst at other times they came in a bunch. When they came one by one, it was easier rather than when they came in a bunch of people. We checked them one by one for the pandemic cases.” (349-354)  
Ezlina (SNX-11)

Even though a few of the nurses had never been involved in any training, some of them nevertheless gained exposure when they enrolled in post-basic emergency training. This helped them to be ready when needed and improved their competencies.

“I have not attended any training, but I attended a post-basic course where they organised a few disaster simulations.” (269-270)  
Marlina (SNX-10)
Some of the respondents highlighted the inadequacy of their disaster training and the way in which focus was given only to the scenario for a road traffic accident. This meant they were not ready to respond should another type of disaster scenario arise. This could have an impact on their competencies when working in a disaster situation.

“… the training was inadequate since the department or hospital merely organised a simulation of a road traffic accident scenario such as a bus that had overturned. It was a typical case that usually occurred. We need more adventurous scenarios such as an air crash or even flood management, but they have never done this type of scenario.” (217-222)

Marlina (SNX-10)

Being involved in a real situation enables the participants to obtain information by attending a briefing on a disaster situation. This helps to ensure they are ready to deal with any circumstances.

“We were given a briefing that we should be ready to face any circumstances that could harm ourselves. These actions have been done by the intruders [terrorist] where they purposely attacked government workers, including healthcare and medical staff.” (84-87)

Imran (SNY-40)

It is a requirement that the respondents know what should be done in a catastrophic event. This is to ensure they are ready for the response and to carry out their responsibilities.

“When we heard the warning, we went to the call centre where the MA [Medical Assistant] in charge or the matrons provide a briefing and allocate us to the appropriate zone to carry out the duties. If we did not know where we were at the time, we would just wander here and there. It ended up with no one being at the green zone. So, they distributed us and allocated us into a few zones.” (98-101)

Ezlina (SNX-11)

Being prepared also allows nurses to anticipate the situation during a disaster and could make them ready to engage in a disaster response.
“I think that is very important because when you go to a disaster area, you need to know what you are getting into. Because, if you are not mentally prepared, you may get into the area and may not be able to function if you are panicking or distressed. In fact, you may become a burden to the team. It is very important for the team to function well. You need to prepare them psychologically. That’s why in the workshop or advanced workshop, we create a scenario that involves a training practicum. So that they know what they are getting into, they get a feel for what happens in a real event. Another thing is, it is good for them also because we do not want them to come back with PTSD [Post-Traumatic Stress Disorder]. That is actually very important. So, what we offer, for the advanced workshop, is the creation of scenarios mimicking different types of disasters, so they could get used to it when they are in the middle of the chaos, and they can function well.” (137-146)

Wong (DRY-01)

The respondents were informed regarding the lack of basic needs such as electricity and other public amenities. This raised their awareness of the absence of these resources.

“Before I went to the disaster site, they organised a meeting for everyone who would be deployed to the disaster site. They told us briefly about the situation at the place. For example, there would be no electricity and less water supply, and most of the facilities were malfunctioning.” (300-302)

Norhazrina (SNX-13)

“We were given a briefing on self-preparation for any forthcoming events.” (274-275)

Imran (SNY-40)

Being ready involves the respondents obtaining sufficient information that encompasses their personal safety, to which they should pay the utmost attention.

“Before we went to the disaster area, we received information from our HOD [Head of Department]. Information was given on what should be done and what we should avoid. Even though we want to help people, we have to first think about our safety. We cannot recklessly go into a disaster area without assessing the risk of danger. In that situation, we have to think about our safety before getting into this field. So, we had the briefing from our HOD.” (124-129)
Despite already being vigilant with regard to his own safety, the following respondent also prepared himself with survivor skills for handling an unpredictable situation that could arise at any time and anywhere during the mission, and to safeguard himself.

“I equipped myself with survivor skills. I bought a penknife in case of anything that could happen. I did bring a few clothes when I needed to travel from [name] to [name], as well as ensure an adequate supply of food, in case something might happen between the journeys.” (275-279)

Imran (Sny-40)

Regardless of the situation, prior to their deployment, it is essential that the respondents equip themselves with a survivor kit to take to disaster areas that contains things such as food, water and medication.

“The moment you heard about the disaster, you were by now activating yourself to be ready. That is why we need to get ourselves ready with our own food, water and own medication or any supplements. We are ready with our own backpack. The backpack should be able to accommodate our rations for about two days. Only once you are ready are you then ready to help others.” (140-142)

Kumaran (Sny-02)

One concern was around obtaining adequate information on the preparation of certain dry or handy foods prior to deployment.

“I think before we deploy to the disaster area, we must be informed ahead to bring some foods such as biscuits or anything that we did not know about it. We must be notified before arriving at the disaster area. So, I think we need to be informed and exposed before the deployment.” (411-413)

Sabrina (Sny-01)

The lack of a briefing prior to deployment affects the performance and readiness of the respondents.
“We received only a short briefing about the situation although we should have been told what were the do’s and don’ts for when we reached the disaster area. They should inform us of how we need to manage the situation, so we could be ready in advance.” (447-449)

Imran (SNY-40)

Other necessary information included the types of diseases that might occur during floods, including water-borne diseases such as cholera and typhoid; hence, they could prepare themselves.

“During a flood disaster, they have to know about the diseases that can emerge during floods; water-borne diseases. We have to be concerned with hygiene as well as the medication that we have to prepare earlier on. We also need to know the type of disaster that we are confronting.” (187-189)

Sabrina (SNX-01)

Knowing what should be done means the situation should be easily managed and the respondents should be ready. It also makes for a more effective working environment since everyone works as part of a team.

“We know our responsibilities, and the doctor would not be angry since we know what should be done. For example, if the doctor needs to intubate the patient, we could prepare the equipment since we know what we are doing. So, there was no problem at that time. I can work easily with them. The most important is that we know what should be done.” (286-290)

Ezlina (SNX-11)

Having multiple agencies involved and holding a discussion could help teams to be prepared with various contingency plans.

“… I tried to get as much information as I could to predict the situation. I also get information on how other departments managed the situation. At least I could get some brief information from different perspectives. We also hold a discussion with another team from various agencies to plan for anything unexpected. We should already have a few plans; plan B, plan C or even plan D.” (80-84)

Fatimah (SNX-03)
Despite being unprepared, the respondents were compelled to respond at the disaster area.

“When the tsunami struck, I had just started my duty as a nurse in October and the tsunami happened in December of the same year. I had to respond although not been given early preparation.” (350-351)

Zalina (SNX-41)

A lack of formal preparation may however, be appropriate for those who already work in emergency departments since they frequently carry out tasks related to emergency management.

“We have to know our tasks and use our own initiative. For example, we cannot wait for the doctor’s orders. When I attended patients with bleeding, I applied compression bandages to the injured part. However, we need to follow DRSABC [Danger, Response, Send for Help, Airway, Breathing and Circulation]. In whatever situation we encounter, we need to perform DRSABC, followed by the disaster guidelines. We followed the START [Simple Triage and Rapid Treatment] and RPM [Respiration, Perfusion and Mental status]. We did RPM during the primary triage.” (102-108)

Ezlina (SNX-11)

When in an out-of-hospital environment, it is necessary to prepare equipment that will be taken to the scene in order to avoid delay in providing treatment to victims.

“Yes, sometimes we get involved in the preparation of disaster bags and equipment. We have to get involved so we can familiarise ourselves with the content .... So, we have to be involved in the preparation.” (369-372)

Ezlina (SNX-11)

However, it was common for the respondents to receive less assistance and be lacking in terms of their preparation, including their emotional and psychological preparation.

“We received less assistance and preparation before being deployed to a disaster area.” (98)

Imran (SNY-40)
“So far, we do not have any preparation, no preparation at all. Everything was done on the spot. There was no preparation at all, including emotional preparation.” (320-321)

Zalina (SNX-41)

The respondents mentioned that they were not prepared emotionally for disaster response. Since they were trained nurses, they were mainly left to deal with whatever situation they were confronted with.

“As far as I could remember, there was no preparation in terms of emotional preparedness. The focus was given only to the disease. Since we were destined to be a nurse, we needed to accept the possibilities of whenever things are approaching, we have to be on standby. Whether you are strong or not, you have to deal with that. The briefing provided more concerning our preparation to protect ourselves, the preventive measures, the workflow, that is all.” (312-316)

Ruzniiah (SNX-36)

“We never had any CNE about disaster preparedness. However, after the flood occurred, the hospital started the programme. Before this, we had never experienced a disaster situation. This kind of thing [floods] happened once every 30 years.” (290-291)

Roslinda (SNX-22)

In handling the victims at the scene and adapting to the situation, the nurses seem to have made themselves emotionally and psychologically prepared.

“We have to be mentally prepared, just like what had happened when I was involved. We have to be strong mentally. We cannot feel scared to attend to the patients, we should never do that. Our mental state has to be strong at that time.” (117-121)

Ruzniiah (SNX-36)

“… we should prepare our mental state, our emotions. Sometimes when we went there, there was not enough equipment, and at a certain point in time you were nagging and wondering how you would be able to perform the task without the necessary equipment.” (275-277)

Noraini (SNX-15)
The experience of having been involved in prior disaster(s) was an advantage for some of the respondents that could help them to be ready.

“I gained the preparation I had before, when we were always involved with floods in my hometown. In fact, I have a military background from before I joined the psychological first aid team. That makes me feel ready to be deployed to that area.” (493-499)

Imran (SNY-40)

“I could see that, this experience, being involved in floods, could help me to be prepared for future disasters. For example, when I engaged with disaster training. So, we could apply the same principle.” (230-233)

Norhazrina (SNX-13)

Yet some nurses certainly seemed unable to grasp the importance of obtaining exposure to the disaster.

“... when we open up to another discipline, they also have a problem because they never understand and they never think that this is necessary for them to learn disaster preparedness or attend disaster training because they say that if anything happens, they will be in the ICU [Intensive Care Unit], in the wards, in the OT [Operation Theatre]. How will they get ready for when the patients arrive? So, they never see the importance of the training. That is why if you need nurses to get experience or exposure, it should begin at the nursing school. It would be better.” (276-281)

Razwan (DRY-04)

Experience of working in the ED was an advantage for a few of the respondents. They were ready to carry out their duties promptly and it enhanced their disaster competencies.

“... it was helpful since we had different experiences compared to the one that we received in our department [ED]. We frequently attend courses about disaster. It taught us about managing a situation, what we should do and what we should avoid, how we should react in a real emergency situation and what we should consider.” (198-201)

Ramlah (SNX-09)
“Yes. Working in the ED exposed me to working in a hectic and critical situation that requires immediate and rapid action. So, it was helpful when I dealt with a disaster situation. When I have to deal with emergency cases, I would not feel startled.” (319-322)
Ezlina (SNX-11)

Working in another critical area such as an intensive care unit also enabled the respondents to work competently and manage the victims accordingly, as well as be ready to provide care. It helps to bolster their competencies not only in the intensive care unit but also within the disaster area.

“It helped me a great deal. I got the experience, so I knew what should be done during an emergency. It helped me, from the experience working in the ICU. ... It also helped with my skills, communication and coordination.” (232-234, 236)
Roslinda (SNX-22)

Knowledge gained prior to deployment to the disaster area was important for the respondents. They would routinely utilise their knowledge and apply their skills whenever and wherever necessary, but predominantly when facing life-threatening conditions.

“... I practised and used whatever I knew about the medical [procedure]; for instance, setting [an intravenous] line, and whatsoever. It should not be the case that nurses do not know how to set [up the] line. We can even do that procedure. ... Example like us from emergency where we applied ABC [Airway, Breathing, Circulation]. So, we learnt about emotional support and ABC as well... I applied what I had discovered in an emergency. I applied it when I responded to the disaster.” (257-262)
Sabrina (SNX-01)

Responding to a disaster requires the respondents to be ready to enable them to work effectively and efficiently. It is important that respondents attend training and briefings relevant to the situation. Indeed, obtaining decent information for initial preparation before the event is beneficial. Being ready for involvement in a disaster drives the respondents to establish their competencies and responsibilities as nurses while rendering care to those affected.
Any respondents that have had previous experience working in a critical area, such as an emergency department or intensive care unit, benefit from a degree of leverage. It equips them with some of the requisite knowledge and skills for handling an emergency situation such as a disaster. Even more significant is the experience they have gained from any prior involvement in an actual disaster.

ii. Gaining experiences

Experience is gained in various ways; through training and/or involvement in a real disaster situation. The greater both the variety and quantity of experience that the nurses get, the better able they are to prepare themselves for forthcoming events. Gaining experience after being involved in disaster response was thus seen as helpful for any future disasters. It could contribute to the nurses’ competencies and ability to hold responsibility while working in a disaster area.

“I think, my experience in nursing is priceless, in particular during a catastrophe. I believe that only certain nurses get the opportunity to work during a disaster, unlike nurses from the ED.” (160-163) Sabrina (SNX-01)

The respondents gain various experiences and quickly learn their roles and responsibilities during spent time in a chaotic situation.

“... when a patient came, we automatically knew what should be done. Although it was chaotic, it provided an experience to manage the patients.” (155-157) Marlina (SNX-10)

Despite facing the horrendous situation of a disaster, it nevertheless provided them with a new experience.

“I was ready to face it. It was quite harsh to say that I liked to be involved in a disaster. What I meant was, I acquired a new experience.” (122-123) Noraini (RX-15)
Being exposed to disaster response allows the respondents to gain experience in learning new knowledge and skills, thereby enhancing their competencies and responsibilities while handling the disaster victims.

“When involved in a disaster response team, I learnt how to handle victims involved in the disaster. I learnt about tagging [field triage], and how to treat the victims. I managed to do the necessary procedure at the disaster scene. For example, wound dressing, setting intravenous line, inserting intravenous drip and all the basic procedures that require urgent intervention like bandaging.” (114-116)

Sharmila (SNX-37)

In addition, the respondents learn about various different workflows when handling a disaster, along with the documentation for recording every action taken during the chaotic event.

“I had the opportunity to learn about the workflow on disaster [management]. I learnt about the procedures in handling the victims from the scene until they had been transported to the hospital, documentation of the whole process at the scene, providing treatment as required and document all action being provided.” (114-116)

Sharmila (SNX-37)

The experience gained during an actual disaster is useful in terms of helping to ensure they are ready for any future disaster event. One of the respondents experienced a series of hitches during a mission that could serve as a lesson for the future.

“I need the experience which is important for me. We can work wherever they wanted us to go; into the boat, into the ship. We can even handle the situation when we have the experience. I have been deployed offshore, on a massive seagoing vessel and brought along the equipment bag and spinal board. Allah! The ship was rocking, and I felt like I was falling, but I had to do it. I feel so delighted since I have the experience that others might not get. I do not need a compliment from other people. Experience is the most important, and you cannot trade that but have to find it. I like that. I was not saying that I like it when people are involved in the accident, but when we went there, we gained the experience. I feel sorry for them because I derived pleasure from treating people that were suffering
from the incident. However, if we were not involved, we would not learn. It is a part of the learning process, right? I was not saying that I was feeling pleasure because they died but that was how their lives ended. Allah gives everyone their individual way to die. We were given the opportunity to help those still alive, and that was our duty. Those who died remain dead but those alive should be saved. That is our duty, right?” (182-197)

Noraini (SNX-15)

This type of experience cannot be gained from any books; it can only be acquired through a respondent’s involvement in a disaster response. The importance of experience for learning is thus evident.

“... it became an experience and lesson for us to learn. The experience that we could not even get from any books. We only learn it from our involvement where we would not be taught in any of the books available.” (164-166)

Ramlah (SNX-09)

The experiences they gain during a disaster help the respondents establish their competencies and responsibilities for future disasters, which is even more true if they are frequently involved in a disaster response team.

“I was involved in two different scenarios on disaster response; the armed intrusion and floods since I started working. So, I will use all my experiences in various situations for a future disaster situation. On the other hand, I will improve myself for the next mission.” (36-39)

Imran (SNY-40)

It is important that the respondents learn about disasters from real situations and by gaining their own experiences.

“... we learnt about the secondary survey. We were also taught how to evacuate victims with help from other agencies such as the fire and rescue services and police, and we learnt from them.” (208-209)

Sharmila (SNX-37)
Involvement in disaster training or in a real situation helps them to respond to a chaotic situation as necessary. Once the respondents gain experience, it builds their ability to manage a future disaster should one occur. It establishes their competencies in disaster nursing and the ability to hold responsibilities while providing urgent care to victims at the scene. During a disaster, they are faced with a sudden influx of patients, which requires them to improvise and be able to adapt to the circumstances.

### iii. Adapting to circumstances

In a disaster, anything can happen. Thus, it is essential to adapt to the needs of the affected people and even those of the other team members. When a disaster strikes, the amenities in the area are often completely ruined. This requires the respondents to find alternatives to ensure they can provide an optimum level of care to those affected.

The nurses’ ability to be creative and adapt to the circumstances when working in a desperate situation is paramount. Such example:

“We do have a portable suction machine, but the tubing was too short. So, we must be creative. ... the patient has too much secretion. ... we cut the nasal prong catheter to use and act as a suction tubing.” (96-98)

Azrinda (SNX-21)

“They made a coloured ribbon tag to differentiate the triage of the victims. That was a good idea. However, when the patients came with bleeding, the label turned a red colour. Sometimes it went missing because some people did not know the purpose of the ribbon and yet they removed it from the patients. Those days they used paper, which was damaged once it came into contact with water and blood. So, we have to think about what should be used to ensure the tagging system effectively. We might be thinking of using the ribbon as that was what was practised in the OT.” (306-314)

Ezlina (SNX-11)

It is common for healthcare personnel to face inadequate resources and insufficient staff numbers when working in a disaster area. Sometimes, they have to work alone, especially when acting as first response team members.
“When we went there, there were head injury cases, laceration wounds. Sometimes I thought that it would be difficult for me to do the work alone, for example, bandaging. I needed to hold the lacerated scalp wound, lift the head and so on by myself. However, when at the scene, the situation was entirely different from the hospital. At the hospital, we have friends to help us, and we would not feel too tired... Passers-by would only look upon us and none of them would help us to hold the head, and none would want to help with bandaging. So, we have to do that on our own. ... have to do it since we went there with fewer resources to help us. How can you wait for your colleagues to do the procedure? When we first arrived, we have to do everything as necessary, accordingly.” (197-207)

Noraini (SNX-15)

The nursing division frequently experiences inadequate levels of human resources during a disaster. Any nurses that are available at the disaster site have to play multiple roles in carrying out their duties to accommodate the needs of people affected, including the roles of other professions.

“Then, we set up the clinic and divided it into the yellow zone, green zone as required, exactly like what we have at the hospital setting. However, we were assigned to provide treatment to the green cases, OPD [Outpatient Department] cases. Thus, we had limited medication to be prescribed, and even we handled it, not the pharmacist. We did everything.” (99-102)

Norhazrina (SNX-13)

Another situation included a mother in labour. The respondent nevertheless managed to assist and used the instruments they had available to cut the baby’s umbilical cord.

“There was a labour case with normal delivery. It was fortunate that no complication occurred. All of a sudden, I had to conduct the delivery. There were matron and the midwife as well. So, I did that, without any instrument to assist the delivery, then I cut the umbilical cord with non-sterile scissors.” (67-71)

Roslinda (SNX-22)

Disaster results in the destruction of facilities. When this happens, the respondents will often be faced with a lack of amenities, no appropriate place to stay and a lack of

3 Literally known as ‘cold cases’ that are low priority compared to other cases.
resources to carry out daily activities such as showering and going to the toilet. They adapt to the environment experienced by the people affected.

“We do not have room to sleep, but the hospital director provided us with a space at the auditorium to sleep on. We were given a prayer mat and blanket. We slept, we bathed by the toilet bowl as well as hung our clothes inside the auditorium. We lived there almost ten days until they said ‘stand down’, then we returned to our own hospital.” (133-136)

Sabrina (SNX-01)

“We have been prepared mentally, made an effort, but at the same time, I was exhausted, lived similar to the people affected; in the state of deprivation. We have to undergo experience as what they have, eat like them, and limited to have a shower in a day. However, we already predicted the situation that we might face when being deployed to the disaster area. Hence, we have prepared ourselves mentally to accept the situation.” (117-121)

Ramlah (SNX-09)

People affected by a disaster face shortages of all resources. The respondents were able to bring along their own supplies – water, foods, logistics – and anything needed to mitigate any further inconvenience.

“We should avoid creating inconvenience for the people affected. We brought everything we need when responding to the disaster area, instead of asking for their stuff to fulfil our basic needs. They were struck by disaster, yet we asked them to assist us. We needed to prepare our evacuation centre, our basic needs and everything.” (331-334)

Ramlah (SNX-09)

With limited facilities and resources during a disaster, the respondents are required to multitask in order to provide optimum care to the affected people. Although they are nurses, some are required to dispense medication, help to clean up health facilities and provide informal counselling.

“... dispensed Rifampicin [Tuberculosis drug] to the TB [Tuberculosis] patient when they came to the clinic... We were also involved in a home visit to carry out a necessary procedure such as
wound cleaning, changing CBD [Continuous Bladder Drainage] and et cetera ...” (208-212)

Laila (SNX-08)

“Other than setting up a medical base, we calculated the victims involved in the disaster. We were also required to set up a temporary morgue. In some cases, we assisted the policeman, counted the victims. Apart from that, we also indirectly counselled the victims and family members, if needed. It depended on the problem encountered by the victims, in order for us to provide the necessary care.” (88-93)

Suriani (SNX-35)

In some circumstances, when witnessing other people’s ability to cope with the situation, it led to the respondents feeling that they could also manage and handle the situation.

“I always hold the principle of, if others can do it, why not me? One more thing, we have to be confident in doing things although sometimes I do not even know how to do it. We have to be confident in what we do is correct. Then, we could just please those who are in need. We would not let them stay in that way.” (211-214)

Noraini (SNX-15)

An ability to adapt to the situation they experience when deployed to a disaster area is important. Some are able to resume their regular duties as a nurse after they return to their normal working environment.

“For myself, when I came back and continued my regular duty in the department, I do not feel any problem, and in fact, it doesn’t affect my psychological aspect at all. I can continue my work, as usual, even we were involved in the response before.” (279-281)

Ramlah (SNX-09)

Every disaster is unique in its form. For instance, while floods may appear the same, the impact from one flood to another is not comparable. Thus, it is important for the respondents to adapt to the situation that is unfolding while also responding to the disaster area. This helps them to perform to the optimum in providing care to the people affected. Hence, the nurses’ competencies working within the disaster situation
could be established effectively. They must also be capable of fulfilling their responsibilities towards the community and those in need, besides maintaining their sense of duty as a nurse working in a disaster area.

iv. Fulfilling duties

Regardless of the situation in which they are operating, a nurse is required to fulfill their duties and responsibilities, even in a disaster, in order to establish their competencies. This subcategory is related to the core function of a nurse; providing care to the people affected. It examines the internal concepts of being good, helpful, compassionate, attentive and being a good listener, which help them serve as positive role models to other people such as their counterparts and the people affected by the disaster.

Being a nurse requires one to attend to both the physical and emotional needs of those affected by a disaster.

“Our job requires us to be gentle, understand the situation. We are focusing on our good personal values when we become a nurse. So, nurses’ duties could help us and assist during the disaster response.” (240-242)

Sabrina (SNX-01)

“Be sensitive, understand them and give more emotional support. Emotional support is a priority. After that, listen to them when needed. The same as what we did within the hospital environment. We meet many patients with different problems, so we have to be a good listener.” (249-252)

Sabrina (RX-01)

Nurses play significant roles during a disaster, either in the hospital or at out-of-hospital sites. This is illustrated by the views of emergency physicians regarding the duties of nurses in a disaster.

“The roles of nurses in a disaster are actually very important.” (21-22)
In any situation, when working in the out-of-hospital, nurses play a lot of roles. Most of them are important in order to support the team in disaster response and disaster team.” (12-14)

Izzul (DRY-04)

Emergency nurses, unlike general nurses, are required to have advanced skills in order to be engaged during a disaster.

“For the emergency department, it is important because nurses’ roles [in the ED] can be in the hospital or they could be sent outside of the hospital. So, they need to have more advanced knowledge and skills as compared to general nurses.” (76-77)

Wong (DRY-01)

One emergency physician also claimed that fewer nurses were ready to take on a front or leadership role, while others were well-versed at the scene.

“… there are not many nurses [in Malaysia] that actually take up the front role or leadership role, as compared from what I gathered through my overseas experiences.” (199-200)

Izzul (DRY-01)

The implication of sending disaster victims to hospital was clear. It is to ensure that the victims receive subsequent treatment at the hospital, which is part of nurses’ duties.

“It was crowded and yet the victims had also been placed in our ward [chest ward] temporarily. All of the patients were mixed up and had been lodged temporarily. We made an arrangement for all. It did not matter to us as long as they were safe.” (106-109)

Zalina (SNX-41)

During a disaster, nurses’ ability to manage people requiring urgent attention is vital and becomes part of their core duties.

“When I opened up the ambulance’s rear door and lifted the equipment, I was immediately able to manage the victims when I
saw their condition. They were bleeding everywhere; on their faces and limbs. My work uniform was soaked with blood. I was not bothered as long as I could save them.” (178-182)

Noraini (SNX-15)

Prioritising cases is a vital aspect of nurses’ duties while working with multiple casualties. For instance, an intubated baby with an unknown diagnosis was to be transported to a nearby hospital for further management. When disaster struck, all of the main facilities and supplies shut down, including the oxygen supply.

“... the baby was intubated at the A&E [Accident & Emergency] in the dark, during dusk, without sufficient lighting. Indeed, the child was sent to [name] since we have depleted oxygen supply and we requested assistance from the air force for air transportation. They sent a helicopter to fetch the baby, and we dealt with the doctor at the referred hospital.” (44-48)

Azrinda (SNX-21)

“It was non-stop work. We accepted all cases. We sent an asthma patient to the asthma bay. Anyone who was seriously ill was sent directly to the red zone, and stable patients were directed to the yellow zone... Those requiring stabilisation were registered after the treatment was given.” (118-123)

Kumaran (SNY-02)

Patients requiring urgent treatment were given priority at nearby hospitals; for instance, patients requiring dialysis. Thus, the respondents had to arrange transportation, which is part of their duties in ensuring the patients are sent to the appropriate hospital for definitive treatment.

“I stayed at the triage counter, and whenever we received any cases, I went there by boat. Then, a few women with haemodialysis were in trouble since they needed to be on dialysis. Later on, we fetched the patients, waited for the boats, then used the Hilux [a type of four wheel drive] and there were difficulties at that time. There were many people using boats and helping to rescue the women that required haemodialysis.” (124-127)

Sabrina (SNX-01)
Haemodialysis patients affected in a disaster will also require transportation to evacuate them. Apart from that, the respondents’ duties as nurses require them to focus on the condition of vulnerable groups such as babies, pregnant mothers and the elderly.

“We have to choose which patients need to be flown to the hospitals for haemodialysis since there was no electricity and water supply here. That was our duty, to get adequate information about the patients for Medivac [helicopter] such as expectant mothers, anyone with severe chest pain, SOB [Shortness of Breath], or any cases requiring assembly to the nearby hospitals.” (71-74)

Kumaran (SNY-02)

The respondents were still able to assist the department during the post-disaster period, helping the victims, along with other agencies, even though they were not on duty at the time of the immediate disaster.

“I was not on duty that night. I was called to the incident site when they realised there was an excessive number of victims and they called all ED staff. They alerted the operator to call for staff to come except for those who were away from their houses. Since I was not working that night, I just got into the group. When I arrived, they were preparing equipment and I immediately got into the ambulance and went to the scene. However, the JPAM [Jabatan Pertahanan Awam Malaysia] was already there, at the scene.” (113-119)

Noraini (SNX-15)

However, the respondents’ intentions to help people affected and fulfil their responsibilities as nurses are aborted if the situation poses a danger; for example, getting to the hospital area when the hospital has been affected during a flood disaster.

“I thought to come to the hospital, but we have to go there by boat. The boat was not allowed to depart as the river currents were too powerful. So, I just remained there and helped the people of the neighbourhood.” (58-60)

Roslinda (SNX-22)

Despite being unfamiliar with emergency management, working on the wards enables ward nurses to render general duties to victims brought to the ED.
“We managed the condition in the same way as we treat patients that were previously admitted to the chest ward. When we received a collapsed patient in the ED, we helped with the intubation. It depended on the patient’s condition. In the ward, we still need to assist the doctor for chest tube insertion. The same for pneumothorax cases that we received in the ED. We treated them similarly to what we had done in the ward. There was no difference, except here in ED, their mouths were filled with sand. So, their condition was not very good.” (203-210)

Zalina (SNX-41)

“When we went off to the ED, we did the routine tasks such as taking vital signs, intravenous cannulation and wound bandaging. That was all we did at that time. Usually, the doctors knew what we could do, except if it was related to the prescription of painkillers. We confirmed with the doctors whether the victims required any pain killer, any drips or needed immobilisation. That was all we did.” (181-186)

Marlina (SNX-10)

Other than helping patients, the team were also needed amongst the family members. Therefore, nurses carry out essential duties in providing moral support to the family members of victims.

“I helped the victims. We, in a team, contributed to providing treatment to the victims, besides moral support to the family members.” (145-147)

Sharmila (SNX-37)

In addition to fulfilling their nursing duties, they established a mobile team to provide services to remote areas.

“... we established a mobile team that can get into the villages which included drivers, doctors, SNs [Staff Nurses] and MAs in this team. So, they reached communities where the patients were not able to pay a visit to the clinic. We looked into their needs, whether they were feverish and whatsoever. We provided them with the necessary medication.” (185-189)

Norhazrina (SNX-13)

“We established one group from our department. We gathered various foodstuffs from the department, asked for a contribution.
Apart from that, we asked them to contribute to basic things, collecting money to bring them all to the disaster area. We went there in a group to the remote area and provided them with foodstuffs, medication, pampers, clothes and dry foods, for all of the affected people.” (62-67)

Ramlah (SNX-09)

Some performed duties beyond their responsibilities as a nurse, in addition to their core duties, as evidenced by the following.

“We checked their blood glucose, blood pressure, provided eyeglasses, checked their vision and then dispensed the medication as needed. ... we were together helping them, lifting the stuff from the lorry and distributing it to the people affected.” (89-92)

Ramlah (SNX-09)

Apart from fulfilling their nursing care duties, the respondents were also involved in spiritual aspects through Islamic ways of life since most of the people affected in the disaster were Muslim.

“We offered a religious scholar [Ustaz] to deliver religious talk [tazkirah] and asked them to reflect [muhasabah] themselves to accept the test [dugaan].” (318-319)

Ramlah (SNX-09)

Being a nurse demands that the respondents fulfil their duties regardless of the situation, even during a disaster. This means they provide the best care they can in helping those affected as well as their counterparts at the disaster area. This subsequently empowers them to establish their competencies and hold the responsibilities of working within a disaster situation. Their duties include anything that could promote health, such as cleaning houses and helping to move the community towards healthy living. Despite working in uncertain situations, they give their full commitment and prioritise their duties in helping those in need.
v. Giving priority to work

Working in a hostile environment presents the respondents with a dilemma. This subcategory is about prioritising work over anything else, including their family, own self and property.

Regardless of the type of disaster situation, the respondents, in particular, those who were affected by a massive flood in [name], demonstrated a willingness to prioritise their duty as a nurse in the face of any other matters.

“... I saw a guy steering the boat and I asked him to bring me to the landing zone [evacuation centre]. I told him that I could do some work if I was there and could forget what had happened during the disaster. If I had remained at that place, I wouldn’t have been able to do anything. ... If I came here [to the hospital], I could do some work, and I can contribute to those in need.” (136-140)

Roslinda (SNX-22)

Some of them have their own families. Thinking about the safety of family members, especially their children, could potentially divert their attention while undertaking their responsibilities.

“... I gave my name to be volunteered for the flood disaster in [name]. Simultaneously, I heard no news about my parents-in-law who are also affected in another part of the state. The city was on the top ranking of the awful areas affected by the floods. ... I have only been married to my wife for about four months and left her alone to help out my counterpart. I was in a dilemma as I have to leave her and even she has heard no news about her parents. Yet, I was requested to be in the response team to assist the people affected.” (388-399)

Imran (SNY-40)

In some situations, the country requires the service of its citizens. As such, when helping people affected by a disaster, some of the respondents acted entirely in the spirit of serving their country, alongside carrying out their responsibilities.
“... the spirit of patriotism at that time was rising because, for me, I have never contributed to my homeland. Therefore, whenever I was selected to be deployed to the crisis area, that could be a part of my contribution to her. Even though only a little, but I feel, this is the only contribution to my country as well as to the people as in return. At that time, I was determined to join the response team even without my mother’s permission. I had to get involved since it was a call to my country to serve her.” (303-311)

Imran (SNY-40)

“Besides feeling scared, I was so proud. I was proud since I contributed something to my country. I was proud because I gained priceless experience which not all people could get.” (64-66)

Fatimah (SNX-03)

They think about helping those needing assistance as their ultimate concern over family, and this is part of their responsibilities.

“I have a family. I get scared if it could affect my family, especially my little child. However, due to the accountability and responsibility, I accepted the duty. I took a precaution and performed the task as requested.” (42-44)

Ruzniah (SNX-36)

“I was at home when we received a case where this family just returned from [name]. I was called at 1 am on standby for the arrival. I had to go even though it was 1 am. They were suspected of having H1N1 as they showed the symptoms. Before the patients arrived, I was ready with full PPE attire.” (63-66)

Ruzniah (SNX-36)

In certain circumstances, a disaster can drive someone to willingly put themselves at risk in order to help those in need and hold the responsibilities in contributing services.

“I paid RM30 [equivalent to approximately £5.84, as of September 2019] for the boat fee. I took a risk, without wearing any life jacket as I couldn’t stay there anymore. I told the boatman to send me to the hospital. However, he said he could not accept my request since the water currents were powerful and we couldn’t pass through them. So, I asked him to send me to the landing zone instead, near to the hospital.” (89-92)

Roslinda (SNX-22)
Nurses’ working hours are divided into several shifts. However, when a disaster occurs, they are sometimes required to work beyond their regular hours. This reflects the nurses’ consideration to prioritise their profession over others.

“... I should be back home around 7 am. However, when the disaster occurred during our working hours, we were not allowed to go home. I had to extend my working hours into the afternoon.”
(163-164)

*Marlina (SNX-10)*

“When the incident happened, I was on the morning shift. So I had to stay back until the case settled since it happened in the afternoon.” (137-138)

*Ezlina (SNX-11)*

When talking about accountability and responsibility as part of a nurse’s duties, chaotic situations did not concern them at all.

“Put family aside; we have to do that, and it includes our children. We have to prove it. We were at our working place, so we settled down our work here, in the department. We should never bother about anything else. We should prioritise our profession and proceed with the duties as demanded.” (245-248)

*Zalina (SNX-41)*

It is important for them as nurses to follow the orders given by administrators and to prioritise their work over other matters, regardless of the situation. Indeed, their concern is the provision of healthcare for people affected by a disaster. Regardless of the situation, they serve their country enthusiastically and are willing to get involved, even in a hazardous situation, in order to serve people and their country.

**vi. Getting involved**

There are various ways of getting involved during a disaster response. These include acting as a volunteer, which reflects the respondents’ sense of obligation to participate in a disaster response team due to the oath they pledged when they first became nurses. Only a few of the respondents thought that they would respond to the commands given
by their head of department or the top management of the hospital. Thus, the more they get involved, the more experience they gain that could improve their competencies of working within a disaster area.

While some may certainly find working in chaotic circumstances tough, the majority agreed to help those in need.

“Some of the nurses from wards or unit were volunteered to participate in providing nursing care to the disaster victims. However, some were not and mainly obeyed the command by the higher authority.” (225-226)

Ramlah (SNX-09)

Due to her awareness of the requirement to help those in need, the following respondent gave her name to the department authority to signal her wish to be involved in the disaster response team.

“When I got to know about the flood disaster in [name], I waited for their announcement that they were looking for volunteers. At that time, I informed my head of the department that I wanted to participate and nominated myself to participate in the team. My head of department advised me to be in standby mode as they could call me at any time.” (34-39)

Norhazrina (SNX-13)

However, a few of the respondents simply obeyed the organisation’s command.

“I felt myself being compelled to the command. I just went there even I have never been involved in any disaster response before. That was my first time, so I went there immediately. I was telling myself that I can only do whatever I can.” (56-58)

Sharmila (SNX-37)

An influx of patients requiring treatment can exceed the capacity of the hospital staff when a disaster strikes. Thus, it is desirable for other staff to be involved in helping those in need and carrying out their responsibilities during a disaster.
“It is essential for nurses who work in the department other than ED to be involved, not only us from the ED. In major cases, the staff from wards should be involved. It is essential for them to head to the ED and help their counterparts. It is a kind of normal scenario, and we have to involve them in disaster management.” (280-284) Marlina (SNX-01)

“... whenever a disaster happens, the response should not just come from the staff of the emergency department. It is always a hospital response and the staff that go out to the site are usually from the emergency department. Some of the patients will be sent to or will come to the hospital. So, all nurses need to know about disaster management because the patients will still go to their wards when disaster happens. They could be the one who has to go down to the emergency department when we are overwhelmed because our staff have gone out to the scene and more patients are coming.” (88-94) Wong (DRY-01)

Being involved in disaster training could enhance the nurses’ competencies. However, their involvement in disasters continues to be lacking for several reasons, as mentioned by the emergency physicians. For example,

“... One of the major factors, to begin with, is the nurses themselves think that disaster response is not part and parcel of their training and their duty. They have this notion that a nurse merely works within the four walls of the hospital.” (38-41) Shariza (DRX-02)

“... we’ve got nurses who have this mentality or this idea imprinted in their brain that they are supposed to take care of the patient in the ward only. So, their willingness to actually go out and participate or to learn to participate in disaster management is a hindrance, personally to the person itself.” (112-115) Razwan (DRY-03)

Realising the hindrances experienced by their colleagues who had worked continuously since the day the floods struck made them realise it was now their time to return to work, replace their colleagues and get involved.

“On 24th, I did not feel good since most of my friends kept working continuously. So, I told my husband, who is also a member of staff
here in the physio[therapy] department. He also did not turn up on 23rd. I told him ‘let’s do our work here!’ ... We have to replace them and give them time to rest.” (39-46)

Roslinda (SNX-22)

“... I heard the staff nurses being called to work. Those who were not from the ED and work in the ward, they have to replace those staff nurses who were not able to come to work.” (137-139)

Sabrina (SNX-01)

The respondent emphasised the need to replace their counterparts who were overworked and fatigued and to temporarily relieve them from duty. Indeed, they were required to get involved in any situation.

“We have to help staff at the emergency department, yet, we still need to carry out duties in the ward. When we finish our shift, we have to help them in the emergency department. Between the double shifts, we were allowed to have a break. The double shift lasted for a few days.” (65-70)

Zalina (SNX-41)

However, it is also possible that working within the hospital compound means the nurses are able to help patients more, unlike being at the evacuation area.

“As I said earlier, I do not want to be there [evacuation centre]. Apparently, the hospital needs me more than the centre. I do not think they need me here [evacuation centre]. They have many helpers. So, I thought that if I was still there, it would limit my ability to work. That was the reason I wanted to be at the hospital.” (170-173)

Roslinda (SNX-22)

Disaster response also requires the involvement of nurses from wards and other units of the hospital, alongside ED and ICU nurses.

“The nurses from the general ward should actively be involved since disasters commonly occur on a large scale and include a larger population. So, we should not entirely depend on the ICU staff. We have to incorporate them during the response.” (247-249)

Roslinda (SNX-22)
The non-emergency nurses expressed their willingness to be involved in disaster response, but they never had the chance.

“I asked the ward nurses, and they say they have never been involved in any response team. They wanted to learn but did not know where they should ask for information about this. That meant, even not directly under any hospitals, they wanted to help but did not know how to go about it.” (229-232)

Ramlah (SNX-09)

Due to them being less involved in disaster preparedness, the nurses from wards and units had no information about it and did not know how to obtain such information.

“... We once had a presentation on disaster management during continuous nursing education. We could see that staff nurses who worked other than at the ED did not know at all about disaster management.” (144-146)

Marlina (SNX-10)

“Even they are not working in the ED, but they are showing an interest to participate in the disaster response team. However, they do not know how to get information about this.” (237-238)

Ramlah (SNX-09)

At some hospitals, nurses were granted lower priority to be involved in pre-hospital care or the disaster response team due to the policy of the department.

“In this following situation, usually the MAs will attend the cases, but in severe cases, staff nurses will help as well. We were given less priority to be involved in the disaster. We were only required to prepare resources in the department.” (70-71, 75-76)

Marlina (SNX-10)

In some circumstances, emergency nurses from a few hospitals were denied an equal chance to advance their emergency nursing skills. This limits their capability to perform within a disaster situation and hinders them in enhancing their competencies working within the disaster area.
“We nurses have to learn about the equipment. We are unlike the MA. There are many things we did not know about; for example, how to apply a splint, how we should use the AED [Automated External Defibrillator], KED [Kendrick Extrication Device] and we learnt many things from them.” (213-215)

Sharmila (SNX-37)

However, some hospitals emphasise the importance of nurses gaining exposure to the hospital’s disaster policy.

“… all nurses have been given a briefing on the hospital disaster policy, so they are supposed to know during the orientation about our disaster planning.” (36-37)

Wong (DRY-01)

There was also a situation where the opinions of nurses were taken into account and they were actively involved in the disaster management committee.

“…, but in terms of our local training or sometimes our policy setting for the hospital, nurses’ opinions will be taken into consideration. We do put them as a part of members. When we renew our policy, or we organise our training, the nurses will be one of the committees.” (57-60)

Wong (DRY-01)

An unfavourable situation was identified involving several respondents who had not received any preparedness training despite having been sent to disaster areas on more than one occasion.

“Since the day I worked here and also when being deployed to disaster areas; armed intrusion and flood disaster, I have never been involved in any drills or disaster preparation.” (464-465)

Imran (SNY-40)

“I have never participated in disaster training even after being involved in the flood disaster.” (240)

Roslinda (SNX-22)
Involvement in a disaster situation formed part of a nurse’s duties, most notably for those who work in the emergency department. There is a clear-cut decision to be made about becoming involved, working during a disaster requires training and preparedness to be able to deal with the hostile environment. It concerns a willingness to be involved and contribute to the needs of people who are helpless at that time, although some feel it is mainly an obligation to obey the command. Yet despite nurses’ ability to be involved in a disaster response team and the opportunity to gain diverse experience, some hospitals lack a policy for involving them in either training or actual events. Though, being a nurse, regardless of the situation, they are ultimately required to be involved and provide nursing care from all aspects; physical, psychological and emotional.

**Summary of category 1: Establishing competencies and responsibilities**

Nurses on the front line play a significant role in helping those affected in a disaster situation. It is crucial for nurses to establish the requisite competencies and understand their responsibilities for working within a disaster situation. This category revealed six subcategories which most of the nurses have discussed about their sense of duty as a nurse while responding to a disaster event, as well as the doctors which they mentioned how important it is for nurses to be involved in disaster management.

**4.2.2 Category 2: Managing emotions**

Individuals can find it challenging to manage their emotions, especially when working in a hostile environment. This category discusses four of the emotions that were disclosed. These can be split into the two positive emotions of ‘feeling excited’ and ‘being kind’, and the two negative emotions of ‘feeling fatigued’ and ‘feeling scared’, as shown in Figure 4.2 below.
Working in chaotic situations requires an individual to be prepared physically, psychologically and emotionally. In order to work effectively and efficiently during the situation, they should be able to remain calm.

“The whole action taken was to stabilise our emotion. It means that we need to consider the patient’s condition and try not to be nervous. Be calm, try to handle the patient as rapidly as possible, be competent in handling them. In the meantime, provide emotional support to the patient. However, we must control our emotion first before proceeding to the patient.” (235-240)

Marlina (SNX-10)

The respondents displayed different kinds of emotion when responding to the disaster.

i. Feeling excited

The respondents discussed their own ways of motivating themselves and ignoring the difficulties they faced in the situation. They also found excitement in being involved in a disaster response team.

“If you asked me, I will say that I am excited since I love disaster [nursing]. Even though without being instructed to do so, I offered myself to be a part of the disaster response team.” (61-62)

Kumaran (SNY-02)
“I was so excited, and I feel it was a challenge for me as a nurse. Yes, I think it was my responsibility, but I feel that was my obligation to help them as well. In fact, I want to get experience of working in a disaster situation. I served as a nurse for quite some time, and I need this experience.” (73-76)

Sabrina (SNX-01)

The opportunity to work alongside supportive colleagues motivated the nurses to perform within the hostile environment. Some of them transmitted their motivation and excitement to their colleagues.

“... The spirit gained from the team became the main supporter and provided motivation to me even I am only a nurse.” (316-318)

Imran (SNY-40)

It is also part of their aim to participate and achieve their goal of managing disaster victims as a nurse.

“I was so happy to be selected as a member of the team. Finally, I achieved my vision to assist during a disaster response.” (328-329)

Norhazrina (SNX-13)

Regardless of the contribution, the following respondent offered support through their skills and knowledge, as well as the effort and time spent serving people affected by a disaster.

“I was feeling excited not because I could go to the disaster area, but because I could contribute my services since I did not have sufficient finances to support them through monetary value. I can use my energy, skills and effort to help them.” (79-81)

Ramlah (SNX-09)

Feeling motivated and excited forms part of the driving force that inspired the respondents to build experience in their career. Despite working in a precarious situation and knowing there would be risks, they were excited to be part of the disaster response team that helped those affected. Indeed, a disaster area or disaster situation could serve as somewhere for them to reflect on their past and motivate them to be kind to others, despite the situation.
ii. Being kind

Although the respondents were required to work in uncertain environments, their empathy and compassion were apparent. They understood the feelings of people who were affected during a disaster.

“We need to understand the victims. They might lose their mother or sisters. We should put ourselves in their shoes. We should listen to them and never keep them waiting for you to share their experience. No, you cannot. We have to empathise since they might be traumatised, or they could feel traumatised. We need to help them psychologically. That is part of our job as a nurse, right?” (228-232)

Sabrina (SNX-01)

“When we were surrounded by the people affected, we felt what they felt. Feeling the loss of affection, losing properties, and the feeling of a dead end.” (159-161)

Ramlah (SNX-09)

Dealing with people affected by a disaster thus requires soft skills, for example, being compassionate, which could help to lessen their frustration and anger.

“I was so sad since most of the victims were left with nothing, except the clothes they wore. The water rose so rapidly and it increased the level of the river. However, Alhamdulillah [thank God] no fatalities, except they lost most of their properties. Some of the victims became irritable and easily got angry. They would not be able to accept any sensitive question, and they easily became irritable. We could not easily respond negatively to their actions. We have to soothe and keep them calm, need to understand their situation.” (281-285)

Sabrina (SNX-01)

When looking at the disaster situation, the respondents showed their empathy:

“However, when we arrived, I was so sad to see the people’s life was hard since I never expected that it could be the worst-case scenario. They were left homeless and facing population displacement. We could see they were struggling. That is why I felt eager to come and help them.” (329-332)
Norazrina (SNX-13)

“However, I feel sad for the victims. I was sad since they were school pupils, so that made me even more miserable. Then, I immediately joined the team and attended the victims. I couldn’t wait any longer. Once I got a call from the department, I went straightaway to the hospital to provide assistance.” (124-126)

Noraini (SNX-15)

Being compassionate and empathetic was seen as important. However, it was not only about care for the patient; the nurses also needed to be healthy in both body and mind in order to continue helping victims.

iii. Feeling fatigued

Anyone who responds to a disaster situation will work long hours and will be exposed to working under pressure. Due to the limited number of staff during peak periods, nurses who remain at a disaster site will work continuously until another team take over their positions.

It was critical that the respondents worked continuously during a disaster, particularly when there was no external assistance to take over their duties. They may also have experienced having to work while wearing a wet uniform.

“At the time on the scene, it was raining. We had experienced depletion of the food supply since we had to work around the clock. In fact, we wore our nursing uniform that already became wet due to the rain, and it was uncomfortable. I arrived around 2 pm and was not at the hospital until 2 am the next day. So, I had to wear a wet uniform for the whole time I was there.” (129-131)

Sharmila (SNX-37)

Working in a hectic environment, such as that found in a disaster area, in particular during the active phase, can lead to consequences such as stress and fatigue.
“My feeling? I was terribly exhausted, tired since we were not even able to get enough rest even though the initial plan was to do work by rotation of 6 hours, 6 hours.” (137-138)

Kumaran (SNY-02)

Prolonged exposure to a disaster situation over an extended period of time leads to exhaustion and tiredness.

“When we arrived at the field hospital, we were working with limited resources and our working hours could be extended beyond the normal working hours of seven hours. I was feeling so exhausted and tired.” (126-127)

Kumaran (SNY-02)

Experiencing a disaster while concurrently providing care to victims could lead to nurses feeling traumatised.

“I was traumatised. I was traumatised when I saw the water kept increasing. My body was too tired since I had not had enough food. I was not even able to lift the patients. I could only sit and write, nothing more I could do.” (155-157)

Roslinda (SNX-22)

It can sometimes take almost twenty-four hours to arrive at a disaster site and can be an exhausting journey. This also affected their physical and psychological aspects.

“We were directed to assist the Hospital [name]. So, we went through [name] road since other routes were closed due to the landslides. It was difficult due to road closures everywhere. It took us almost 24 hours’ journey to arrive at the hospital. Everyone was tired and exhausted when we arrived at the site.” (49-53)

Norhazrina (SNX-13)

Sometimes the fatigue can be overwhelming.

“... I was unable to concentrate on helping the victims while assigned at the landing zone. So, I only carried out the clerical work, for example, registering the victims, monitoring the name list of patients that needed to be transferred via air transport and receiving donations and contributions from donors. I could not work with the
patients at that moment because I was so weak and fatigued.” (148-152)

Roslinda (SNX-22)

“Oh! I developed hypoglycaemia. I took some food to avoid hypoglycaemia. I was asleep throughout the day. Later, my husband was looking for food, and he found a can of drink. He took the drink and gave it to me. After that, I could open up my eyes, and I regained consciousness. When I felt better, I helped people. I had no food for about two days.” (111-115)

Roslinda (SNX-22)

A disaster thus requires full commitment from the nurses involved in helping those affected and can result in fatigue and also cause them to feel scared.

iv. Feeling scared

Being panicked and frightened is a natural reaction to something that is scary. Disasters can scare the respondents, especially if they are exposed to subsequent events such as aftershocks (a smaller earthquake that occurs after a previous large earthquake, in the same area as the main shock) and landslides, which can be risky and dangerous.

The findings demonstrate the emotional and psychological disturbance experienced by the respondents, such as feeling panicked and frightened due to the chaotic situation in the disaster area.

“... The glasses were broken, everywhere. We were shocked. We were lying in the bed, on the bunk bed. It was tremors. It was beyond our imagination. Everybody was looking for their friends, and we cuddled each other. We couldn’t even think what we were supposed to do at that time. We went down from the fourth floor of the hostel [nurses’ hostel] and headed to the assembly point.” (45-50)

Zalina (SNX-41)

“We did not know what had happened since the house was located on the hilltop. Initially, we set up our medical base camp there, on the hilltop. ... However, there were tremors behind the hill. After
about half an hour we could still feel the tremors. We were afraid and decided to go down from the hilltop with all of our equipment.”

Sharmila (SNX-37)

Moreover, this type of feeling can be exacerbated if they do not have adequate information about the situation.

“We were afraid because of the landslide. We did not know what the current situation was and it was unpredictable. I was feeling frightened and kept wondering if there would be another slide while we were there at the moment. That was what we were afraid of.”

Suriani (SNX-35)

“I was worried, worried that it might happen again. I was scared that the tsunami would strike again...”

Zalina (SNX-41)

... It was raining, torrential rains and it was unsafe. We can still feel the tremors, and the land keeps moving. Later, we were told to find another place to set up our medical camp since they identified that the area was unsafe.”

Sharmila (SNX-37)

Another reason to be scared related to the risk of infection by a contagious disease.

“We were told to inform the officers if anyone felt unwell or experienced any medical symptoms. We should let them know earlier, so we could be excluded from the list of staff that were required to be involved in the pandemic (H1N1). They were afraid of the condition of the team worsening.”

Ruzniah (SNX-36)

“When we first accepted the patient, we were nervous. We were scared and worried since the disease has no cure for now. For MERS-CoV, if it is positive, it means that there is no cure for now. We do not have the drugs but only give a flu injection like H1N1. We only treat the symptoms. We were scared, nervous since we have never been exposed to this kind of disease.”

Nurul Huda (SNX-32)
“This [H1N1] became a huge issue in our country, for sure at first I was feeling so scared. Of course, I feel scared since it could spread and was contagious to everyone.” (36-37) 

Ruzniah (SNX-36)

Dealing with uncertainty regarding the disaster situation, as well as the number of victims involved, could also lead to them feeling scared.

“I was shocked and panicked at first since I did not know how many victims were involved or the severity of the disease. I knew the number of casualties involved, but I had no clue about the seriousness of the injuries. I was frightened and afraid of the incident as it was beyond our capacity to manage the victims.” (89-93) 

Marlina (SNX-10)

Aside from this, having no experience in or less exposure to dealing with a disaster was a difficult situation for some of the respondents and it frightened them.

“I was scared since I was still way far from having enough experience. I was afraid that the accident would turn horrible and I would not be able to attend to all of them at once. We do not know what Allah plans for, but if there is a minor situation, then I feel I can still handle it. For ordinary cases, I am still able to manage, but in severe cases such as those requiring intubation, I might need doctors to attend and help me.” (191-197) 

Marlina (SNX-10)

“I was so scared since I have never been involved in a disaster. It was a real situation, an actual situation. That is why I was so afraid at that time. ... I was scared since I did not know what to do. I also felt worried because of the landslide, and we were uncertain about the situation.” (60-61, 68-69) 

Sharmila (SNX-37)

Situations in which the respondents were subjected to danger led to some feeling scared, especially if they had dependents.

“It was my first time on a boat ride. I was thinking about the lifejacket and in fact, I have my little child. I have my parents and
husband; even he was with me at that time. Secondly, I have to cross the water at the level of my neck and if I put my head down it blocks my nose. I kept wondering whether there was a crocodile deep in the water, or maybe something else? All of these things made me scared and traumatised.” (162-166)

Roslinda (SNX-22)

“A few nurses that have young children at home feel afraid to stand by for the pandemic. Yes, we were scared, terrified. However, as I mentioned earlier, we have to take preventive measures and follow the SOP [Standard Operating Procedure]. We can do it, despite feeling scared. It happened when my name was selected to join. I felt scared.” (329-333)

Ruzniah (SNX-36)

Working in a dangerous environment exposed the respondents to uncertainty and hazards. In some circumstances they had to evacuate:

“... we have not had any companion from the armed forces. We did not get any weapon or even bulletproof jacket. ... we have tried to imagine that the situation might be stable. However, when we arrived at the scene then we could see the truth with our own eyes.” (81-84)

Imran (SNY-40)

“... It was crowded at that time. The land was unstable, so we had to follow the procedure. We should follow the protocol. As a paramedic, we must first wait for permission to be given by the fire and rescue services. If they say the land is stable, then we can get into the area. If they identify the area as unsafe for us to enter, then we should refrain from entering the zone. We must ensure our safety before thinking to proceed in assisting people.” (50-54)

Suriani (SNX-35)

Some of the respondents had been exposed to extremely dangerous conditions, mainly when the crisis involved a weapon. This created panic and a fear that they might be killed.

“There was a situation where the intruders were cuffed by the police in the middle of the city, at the market area. So, when we heard that news, we were so frightened and worried, and we feel refrain from carrying out the duty.” (91-95)
In some circumstances, despite feeling scared and panicked when they were involved in a disaster, some felt happy at being able to gain experience that not all nurses had the opportunity to acquire.

“So, I still feel scared but later I was happy since not all people get the same experience as what I had.” (149-151)

Norhazrina (SNX-13)

It was important for the respondents to have a briefing as this could help reduce their anxiety and fear, thus ensuring their preparedness by having a few contingency plans in hand.

“... once we applied all precautions and safety that been commanded by the government to all hospitals, it indirectly reduced my fright and indeed, our department has taken preventive measures to be alert.” (37-39)

Ruzniah (SNX-36)

Being involved in a catastrophic event made the nurses feel scared and anxious. This is an unavoidable feeling that nurses have to face when they are involved in helping in a disaster area.

**Summary of category 2: Managing emotions**

Working in a disaster situation can create excitement for nurses, mostly when they can contribute their expertise to assist those in need and then observe them recover from the impact of the disaster. As a nurse, showing kindness while performing their duty normally helps to soothe and alleviate the situation for the people affected. Yet despite these various positive emotions, the nurses also expressed being fatigued and scared. However, these feelings can also turn to something that they would never forget in their career.
4.2.3 Category 3: Getting Support

Some people may find being rushed into a disaster area thrilling. Whenever a disaster occurs, many individuals and groups provide their specialist assistance to help those affected. To ensure maximum performance, these staff require support which can derive from family members as well as colleagues, their organisation and other agencies that are involved during a disaster. It also includes support in religious aspects that could offer calmness and reduce their anxiety. Figure 4.3 illustrates the support obtained by the respondents from different sources throughout their experience of responding to disasters.

![Figure 4.3: Subcategories of getting support](image)

i. Support from family

Whenever a disaster occurs, the respondents answer the call and leave their family behind. They could be part of a family; a husband, a wife, a father, a mother or a child to somebody. For the respondents, family played an important role when they were away in the disaster area.

It was important for the respondents to engage their family members prior to deployment as well as throughout the mission.
“We get our family involved, not just ourselves and after we have done, and then we have a debriefing, input and awareness how to detect and actually manage post-traumatic stress disorder. Because, if we do not recognise it and are unaware, it is actually a problem and will become a huge problem.” (108-111)

Izzul (DRY-04)

The support continued after the nurses had returned home and could extend for more than a month in order to identify any symptoms of post-disaster psychological impact.

“In the case of an unfortunate event that might occur, the level of acceptance is much better, for someone to perceive. And this also leads the family member to look for because when one person goes into a disaster, it may take more than two weeks, sometimes a month and also, to actually understand and also be able to notice certain cues.” (127-131)

Izzul (DRY-04)

Most of them received full support from their family members to serve the country.

“... and my mother inspired me. Both my parents helped me a lot and encouraged me to be involved. ... They support me, one hundred per cent.” (187-190)

Zalina (SNX-41)

“So far, I get support from my husband, and he never stops me, as well as my family. They know what I like to do and they know what I want to do in my life.” (169-171)

Ramlah (SNX-09)

“So far, I get support from my husband, and he never stops me, as well as my family. They know what I like to do and they know what I want to do in my life.” (169-171)

Ramlah (SNX-09)

“Alhamdulillah [Thank God]. So far, my husband has been incredibly supportive as he also has the same interest as me in disaster works, albeit we were in a different field. ... I got his full support to be involved in this area.” (141-145)

Ezlina (SNX-11)

When they were deployed to the disaster area, someone would look after their family and mind their children.
“... I asked my family and the childminder to take care of them. Luckily that they helped me out. ... Once everything stands down, we went home.” (165-168)

Marlina (SNX-10)

“I lived next to my parents’ house. So, whenever I need to leave them at 2 am, or 3 am, I just need to knock their door and asked their help looking after my children.” (167-169)

Noraini (SNX-15)

Since the respondents were often deployed to unpredictable situations, their family members needed information on the status of the respondents who were going into the disaster area as the situation could be volatile at any time.

“... when they had an adequate explanation, they finally agreed and allowed me to participate. I explained to my family that I went there through a proper channel and our safety is surely guaranteed and monitored.” (178-182)

Ramlah (SNX-09)

“... having problem with staff that could not come to work. There was no communication with anybody outside the area. I understood that the Director [Hospital] was giving an instruction not to stay at their own house [those who lived nearby hospital]. They must go to the hospital for assistance and report for duty since there were floods everywhere. He tried to accommodate all staff and their family in the hospital.” (62-66)

Hasmawati (SNX-20)

Prior to engagement with the activities, discussion amongst family members is encouraged regarding the mission.

“One thing we always tell them is not only to involve them, and especially in humanitarian missions, they also need to discuss with their family what the risk is. So these are the things that we should tell them because it is not just about training. So this part, in this situation, the nurses need to tell and to get their family approval. So their family will understand before the nurses engage with this activity.” (156-160)

Wong (DRY-01)
Providing adequate information and keeping the family updated about the nurses’ situation can help to lessen the after-effects and could indirectly be calming.

“*If the department could explain to the family, it could reduce the problem that might occur later. If the department officially informed the family, it would not become an issue. At first, I do not have a problem with my family. The [name] informed and asked us to notify our family that whenever we worked for seven days, we were eligible for two days off. So, we could get four days off for two weeks’ working days. That means I should be back to my home after ten days.*” (159-164)

Norhazrina (SNX-13)

“The problem occurred when my husband could not accept that I would not be returning home after ten days of working at a disaster site and would have to extend our stay. Even though I informed him earlier before we departed to the disaster site, he still could not accept that we went there for a longer period than he expected.” (135-138)

Norhazrina (SNX-13)

Spending too long in the disaster area in terms of response time led to the respondents missing their family members, with some of these family members also expressing their unhappiness.

“When we were in the disaster area, placed at the crisis zone, then I started having mixed feelings. I felt scared and missed my family since we were apart for about 14 days.” (52-54)

Imran (SNY-40)

“*However, it became an issue raised by my husband when I did not return after 12 days.*” (164-165)

Norhazrina (SNX-13)

Working under disaster circumstances required the nurses to leave their family. Yet, they had to keep their family members regularly updated on their situation to avoid misunderstanding and reduce feelings of anxiousness. Having support from family members is vital in order to ensure everyone feels satisfied and is kept updated on the
latest situation. Family members will also often pray for the respondents’ safety throughout their mission.

**ii. Support from religion**

Religious practices are common in Malaysia amongst the Malay population. Since most of the respondents are Muslim, they practise Islamic ways of life, such as Al-Quran recitation, *solah* (prayer), *du’a* (prayer) and *zikr* (devotional acts).

During their time in a chaotic situation, they recite Al-Quran and pray to strengthen their spirit.

> “Usually, we strengthen our motivation through our religious practices. We established the activity of Al-Quran recitation and performed congregational prayer [*solah*]. Then, we sat down and discussed the current situation.” (102-104)

*Imran (SNY-40)*

Having experience of being involved made the respondents accept the destiny that had been determined. Participation changed their lives.

> “I feel like... I feel different, you know. After I came back from the disaster area, I started to understand the meaning of life. About the spirituality, whenever He wants He will make things happen [*kun fayakun*].” (292-294)

*Sabrina (SNX-01)*

As Muslims, when they felt worried they would turn to Allah.

> “As a Muslim, I give 100 per cent devotion to Allah. I cannot do anything since I was in a dilemma. I have to help my organisation, and at the same time, I have not heard any news about my parents-in-law. I do not have my own transport to assess their house since the water level is still high. So, I have to put faith in Allah to protect and save them.” (402-409)

*Imran (SNY-40)*
During missions, Muslim scholars were involved to provide religious support.

“So, we even get people like imam (leader) or Ustaz (religious teacher) to follow us on a difficult mission and they do play a role.” (113-114)

Izzul (DRY-04)

Religious practices were thus shown to play an important role in someone’s life, and colleagues were also seen as important.

iii. Support from colleagues

Working within a disaster situation requires a collaborative team. The emergency department will mainly establish a disaster response team comprising doctors, assistant medical officers, nurses, healthcare assistants and drivers. The team also includes staff from other hospital departments, regardless of the profession.

“All wards were involved, everyone was involved, not only my ward, specifically those who were single and living at the [nurses’] hostel. Thank God that we could manage the situation. Everybody helped each other.” (82-85)

Zalina (SNX-41)

During the active phase of a disaster, the emergency staff get an instant response from all staff of the hospital. However, a few nurses are required to remain at the department to support staff from other departments who have been called to assist in the emergency department.

“Despite being sent to the disaster area, there were still a few emergency staff left to assist others in the department. They guide us to be familiarised with emergency management and help with the department arrangement.” (140-141)

Zalina (SNX-41)

“... So, they called ED staff who were not on duty at that time. Due to the huge number of casualties, which exceeded the human
capacity of the department, they declared a red alert for the hospital. The ED staff were unable to cope with that situation.” (68-70) 
Noraini (SNX-15)

Whenever a disaster happens, there are responses not only from emergency staff but also from ward staff, mostly nurses. These nurses are then deployed to the emergency department to assist their colleagues in managing disaster victims at the department level.

“I was so fortunate as the incident happened in the early morning, where there were many staff and doctors around to help me. Those nurses who work at the ward came to help when they heard the siren [bell] wailing. They were required to assist the ED staff.” (93-96) 
Marlina (SNX-10)

“... we received help from many people; our friends, the doctors and the nurses. All of them came over to the ED to help us.” (172-173) 
Marlina (SNX-10)

Staff from other professions, for example, pharmacists and counsellors, were also involved in the disaster response team.

“We work as a team since we went there with pharmacists, doctors and MAs. Also, we have a counsellor. So, if any one of us feels traumatised, we refer them to a counsellor. Then, we were getting close like siblings. Whenever any of us was not around, we were concerned about them. We work in a team.” (266-270) 
Sabrina (SNX-01)

Auxiliary staff such as healthcare assistants and other professionals participated, including staff from other disciplines.

“Based on my previous experience, the doctors and the MAs, they worked remarkably as a team. We cannot do our work alone. We need doctors, MAs and for sure we have many other nurses to help in the department. We also need the PPK [Pembantu Perawatan Kesihatan] to handle specimens and assist in any circumstances that require their assistance.” (196-200) 
Ruzniah (SNX-36)
“There were many doctors that went down to the ED. All of us had to stand by and receive the victims. When we were on our shift, such as from 2 pm until 9 pm, we had to work as a team and build up teamwork throughout the shift. Most of the doctors were not from the ED, and many of them came from other wards. We cooperated with all professions and in fact some of them I met at the chest ward, where I work.” (225-230)

Zalina (SNX-41)

Working in a chaotic environment can result in those involved getting to know each other better.

“We have a good teamwork albeit just knowing each other during a disaster event at the ED. We still have good communication and work as a team. Even when we ended our duty at the emergency department after the event, we still kept in touch. Because of the tsunami, we were closer to each other, knowing many people, especially those who work with us in the emergency department. All staff from other departments got closer to the emergency department staff.” (217-222)

Zalina (SNX-41)

“When we were working, we felt no gap or barriers or discrepancies amongst us. Me as a nurse and they are psychiatrists. I never feel any difference, and it was just like a family bonding. We were attached amongst the team members.” (318-321)

Imran (SNY-40)

Although the staff who respond to a disaster can sometimes also become victims of it, they would receive help and support from their friends to cope post disaster.

“... I told my friend [name] that I had lost all my stuff. She took me to her house to get changed, and I wore her clothes. I did not want to think about that [the troublesome] anymore and just headed to the landing zone to carry out my duty and help my counterparts.” (93-95)

Roslinda (SNX-22)

Some of them transmitted their motivation and excitement to their colleagues. They also shared their own stories with other friends.
“We were having a conversation after work since we were so tired and exhausted. We were sharing our stories on what we had done on that particular day. We went back to our hostel just for sleep and continued our duty for the whole week.” (180-183)

Zalina (RX-41)

“After finishing our duty, all the tiredness went away. It just went. We discussed a lot about the patients’ conditions, the types of patients we received. Like what you have said, we received various conditions such as wounded and all kind of cases. We worked non-stop that day. Everyone expressed their feelings about what had happened during their shift.” (339-342)

Zalina (RX-41)

A cross-disciplinary team develops and this takes place without concentrating only on emergency personnel. It comprises multidisciplinary collaboration with other professionals. Assistance from colleagues establishes good professional relationships amongst those involved during a disaster. Henceforth, it strengthens the organisation in helping disaster victims, including staff who are affected.

iv. Organisational support

The organisation plays a significant role in supporting staff during all phases of disaster management by organising training, providing psychological and emotional support, arranging logistical assistance, establishing multiagency collaboration and many more.

The organisation was concerned about staff welfare; lodging, food and other logistic matters, including shift rotation arrangements. This becomes a priority, especially if the hospital has been affected by the disaster.

“Apart from treating the victims, we care for the staff’s welfare at the disaster site. We provided a cooking team and we changed their shift rotation and on-call shift.” (183-185)

Norhazrina (SNX-13)
Some hospitals were affected during floods and the hospital director allowed staff to use the facilities available at the hospital to ease their situation.

“... He [Hospital Director] said that it is up to me to manage and make sure it would be under control. The staff restroom was utilised as a room to occupy the staff’s children, in order to control the situation, and helping to lessen inconvenient feeling amongst their parents [the nurses]. Thank God that there was no problem at all and he understood the situation since his house was also affected by the flood.” (157-161)

_Hasmawati (SNX-20)_

One of the primary issues raised during a disaster concerns potential food and water shortages. This issue was addressed by the organisation and ensured staff received their supply during the catastrophe.

“They [the hospital] supported us with food, and even the doctor helped to cook. All of us, regardless of position, helped to cook for everyone. They assisted in distributing the food.” (272-274)

_Roslinda (SNX-22)_

The organisation helped with arranging assistance during the disaster, including calling out off-duty staff to assist existing staff, as well as involving other agencies in the disaster response.

“The ward sister arranged a replacement for the staff who were overworked. While I was on night duty and working from 9 pm to 7 am in the ward for three days, someone else was working and covered duty at the ED. After night duty, we usually had three days off. However, during the period, we were only allowed one day off [sleeping day].” (166-170)

_Zalina (SNX-41)_

The head of the department at one of the hospitals made arrangements to assist the flood disaster victims.

“Our HOD, Dr [name] was very helpful. She helped us a lot, helped us to get transport to the catastrophe area, made
arrangements with the pharmacy department to get pharmaceutical supplies and many other things.” (71-73)

Ramlah (SNX-09)

Apart from the physical conditions, it is essential to identify the psychological impact on staff in order to avoid the consequences. Within the team deployed to the disaster area, the hospital includes psychologists to support the early detection of staff that might present with significant symptoms of psychological trauma.

“... psychology includes everyone, not merely the victims. Sometimes the psychologists would sit amongst us and begin the conversation, ask about our feelings, what could they help with, and what we felt when we saw the victims. The psychological approach of the psychologists was helpful.” (268-271)

Ramlah (SNX-09)

“... Yes, the [name] called me a week after I returned to work. They called to ask about our situation and assessed our psychology. They also asked if any of us might be demonstrating any symptoms of psychological trauma post-disaster.” (307-309)

Sabrina (SNX-01)

“I felt good when we went home, and we can work as usual, as before. However, we were still being called for counselling because they were afraid that we might still imagine that situation and bring it out to the real world. Thanks to God [Allah] that I am still okay until now.” (357-360)

Norhazrina (SNX-13)

The nurses involved had to be prepared psychologically, but the organisation did not provide any sessions to address that need.

“In terms of psychological preparedness, we do not have it in our hospital setting, we do not have a special session for that, but we do have a sharing experience session.” (120-121)

Wong (DRY-01)

Some organisations recognised staff for their contribution to helping in a disaster response.
“So far, during the debriefing session after stand down, the bosses congratulated all staff involved during the disaster event. That was one of the emotional support given by the department. Then, they showed their empathy and appreciation. When the bosses appreciate our contribution, we could feel that it is worth to do that work. We do not need to ask for leave, and in fact, they offered it to us even though we never get it. They said it could make us feel better.” (393-400)

Ezlina (SNX-11)

During a disaster, no single agency or organisation is able to manage the whole of the situation on its own. Collaboration and partnership are required across several agencies, be they government or private.

“... a lot of assistance came from across the country. I saw many VIPs [Very Important Person] who came and brought together a few kinds of stuff to be distributed. Dr [name] also dropped by and looked around the disaster area.” (145-146)

Sabrina (SNX-01)

“There were many agencies that came during the floods; [name, name, name] and a few more agencies came to render their assistance and contributions.” (373-374)

Sabrina (SNX-01)

The establishment of these interagency partnerships was significant in helping to ensure a smooth process for assisting victims.

“We needed help since we could not manage it alone. In this case, we do have policemen, JPAM and fire and rescue services. Even the public also helped us.” (91-93)

Noraini (SNX-15)

Networking with multiple agencies, namely the fire and rescue services, police, military and non-governmental organisations (NGOs), is not only established during a disaster but begins when training is organised between various agencies.

“... we did a simulation and involved firefighters and other professions. It was just a simple simulation like the one that we had, involving fire and rescue services. But, it wasn’t about the tsunami.
It was just about common cases like mass casualty incidents.” (203-206)

Marlina (SNX-10)

“There were a few training sessions conducted by our department, and some were joint-ventured with other agencies.” (345-346)

Ezlina (SNX-11)

The fire and rescue services are commonly the first to arrive at the scene out of the rescue teams involved. A team that provides medical services must follow their command to ensure the location is safe to enter in order to provide medical treatment to the victims.

“Once the fire and rescue services confirmed that the place was safe, then we were allowed to enter. Usually, they evacuate the victims and put them in the safety zone. It avoids us having contact with the fire splash from the incident site.” (106-109)

Noraini (SNX-15)

Apart from the fire and rescue services, the military also come forward to help during a disaster. They are fully equipped with all aspects of assistance needed, from a medical team to a logistics team. When a flood disaster strikes, the military assists in supplying logistics.

“On the fourth day of the disaster, we felt so much relieved when the military sent assistance to supply a water tanker to the hospital. They put the new tank, replacing the dried tank, which was almost the same size.” (48-51)

Hasmawati (SNX-20)

“I worked with one of the armed forces. I asked him to help me check on the helicopter movement and the freight for supplying donation. So, it reduced my workload as I would not have to move here and there and he helped me a lot.” (184-188)

Roslinda (SNX-22)

Many different agencies are involved in a disaster response, yet they can sometimes give conflicting instructions and this creates a dilemma for those trying to follow the instructions.
“When I went to both disasters, I received redundant commands and instructions from different people. So, when this happens it creates ineffective communication, and secondly, we can see the workflows become haywire and contradict each other.” (427-430)

Imran (SNY-40)

Working with multiple agencies can be challenging for some people, in particular working with the military, which is known for its discipline. In the end, they all work well together.

“At first, when I had to deal with the military, it was slightly hard since they were strictly following the command from their superior. However, once we started the collaboration, it became easier since we knew how they worked. They are firm and have clear command and direction. Eventually, I could cope with working with them.” (215-218)

Roslinda (SNX-22)

These findings show that a disaster requires support from the organisation, including the nursing administrator and top management, with regard to the nurses’ welfare. It is also important to establish collaborative ways of working, including organising joint training between multiple agencies to strengthen the knowledge and skills of the healthcare professionals and enable them to render the necessary healthcare to the people affected.

Summary of category 3: Getting Support

Working within a disaster situation demands support from every aspect, such as from the family members, their colleagues as well as the organisation. Family support is important in ensuring both parties – the nurse and spouse or family members – develop an understanding of their duty to serve those in need and their commitment to their profession. Additionally, the support derived from religious beliefs, colleagues and the organisation could help to lessen any impact post disaster, wherein they are recognised and have someone to talk to about their experience of responding to the disaster.
4.2.4 Core category: Ensuring Individual Sustainability when in a Hostile Environment

Disasters often lead to the creation of a hostile environment. Nurses should possess some characteristics that allow them to be able to work in a disaster situation. The findings have provided evidence to support the categories of establishing competencies and responsibilities, managing emotions and getting support can help sustain nurses working in disaster areas.

In this study, the nurses have demonstrated that these categories ensure their individual sustainability to work in a disaster situation. Nurses need to be competent in both general nursing and specific disaster skills, besides learn on the job, in order to discharge their responsibilities. Their ability to adapt to their vulnerable situation and demonstrate competency was reported by an emergency physician.

“There were different scenarios from my experience, when I have the nurses to volunteer to go for disaster relief with us, for a humanitarian mission. In fact, it exceeded my expectation. Honestly, I never think they can do that work as I mentioned earlier, they can be at an ‘out-post’ for a week. The conditions at the disaster site were not conducive. There was no proper lodging, accommodation. In terms of personal hygiene, it probably became one of the issues, no clean water, and limited resources and food. Surprisingly, the nurses that I worked with have never had any problem or even always complement the role of the doctors because, in crisis situations as I said, it exceeded my expectation. It was probably the training in the nursing school that might have brought them in the situation where they played much more positive roles. Sometimes they exceeded the role that doctors can play.” (39-48) Izzul (DRY-04)

In facing a difficult situation within a disaster, nurses must be able to manage their emotions, be these positive or negative, in order to continue their work in such a hostile environment. Nurses typically receive support from their family members, colleagues and other agencies, for childminding, to work as a team, undergo training and so on, as discussed earlier in this chapter. All of these actions help to ensure they can continue to work effectively and efficiently within a hostile environment.
Through the findings, the researcher has identified four parties (groups) that are closely related to the categories. These are identified as the organisation, the wider society, the family and the person themselves. It was identified that the organisation, wider society, family and the person themselves all play a significant role in achieving the nurses’ target to be sustained throughout the disaster.

Throughout a disaster episode, there was a temporal element to the categories identified (see Figure 4.4). From this temporal perspective, ‘establishing competencies and responsibilities’ can be seen as spanning the entire period, from the pre-disaster phase to the end of the disaster period. It is a similar picture for the category of getting support. This element begins on the day the respondents receive any formal or informal training and exposure to disaster preparedness and continues until the respondents return to their normal workplace and resume their regular duties. For managing emotions, this commences when the disaster first strikes and lasts until the respondents return to work and are able to control their emotions effectively.

Figure 4.4: Temporal element of the categories
Summary of the core category

Being a healthcare worker, specifically a nurse, requires one to be sustained and resilient to the challenges posed by working in a hostile environment during a disaster event. In this study, the nurses have shared how attaining the sustainability to work in a hostile environment requires the establishment of nursing competencies and responsibilities, in addition to the ability to manage their own emotions and obtain the appropriate support.

4.3 Summary of the chapter

This study contributes to the findings on nurses’ experiences when they respond during disasters. It has uncovered three categories: 1) establishing competencies and responsibilities, 2) managing emotions and 3) getting support. These categories lead to the emergence of a core category, ‘ensuring individual sustainability when in a hostile environment’. A nurse responding to a disaster needs to be competent, including in a chaotic and hostile environment. In order to accomplish this, nurses should be ready, able to adapt to the circumstances they face and fulfil their duties. Through participating in training and a real scenario, they gain experience that can help them with regard to their future preparedness.

This study reveals how the nurse respondents perceive disasters on an emotional level. While some feel excitement at the prospect of becoming involved, others tend to feel scared. Working with vulnerable people encourages them to be kind and focus on the needs of those affected. However, working for prolonged periods of time leads to them feeling fatigued. In order to work in a hostile environment, the nurses need support from their organisation, colleagues and their family, including religious support to provide comfort on their journey in a disaster situation. This study also reveals the temporal elements of the categories, from the pre-disaster period through to the post-disaster period. It indicates the period that each category falls into throughout their response.
CHAPTER 5: DISCUSSION

5.0 Introduction

This chapter discusses the findings of the study that addresses the following research questions:

1) What are the experiences of nurses being involved in a disaster response?
2) What are the factors that contribute to and hinder nurses’ performance while responding to disaster events?

In seeking to answer these research questions, this study utilised the constructivist grounded theory approach developed by Charmaz (2006). One aspect of grounded theory is to assist in the discovery of social and psychological processes. In this study, it was used to explore the social interaction of the nurse respondents with their experience when in a disaster situation. Many lessons have been learnt from exploring the nurses’ experiences of being involved in disaster response and these will be explained further in this chapter. From the findings, a total of seven key points have been identified through their shared experiences.

This study identified the following three categories within the time frame of the disaster management continuum: 1) establishing competencies and responsibilities (with five subcategories), 2) managing emotions and 3) getting support. These categories then led to the discovery of the overarching core category ‘Ensuring Individual Sustainability When in A Hostile Environment’. These categories can be mapped across the time phases of a disaster, which comprise pre-disaster (the preventive/mitigation and preparedness phases), during a disaster (response phase) and post-disaster (recovery/rehabilitation phase) as given by the World Health Organization (2011) on the phases of disaster.

There was a distinct temporal element to the nurses’ involvement in disaster management. From the temporal perspective, establishing competencies and
responsible for pre-disaster phase to the end of the post-disaster period. The temporal element of obtaining support commences on the day a nurse is first exposed to disaster management in the pre-disaster phase and continues until they require no further post-disaster support. Yet learning how to manage emotions during the pre-disaster was somehow missing from the picture (see Figure 5.1).

Figure 5.1: Temporal element of the categories

The discussion of what these findings mean is summarised in Figure 5.2 and will be presented next.
Figure 5.2: The emergence of subcategories, categories and core categories

- Ensuring individual sustainability when in a hostile environment
- Managing emotions
- Getting support
- Establishing competencies and responsibilities
- Being prepared and ready for the call
- Establishing competencies in managing a disaster situation
- Being responsible and fulfilling duties
- Adapting to the circumstances
- Gaining memorable experiences

Temporal element of disaster continuum (Pre-disaster, During disaster and Post-disaster)
The further discussion in this chapter is thus organised in the following manner:

**Part I** – An explanation of the three categories, including five of the subcategories from ‘establishing competencies and responsibilities’, from the experiences of the nurses when in a disaster situation.

**Part II** – A discussion of the core category of ‘Ensuring Individual Sustainability When in a Hostile Environment’, which leads to the establishment of the ‘Being a Disaster Nurse’ model.

**Part III** – A summary of the exploration into how the methodology influenced this study and the original contribution made by the study to the current body of knowledge. This part also examines the strengths and limitations of this study.

**Part IV** – A reflection on the journey, both personally and professionally, and an overall summary of this chapter.

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**PART I**

This section explains the three categories; 1) establishing competencies and responsibilities (with its five subcategories), 2) managing emotions and 3) getting support.

**5.1 Establishing competencies and responsibilities**

The category of establishing competencies and responsibilities built up from the emergence of the five subcategories of i) being prepared and ready for the call, ii) establishing competencies in managing a disaster situation, iii) being responsible and fulfilling duties, iv) adapting to the circumstances and v) gaining memorable experiences. Each of the subcategories will be explained next.
5.1.1 Being prepared and ready for the call

Disaster preparedness helps to minimise the impact of disasters on the community affected and consequently could save lives. Ideally, during a disaster, nurses should be in the right place, at the right time and with the right equipment. This would enable them to assist and facilitate the people to recover and return to normal life within a short time. However, the findings from this study have revealed that the nurses lacked the necessary preparedness and involvement for a disaster in a Malaysian context.

i. Lack of involvement in disaster preparedness

Malaysia receives heavy downpours during the monsoon season that can sometimes leads to ‘hydrological and geological’ disasters (namely floods and landslides, respectively), while flooding has been a major concern due to rapid building development. Despite this type of recurrent scenario, the nurses in this study who were affected by a flood disaster mentioned that they had been unprepared for the event that struck the area. Others reported having received inadequate preparation prior to the disaster response. They also had fewer opportunities and were rarely involved in the pre-disaster phase that comprises mitigation and preparedness activities, in which planning and preparation take place. Furthermore, the emergency physicians in this study acknowledged that the nurses lacked involvement during the pre-disaster phases, such as in the development of disaster plans and policies. For them, the nurses should be part of the disaster management policy team and be involved from the very start of the disaster continuum, not merely during the response and recovery phases. These findings reflect another study by Secor-Turner and O’Boyle (2006) which reported that nurses have minimal involvement in the development of an institutional plan as part of the pre-disaster activities. In addition, the World Health Organization (2007) confirmed in its report that nurses are rarely involved in the planning and development of policy with regard to emergency preparedness and response. Since this report, the situation has not changed in a Malaysian context.
The occurrence of disasters prompted the willingness of the nurses in this study to help people in some way. However, the findings of this study, supported by many studies across the continents (Arbon et al., 2013; Baack and Alfred, 2013; Fatma Abdelalim Abdelghany Ibrahim, 2014; Al Thobaity et al., 2015; Li et al., 2015; Usher et al., 2015; Wenji et al., 2015; Wilkinson and Matzo, 2015; Hodge, Miller and Skaggs, 2017; Labrague et al., 2017), indicate that nurses lack involvement and preparation for disaster response. In line with this, several other studies have also supported the finding that the nurses were not well prepared, either educationally or psychologically, prior to a disaster response (Li et al., 2015); as such, these workers were not well utilised and this constituted a waste of resources (Wenji et al., 2015).

As the largest group of healthcare professionals, nurses should be able to participate in a disaster team to deliver nursing care. They can play a vital role (Labrague et al., 2017) in safeguarding the health and well-being of the affected population, thus aligning with the global agenda on ‘Sustainable Development Goals, Goal 3: Good Health and Well-Being’. It is therefore crucial that every single nurse is given opportunities to be involved in the disaster continuum and be prepared. This could enhance the effectiveness of the Malaysian healthcare system in responding to the increasing frequency of disasters.

**ii. The need for nurses to be prepared and ready**

Most of the nurses in this study reported that they were unprepared for disasters of all kinds. They shared a common view on the need to be prepared and ready prior to deployment to a disaster site. In a pandemic situation such as Severe Acute Respiratory Syndrome (SARS), the nurses in this study who had been involved in handling cases stated that they were provided with specialised training on the use of personal protective equipment (PPE). What they related corresponds to a statement by the International Council of Nurses and World Health Organization (2009) in the (International Council of Nurses) ‘ICN Framework of Disaster Nursing Competencies’ that specialised training
could fill the gap in knowledge and thus enhance the effectiveness of response with nurses prepared to volunteer for disaster response.

On the other hand, most of the nurses in this current study indicated that being prepared would facilitate them helping the affected population. It could also lessen their ‘burden’ and help them become more organised in handling the tasks when they were prepared beforehand. They mentioned that a priori information received could give ‘a clearer picture’ of what to expect and promote a feeling of readiness amongst the nurses in regard to their physical, psychological and emotional well-being. Ferry (2017) also emphasised the importance of being prepared for a disaster; for instance, it helps in developing business continuity and facilitating the volunteers involved in disaster response.

From the nurses’ point of view, the importance of being prepared was a key focus in this study. They mentioned the need to strengthen both the human resources and the institutional response through training. They highlighted the importance of being trained through disaster education or training. Cotanda et al. (2016) discussed the improvement in the knowledge of healthcare workers, including nurses in the field of paediatric emergency medicine, when they were prepared before deployment. Xu and Zeng (2016), meanwhile, wrote about how the preparation of nurses could determine the success of disaster-related training and how this would later impact on their responses and recovery of the population during a disaster.

The nurses in this study talked about the importance of different type of preparedness, not only physical preparation but also emotional and psychological preparation. They suggested that they could be taught and informed about emotional and psychological preparation for a disaster area prior to becoming involved. Several studies have revealed the importance of psychological and emotional preparedness, including Al Khalaileh, Bond and Alasad (2012), in which the suggestion was made to address mental health issues, and Pourvakhsboori et al. (2017), who discussed how training could
minimise the psychological and emotional impact. The participants in Nekooei Moghaddam et al. (2014) pointed out the need for emotion management training. This could help them to adapt to the situation and enable nurses to avoid becoming engaged in an environment that could lead to them experiencing adverse effects from the disaster and its aftermath. Indeed, a growing level of attention is being accorded to disaster training all over the world. However, in some countries, especially developing countries, including Malaysia, the situation continues to be lacking.

iii. The current state of disaster training in Malaysia and other countries

In Malaysia, the common requirement for entry into the nursing profession is a diploma in nursing that comprises three years of learning. The researcher has taught this topic in her home university and knows that out of 21 hours of emergency and trauma teaching, there are only two hours of classroom teaching and two hours of disaster mock drills. In addition, the researcher discovered through informal discussion with lecturers from across Malaysia teaching the same course that only around two to six hours are dedicated to the topic of disaster management, depending on the school or institution.

To date, there is no universal guideline on the ideal number of hours for teaching disaster management. However, fewer hours allocated to disaster nursing education ‘takes its toll’ when nurses are required to respond immediately to a disaster. The nurses who participated in this study also spoke about this, wherein they felt it was difficult to manage the unpredictable situation such in a disaster as they were unfamiliar with it, which consequently lengthened their response time. They also expressed their ‘obligation’ to be trained with disaster education prior to their deployment. Likewise, Ahayalimudin (2012) found that the nurses in her study also required lessons in disaster nursing while they underwent basic nursing training.

The current situation demonstrates that in most countries, there is only a minimal presence of disaster preparedness education in undergraduate nursing curricula (Achora
and Kamanyire, 2016). Al Khalaileh, Bond and Alasad (2012), meanwhile, noted the absence of disaster education for undergraduate nursing students in Jordan and various other counties worldwide. A survey by Usher and Mayner (2011) indicated that only a few nursing schools in Australia include sessions on disasters in their curricula, with the main focus being merely on theoretical-based as opposed to practice-based training. Several studies support the findings on the importance of nurses’ exposure to such areas prior to them registering as a nurse (Kako and Mitani, 2010; Usher and Mayner, 2011; Jose and Dufrene, 2014; Turale, 2014), while Whetzel et al. (2013) suggested the provision of disaster education during the post-registration phase. The nurses in this study spoke about the duty of their individual institution to offer training and provide an equal chance to those who expressed an interest in being exposed to disaster management. Hence, the provision of appropriate tailored disaster training by the organisation is necessary for effective response.

iv. Duty of care of the organisation to provide disaster training

Preparedness involves planning and readiness to respond to any emergency and disaster situation. In this study, preparedness was developed mainly through training, either during basic nursing training or in specialised post-registration training. Apart from that, the nurses also acquired experience from the workplace, notably from the emergency department, as well as their exposure in any previous disaster response. Gaining various kinds of experience in this way builds up the nurses’ ability to respond to an uncertain situation.

However, this lack of preparedness was a challenge for the nurses in this study as it was not only the better-prepared emergency nurses that were asked to respond to disasters, but also those with no such preparation who worked in areas other than the emergency department. The majority of the emergency nurses in this study were trained for disaster; however, very few of the non-emergency nurses had received any such training or exposure to disaster management. They were not disaster-trained but
nevertheless were part of the disaster response. In some cases, despite having participated in a disaster response, they had still had little, if any, opportunity to attend any disaster-related education or training. This leads to haphazardly prepared nurses and experiences that could cause them distress, thus potentially impacting on the care they can provide to the people affected and on the nurse longer term well-being.

To encourage nurses to be prepared, most of them identified that their organisation had a duty of care to offer disaster training to employees, as mentioned previously. This is parallel to the suggestion by the World Health Organization (2019) that all countries that experience disasters should consider training as a national agenda for their healthcare professionals, including nurses. Training constitutes a major capital investment. Disaster researchers worldwide have called for more training and education to be provided, in addition to better planning for managing future disasters. This study found nurses wanted the training, supporting the findings of Li et al. (2015) who concluded organisations need to provide opportunities for nurses to be ready prior to deployment to a disaster area. In addition, Gallardo et al. (2015) stated that all healthcare professionals involved in disaster response should receive disaster training.

The offering of appropriate training to nurses would make their tasks safer and minimise the emotional and psychological impacts they experience (Pourvakhshoori et al., 2017). Receiving preliminary training before exposure to a disaster helps nurses develop a strategy for their competencies and responsibilities that would enable them to focus on the potential task (Livornese and Vedder, 2017) prior to disaster response. Gov.uk (2014) mentions that training helps nurses to feel comfortable and confident with the exercise, even if they have only recently graduated from nursing school. Yet, the amount and suitability of the training being provided remains a question.
v. Frequency and type of disaster training

The nurses in this study reported that their own institution offered only a limited amount of disaster training in a year, while in other situations the institution offered no training at all. It was found in this study that some of the nurses were not be able to access disaster training for a range of reasons, including 1) no opportunity to be selected for the training or a ‘real’ disaster situation, 2) working in a discipline that was considered would have ‘less involvement’ in a disaster, such as an operating theatre, yet nevertheless still being called when a disaster happened, 3) a small number of courses offered annually, despite many nurses and other healthcare workers needing to be trained, and 4) a policy enacted by the administration of the hospital/department limiting nurses’ involvement in disaster-related training/education and disaster management.

Disaster training should be conducted periodically, mainly in organisations with a high turnover of workers such as healthcare institutions. However, the World Health Organization (WHO) has issued no specific instruction as to how frequently such training should be carried out. According to Lakbala (2016), in the United States (U.S.), the Joint Commission on Accreditation of Healthcare Organization (JCAHO) recommends that the hospitals under their purview test their emergency response plans twice a year, including one community-wide disaster drill. This drill tests the readiness of the organisation and provides scope for improvements to be made. In addition, the JCAHO also recommends an organisation located in a disaster-prone area should conduct training more frequently and exposure should be given to the majority of the workers, specifically to those who work in the emergency department as well as those involved in emergency preparedness and response planning.

Even if they are taught within a disaster training curriculum, there was less likelihood of the nurses being exposed to a ‘real situation’. Some of the nurses in this study had attended a seminar or simulation workshop related to disaster management and received training through their own working experience, plus exposure in a previous
disaster response. Other nurses, meanwhile, had never been involved in any kind of training and this training had been neglected by their employer. There are many nurses as well as healthcare professionals that need to be disaster-trained. In this study, the nurses who attended such training were generally exposed to different methods of training such as lectures, tabletop exercises, workshops and drills. This aligns with the current practice of disaster training in Malaysia where several of the methods employed mimic the ‘real situation’ of disasters, often relating to mass casualty incidents and pandemics. Hammad, Arbon and Gebbie (2011) mentioned that the hospital of South Australia offered simulation exercises as part of the training. Overall, this meant the nurses had relatively few opportunities to develop the capacities and competencies needed, and so felt unprepared.

In addition, some of the nurses were involved in conjoint training with other agencies such as a fire brigade team. Li et al. (2015) noted that collaborative training with other agencies was helpful in understanding others’ roles and observing the coordination between teams. The ability to work in partnership with other agencies would improve nurses’ preparation and help them to be at ease when working in a chaotic situation. Aside from that, the nurses prefer to be prepared in advance with all of the required elements to ensure they are able to perform at their best while helping the affected population.

vi. Preparing the nurses in all elements; physical, psychological and emotional

Being unprepared due to a lack of training and inadequate exposure to disaster management resulted in a stressful condition for the nurses in this study and led to frustration. Indeed, insufficient exposure to disaster management training for nurses is a common problem worldwide (Wenji et al., 2015). Only a few of the nurses in this study stated that they had been exposed to physical preparation such as being involved in disaster simulation training. None of them mentioned being equipped beforehand in terms of emotional and psychological preparedness. Indeed, being physically prepared provides no guarantee that nurses are prepared psychologically and emotionally; however, this
could be the outcome if they were trained and exposed to a disaster, either as a simulation or in a real scenario.

It was observed that a large number of the nurses in this study were inadequately prepared in all elements. Indeed, they all shared the same view of the importance of being prepared emotionally and psychologically. The nurses stated that their colleagues were vigilant with respect to any changes they displayed after the response phase and sought to intervene early, such as by enquiring about their condition or the department administrator granting ‘leave’ as a means of preventing psychological impact due to the disaster. These findings are supported by Li et al. (2015), who state that the need for psychology-related knowledge is significant for nurses during a disaster and that they are lacking in this domain. According to the Federal Emergency Management Agency (2019), disaster workers are required to be psychologically prepared as a basic element of pre-deployment. Preparing nurses psychologically and emotionally beforehand could make them feel confident, maintain better control and enable them to make the best decision during a disaster (Australian Psychological Society, 2018).

Summary on the section being prepared and ready for the call

The nurses in this study emphasised their need to be prepared in all elements, as mentioned previously, since most received inadequate preparation, especially psychological preparation, for all kinds of disasters.

5.1.2 Establishing competencies in managing a disaster situation

Nursing at its best demands competence and caring in nurses’ ‘professional life’, regardless of the situation, e.g. in a disaster. These competencies are not merely obtained prior to any disaster; rather, nurses can also attain them through exposure to the nature of a disaster. The nurses in this study mentioned the importance of being competent while delivering the best care during a disaster. They received help in regard to the required
competencies through their own organisation, although in some cases it was down to themselves as individuals whether or not they wished to enhance their competencies. However, insufficiency of competencies was stated by the nurses in this study during the interview.

While nurses and many other professionals such as clinicians and public health practitioners (Hsu et al., 2006) develop their own individual set of disaster competencies, the nurses in this study outlined how the competencies depended on the length of time they were involved in disaster management, as well as the disaster management training and disaster response. Nurses develop the competencies required to work in a disaster over time. However, questions are raised such as ‘What competencies enable them to work well within a disaster area?’ and ‘Do the competencies acquired while working at their department assist them while in a disaster area?’

i. Disaster competencies in Malaysia and other countries

At the present time, there is yet to be established a list of disaster competencies customised to the types of disasters that commonly occur in Malaysia, and it remains indistinct. Empirically, through the researcher’s own experience in disaster nursing in Malaysia, there is no monitoring of nurses’ competencies during a disaster. Indeed, the nurses in this study reported that they lacked the competency required to work within a disaster situation. However, despite having insufficient skills and competencies, which will be explained in this section, and facing an unfamiliar setting, they still had to perform the tasks they were given. There are however several disaster competency frameworks to assist nursing associations and related organisations to work in a hostile environment such as a disaster area.

Competency is vital as it could set a guide for nurses to perform their roles effectively when dealing with ‘human lives’, thus improving the quality of care provided. Nurses can attain the competencies needed when they perform required tasks repeatedly
and are actively involved in helping the affected population in a disaster. Referring to the International Council of Nurses and World Health Organization (2009), “competence is used to describe the knowledge that enables a practitioner to perform activities consistently in a safe manner” (p.34); it is acquired through involvement and performing the required tasks in any situation. These activities could thus enable the nurses to develop some form of the competencies needed when responding to a disaster.

Within the literature, numerous scholars and experts have discussed the prerequisite of competencies in disaster nursing disciplines (Scott et al., 2013; Gallardo et al., 2015; Fukada, 2018). In Malaysia, as previously mentioned, there is no specific framework for disaster nursing competencies. However, clause 1.2.1 of point number 2 in the Code of Professional Conduct established by the Nursing Board Malaysia (1998) states: “the nurse is expected to provide a good standard of nursing care in following manner: provides compassionate and competent nursing care to meet each patient’s needs” (p. 1-2). However, the clause only mentions being competent in general and is not specific to an ‘extreme situation’ such as a disaster. In addition, clause 1.2.2 of the Code of Professional Conduct mentions that “Each nurse is required to keep up with advances in nursing, medical and health practices to maintain competence in nursing knowledge and skills” (Nursing Board Malaysia, 1998, p.2). Therefore, it is essential to develop nurses’ disaster competencies in order to achieve the required standard as stated in the code.

Linked to this is the international parameter of the ‘ICN Framework of Disaster Nursing Competencies’ as a guide to nurses’ competencies during a disaster. This framework was established by the International Council of Nurses and the World Health Organization (2009). However, other countries, such as the United States of America, have established their own disaster nursing competency guidelines in line with the International Council for Nurses (ICN) framework and adapted to their own needs. For example, ‘Educational Competencies for Registered Nurses Responding to Mass Casualty Incidents’ by the International Nursing Coalition for Mass Casualty Education (INCMCE)
(Weiner, 2006b) and ‘Core Competencies for Disaster Medicine and Public Health’ by the National Center for Disaster Medicine and Public Health, Uniformed Services University of the Health Sciences (Walsh et al., 2012) were developed by a specific group of people with a similar interest in disaster competencies.

In Japan, faculty members of the University of Hyogo, Graduate School of Nursing developed ‘Core Competencies Required for Disaster Nursing’. The development of this framework took place following a report by the Nursing Education Study Group of the Ministry of Education, Culture, Sports, Science and Technology of Japan entitled Achievement Targets for Undergraduate Students upon Graduation, toward Enhanced Practical Nursing Skills and Abilities (College of Nursing Art and Science University of Hyogo, 2006). The contents of the framework were also included in the ICN guidelines ‘ICN Framework of Competencies for Generalist Nurse’ (Hancock, 2004) and the INCMCE’s ‘Educational Competencies for Registered Nurses Responding to Mass Casualty Incidents’.

As such, there are many frameworks on disaster competencies across the globe. Their existence points to an effort to accommodate the needs of specific countries that experience disasters of a different nature. Nevertheless, all of the frameworks that have been developed follow the guidelines by the International Council of Nurses and the World Health Organization (2009). Any nurses involved in a disaster response, regardless of their workplace and background, should gain exposure to all of the competencies needed. It has been identified in this study that there are many versions of the list of competencies needed in managing a disaster. However, attention has tended to be paid merely to the physical aspects, thereby neglecting the psychological and emotional aspects. According to the International Council of Nurses and World Health Organization (2009), all nurses must be competent to provide psychological support and possess the necessary knowledge to address mental health issues, for their patients as well as for themselves.
ii. Variation of competencies amongst nurses involved in disasters

The competencies required by nurses begin as early as the pre-disaster phase. In this study, several competencies were mentioned by the nurses, including assisting during a disaster by performing first aid treatment, administering medication, assessing the needs of victims and monitoring the physical and mental health of victims. However, these areas were identified as lacking for some nurses. As listed by the College of Nursing Art and Science University of Hyogo (2006), competencies such as having fundamental attitudes towards disaster nursing and professional development are recommended. Hammad et al. (2012) stated that emergency nurses should continue to perform patient assessment and management in the same way as in the department.

The disaster response phase involves many different activities and skills. For example, some of the nurses identified the needs of individuals with chronic disease such as end stage renal failure (ESRF) who required dialysis. The College of Nursing Art and Science University of Hyogo (2006) identified the systematic assessment and provision of disaster nursing care, care provision for vulnerable people and their families and care management in disaster situations as amongst the competencies that nurses are required to demonstrate. On the other hand, they also perform nursing assessment and physical examination on individuals that require medical follow-up at the nearest hospital.

In the post-disaster phase, the nurses in this study applied several related skills and competencies such as reinstating vital services; for example, providing emergency food supplies and moral support to the population affected. In addition, the nurses attended to the population’s needs and helped in restoring damaged infrastructure. They also helped with cleaning out clinics that were caked in mud. These skills were mentioned by the nurses in this study; indeed, they are listed in the disaster nursing competencies framework amongst the skills required during the recovery phase. Nevertheless, nurses require many more skills and competencies in order to assist the population affected.
However, not all of the nurses in this study that were involved in disaster response had these required competencies.

Nevertheless, it has been seen that the nurses in this study who work on medical-surgical wards, paediatric wards, obstetrics & gynaecology wards, psychiatric wards, in operating theatres and infectious disease wards are all simultaneously part of a disaster response team. Furthermore, three of the nurses work in non-clinical nursing areas comprising a nursing headquarters at the ministry level, an administrative office and a research centre. Unlike their counterparts from an emergency department or those who have been trained in emergency and disaster response, the findings from the study found that nurses from a non-emergency background felt unfamiliar with the situation and arrangement of the equipment at the emergency department. This meant they were slower in acting to help.

This study has also identified that some of the non-emergency nurses do not having the competencies needed for disaster response. Hammad et al. (2012) explained that nurses must draw on a wide range of skills and competencies in a disaster and between different types. This is also supported by the American Nurses Association (2017) which mentions how those in non-emergency response functions find it difficult to respond to a disaster. As an example, nurses working in a non-emergency discipline were inexperienced in trauma management, which is amongst the fundamental knowledge and skills required in managing trauma victims in a disaster area. This is concurrent to the suggestion made by Li et al. (2015) on the importance of having knowledge and competencies in trauma management when working within a disaster area.

Nurses with a background in emergency nursing have different skills and competencies (Emergency Nurses Association, 2011; Harding et al., 2013) compared to those without experience in this area. For example, the triaging process is fundamental in emergency nursing as a way of assessing and prioritising the severity of victims’ illnesses or injuries. However, triaging is not widely practised as a routine by non-emergency
nursing practitioners and is thus unfamiliar to them. As non-emergency nurses are included in a disaster response team, they also need such skills and competencies to enable them to respond effectively in a disaster situation.

In a different circumstance, Li et al. (2015) mentioned how there was no need for nurses who work in internal medicine to be involved in the situation, and their study included only nurses from a surgical-based ward. This claim could be debated as nurses, regardless of their discipline, should be able to work in any situation, whether it is within the ‘four walls’ or in a hostile environment such as a disaster. This is according to a statement by Veenema (2006), while the Society for the Advancement of Disaster Nursing (no date) said that ‘every nurse should be trained as a disaster nurse’ in order to prepare them for any unpredicted event. Likewise, nurses should ensure their competency is maintained and updated accordingly. This could lead to them feeling responsible and capable of fulfilling the necessary duties when working in a disaster.

**Summary on section establishing competency**

Disasters require continuation in the development of disaster nursing competencies to enable them to effectively perform their duties when responding in a hostile environment. Competency in disaster management is vital, as informed by the nurses in this study. A lack of training in disaster management for nurses and other healthcare workers results in little competency or even no competency at all, as emphasised by the International Council of Nurses and the World Health Organization (2009). Greater exposure to and experience in disaster leads to improvement of the tasks (Cut Husna, Hatthakit and Chaowalit, 2011; Mohamed Alharbi, 2013). The nurses in the current study suggested that they prefer competency to be taught within the pre-disaster period. Equipping nurses with preliminary ideas about working in a disaster situation could enable them to work effectively, be responsible and know what should be done to undertake the required duties.
5.1.3 Being responsible and fulfilling duties

Nurses play a major role in a disaster (Veenema, 2013; Turale, 2014) and embrace an extensive range of responsibilities, not only during a disaster response but across all of the disaster management phases, from disaster mitigation to disaster recovery. As a professional career, nursing demands the provision of comprehensive care in order to meet the complexity and diversity of patient needs in a disaster. Regardless of where they work, for instance, in an emergency department or medical-surgical unit, or in an intensive care or even a paediatric unit, these nurses must be able to obtain adequate information and integrate the criteria to make a meaningful decision as well as practise the best holistic nursing care. They must perform their role not solely in the ‘ideal’ environment of a hospital but also in unpredictable disaster situations.

These findings revealed that the nurses in this study held huge responsibilities and some of them prioritised their work over other matters. Since disasters inherently require the involvement of large numbers of healthcare personnel, the nurses have a tendency to neglect issues such as the safety of their families. Instead, they opt to help out their colleagues at the hospital or scene to manage disaster victims. These nurses feel it is their duty to deliver care even within a disaster.

i. Ethical and moral obligation to provide the best care

Nurses have a duty of care towards disaster victims. Regardless of the setting, nurses must ensure they deliver professional practice that “constitutes the duty of care that the nurse has towards her patient” (Nursing Board Malaysia, 1998, p.2). When working in a disaster area, the professional responsibilities of a nurse are often extended and expanded in comparison to the ‘normal’ situation at the hospital. For instance, the nurses in this study evacuated patients from the site of a flood disaster to a nearby hospital, which was considered to be beyond their actual task. The nurses in this study explicitly mentioned
their roles and responsibilities involved in satisfying the needs of the affected populations in a disaster area.

The nurses in this study are required to fulfil this act of being responsible, from the pre-disaster phase through to the time at which a ‘stand-down’ announcement is declared. ‘Stand-down’ is defined as a relaxation of the status of a military unit or force from an alert or operational posture (Merriam-Webster, 2019). Being responsible to assist those affected during the disaster phase is aligned to the ‘Code of Professional Conduct of Nurses’, which states that “the nurse assumes responsibility and accountability for her own nursing judgments and actions” (Nursing Board Malaysia, 1998, p.2). Although not referring to any specific type of situation, this applies equally to a disaster site.

The nurses were able to perform their duties regardless of the type of situation in which they found themselves. An example from this study was the lack of surge capacity, particularly in staffing and supplies. Referring to the American College of Emergency Physicians (2017), surge capacity “is a measurable representation of ability to manage a sudden influx of patients. It is dependent on a well-functioning incident management system and the variables of space, supplies, staff and any special considerations (contaminated or contagious patients, for example)” (para 2). It could be observed in this study that the nurses were ‘struggling’ to perform their duties due to the influx of disaster victims and resource shortages. Indeed, some of the nurses in this study were forced to work continuously for several days, with only limited break times.

This study raises the questions of ‘do nurses have an obligation to answer the call?’; ‘Is there any law to command them to respond and what are the ethical obligations of nurses in responding to a disaster?’ The majority of the nurses in this study spoke of their obligation to help their nursing colleagues who were involved and simultaneously affected during a disaster. These findings align with those of Arbon, Cusack, et al. (2013)
who stated there was a sense of professional duty among the nurses in their study to fulfil their responsibilities.

In the Malaysian context, no specific clause within the ‘Code of Professional Conduct of Nurses’ from Nursing Board Malaysia (1998) mentions any obligation to respond during a disaster. However, the following clause in section 1: ‘Professional Nursing Practice’ expresses that nurses should have:

“1.1 Respect for [the] patient

The nurse renders care to patient regardless of ethnic origin, nature of health problems, religious beliefs and social status.” (p. 1).

However, the clause could also state ‘regardless of the situation or environment’ to represent the necessity for nurses to work within a disaster situation. Moreover, section 2: ‘Neglect or disregard professional responsibilities’ mentions:

“The professional practice described in (1) above, constitutes the duty of care that the nurse has towards her patient.

Negligence is the failure to discharge a duty to use reasonable care. Reasonable care refers to that care which would be exercised by a reasonable competent nurse.

However, as nurses practice in a variety of settings, it is recognized that there may be factors beyond the nurses’ control, such as management policies and resource constraints, which affect the fulfilment of their moral obligations.”
Based on the content of the above clause, we see that no ‘definite’ written rule has been established by the Nursing Board of Malaysia (NBM) in relation to the obligation of Malaysian nurses to respond to a disaster. However, section 2 of the code, as mentioned above, could be inferred to apply to nurses in such a situation despite it not explicitly stating ‘within a disaster situation’. According to the clause, it is likely that the NBM might be grounds for disciplining a nurse if they ‘fail to carry out the duties’, such as in a disaster response.

Elsewhere in the world, the American Nurses Association (2017) mentioned that some states within the (U.S.) have a written law requiring healthcare professionals to respond during a disaster, with any refusal to do so leading to reprimand. Klein (2006) added that nurses, when on official duty, depending on the job descriptions and policy of the institution, are obliged to carry out the duties when a disaster occurs. It is against the law for a nurse to avoid being present when needed. If they decline for any reason, Klein (2006) states that nurses can face disciplinary action by the organisation, with the exception of not being able to attend a disaster due to being unable to reach the destination or the government imposing martial law, a direct military control over the normal civilian functions of the government. On the other hand, Nasrabadi et al. (2007) and Grochtdreis et al. (2017) recommended that the involvement of nurses in a disaster response should be compulsory in order to help the population affected to survive.

ii. Involvement in a disaster response team

The question of ‘how can I help?’ always echoes in the nurses’ mind when they hear news of a disaster occurring somewhere in the world. In these situations, most people would like to help, and this includes these nurses. From the interviews, some of the nurses had been personally affected by a flood disaster, yet they still had to be involved in the disaster response team. The findings in this study reveal two types of nurses’ participation in a disaster response team; 1) voluntary, and 2) being told to take part.
Apart from these two different groups of nurses, in reality, all of the study participants reported for duty in a disaster without hesitation. Most of the nurses in this study would willingly become involved in a disaster situation, with only a few having initially mentioned that they were obliged to follow the order put out by their department/hospital and that they had little choice to decide. However, the findings of this study have identified that none of the nurses were coerced into participating in disaster response and some nurses had even asked the organisation if they could be involved from the outset. A similar situation to this finding was experienced by the participants in Li et al. (2015), where some of them followed the command as given by their employer, while others were instructed. Klein (2006) stated that nurses are allowed to volunteer their services unless there is no requirement for them to do so.

Despite being ordered to be involved in a disaster situation, the nurses were nevertheless enthusiastic to complete the tasks they were given. The nurses themselves requested to be part of the team and some had volunteered when asked. They were willing to be part of the team for a few reasons, including 1) it was their first experience of being involved in a disaster, 2) they wanted to ‘feel’ the experience of working within a disaster area, and 3) they wanted to ‘see’ the disaster area and how terrible it was. These were the main reasons for the nurses’ involvement in a disaster response. However, this study also acknowledges several other factors that influence nurses to become involved in a disaster response team, as follows: 4) when the disaster has affected their workplace, 5) a feeling of responsibility to help their nursing counterparts, and 6) to abide by the nursing pledge that requires them to fulfil the duties.

Pandemics, mass casualty incidents and landslides are among the common types of disaster to affect Malaysia. The nurses in this study expressed their willingness to become involved in any kind of disaster, including infectious disease pandemics. Confronting this type of disaster requires full preparation, especially with regard to personal protective equipment (PPE), as the personnel involved are exposed to a highly contagious environment. Working with a pandemic can expose them to the risk of
infection by the disease if they are not well trained in dealing with that type of disaster. This could also lead to the risk of them spreading it to other people such as their family members. Instead, they were willing to be involved, provided they received appropriate training beforehand.

This study has revealed that their own organisations would ensure the safety of healthcare personnel prior to their involvement in the event through the provision of adequate training in PPE. For example, nurses who were involved in the H1N1 (Swine flu) and Middle East Respiratory Syndrome-Coronavirus (MERS-CoV) outbreaks received briefings on the correct procedure for applying PPE prior to being involved in working with the diseases. At the same time, of those who were involved in a mass casualty incident response, some were familiar with the management of mass casualty incidents and the safety measures to be applied while at a disaster scene. The actions taken by the organisation would encourage the involvement of the nurses to carry out their duty and responsibility to provide their best care even in a disaster situation. These nurses were pleased to hold the duties and responsibilities to care for the victims and affected population.

In contrast, Couig (2012) and Wilkinson and Matzo (2015), in their respective studies, found the healthcare personnel respondents concerned, in particular nurses, were less likely to respond to infectious diseases or disasters involving harmful agents, compared to other natural disasters. A number of other studies have cited the reasons for this refusal to be part of a disaster team. One such reason concerned a fear of the hazardous situation and its potential aftermath (Gershon et al., 2010), which led to a low willingness on the part of the nurses in that study. Chaffee (2009), in her review of the literature on the willingness of healthcare personnel to work in a disaster, found that they declined to report for duty in certain disaster situations such as a hurricane.
iii. Factors related to nurses’ performance in a disaster response

Several factors related to the performance of the nurses during a disaster response. The nurses in this study who were affected by a flood found it difficult to respond to the disaster as they themselves were also victims. Through the findings, it can be recognised that the married nurses with children felt a degree of reluctance to become involved as they would be thinking about their children’s welfare if they were away for several days and this would impact on their focus in performing their duties. Indeed, in one situation, the spouse of a nurse felt impatient when his wife was away from home for almost two weeks.

In another scenario, the ‘young’ nurses in this study felt less confident as they lacked the necessary disaster-related experience as well as training. This finding is concurrent with other studies. Al Khalaileh, Bond and Alasad (2012) found in their study that the nurses from Jordan with more experience had a higher level of knowledge, skills and preparedness compared to the less experienced. Baack and Alfred (2013) revealed that the nurses were not confident to respond in a disaster, except for those with prior experience, while the less experienced nurses in a study by Arbon, Cusack, et al. (2013) felt they lacked confidence due to the inadequacy of hospital preparedness. As asserted by Livornese and Vedder (2017), inexperienced and unorganised individual nurses can complicate as opposed to assist in a crisis situation. In contrast, those personnel who worked in an emergency department or who had gained some prior exposure to emergency management were confident to be deployed to a disaster site. In some of the circumstances within this study, the institution’s policies, such as limiting nurses’ involvement in disaster response and the lack of surge capacity, affected the nurses’ performance, as they expressed during the interview.

Some of the nurses involved in the flood disaster revealed that they worked long hours each day with little in the way of breaks due to shortages in the numbers of nurses that reported for duty at the hospital and relief centre. Thinking of the difficulties that their
colleagues handled urged them to offer themselves to substitute and allow their fellow nurses to have a short break. The nurses were thus able to carry out their duties consistently with help from others, namely friends and their own organisation.

**Summary on the section being responsible and fulfilling duties**

Regardless of where they practise their nursing care, the nurses are required to be responsible and perform their duties to all humankind that need their attention, primarily in a hostile environment such as a disaster area. It is stated in their job description that they are bound to the ethical and moral obligation to discharge their duty without fail, except in circumstances in which they are allowed to so do, such as falling sick themselves. It was also their responsibility to assist their nursing counterparts in providing the best care to victims, without putting their own health at risk. This study also observed that the nurses tried their best to adapt to the circumstances that required them to render care to the population affected.

**5.1.4 Adapting to the circumstances**

Under normal circumstances, especially in an emergency department, there is a tendency for situations to already be strained due to the high volumes of routine work. These nurses encountered similar circumstances when they were deployed to a disaster area. In order to carry out the duties required within a disaster situation, the nurses occasionally had to perform their tasks faced with scarce resources and had to adapt to the disaster situation. The nurses were required to adapt to this complex type of situation and manage the disaster effectively based on their planning and knowing what had to be done to improve the health status of the victims of the disaster.

This study has revealed the need for nurses to employ their own innovation and creativity when forced to deal with inadequate resources. Despite some of the nurses going to the disaster site with up-to-date and advanced emergency skills, they nevertheless
felt frustrated as the ultimate challenge they faced was a scarcity in resources. The findings are parallel to from Wenji et al. (2015), who revealed that the nurses in their study were frustrated by their inability to help the victims with their emergency nursing skills due to the resource limitations they faced. In one such example, the respondents used a paediatric-size nasal prong catheter to substitute for the function of a suction catheter. In another situation, due to the influx of victims during a disaster, the nurses used different-coloured ribbons to tag the victims as a means of differentiating the severity of their injuries, as opposed to using the prepared triage tags that were in short supply. Li et al. (2015), in their findings, also discussed the nurses’ adaptability within disaster situations and their use of critical thinking skills in solving the problems that arose. They also had to utilise the limited equipment available at the incident site.

In this study, some of the nurses thrived on adapting to circumstances that required them to modify their role accordingly. In one scenario, it was expected that a pregnant mother would give birth to her baby in a temporary shelter. Being in the same area as the mother, the nurse had to assist the midwife in delivering the baby with help from other people at the shelter. In some circumstances, the nurses had to utilise anything they could find around them to help them provide the ‘best’ care. For example, they used branches and folded newspaper when treating mass casualties with suspected long-bone fractures during pre-hospital care at the disaster site due to the limited availability of splints.

Apart from that, the nurses in this study were critical of the lack of information they received regarding what could be anticipated prior to their deployment to the disaster area. Regardless of the situation, it is compulsory for nurses instructed to attend a disaster scene to be informed as to the ‘expected’ situation prior to their deployment. The nurses could not assume or have high expectations regarding the availability of complete equipment or a comfortable situation due to the lack of available resources within the area. However, they could at least prepare themselves mentally for what to expect when they arrived at the disaster site. As an example, during the pandemic situation, the nurses
involved knew that they would be facing the ‘deadliest virus’ of H1N1; hence, they were extra vigilant when handling these cases at their hospital.

The handling of a disaster, whether natural or man-made, left the nurses with thousands of memories. Being involved in a disaster on one or more occasion allowed the nurses in this study to experience the situation and realise the ‘true picture’ of disaster. All of them gained memorable experiences that could help them be ready for the next event.

5.1.5 Gaining memorable experiences

It is common in disasters for everyone affected to be left with indelible memories, including the nurses who have been involved, be it a positive or negative experience. Thus, nurses are the people best placed to describe their journey so that others may learn from it in future. They are also becoming key informants in the planning of more effective disaster nursing management for forthcoming developments. The findings reveal the nurses’ perspectives on the experience of working within a chaotic situation. The nurses shared their positive and negative feelings from when they were selected as part of a disaster team, as well as when they arrived at the disaster site and helped those affected. Gaining various kinds of experience in this way built their ability to respond to the uncertain situation.

The nurse respondents spoke of the notion of being amongst the chosen ones, and they felt proud to be given the chance. Despite feeling a sense of excitement at the occurrence of a disaster, this does not mean they rejoiced at the event. It literally demonstrates their delight at being involved in the team and serving the population affected. For them, being involved in a disaster response team provides them with invaluable experience in comparison to what they generally deal with. The nurses shared that they had learnt a lot through their involvement in a disaster response team that could be useful in any subsequent deployment.
Some of the nurses reported that they had insufficient experience in relation to disaster nursing. Understanding nurses’ experiences of working in a disaster can help to identify problems in this area. Some were challenged by the situation that they had never experienced before while working within the hospital compound. It was a new experience for them, and this finding echoed that regarding the nurses from other studies (Li et al., 2015; Wenji et al., 2015; Yan et al., 2015). Several studies have suggested that experience enables nurses to be more prepared to work in a disaster (Al Khalaileh, Bond and Alasad, 2012; Li et al., 2015).

Other nurses, meanwhile, reported having a ‘rough’ experience while working at the disaster site. Some of the nurses in this study had endured a hard time working in the rain, with one nurse who responded to a mass casualty incident finding it difficult to deal with the rain at the disaster site. She reported finding the experience extremely difficult due to seeing the victims’ blood everywhere, combined with the rain. Since that was her first experience, she was left shocked. From another report, the nurse felt exhausted as she had been affected by the flood, which had left her with nothing but the clothes she was wearing. She had not had meals for about two days, except for a can of carbonated drink that she had found. However, despite the conditions, she had insisted on helping her friends at the evacuation centre and was given some clothes to wear by a friend. Stelton (2011) shared the ‘not-so-good’ experience faced by nurses involved in disaster relief, even though they had found the experience to be ultimately rewarding.

The nurses faced a different type of experience while working during a disaster. Some worried about their own safety, especially those deployed to conflict areas, pandemic situations and who responded to landslides. Some were left feeling stressed and fatigued after working continuously during floods with only minimal breaks, while others responded to a mass casualty incident that called for resilience in handling the trauma victims. Given all these sorts of experiences, ultimately, the nurses in this study were grateful as they had been able to help other people. However, were they affected psychologically and emotionally by their involvement in disaster situations?
5.2 Managing emotions

Apart from the category of being prepared and establishing competencies, which we could state focuses more on the physical side, this study also revealed another category related to the ability to manage and deal with emotions. Unlike establishing competencies and responsibilities, the temporal aspect of this category begins when the disaster first occurs and lasts until the respondents return to work and are able to control their emotions effectively. In contrast, the study has revealed how managing emotions was not identified during the pre-disaster phase.

When the focus is placed solely on physical preparation, the emotional and psychological sides frequently go unnoticed. Most of the nurses reported that their emotions were neglected and this can be observed in the findings of this study. Managing emotions should ideally begin in the pre-disaster phase, as for the other two categories from the findings. Livornese and Vedder (2017) support this in their observation that very few studies have been conducted on the emotional and psychological well-being of nurses when responding to a disaster.

In this study, the nurses expressed their mixed feelings whilst being instructed to participate in a disaster response team, including being excited, being kind, being fatigued and being scared. They acknowledged the importance of emotional and psychological preparedness prior to involvement in disaster response. However, they also expressed their concern about the impact of being unprepared psychologically and emotionally. The literature also identifies the short- or even long-term impact of any disaster on the workers.

i. Impact of being unprepared psychologically and emotionally

Every individual, victim or worker who goes through a disaster event is exposed to some emotional and psychological impact. Likewise, nurses are susceptible to risk and danger when involved in any disaster or emergency situation such as a flood, landslide, pandemic,
mass casualty incident or armed intrusion. They spoke of their concern for both their own safety and that of their families. In some circumstances, the disaster could affect their next of kin or people around them. The respondents in a study by Secor-Turner and O’Boyle (2006) also reported fearing for their personal safety during a disaster event. The nurses in Pourvakhshoori et al. (2017) also expressed a similar concern.

The nurses in this study noted experiencing fear and anxiety as common feelings while involved in a disaster response. Working in a disaster situation can stimulate the ‘fight and flight response’ from the hypothalamus, which subsequently activates the sympathetic nervous system and adrenal-cortical system. This can lead to panic and frighten individuals, especially if they have received no or little training and exposure to it prior to the response. For these nurses, the fear they experienced was often due to the uncertain situation they faced while working at the disaster site. The nurses spoke of how, during mass casualty incidents, there can be hazards such as oil spills or being hit by other vehicles. In another scenario, they were afraid of the aftermath from a disaster such as a recurrence of mudslides when they were setting up a medical base station close to the scene.

They were also afraid of the increased likelihood of coming into contact with communicable diseases via water-borne and air-borne routes. In situations such as floods and landslides, nurses can be exposed to water-borne diseases like typhoid and cholera due to water contamination and a lack of adequate sanitation. Similar feelings were reported by the nurses in studies by Li et al. (2015) and Wenji et al. (2015), where the participants had to deal with contaminated drinking water in an earthquake situation. Some of the nurses had been involved in managing infectious diseases such as H1N1 and SARS and they shared the fear of becoming infected by these diseases which they might later spread to their families and friends. However, the fears experienced by the nurses in this study had diminished over time.
Apart from feeling scared, some of the nurses expressed feeling stressed at having to cope while working in a disaster situation due to, for instance, a lack of water and food supply, and being exposed to hazards and risks. Stress due to fatigue increases exponentially when working in a ‘nerve-racking’ situation such as a disaster. The nurses in this study revealed how they had been exhausted due to having worked for over 24 hours at the disaster site. While it may seem ‘illogical’ to work endlessly for more than two or three days during a disaster, that is nevertheless the reality that nurses face in these types of situations. They mentioned how being overworked during the flood and landslide disaster had increased their stress level. This led to fatigue and to them not being able to give their full commitment to helping the victims. Some of the nurses developed fatigue due to the prolonged working hours. Fatigue is a physical symptom that is often related to psychological symptoms (Dorn et al., 2006). One nurse who had experienced fatigue expressed the difficulties she found in thinking rationally when she attended the disaster victims. In the end, she chose to work only on clerical matters such as assisting in controlling the air traffic and checking medical supplies, in order to avoid the risk of committing medical negligence due to fatigue.

It is likely that some of the nurses in this study had been exhausted, yet they had to go and do their duty. A study by Barker and Nussbaum (2011) confirmed that long working hours are associated with fatigue among registered nurses, and fatigue has also been documented by other studies. Spinhoven and Verschuur (2006) studied fatigue amongst professional rescue workers in an aviation disaster, while Morren et al. (2005) examined the health impact on firefighters involved in a technological disaster. Pourvakhshoori et al. (2017) also reported in their findings the stressed state of the nurses they looked at due to workload, health issues, family issues, organisational issues, poor coordination and issues on low awareness of the nurses. Li et al. (2015), meanwhile, reported on how nurses come to feel stressed due to a lack of exposure to disaster nursing training. As seen in the literature, disaster relief work requires endurance and stamina due to the nature of working within a disaster area (Xu and Zeng, 2016).
On the other hand, some of these nurses had no follow-up support for their distress after arriving home or returning to their normal duty. The mental health of nurses who have responded to a disaster is often thus disregarded by the organisation and their colleagues. It is often a stigmatised condition which can have severe consequences. This finding corresponds to a statement by Livornese and Vedder (2017) that emphasised how the process of getting ‘back to normal routine’ may not be as smooth as expected; hence, the nurses require continuous post-disaster monitoring of their condition. The participants in Li et al. (2015) suggested that nurses should have ‘good mental quality’ to ensure their ability to manage emotions. Good mental health is “characterised by a person’s ability to fulfil a number of key functions and activities” (Mental Health Foundation, 2019). Labrague et al. (2017), in their study, also mentioned the negative impact on the health and well-being of the population affected by a disaster.

To date, however, studies worldwide have tended to focus on the negative impact and ignored the positive impacts of disaster work. Despite feeling overwhelmed by negative emotions, which were identified as being fatigued and scared, the nurses also expressed their excitement at getting the chance to work in a calamitous situation. For most, it was their first experience of being involved in a disaster. For them, not every nurse gets the opportunity to participate in that kind of situation. Moreover, a disaster nurtured their instinctive drive to be kind. They shared that they were kind not only to the victims but also to their colleagues and that this continues into the present day. It is also increased the ‘love’ between them and their families. For most of the nurses, having the opportunity to be involved in disaster work also enhanced their personal and professional growth. They also talked about turning the negative emotions into positive ways, which is one of the strategies for handling the emotional and psychological impact.

**ii. Strategies for handling emotional and psychological impact**

Working in a hostile environment is likely to be tough and this can be critical for the nurses. They have to manage their emotions, both positive and negative, in order to do
their best work under the circumstances. Indeed, the nurses in this study had at times ‘blocked’ negative feelings through immersion in their daily life while in a disaster area, without thinking about the situation. The nurses in this study avoided feeling sad by occupying themselves with attending and helping the victims to prevent them from dwelling on the situation too much. The nurses in this study put aside their feelings and ignored other matters while working in a hostile environment, yet they still faced a dilemma while providing the care needed. It is thus critical for nurses to be able to manage their emotions so they can deal with the impact of the disaster.

The family members, their own organisation and they themselves all helped in managing the emotional turmoil from several aspects. For example, one nurse felt sad when she was involved in a landslide at an orphanage as there was a ‘death toll’ amongst the children. To avoid becoming overwhelmed by the feeling, she kept herself busy by doing other things and not only thinking about the situation. Some of the nurses tried to ignore the incident and diverted their attention to other areas that helped them not to dwell on the situation. Others would share their awful experience with their colleagues, either at the scene or when they returned to their workplace. In some cases, their families and colleagues were always at their side whenever they felt sad after witnessing the disaster, and their department granted them days off after being involved in the landslide disaster.

The nurses returned to their own organisations once they received the ‘stand-down’ declaration. In a disaster area, some nurses willingly share their feelings and stories with their fellow team members and attempted to cope with any issues that arose while working with the victims. This forms part of their therapy in dealing with the distressing experience. As mentioned by Heitler (2019), it is vital that the nurses are able to express their feelings in a safe manner as it could help them to establish a connection to the feelings between people. Expressing and understanding emotions helps nurses adapt to challenges and guides them in handling them successfully when working in a disaster situation. Nurses require this support as it helps them to cope in even a tough situation.
such as a disaster. A similar finding was also reported for the participants in Li et al. (2015).

Most of the nurses emphasised how being prepared emotionally and psychologically could help them manage their emotions. The Australian Psychological Society (2018) also reinforced how it is helpful when people know how to be prepared before a disaster and that this can reduce anxiety and enable them to respond well to the psychological impact. According to Thormar et al. (2010), workers who are better prepared mentally and psychologically are at lower risk of developing a mental disorder. Kılıç and Şimşek (2018) also emphasised the significance of engaging with the psychological aspect as this could improve the nurses’ endurance while working at a disaster site, in addition to reducing their work-related stress.

**Summary of section managing emotions**

People often divide their emotions into positive and negative (Linley and Joseph, 2006). The ability to experience both types of feelings, negative and positive, seems to allow the nurses to find a positive state in stressful conditions. It is critical that emotions are dealt with effectively since they have the potential to affect their lives as nurses and, indirectly, impact their future life in relation to their career and families. Corresponding to the findings of this study, Malkina-Pyk and Pykh (2013) mentioned that disasters can generate negative responses such as stress, fear and anxiety. In contrast, Linley and Joseph (2006) suggested that studies should also shed light on the positive impact of working with disasters, such as personal growth. Other than managing emotional turmoil when at a disaster site, nurses require support in all elements in order to help them deal with a disaster. Receiving support facilitated the nurses to ‘survive’ during the period of disaster response.
5.3 Getting support throughout the disaster continuum

This study has identified the role of the support system from various resources. Support was provided in the form of tangible sources such as financial assistance, material goods or services, and also as intangible sources, for example, the emotional aspects of caring, empathy, reassurance, acceptance and concern. The temporal element of obtaining support lasts from the pre-disaster phase through to the end of the post-disaster phase, although the precise length of time involved varies from one person to another, and from one phase to another, for several reasons. As examples from the findings, 1) the time when they first gain the support, 2) the time when they are involved in a disaster, and 3) the time when they have completely detached from the disaster and its aftermath and no longer require support.

Commonly, ‘routine’ support was derived from the people around them, such as from their spouse, parents, family members, colleagues and the administrators of the organisation, plus to some extent from the wider society. Some nurses reported receiving support continuously from the time the disaster struck, from both the government and various other parties. In contrast, others reported receiving minimal support from the organisation in terms of helping them cope, developing the competencies needed and helping them manage their emotions.

i. Category of support

In this study, support explicitly comprises social, psychological and physical support. All these types of support were an issue throughout all of the disaster management time phases. For these nurses, social support was all about the support given in order to ease their duties and which they mostly gained from family members and friends. In some examples of this social support from the findings, the nurses’ parents minded their grandchildren when the nurses had to respond to a disaster call at short notice, and the nurses were helped by colleagues to clean out the house after the floods or when
necessary. Having good relationships within the team was also identified as a source of the social support received by these nurses. Social support thus includes having a network of family and friends that the nurses can turn to when needed. This provides them with the strength to carry on and sometimes even thrive in the hostile environment. According to Sherman et al. (2006), social support acts as social integration and functional support that involves specific functions other than those that the people close to them can provide.

Physical support, meanwhile, refers to support gained in the form of something that can be seen and touched, e.g. training and financial assistance. Some of the nurses mentioned that they had attended disaster-related training offered by their organisation, as well as the financial assistance provided by several parties. On the contrary, not all nurses received physical support, i.e. training, especially those from a non-emergency background or those who worked in areas other than the emergency department. In one case, even a nurse who worked in the emergency department had received no disaster training prior to deployment.

With regard to psychological support, the nurses expressed how the support they received would ease their feelings; for instance, sharing moments and any form of support where mental health was concerned. A majority of the nurses commented that they received little or no support in the psychological aspect prior to their deployment. In Malaysia, the Ministry of Health Malaysia (2013) has produced a manual that outlines the requirement on mental health preparedness for disaster workers such as nurses. Every nurse should be exposed to the necessary information prior to being involved in any disaster work. The aim is to build their readiness to face the mental health impact of working long hours, such as losing focus, poor concentration and so forth. Within the disaster period, various parties provide support to those involved in disaster work.
ii. Source of support

The nurses received support from their spouses, parents, family members, colleagues, own institutions and the wider society. The wider society identified in this study comprises external government agencies, adjoining districts or states as well as the federal government. Support can also be obtained from anyone else, such as individuals from outside the neighbouring area or non-governmental organisations (NGOs). This section explains the sources of support, which comprise 1) the organisation, 2) wider society, 3) family members and 4) personal. Figure 5.3 illustrates the parties involved and the type of support received.

*Figure 5.3: Sources of support and their categories*
Family

This study identifies that family members provide their support. Family thus plays an important role for the nurses, helping in supporting them when they are away from home, particularly with regard to psychological and emotional support, and also social support. The support gained from family members is important. Most of the nurses were supported by their family after they had informed them of their decision to join a disaster response team. From the family’s side, they accepted this as part of the nurses’ duties when it came to a disaster. In relation to social support, the nurses’ parents assumed the responsibility of looking after the children when the nurses went to a disaster site.

Some of the nurses were torn between their family’s safety and their own professional obligation. They felt obliged to participate in a disaster team; however, leaving their families in an uncertain situation only added to their concern. French, Sole and Byers (2002) investigated several criteria by which staff can be exempted from the duty to respond during a hurricane in Florida. One such criterion was “a parent with a spouse who is also required to work by his or her employer (e.g., nursing, law enforcement, fire/rescue, or city employee)” (p.114). In this study, however, it could be observed that the nurses had taken measures to ensure the safety of their family members when they left for work, such as in a flood disaster. Among these was sending their parents to a safe area that was not affected by the flood.

Organisation and colleagues

Other than the support they received from their family, the organisation also plays a part in supporting employees engaging in disaster work. The organisation that instructed them to join a disaster response team would thus take responsibility for the safety and health of the nurses. At the organisational level, the hospital is required to ensure the nurses are prepared for all aspects of the disaster response. In this study, generally, the organisation offered training to expand the nurses’ knowledge (cognitive domain) and skills
(psychomotor domain). Most of the nurses in this study indicated that the training syllabus should include coverage of the psychological and emotional aspects. Thus, nurses require emotional support (affective domain), which was identified from the findings as lacking. The emergency physicians involved in the interviews also felt that the emotional and psychological component needed to be included in any disaster training programme.

Emergency departments in hospitals often lead when it comes to disaster management, but they also require extra help during mass casualty incidents. A multidisciplinary approach and multiple organisations are required to effectively manage any type of disaster. The chaotic and deadly aftermath of the tsunami that struck the northern region of Peninsular Malaysia in 2004 served as a reminder of the significance of cross-discipline and collaboration. The ‘Code of Professional Conduct for Malaysian Nurses’ also states the following: “The nurse works collaboratively and cooperatively with other members of the health care team. She does not hesitate to consult appropriate professional colleagues when needed” (Nursing Board Malaysia, 1998, p.2). The need for collaboration with other agencies was also stated by the nurses in this study. Organisation also involves the contribution of other governmental agencies to ensure services are rendered to those affected by a disaster. These include the Fire and Rescue Department, Malaysia Red Crescent Society and the city council. The Fire and Rescue Department frequently conduct exercises and simulations in relation to disaster response. The involvement of National Disaster Management Agency (NADMA) is vital for disaster management in Malaysia as it is responsible for coordinating the various agencies involved in any disaster (Zainal Azman, 2017). This is supported by the findings of other studies which state that multiple approaches are required to ensure the best work in disasters (Chan et al., 2010; Whetzel et al., 2013; Li et al., 2015).

Nurses can become overwhelmed by the turmoil they encounter if they have no experience and lack guidance from colleagues as a support system. Whenever a wide-scale disaster occurs, nurses from departments other than emergency support their colleagues. In some circumstances, such as in a large-scale disaster, the team members
involve other professionals, for instance, assistant medical officers, physicians, pharmacists. Auxiliary groups such as health assistants and drivers may also be involved. Additionally, having psychologists and counsellors involved in a disaster team helps both the disaster victims and the team that is working. However, not all disaster cases necessarily include the involvement of a psychologist or psychiatrist in the team. In most situations, however, psychologists and counsellors are involved mainly to serve the population affected by the disaster and not the disaster workers.

**Wider society**

Aside from various organisations such as hospitals, the wider society also works to provide the support that nurses require when responding to a disaster event. The wider society includes neighbouring villages; individuals; the state/federal government, such as the Royal Military Forces; and non-governmental agencies external to the organisation. The involvement of NGOs such as the Persatuan Bulan Sabit Merah (Malaysian Red Crescent Society) and Jabatan Amal Malaysia, to name a few, was mentioned by the nurses. This study observed, as previously stated, the involvement of several agencies in helping the local population. Thus, getting external support from the wider society is respected, with it contributing resources such as strength and effort in the form of financial help/aid, providing boats during floods, et cetera.

**Personal traits**

Another equally important area involves the nurses own personal traits. Their characters can be of huge benefit in helping them when faced with a disaster. According to Kennedy, Curtis and Waters (2014), the personality of the nurses will influence their selection of speciality. Commonly, nurses who work in the emergency department are likely to differ from the more regular nursing population. Since the emergency department is a highly stressful environment, those that stay in this setting may be more resilient.
iii. The benefit gained from being well supported

Getting support from different parties such as their organisation, colleagues, the wider society and, most significantly, from their family members, helps to ensure the nurses go through the process smoothly without disruption. Consequently, getting the right support is crucial to enable the nurses to deal with their own emotions while in ‘an utterly confused’ situation. It was mentioned that social support has a positive effect on health and well-being (J. Yang *et al.*, 2010; Fernandes, Boehs and Heidemann, 2013). The benefits of receiving support were stated in an article by Gimenez and Sanchez-Luna (2015) and can include a reduction in depression and anxiety. Indirectly, this can lead to the feeling of responsibility all nurses require when providing care in a disaster area. The nurses indicated that the support they received helped them to effectively manage the victims during a disaster.

**Summary of section getting support**

It was found in this study that the nurses were not always well supported throughout the phases of a disaster, from the beginning through to the end. This study has identified a concern regarding the establishment of adequate support. Some of the nurses received full support, others received partial support, although there were no reports of anyone receiving no support. In this study, the nurses were not being well educated or well exposed to disaster management prior to the response, and some attended no training. Some of them had not even had the whole picture of the disaster explained to them, which left them perplexed.

The emergency physicians interviewed in relation to this study, as well as the nurses, mentioned how there was relatively little professional counselling support for the nurses. This finding in line with the study by Li *et al.* (2015) where the participants were found to receive little psychological support. Nekooei Moghaddam *et al.* (2014), in their study, recommended that nurses should be given adequate support in regard to 1)
psychological support, 2) related competencies, 3) proper disaster management and 4) personal readiness, in order to effectively respond in a timely manner during a disaster. Hence, it helps to enhance the nurses’ confidence, strength and coping skills while working in a chaotic situation. In some cases, the support continued after they had resumed their duties at the hospital since some of the respondents probably needed continuous support due to the impact of the disaster aftermath.

5.4 Interlinkage between the source of support and the three categories

It was found from this study that the four sources of 1) personal, 2) family, 3) organisation and 4) wider society were not merely linked to the category of getting support but were also connected with the other two categories of establishing competencies and responsibilities and managing emotions. Figure 5.4 illustrates the linkages between the categories and sources of support for these nurses that assisted and facilitated them throughout the disaster management continuum.

![Figure 5.4: Interlinkages of the categories and sources of support](image)

Previously, the nurses stated that they received support from their family, organisation, the wider society and also from themselves as individuals. Apart from that, some of the nurses in this study reported being able to manage their emotional turmoil
through the help they received from various other parties such as their family members, their own organisation and from their inner self. This was mentioned in the section ‘strategies in handling emotional and psychological impact’ (5.2: Managing emotions). With regard to the nurses’ competencies and responsibilities, their own organisation plays an important role in helping to improve their performance when in a disaster.

**PART II**

5.5 Discussing the ‘Being a Disaster Nurse’ Model

Nurses require development in understanding disaster management, particularly disaster preparedness and disaster response, so that their institution is able to rely on them to assist the population affected. Working within a disaster environment is challenging and requires what was described by Jamaluddin (2012) as “a heart of a lion and a soul of an angel” (p. V). This quote illustrates the equal importance of the natural attributes of strength and compassion for a nurse who goes to work in a disaster area.

The findings from the categories of 1) establishing competencies and responsibilities, 2) managing emotions and 3) getting support highlight the significance of nurses being ready and prepared in order to adapt to the chaotic situation and prioritise their duties. These categories led to the development of the core category of ‘Ensuring individual sustainability when in a hostile environment’. According to Noble and Mitchell (2016), the core category is the ultimate ‘finding’ from which a theory is generated due to the level of variety from the data gathered.

The use of the word ‘sustain’ is aligned to the global Sustainable Development Goal (SDG) agenda, which will be explained next. To be a disaster nurse, which can be a ‘life-changing’ experience, nurses must have the ability to manage the ‘turbulence’ of emotions within this type of situation. Figure 5.5 illustrates the characteristics required to be a ‘disaster nurse’ that were discussed by the nurses.
In this study, the need for preparedness was stressed highly by these nurses as one cannot be ‘plunged’ immediately into participation in a disaster response team. However, this had been the experience of most of the nurses in this study and other studies, as mentioned earlier. Adequate preparation is thus required prior to the deployment. This study contains evidence that being unprepared can have a very negative impact on the nurses. Some of them developed fatigue, while others took a long time to forget the experience. For the nurses in this study, being a disaster nurse requires the individual to have related competencies and a responsibility to become involved in disaster management. They must also be able to manage their emotions and be supported by all of the necessary parties. Therefore, the choice of ‘individual sustainability’ as terminology is core to being a disaster nurse. Subsequently, this study uncovered the core category of ‘ensuring individual sustainability when in a hostile environment’, which is aligned to the SDGs.
Specifically, it aligns with SDG 3: 3.D “Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks, 3.D.1: International Health Regulations (IHR) capacity and health emergency preparedness” (United Nations, 2016). Therefore, nurses, as healthcare professionals, should be educated and prepared to become involved in a disaster. Furthermore, Malaysia as a developing country should give more attention in regard to ensuring the sustainability of individuals involved in a disaster, so as to achieve the above SDG since human capital is a core business in managing disasters. An inability to grasp the ‘human capital’ element of disaster management can lead to the situation becoming ‘disastrous’.

Nonetheless, involvement in a disaster response can serve as a ‘wake-up’ call for the nurses, and this was notable in this study. They have to ensure they are ready and prepared with adequate knowledge, skills and competencies, as well as dealing with ‘strong’ emotions. Nurses should be able to demand training on how to become prepared and involved in disaster management, as well as exposure to a ‘real disaster’, if possible. Involvement in the pre-disaster phase is important in the context of improving disaster nursing management. It was also explained where the nurses in this study developed their strength, perseverance and individual sustainability over time until they completed their duty at the disaster site. Thus, with all of the subcategories, categories and core categories having now been discussed, based on all the information gathered through this study, the conceptual framework is established as illustrated in Figure 5.6.
Figure 5.6: Conceptual framework of ensuring individual sustainability when in a hostile environment
There is no guarantee that nurses deployed to a disaster site will be working in a ‘favourable’ atmosphere. Indeed, it could be hostile, precarious, horrifying and in worst-case scenario, they could be exposed to danger from the aftermath. As such, certain characteristics and skills are required to work effectively within that type of environment. Li et al. (2015) identified an emergent theory of ‘working in that terrible environment’. The nurses in their study discovered that they were thrust into ‘terrible’ scenes of destruction following the 2008 Wenchuan Earthquake in China. It would seem that the nurses in this current study experienced an almost similar situation to those in Li et al. (2015). However, Li et al. (2015) focused merely on nurses that had been involved in an earthquake, whereas this study involved a range of nurses who had gained experience in various disasters.

PART III

5.6 Explaining the methodology that influenced this study

This study has explored the experiences of nurses working in a disaster area through a grounded theory approach. This was shaped by the constructivist grounded theory method as introduced by Charmaz (2006). Charmaz’s approach to constructivism facilitated the researcher in all stages of the research process.

5.6.1 Considering the methodology used

As an academician with emergency and disaster nursing experience, the researcher is interested in discovering what nurses experience while working in a disaster area. The researcher acknowledges the importance of exploring this subject matter, which could help nurses prior to a specific deployment as well as when involved in disaster management as a whole, from the first phase of disaster management, disaster mitigation, through to the final phase, disaster recovery. Only a limited number of studies have sought to explore nurses’ experiences in disaster response by employing grounded theory, in
particular, constructivist grounded theory. The application of constructivist grounded theory in this study presents several advantages that could help the researcher understand the nurses’ experience while responding to a disaster.

5.6.2 Being influenced by the constructivist point of view

This study adopted the constructivist grounded theory methodology by Charmaz to facilitate the entire research process. The researcher constructed the findings of this study based on the participants’ stories, which were shaped by their views, values, perspectives and positions. The constructivist grounded theory assisted in the development of a systematic understanding of the basic social and psychological process within the specific context of this study (Charmaz, 2006; Gardner, McCutcheon and Fedoruk, 2012) through social interactions and structures. The constructivist grounded theory focuses on the interpretive understanding of the ‘meaning of the story’ by the nurses.

There were mutual interactions between the researcher and the nurses involved in disaster work, in addition to the researcher’s own relationship with the disaster nursing field. This promoted reflexivity and culminated in the construction of theory between the researcher and the nurses’ stories and views. The development of the ‘model’ in this study emphasises an understanding of the concepts (Charmaz, 2006). It relies on interpretation and analysis of the data by the researcher besides searching for an understanding of the social phenomena that had occurred when the nurses in this study went to a disaster site. The researcher then compiled all of the data until the ‘Being A Disaster Nurse’ model was developed through multiple processes using constructivist grounded theory. Rigour was maintained to guide the researcher in completing the process.

5.6.3 Establishing rigour

Rigour is the most crucial element in a qualitative study. As this study adhered to the version of constructivist grounded theory by Charmaz, it thus applied four quality criteria
for judging grounded theory. These were: 1) credibility, 2) originality, 3) resonance and 4) usefulness.

i. Credibility

For Charmaz (2006), credibility equates to ‘trustworthiness’. The process involved all stages of the research. The data were collected between January and September 2016. This study involved multiple data sources from different perspectives, with the nurses selected from various disciplines, workplaces (different hospitals) and encompassing a diverse range of disaster types. Involving a wide range of participants may improve the credibility of the study, along with a wide range of sites (Shenton, 2004). Patton (1999) noted that the process of multiple methods of data collection and data analysis provides convincing results as it offers diverse aspects of truth. In regard to the transcript, the initial interviews from the pilot study were translated from Malay into English for the purpose of discussion with the supervisors. Later, the researcher conducted back-to-back translation from Malay to English and then back to Malay to ensure the words conveyed an accurate meaning in both languages. From the comments and advice, this facilitated the researcher to show an acceptable quality of interviewing skills, demonstrate critical thinking and write soundly, which were elements mentioned by Angen (2000).

ii. Originality

The findings from this study have revealed new insight into the phenomenon of nurses’ experience while working in a disaster situation. The findings present “a new conceptual rendering of the data” (Charmaz, 2006, p.182). Through a search of the literature on the current scenario in Malaysia, it was established that no other study has investigated the experiences of nurses while responding to a disaster, not to mention from the qualitative research perspective such as in the form of a grounded theory study. Even though Malaysia tends to experience fewer disasters than its neighbouring countries such as Indonesia and the Philippines, it has nevertheless still experienced various types of
disaster; for instance, floods, pandemics, landslides and mass casualty incidents. Therefore, the examination of nurses’ experience in this study could form its originality and novelty in the Malaysian context. The other elements arising from this study are the role of the religious aspect in regard to the nurses themselves, notably where they spoke of how this had helped them when working in chaos. The development of the ‘Being a Disaster Nurse’ model represents the originality of this study. The model acts as an ‘original’ study as it offers ‘new insights’. The implications address healthcare policy, practice and education, in addition to being of use for future research; thus, the originality of this study is acknowledged.

iii. Resonance

In relation to Charmaz (2006), resonance concerns more about do these findings make sense to the people involved and the extent to which they affect the nurses. This study has observed the full experience of the nurses when deployed to a disaster area, from when they received the ‘call’ to the time they returned to their workplace. In relation to the design of the study, the findings from the data that follow the constructivist grounded theory approach by Charmaz (2006) offer the nurses ‘deeper insights’ about their lives when they have experience of working in a disaster situation. They explored their feelings, views and opinions in relation to their experience when working in an ‘unstable’ situation that requires perseverance and sustainability, which could be of value in improving future disaster nursing management policies. These findings have been discussed with some of the nurses, yet, they agreed on the overall findings that conclude about their needs to be prepared in all elements, not only on the aspect of physical.

iv. Usefulness

The findings of this study are worthwhile as they address how to be a ‘Disaster Nurse’ from the Malaysian standpoint. Each country experiences different types of disaster that reflect their ‘unique’ topography, as well as culturally in terms of the competence of
nurses and the policies of the individual institution or the country, which means the findings cannot always be generalised to other countries. As a result, this study is distinct from studies conducted by other researchers across the world. This study would be beneficial to other professionals working in healthcare services, for example, doctors or physicians, assistant medical officers and so forth. It could also assist other countries that experience similar disasters and that have a similar culture to Malaysia. In accordance with Charmaz (2006), the findings from a constructivist grounded theory approach could “challenge, extend, or refine current ideas, concepts, and practices” (p.182).

5.6.4 Reflexivity

Experience working in an emergency and disaster situation could influence the researcher’s views and paradigms about the topic. As outlined by Malterud (2001), the “researcher’s background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions” (p.483-484).

Here, however, the researcher applied the process of reflexivity throughout the development of the thesis. Among the steps taken was the creation of a reflexive journal that the researcher kept throughout the entire process. On occasions when the nurses had difficulty understanding the question, the researcher would prompt discussion with ideas and assumptions aimed at eliciting deeper information from them capable of shedding light on the matter. Furthermore, the researcher attended various training sessions on data collection and analysis run by the university and the Social Research Association (SRA) in London and at the University of Liverpool in order to be equipped with adequate knowledge and skills on interviewing. The researcher also practised interviewing skills with her supervisors and friends to strengthen the interviewing technique. Watching YouTube videos on interviewing techniques further facilitated the technique of interviewing.
In addition, the researcher spent around nine months on the data collection phase, from January to September 2016. This lengthy period allowed the researcher to develop engagement with the ‘topic guide’ that had been prepared earlier as well as become familiarised with the skills of interviewing. Although the researcher was away from the university intermittently during that period, progress continued to be monitored by the supervisors to ensure the work was completed as planned and followed the requirement.

The reflexivity process helps the researcher to critically scrutinise their own actions and systematically develop a clear and understandable assumption (Hewitt, 2007) in the context of knowledge construction for every step of the research process (Cohen and Crabtree, 2006). Over the years, the standpoint of the researcher on disaster management, in particular disaster nursing discipline, has developed and advanced. This can be seen from the researcher’s initial intention to undertake a comparison between the different methods of teaching disaster education – lecture versus lecture and tabletop exercise – which would have predominantly employed a quantitative approach, yet the researcher eventually settled on a qualitative study to explore nurses’ experience of disaster response. This therefore changed the way in which the researcher looked at and prioritised the issue within disaster management.

Despite looking only at the tip of the iceberg, the researcher was working with the nurses’ experience and this could be considered as targeting the ‘foundation’ located beneath the current issues. Indeed, it served as a turning point to actively conduct further research on disaster scenarios in Malaysia, specifically among healthcare professionals. Throughout the process, the researcher realised that this journey could shed light on the current scenario among healthcare personnel in terms of dealing with a disaster, aside from the several limitations that have been identified.
5.7 New contribution to the body of knowledge on disaster nursing

In the previous section, this chapter discussed nurses’ involvement in disasters. The existing literature suggests that nurses worldwide are pleased to be involved, whether this is incited through organisational command or their own willingness to respond as part of a disaster response team (Arbon et al., 2011, 2013; Goodhue et al., 2012), be it locally or internationally, as mentioned in the earlier chapter. From the information gathered, this thesis has discovered the three categories of establishing competencies and responsibilities, managing emotions and getting support. Some elements of the findings from this study have also been discussed by nurses in other studies. Wisniewski, Dennik-Champion and Peltier (2004), Daily, Padjen and Birnbaum (2010), Harding et al. (2013), Mohamed Alharbi (2013) and Veenema et al. (2017) all discussed the need for nursing competencies with an emergency and disaster specialty, while Klein (2006) mentioned the responsibility of nurses to respond to a disaster, as well as Li et al. (2015). On the other hand, Wenji et al. (2015), Li et al. (2015), Kulig et al. (2017) and Johnstone and Turale (2014) examined nurses’ experiences during a disaster.

Despite this similarity with the findings from other studies, this current study contributes to the body of knowledge in relation to disaster nursing worldwide, in particular, nurses in Malaysia. Several new contributions have been uncovered, as follows: 1) no other up-to-date study conducted in Malaysia has addressed nurses’ experiences while responding to a disaster, 2) no other study has used constructivist grounded theory in exploring nurses’ experiences, and 3) the need for religion and its coping mechanism to be introduced in the training for nurses as they face the turmoil and aftermath of disasters.

5.7.1 Malaysian nurses experienced a disaster

Even though some of the findings from this study are similar to those from Li et al. (2015), this study has additionally identified the nurses’ experiences that led to the emergence of
the elements required for involvement in disaster response, as informed by these nurses. This is different from the approach of Li et al. (2015) who focused on the experiences of Chinese nurses by identifying the drawbacks. In other words, this current study looked at the experiences of the nurses from both negative and positive aspects, such as establishing disaster competencies while working in a disaster. It also adds to the existing literature on the support received from various parties which, as an area, has tended to receive less attention from other studies on nurses’ experiences.

This is the only study of its kind to have examined the experiences of nurses involved in disasters in Malaysia, particularly with regard to its use of constructivist grounded theory methodology. It therefore adds to the current literature on the experiences of Malaysian nurses in dealing with disasters. The need to study the experiences of nurses in Malaysia becomes the highest concern as these experiences vary from one country to another; as such, it is unlikely that all aspects would match with those from other countries, specifically in regard to the culture and religion of the population.

5.7.2 The model of ‘Being A Disaster Nurse’ underpinning a curriculum for disaster nursing

Disaster nursing in Malaysia is still in its early stages. Until now, there is no standardisation of the curriculum for teaching the subject of disaster management in any basic training, specialised course or post-basic disaster nursing that is relevant to the work of nurses in Malaysia. The model ‘Being A Disaster Nurse’ has emerged from this study, resulting from the core category of ‘Ensuring Individual Sustainability when in a Hostile Environment’ which overarches three categories of 1) establishing competencies and responsibilities, 2) managing emotions and 3) getting support. The model could underpin the curriculum of disaster nursing in Malaysia since this study has been conducted in Malaysia, by a Malaysian academic/emergency nurse. These findings are thus tailored to the requirements of those nurses. The model serves as a transformation of the experiences of nurses involved in a disaster response. If these three categories are used to inform a
curriculum for disaster nursing, with the support received from the respective authorities such as Ministry of Health and Ministry of Education, it could prepare the nurses beforehand and reduce the risk of impact from the aftermath of disasters such as physical injuries and psychological trauma and enable the nurses to establish competencies and responsibilities, manage emotions and get support when needed.

5.7.3 Utilising constructivist grounded theory

The constructivist grounded theory approach by Charmaz (2006) that was employed in this study has not been used in other studies that focus on the experience of nurses; that is, until the final stage of writing the thesis in September 2019. Li et al. (2015) focused on symbolic interactionism. The use of constructivist grounded theory has enabled this current study to establish a new conceptual model that can help people better understand the elements required to be a ‘disaster nurse’, which are establishing competencies and responsibilities, managing emotions and getting support.

5.7.4 Role of religion and its coping mechanism during a disaster

One further important point was highlighted by the nurses in this study in regard to the importance of religion. This has been noted in literature, but this is the first time it has been identified amongst nurses as a coping mechanism. This is an original contribution to the existing knowledge.

In Malaysia, religion plays a role amongst the population, including nurses who are involved in a disaster response team. Religion shapes people’s beliefs and way of thinking and can both have a positive and negative influence on its believers, notably when they are involved in a disaster. Malaysia is a multicultural and multiconfessional (many religions) country with Islam as its official religion. From statistics reported by the Department of Statistics Malaysia (2010), around 61.3% of Malaysians are Muslim, followed by Buddhist (19.8%), Christian (9.2%), Hindu (6.3%) and others (3.4%).
Religion distinguishes a Malay and non-Malay and by law, all Malays are Muslim. Hence, this contributes to the higher percentage of Muslims in Malaysia as Malays are the indigenous group. This establishes the opportunity to develop an understanding of the different religions and cultures present within the population of Malaysian nurses as they provide healthcare services to people affected by disasters. With only one non-Muslim respondent, we therefore have a situation in this study where almost 100% of the nurses are Muslim and practise their religion even while at a disaster site. Whenever they face difficulties and feel emotionally disturbed, they return to their God (Allah) to ask for help and to soothe their feelings.

This study almost exclusively comprises Malay nurses, thus indicating that they are Muslim. This is reflective of the public sector, particularly the nursing division of the Ministry of Health (MOH), where the majority of nursing personnel are from the Malay population. A similar situation is seen in other public services ministries across Malaysia. As mentioned earlier, some of the nurses in this study practise religious elements whenever they feel scared or anxious. The life of a Muslim is closely related to ‘believing in Allah (Allah is the Arabic word for God)’ and ‘serving Allah’. There are many Islamic rituals applied by a Muslim in their daily life; for example,

i. reciting zikr (ذکر) (a devotional acts in Islam in which short phrases or prayers are repeatedly recited silently in the mind or aloud)

ii. reciting du’a (ذِیقة) which is an expression of submission of faith to Allah and of one’s neediness (supplications)

iii. reciting Al-Quran (Al-Quran is an Arabic scripture that Muslims believe to be a revelation from Allah) and

iv. salah (صلاة) (a physical, mental and spiritual act of worship that is observed five times a day at prescribed times)

In addition, some of the nurses stated that congregational prayer helped them when in a group (disaster team) and helped them to get to know each other very well. For them,
involvement in a disaster created a feeling of being close to God as it taught them to be grateful for the privileges they had and for helping those who were underprivileged.

i. Role of religion

There is an increasing trend for literature related to the role of religion in disasters. Gillard and Paton (1999) explored the influence of religion on the populations (followers) of various religions – Christian Fijians, Indian Muslims and Indian Hindus – following a hurricane. Schmuck (2000) studied the acceptance and survival strategies of people in Bangladesh who are frequently affected by natural disasters. In Indonesia, Islam (2012) surveyed the role of religion for the individual survivor and the implications posed by the risk of a volcanic eruption on the religious sensitivity of survivors. Gianisa and De Le (2018), meanwhile, investigated the religious coping mechanisms amongst followers and leaders within the affected population following the 2009 earthquake in Padang, Indonesia. Joakim and White (2015) discussed the integration of religious elements into the disaster risk reduction programmes of the organisations involved in disaster response following the earthquake in Yogyakarta. McGeehan and Baker (2017), in another study, examined the role played by four different faiths amongst Hawaiian communities in terms of their disaster experiences, while and Ha (2015) focused on the role of religion – Christianity, Buddhism and Confucianism – on care-oriented and mitigation-oriented disaster management in Korea.

Overall, it could be observed that the existing literature places more focus on the population affected rather than the workers, notably on nurses who are actively involved in disaster response. Despite the increasing number of studies on the role played by elements of religion in disasters amongst the affected population, none have focused on disaster workers such as nurses. So, although religion was not the focus of this study, the nurses nevertheless shared their experiences on the need to incorporate religious aspects into their care for disaster victims as well as to become ‘an assistance’ when they need help in ‘spiritual’ aspects to soothe their emotions while ‘wallowing with a disaster’. They also
emphasised the importance of integrating religious aspects in their daily life while responding to any disasters and not merely with respect to those affected by the disaster. As religion is considered important in our daily ‘practices’, especially for a country with a religious population such as Malaysia, looking further into this matter could promote good religious coping for nurses involved in disasters in respect of their beliefs.

**ii. Religious coping mechanism**

The nurses enhanced their coping mechanisms and resiliency in managing disaster situations by providing spiritual support such a prayer (*du’ā*) and solace to the community affected. Most of the nurses that had worked in a disaster area mentioned the lack of spiritual support given to them during a disaster situation. However, in some circumstances, a small number of nurses did receive spiritual and religious support, and the application of religious practices as a support intervention could help them to manage themselves instead. The involvement of various religious groups during a disaster is an important coping approach that can be observed by nurses as they respond in the disaster area. The speeches delivered by a religious teacher, who in some circumstances will be deployed together with a disaster team, to the team of nurses in this study were helpful in controlling their emotion and promoting calmness when working in a hostile environment.

The findings on religious coping mechanisms amongst nurses who have been involved in disaster response suggest that they require assistance with regard to religious provision. Few studies have revealed the positive effect of religion in people’s lives, especially during disasters, with one such example being to keep them from suicidal thoughts (Fujiwara, 2013; Stratta *et al.*, 2014). Religious coping shows a positive correlation with psychological modification to stressors with the enrichment of faith-based social support (Ano and Vasconcelles, 2005). In contrast, other studies have identified various negative impacts of religious belief on the community; for instance, division and rivalry amongst community members (Guarnacci, 2016). As such, it does not follow that the coping strategies shown to have been effective in this study will also be
the best strategies for nurses from other countries, even amongst countries in the same region and that have similar religious beliefs.

5.8 Strengths and limitations of the study

5.8.1 Strengths

The constructivist grounded theory that underpinned the methodological imperative and philosophical paradigm is identified as the major strength of this study. As mentioned previously, this is the first study of its kind to use a constructivist grounded theory approach to assist and facilitate the whole journey of producing this thesis (as of September 2019). This study could also be considered the first study ever conducted in Malaysia on nurses’ experiences during disaster response since the field remains in its infancy; as such, the study provides an overview of the current scenario of disaster nursing in Malaysia. This reflects the fact that most of the studies carried out involving nurses in Malaysia have tended to focus on the clinical field, education and public health, while there has been a relative paucity of studies worldwide on nurses’ experience from a qualitative perspective. This study adds to the extant literature both in terms of its qualitative approach and from the research that focuses on nurses’ experiences while responding to a disaster. Furthermore, this study has had an impact on the researcher in terms of reflecting on her journey, both personal and professional, in relation to disaster nursing in Malaysia.

5.8.2 Limitations

This study has achieved its objectives; however, there are several limitations that would need to be addressed in any future research.

This study involved only thirty nurses from various backgrounds and with varying levels of experience; therefore, it cannot represent the population of many thousands of nurses
in Malaysia. However, it did cover different types of disasters experienced by nurses since the nurses in this study had been exposed to the various types of disasters that frequently occur in Malaysia.

In regard to the background of the respondents, there was only one non-Malay respondent involved in this study. This is due to the fact that the majority of nurses who work under the purview of MOH, Malaysia are from the Malay group as the native population of Malaysia. Thus, the study does not represent the multiracial population of Malaysian nurses and is limited to that context.

Aside from nurses as the core respondents, several emergency physicians were also selected to provide their views, thoughts and opinions pertaining both to the nurses’ involvement in disaster response and disaster management as a whole. Most of the hospitals that play an active role in disaster response and disaster management training are located in Klang Valley, where all of the emergency physicians consulted currently work; therefore, they were given priority. Two work with a teaching hospital and thus are actively involved in disaster training nationally. Taken into consideration the profile of the selected emergency physicians, their opinions and thoughts should be considered in relation to the improvement of disaster nursing in Malaysia.

This study was further limited to only a few states in Peninsular Malaysia, which were chosen due to the frequency with which they are struck by disasters, regardless of the type. The other states are rarely hit by disasters and thus their disaster response is limited. In addition, this study excluded East Malaysia due to the occasional unrest that occurs in that region. However, in spite of the limitations mentioned, this study can serve as a key reference for institutions such as the MOH, Ministry of Education and other organisations that deal with the involvement of healthcare personnel in the disaster response.
5.9 Reflecting on a remarkable journey

In this section, the researcher will use the first-person pronoun ‘I’ and related pronouns to express her professional and personal reflection.

This section reflects my journey through Ph.D. (Doctor of Philosophy) study from 24th October 2014 to the present day, specifically while developing a ‘new proposal’ from scratch and within the process of completing this thesis. There were unforgettable moments and thought-provoking experiences throughout the process until I was finally able to compile this final thought. I have also been reminded of how my own interest in disaster nursing has developed over time.

Foremost, I intended to carry out research on choosing the best method of teaching disaster management. This reflected my current background in ‘nursing education’. When I was first introduced to qualitative study, the term itself was ‘alien’ to me. I did not know how to conduct research using a qualitative design as I had never encountered it before in my life. Being able to ‘immerse’ myself in the design really opened up my views and insights on the beauty of undertaking a qualitative study. As people say, ‘we fall in love by chance, we stay in love by choice’. It happened to me when I began working on a qualitative design. Choosing qualitative research reflects my ‘personal and professional biography’ and how I was shaped by this study, and vice versa. In some circumstances, personal reflection became entwined with professional reflection, with the two at times being inseparable (Creswell, 2003).

5.9.1 Personal reflection

Since graduating from nursing school at the end of 1998, from May 1999 until September 2009, I was assigned to work at two emergency and trauma departments in hospitals in
Selangor, which is a state in the central region of Malaysia. Both departments are amongst the active emergency departments in Malaysia and are headed by a Consultant Emergency Physician cum Anaesthesiologist, who is also the head of the emergency services of Malaysia. While still working in a clinical area (in the emergency department) circa early 2000, I was fairly actively involved in a number of disaster lectures, workshops, drills and simulations and was even accorded the privilege of being a member of the disaster committee set up by the hospital where I worked. I was also a member of a task force for the development of a disaster plan amongst nurses.

The 2004 Indian Ocean earthquake, also known as the Sumatera-Andaman earthquake, and subsequent tsunami attracted my attention. A few days after the disaster event, I received a call from the head of the department, asking whether I would like to join a disaster response team from one hospital to be deployed to Acheh, Indonesia. At first, I was hesitant and pondered whether or not to accept this ‘once in a blue moon’ opportunity. There were so many things to consider; personal preparation, what my roles would be in the disaster area, the documents to be completed, vaccinations, the immigration process, plus other things. However, it was such an honour to be asked to be part of the team. Eventually, I accepted the offer and prepared myself physically and emotionally for working in a hostile environment such as a tsunami (see Figure 5.7). I realised that I really enjoyed working in this branch of nursing and that this was a ‘stepping stone’ for me to further explore disaster nursing.
Disaster team representing the Ministry of Health (Selayang Hospital) in January 2005 at Aceh after the region was struck by a tsunami following the Andaman earthquake on 24th December 2004.

Figure 5.7: Pictures of the researcher when first involved in a disaster mission
From day to day, I developed my ultimate passion in disaster nursing management and education and eventually, I completed my master’s dissertation on assessing the knowledge, attitude and practices of two different groups of nurses in Malaysia with regard to disaster management. I have published the findings in a few journals and presented at several conferences worldwide. The published articles have since been cited by people of different backgrounds from all over the world. The questionnaire that I developed during the study has been used by many novice researchers. Added to this, following my return from the master’s study, one of the requirements was to supervise undergraduate nursing students in their final-year projects. This was a good opportunity for me to introduce disaster nursing to my final-year students. In fact, when the students presented their projects, the former Dean of Nursing where I work was so impressed as the subject was so different from what was commonly presented by final-year students.

However, as the years passed, specifically when I conducted my master’s dissertation on ‘disaster management: a study on knowledge, attitude and practice of emergency nurses and community health nurses’ in 2010, I was surprised by the findings whereby the nurses were found to have inadequate knowledge and practices, despite having a positive attitude towards disaster management. The exposure of nurses in disaster training and in a ‘real’ disaster situation still required further attention. Therefore, I realised that I should immediately start moving towards the introduction of a disaster nursing speciality for nurses in Malaysia. This was such a small contribution from me to my fellow nurses in Malaysia and hence indirectly to the community that requires our nursing care while affected by a disaster.

5.9.2 Professional reflection

In mid-2014, I was given the opportunity by the employer at a university in Malaysia to pursue Ph.D. study with the specialty of disaster nursing. Despite initially seeking to undertake this in the United States, which is known for experiencing many types of disasters, including hurricanes, floods and several others, my proposal was considered by
Professor Kate Seers of the University of Warwick, United Kingdom when I first approached her through an email. A Skype interview then took place between us. Prior to my application for Ph.D. study, I was working on a proposal entitled ‘A randomised controlled trial study in comparing between two methods of teaching disaster: Lecture versus lecture and tabletop exercise amongst healthcare providers in Malaysia’. It intended to examine which of these two methods was more effective in teaching disaster management. I overcame various hurdles prior to being accepted into the programme, including a mild medical condition of the ear. I also struggled with the English requirement of 7.0 required by the Warwick Medical School due to English not being my first language.

I began my journey at the end of October 2014. After several months spent working on the literature, I came to realise, along with my supervisors, that the initial proposal would be challenging to achieve since there was a more substantial underlying issue regarding the current scenario of Malaysian nurses that demanded further attention. It was like being able to see the tip of the iceberg while having no visibility of the major issue beneath the surface. Indeed, at that time, and in fact up to today, my literature searches have identified no qualitative study that has been conducted in Malaysia in relation to nurses’ experience while deployed to a disaster area, let alone one that has used constructivist grounded theory.

Working as an emergency nurse at MOH hospitals from 1999 to 2009 developed my enthusiasm for the scenario amongst Malaysian nurses in regard to disaster management. Being involved in various training sessions and in a ‘real disaster’, as well as being a member of the disaster committee for the hospitals, influenced my thought and attitude towards approaching this study. Most of the feelings that I experienced while involved in Humanitarian Assistance for the Andaman Earthquake in 2004 were similar to the experiences reported by the nurses in this study. It is likely that I had previously been in their ‘shoes’.
With regard to the study, the data were collected in Malaysia between July and October 2016. Undertaking a tour from north to south and west to east of Peninsular Malaysia proved to be such an adventurous and exciting experience. Finally, I managed to gather about thirty nurses across the study locations. Having met them, my eyes were opened as to the difficulties they faced in being involved in various types of disaster such as floods, landslides, pandemics, mass casualty incidents, armed intrusions and tsunamis. Despite that feeling, they were also excited at having the opportunity to be involved in a disaster response team. Indeed, they also felt glad that there was ‘someone’ looking for them to deepen their experience while working as a disaster responder. As I was previously involved in a disaster response team, by chance, I developed my own views and insight about what they would have been through in a disaster area. I was able to recognise the biases that exist and also identified how I might influence the research.

However, while I can state that nurses worldwide are closely related to the discipline of disaster, in the Malaysian context this is often neglected in terms of their exposure to the mitigation and preparedness phases of disaster management. From my own experience, I can see how the pattern of nurses’ involvement in disaster management tends to focus merely on nurses who work in a tertiary hospital (with a specialist). This claim was also supported by several of the emergency physicians that I managed to interview to obtain their views on nurses’ involvement in disaster management across the continuum. Finally, from 2016 until mid-2017, I collected all of the data needed for this study and began analysing the findings.

Nevertheless, when I was in the early stages of the final year (fourth year), I received heart-breaking news relating to a medical condition that required me to temporarily suspend the progress of this study and instead focus on the treatment needed. The hiatus lasted for around a year, from 21/11/2017 until 20/11/2018. The episode did not change things at all, in that I was still excited to complete the study and present the stories I had uncovered while interviewing the bold nurses. Whenever I felt well, I would read the findings to remind me to never forget the nurses that were willing to share and
recall their ‘bitter and sweet moments’ of being involved in a disaster area. They soared from their experience and indeed, some developed an interest in this ‘highly tense’ discipline.

Today, with Allah’s permission, I have now fully recovered from the ‘little test’ and I am enthusiastic to complete the story of my fellow nurses and publish the findings so that their shared moments do not just become a ‘Ph.D. thesis’ but instead shine a light on those nurses who have devoted their career to disaster nursing. There is also the potential for it to attract the attention of the higher authorities in the MOH with regard to improving disaster education and training as well as recognising the importance of the disaster nursing field in Malaysia. The model developed could help and guide the respective institution to prepare their nurses and also be of value to other healthcare providers that may be involved in a disaster response team in the future.

This Ph.D. journey has had such a huge impact on myself with regard to my view on conducting research as well as my insight into the experience of nurses that have been involved in a disaster response team. From the very start of the journey, I learnt a lot from my supervisors, in particular on matters related to research. The area in which I learnt the most was how to develop critical appraisal on the articles related to my subject. I also attended a few short courses on research methodology offered by Warwick Medical School, such as Understanding Research and Critical Appraisal in Healthcare (UReCA), Mixed-method Research and Qualitative Research, that facilitated my progress. Learning all those things changed my understanding of viewing any related articles, as well as of the subject itself. It also enhanced my critical thinking when reading articles and expanding my horizon in research matters. During this period, I realised that I had developed my ultimate interest in the research field more than anything. I wish to expand the culture of conducting research as evidence-based nursing practice in my country and encourage my fellow nurses to explore the disaster nursing field. It is possible that I may help to facilitate nurses who love to learn about research, regardless of their field. On the
other hand, I would also like to apply what I have learnt during my period in the U.K., be it academically or personally.

5.10 Summary of the chapter

Disasters have the potential to create turmoil and leave a mark not only on the psyches of victims but also those of nurses. There is a huge need for the participation of nurses across the disaster management continuum, including in the pre-disaster, disaster and post-disaster phases. This study reflects the needs and concerns of nurses to be educated and prepared prior to their deployment to a disaster area, in addition to addressing their psychological and emotional problems. Effective disaster management can help in alleviating the chaos created by unpredictable circumstances. It is important to expand the planning of disaster management to explicitly focus on the issues raised as well as to provide education and training concerning the standard of care.

The term disaster commonly conveys a ‘negative connotation’ to those affected and to most people around the world. It creates an image of the destruction of the area affected, of people who have been killed and injured in the disaster as well as the socioeconomic impact on the area. However, that is not all that disaster leaves us with. Besides its ‘negative impact’, a disaster can also serve as an eye-opener for us to improve and strengthen the care that should be provided to the affected population, in line with the requirement of the global agenda to ensure the sustainability of the human capital in managing disasters per se.

The findings of this study uncover the establishment of nurses’ competencies and responsibilities, how nurses manage their emotions and the type of support they gain from various sources, thereby supporting and extending the findings of a study by Li et al. (2015), which also noted nurses were working in a terrible environment. While we are unable to predict precisely when a disaster will occur, we can put our hope in nurses to lend a hand in assisting during a disaster to secure the best possible outcomes, not merely
for the community affected but also for the nurses involved. However, a lack of formal education means many nurses have little or no competency in the disaster nursing discipline, which was also the experience reported by some of the nurses in this study.

While nurses may feel confident working in their preferred field, they may not be prepared to deal with a chaotic situation such a disaster. As a result, the nurses in this study reported feeling a lack of confidence in disaster response. Without specialised training in disaster management, their basic knowledge and skills acquired from initial nursing training would not be of much benefit. Conversely, the competencies needed to be involved in a disaster are hugely desirable as the circumstances are highly diverse and thought-provoking. Nurses need to be prepared in all aspects, including psychological and emotional, not only to respond to a disaster but also to maintain their individual sustainability while managing the disaster and which could lead to an effective process of disaster recovery. While it is possible to fully prepare nurses for disaster training in the classroom, they will likely still find actual disaster situations to be stressful and shocking, even with good preparation. The nurses should thus be capable of displaying individual sustainability and resilience when faced with the challenges posed by any kind of disaster.

The concerns and needs of the nurses in this study should be considered in order to provide a safe working area and address any psychological and emotional issues post-disaster. This could help ensure the nurses are able to continue serving everyone in any condition, even at a time of chaos. Regardless of the situations they faced, in any type of disaster, the nurses were able to develop resilience and sustainability and thus serve the victims, despite the difficulties they encountered. Ensuring the sustainability of the nurses in this study when in a hostile environment requires multiple parties to help in establishing competencies and responsibilities, manage emotions and obtain support in all aspects.
CHAPTER 6: CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

6.0 Introduction

This section contains a summary of the study, addresses the implications and provides appropriate recommendations based on the matters identified from the study. The implications and recommendations address the following three areas that are significant to this study: disaster nursing practices and their related policy, disaster education and training policy for disaster management, and future research in the field of disasters, specifically disaster nursing.

6.1 Summary of research

This study was carried out with the aim of discovering the experiences of nurses who had worked through a disaster, regardless of the type. The aim was to elicit their opinions, views, perceptions, thoughts and feelings, along with those of several emergency physicians, as well as to identify the factors that contribute to and hinder their involvement in a disaster response team. This study utilised the constructivist grounded theory approach offered by Kathy Charmaz. A total of three categories were identified from the in-depth interviews conducted with the thirty nurses from seven states in Peninsular Malaysia who had been involved in various types of disaster, including tsunamis, pandemics, mass casualty incidents, floods and armed intrusion. The categories identified are 1) establishing competencies and responsibilities, 2) managing emotions and 3) getting support. These were then developed into the characteristics required by Malaysian nurses and led to the development of the core category of ‘Ensuring Individual Sustainability When in a Hostile Environment’. Holistically, this conceptual framework was then developed into a model named ‘Being a Disaster Nurse’, from the Malaysian context.
6.2 Conclusion

While this study may be of greatest relevance to nurses, the findings may nevertheless be extended to other healthcare professionals such as doctors and assistant medical officers who are also highly involved in the areas of disaster response and disaster management as a whole. They could also apply to other auxiliary workforces in healthcare services that play a significant role in the development of disaster management programmes in the Malaysian context. Therefore, the researcher asserts that the experience of nurses during disaster response should be accorded great attention and explored as a means of eliciting their opinions, views, perceptions, thoughts and feelings as these have the potential to serve as a key reference in the future management of disaster nursing in Malaysia.

Turale (2015), in her editorial comment, mentioned how the authors published in a special issue of *Nurse Education in Practice* emphasised the common theme of the need for nurses to be prepared through education and research. The results from this study could thus be used to propose a modification of the current disaster training education, in particular for Malaysian nurses, and open up new opportunities for further research.

6.3 Implications of the research and its recommendations

This chapter outlines the implications of the research, including recommendations for policies with regard to practices and future research, as well as for educational purposes. The findings generate a remarkable impact in terms of informing the nursing field on the significance of preparing for disaster events and their aftermath. The summary of these recommendations is shown in Table 6.1, later in this section.
6.3.1 For nursing practices and their related policy

This study has shed light on the involvement of nurses in disaster response and recognises there is scope for improvement in terms of the betterment of nursing services while rendering them to the population in need.

- Awareness of the importance of expanding the field of disaster nursing amongst nursing administrators in the Ministry of Health (MOH) is required. As a result, they are able to draw attention to the importance of being prepared and thus serve to boost the confidence of nurses deployed to a disaster area.
- Develop a plan for the future landscape regarding the speciality of disaster nursing based on nurses’ experiences.
- Update the Nursing Board of Malaysia’s Code of Professional Conduct 1998 by instilling clauses related to disaster response.

There are few guidelines available worldwide to facilitate nurses concerning required competencies while working in a disaster area. However, this study observed a lack in nurses’ competencies with regard to disaster nursing in Malaysia.

- Nursing administrators should establish the required competencies and the framework should be relevant to the Malaysian setting, to guide Malaysian nurses, and concurrent with the ICN Framework of Disaster Nursing Competencies.

Involvement of nurses in disaster mitigation and preparedness is required in order to respond well during a disaster. There is, thus, an urgent need for the wide involvement of nurses in the preparedness for any kind of disaster and for them to actively participate in the disaster management continuum; specifically, in mitigation, preparedness and establishing a connection with communities in preparing and recovering from disasters and their aftermath.
In preparing an institutional disaster plan, it is crucial that nurses are invited to contribute their views and opinions for the improvement of disaster nursing management. Institutional top management could thus seek to revise their institutional plans by involving nurses from the pre-disaster phase (mitigation and preparedness) through to the post-disaster phase (recovery).

Nurses’ experience during disaster response should be given great attention and explored in order to solicit their opinions, views, perceptions, thoughts and feelings. This study may be exclusively pertinent to the nurses and this finding came from them. However, we might expect to find a similar situation concerning other professionals who actively participate in disaster response.

This thesis could be used as preliminary guidance for healthcare administrators to focus high concern on the need for their healthcare personnel to be prepared for any kind of disaster. Therefore, it is important for the organisation, in particular nursing organisations, to narrow the gap that currently exists.

The findings could be extended to other healthcare professionals, such as doctors and assistant medical officers. These professions are highly involved during disaster response, as well as disaster management as a whole. Other auxiliary workforces in healthcare services could be involved, for instance, healthcare assistants, pharmacists and counsellors, who also play significant roles in developing disaster management programmes, according to the Malaysian situation.

In general, these findings could inform the Ministry of Health (MOH), and in particular the nursing division, to encourage the involvement of nurses in all phases of disaster management and to prioritise their involvement from the beginning of the pre-disaster phase, which is disaster mitigation and prevention.

Actively promote the dissemination of information in relation to nurses’ involvement in all phases of disaster.
6.3.2 For educational policy on disaster management

It is essential to have a broader understanding of nurses’ experience, knowledge and skills.

- This could assist the MOH or any other educational agencies to develop a nation-wide policy-driven approach to improving disaster education, thus enhancing the safety of the affected population.
- It can be observed from the scenario of the nursing profession in Malaysia that improvement to strengthen the knowledge and skills of nurses at the early stage of their exposure in the disaster field is required.

Over the last several years, many countries and international organisations have become more aware and addressed the importance of providing extensive training to responders by establishing specialised disaster training programmes. This could enhance and strengthen the knowledge that nurses derive from disaster management training and could create awareness of the need for nursing graduates to seek further disaster training in preparation for their professional duties. However, little in the way of training has been offered to healthcare personnel.

- In this context, nurse educators should develop a disaster nursing curriculum and provide disaster training programmes for nursing undergraduates aimed at preparing them for an active role in disaster management.
- These nurse educators could play a significant role in preparing both undergraduates and postgraduates, as well as in post-basic training, by revising curricula that currently offer only a limited amount of disaster-related content.

There are diverse methods of disaster training available, including mock disaster drills, simulations and functional exercises, as well as tabletop exercises, that provide numerous approaches to the learning of disaster management.
• Simulation is an effective method of teaching disaster nursing that offers the potential to improve teamwork, active learning, problem-solving, satisfaction level and self-confidence during disaster nursing training (Xia et al., 2016). Therefore, organising frequent training, specifically hands-on training, could provide early exposure to nurses concerning ‘real’ disaster situations.

• Disaster drills can also be more effective in refining ‘real-life’ practice as compared to classroom lectures and thus multiple approaches to training methods should be considered.

• Offering a variety of learning methods could provide opportunities to those requiring specific training in disaster management. For instance, nurse managers in hospitals must be familiar with the workflow when a disaster strikes and how their institution must respond to the influx of patients and shortage of resources. Tabletop exercises could thus help shed light on how to manage the surge capacity during a disaster.

• Periodic disaster training offered by institutions is significant to ensure the majority of healthcare personnel are trained and prepared to deal with a disaster, regardless of the type.

• Institutional management should increase the frequency with which they provide in-house training delivered by nurses to other nurses within the individual organisation. It is significantly easier for nurses to train other nurses, as they are familiar with the nurses’ educational background, with support from other professionals, such as emergency physicians.

The nurses in this study also spoke of how previous experience in disaster response combined with involvement in disaster training has enabled them to be better prepared.

• The training offered should encompass the competencies required for the nurses to function effectively during a disaster; for example, first aid and life support training (Fatma Abdelalim Abdelghany Ibrahim, 2014), including triaging, communication flow and managing surge capacity should be ensured, in order to improve the required competencies.
• It is necessary to engage nurses with training in the fundamental skills for managing a disaster, such as first aid skills, cardiopulmonary resuscitation skills, trauma skills and life-support training, to build up their competencies while involved in disaster management.

• All emergency nurses, and also those from a non-emergency nursing background who have expressed an interest in disaster nursing, need to be trained.

This study identifies several factors that aid or hinder nurses in performing their duties within disaster response, such as the need to be prepared, both physically and emotionally, prior to being deployed to a disaster area. This factor was emphasised by the nurses in this study and it is critical that their institutions address the issue.

• Inculcating psychological and emotional preparation components in a disaster training is compulsory to prepare nurses in all aspects; not merely physical preparation.

There is a need to establish a disaster nursing committee at the national level (Al Khalaileh, Bond and Alasad, 2012) as a means of inaugurating the movement of the disaster nursing discipline that could facilitate the development and monitoring of disaster nursing curricula in Malaysia. This could involve nurses from different backgrounds, such as emergency, surgical, public health, paediatric and many more, since disaster is not a single-approach discipline but rather demands the involvement of various branches of the nursing field.

6.3.3 For research related to disaster nursing

Exploring the experience of Malaysian nurses while responding to a disaster is not routinely investigated as a field, particularly for research conducted using a qualitative approach, such as constructivist grounded theory.
• It will be necessary to continue disaster-related research in the future to strengthen disaster management amongst nurses, as well as other healthcare personnel.

• Focusing research on the aspect of 1) psychological response in disaster; 2) development of disaster curriculum; and 3) collaborative networking in research with other professions could facilitate nurses in Malaysia to explore this newly ‘blooming’ discipline. Involvement of other healthcare personnel in similar research would be beneficial for them as early preparedness prior to deployment to provide an effective disaster response to the affected population.

• More research is needed to improve disaster education and training and this could add to the body of knowledge in disaster nursing.

• Cross-country collaboration should be developed and recognised; indeed, Turale (2015), in her editorial comment, wrote that this begins from ‘researching, disseminating and translating knowledge into teaching practice about disasters and disaster nursing and management’ (p.52).

• There is also a need for further research regarding disaster nursing; in particular, looking at factors that could support nurses in managing a disaster.

• Other nurses, or anyone who would choose to explore disaster experience further, could be trained on the specific disaster or any recent disasters.

• A mixed method approach could be used in discovering other factors that could aid or hinder involvement in disaster response.

One of the prominent findings is the role of religion as a coping mechanism for nurses while responding to a disaster.

• This is useful if the role of religion as a coping mechanism for nurses, as well as other healthcare professionals, could be further investigated in the future.
### Table 6.1: Summary of the implications and recommendations

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<th></th>
<th>Nursing practice and its related policies</th>
<th>Educational policies on disaster management</th>
<th>Research related to disaster</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Awareness of the importance of expanding the field of disaster nursing amongst nursing administrators.</td>
<td>MOH or any other educational agencies to develop a nationwide policy-driven approach to improving disaster education.</td>
<td>Provide for other nurses or anyone who would choose to further explore disaster experience regarding a specific disaster or any recent disasters.</td>
</tr>
<tr>
<td>2.</td>
<td>Develop a plan for the future landscape of speciality disaster nursing.</td>
<td>Improvement to strengthen the knowledge and skills of nurses at the early stage of their exposure in the disaster field is required.</td>
<td>Other future researchers could expand this study to a larger scale of respondents.</td>
</tr>
<tr>
<td>3.</td>
<td>Update the Code of Professional Conduct 1998 of Nursing Board Malaysia by instilling clauses related to disaster response.</td>
<td>Nurse educators should develop a disaster nursing curriculum and provide disaster training programmes for nursing undergraduates.</td>
<td>Could use mixed method approach in knowing other factors that could aid or hinder their involvement in disaster response.</td>
</tr>
<tr>
<td>4.</td>
<td>Nursing administrators should establish the required competencies</td>
<td>Revising curricula that currently offer only a limited amount of disaster-related content.</td>
<td>Further investigate the role of religion as a coping mechanism</td>
</tr>
<tr>
<td>Nursing practice and its related policies</td>
<td>Educational policies on disaster management</td>
<td>Research related to disaster</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td>and the framework should be relevant to the Malaysian setting.</td>
<td></td>
<td>for nurses, as well as other healthcare professionals.</td>
<td></td>
</tr>
<tr>
<td>5. It is crucial that nurses are invited to contribute their views and opinions regarding the improvement of disaster nursing management.</td>
<td>Offering a variety of learning methods could provide opportunities to those requiring specific training in disaster management.</td>
<td>Involvement of other healthcare personnel in similar research would be beneficial for them as an early preparedness prior to deployment to provide an effective disaster response to the affected population.</td>
<td></td>
</tr>
<tr>
<td>6. Preliminary guidance for healthcare administrators to focus significantly on the need for their healthcare personnel to be prepared for any kind of disaster.</td>
<td>Organising frequent training; specifically hands-on training could provide early exposure to nurses regarding a ‘real’ disaster situation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The findings could be extended to other healthcare professionals.</td>
<td>Offering a variety of learning methods could provide opportunities to those requiring specific training in disaster management.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing practice and its related policies</td>
<td>Educational policies on disaster management</td>
<td>Research related to disaster</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>8. Actively promote the dissemination of information in relation to nurses’ involvement in all phases of disaster.</td>
<td>Institutional management should increase the frequency with which they provide in-house training that is delivered by nurses to the other nurses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>The training offered should encompass the competencies required for nurses to function effectively during a disaster.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Engage nurses with training on the fundamental skills for managing a disaster.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>All nurses, regardless of their background, who have expressed an interest in disaster nursing need to be trained.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Inculcating psychological and emotional preparation components in disaster training is compulsory to prepare nurses in all aspects.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.4 Final thoughts

I end this final thought with prose which I had originally and personally composed (without editing). The idea of writing this artwork came across my mind when I was in the middle of writing of this thesis on the said date below. I wrote this prose to show how I was so impactful with the event and indeed, it became a turning point in my nursing career.
When It Happened No One Can Stop, But We Could Help

It started from the island name Andaman
Way far from my home country
People lost their lives
Properties destructed
What can we see only flat ground.
Those who lives crying
Searching for their family members
People came from every part of the world
Helping those in need
One of them was me.

Although I came after two weeks of the chaotic event
People still in mourning and grieving
For losing everything they have
We came to help and to soothe
Provide healthcare assistance
Ensuring those who lives won’t be neglected.

Past is past
We have to be strong
Building up what left.
This situation open people’s eyes
How important to be prepared
And for me,

It opened up my interest to fall in love with disaster nursing.

Ainyanun
29th October 2016

~ THE END ~
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Australian Psychological Society (2018) Psychological preparation for natural disasters, Australian Psychological Society. Available at:


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Prime Minister Office (no date) *MESSAGE RT. HON. DATO’ SERI ABDULLAH HAJI AHMAD BADAWI, Prime Minister Office*.


Society for the Advancement of Disaster Nursing (no date) *Every nurse a prepared nurse*, *Society for the Advancement of Disaster Nursing*. Available at: https://disasternursing.org/ (Accessed: 15 July 2019).


factor for suicidal ideation’, *Journal of Adolescence*, 37, pp. 605–611.


Available at: https://sustainabledevelopment.un.org/sdg3 (Accessed: 1 July 2019).


World Health Organization (2019) *Emergency and disaster risk management for*


The KKM Strategic Plan

Goal 5: Manage crisis and disaster effectively

| Public Health programme | 1. Enable the implementation of disaster management plan (pre, during and post disaster)  
2. Provide adequate & appropriate emergency care services and facilities  
3. Mitigate impact of disaster  
4. Limit death and disability from disasters and health-related crisis  
5. Expand and ensure complete national coverage of the MOH’s Rapid Response Mechanism  
6. Strengthen emergency pre-hospital care services at primary care level |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical programme</td>
<td>1. Limit casualties during a disaster</td>
</tr>
</tbody>
</table>
| Research & Technical Support programme | 1. Conduct research to support MOH to reduce death and disability from disasters and health related crisis  
2. Conduct research to support MOH in its expansion of the Rapid Response Mechanism for complete national coverage  
3. Limit death and disability from disasters and health related crisis  
4. Establish organizational framework for Rapid Response  
5. Ensure healthcare facilities and equipment are operational  
6. Limit casualties related to radiation accidents  
7. Provide advisory services for the containment of radiological agents to the relevant parties |
| Pharmacy programme | 1. Limit casualties through rapid information response mechanism |
| Management programme | 1. Formulate a media crisis manual  
2. Expand and ensure complete national coverage of MOH’s Rapid Response Mechanism |

Source: Ministry of Health Malaysia (2008)
## Prominent disaster incidents in Malaysia 1926 – 2012

<table>
<thead>
<tr>
<th>Date / Year</th>
<th>Incident</th>
<th>Categories</th>
<th>Loss</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926</td>
<td>Flood known as “The storm forest flood”</td>
<td>Natural</td>
<td>Thousands of hectares of forests destroyed</td>
<td>Not applicable</td>
</tr>
<tr>
<td>19 October 1968</td>
<td>Collapse of four-storey building – The Raja Laut Tragedy</td>
<td>Human-made</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1988</td>
<td>Sultan Abdul Halim Ferry Terminal collapsed – Royal Inquiry</td>
<td>Human-made</td>
<td>Injured 1,634 people</td>
<td>32</td>
</tr>
<tr>
<td>1991</td>
<td>Bright Sparklers explosion (Royal Inquiry)</td>
<td>Human-made</td>
<td>Millions</td>
<td>22</td>
</tr>
<tr>
<td>21 June 1992</td>
<td>Choon Hong III oil tanker explodes and burns (Royal Inquiry)</td>
<td>Human-made</td>
<td>Not applicable</td>
<td>13</td>
</tr>
<tr>
<td>1992</td>
<td>Fire and explosions at South Port Klang</td>
<td>Human-made</td>
<td>Millions</td>
<td>10</td>
</tr>
<tr>
<td>June 1993</td>
<td>Genting Highlands landslide</td>
<td>Combination</td>
<td>Millions</td>
<td>20</td>
</tr>
<tr>
<td>December 1993</td>
<td>Collapse of Highland Towers apartment</td>
<td>Human-made</td>
<td>Tens of millions</td>
<td>48</td>
</tr>
<tr>
<td>December 1996</td>
<td>Floods brought by Tropical Storm Greg in Keningau (Sabah state)</td>
<td>Combination</td>
<td>300 million</td>
<td>241</td>
</tr>
<tr>
<td>29 August 1996</td>
<td>Pos Dipang landslide-mudslide</td>
<td>Combination</td>
<td>Not applicable</td>
<td>44</td>
</tr>
<tr>
<td>1997</td>
<td>El Nino in 1997 which led to severe droughts, forest fires and haze</td>
<td>Combination</td>
<td>Millions in lost tourist revenue, health costs &amp; business losses</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Date / Year</td>
<td>Incident</td>
<td>Categories</td>
<td>Loss</td>
<td>Deaths</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>February 1999</td>
<td>Landslide at Sandakan (Sabah)</td>
<td>Combination</td>
<td>Millions</td>
<td>17</td>
</tr>
<tr>
<td>June 1999</td>
<td>Japanese Encephalitis Virus outbreak</td>
<td>Combination</td>
<td>Millions</td>
<td>60</td>
</tr>
<tr>
<td>2000</td>
<td>Floods caused by heavy rains in Kelantan and Terengganu</td>
<td>Combination</td>
<td>Millions</td>
<td>15</td>
</tr>
<tr>
<td>November 2002</td>
<td>A luxury home collapsed in Ulu Kelang area</td>
<td>Combination</td>
<td>Millions</td>
<td>8</td>
</tr>
<tr>
<td>November 2002 – May 2003</td>
<td>Severe Acute Respiratory Syndrome (SARS)</td>
<td>Combination</td>
<td>Millions</td>
<td>Not applicable</td>
</tr>
<tr>
<td>2003 – 2007</td>
<td>Avian Influenza 2003 – 2007</td>
<td>Combination</td>
<td>Millions</td>
<td>Not applicable</td>
</tr>
<tr>
<td>December 2004</td>
<td>Asian tsunami</td>
<td>Natural</td>
<td>Millions</td>
<td>68</td>
</tr>
<tr>
<td>2005</td>
<td>Haze</td>
<td>Combination</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>December 2006 &amp; January 2007</td>
<td>Floods in Johor state</td>
<td>Combination</td>
<td>489 millions</td>
<td>18</td>
</tr>
<tr>
<td>2008</td>
<td>Floods in Johor state</td>
<td>Combination</td>
<td>21.19 millions</td>
<td>28</td>
</tr>
<tr>
<td>2010</td>
<td>Floods in Kedah and Perlis</td>
<td>Combination</td>
<td>8.48 million (aid alone)</td>
<td>4</td>
</tr>
<tr>
<td>2011 &amp; 2012</td>
<td>La Nina in 2011 and 2012 (which brought floods)</td>
<td>Natural</td>
<td>Not applicable</td>
<td>NA</td>
</tr>
</tbody>
</table>

Adapted from Chan (2012)
Disaster profile of Malaysia from 2000 – 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Occurrence</th>
<th>Killed / Deaths</th>
<th>Affected</th>
<th>Injured</th>
<th>Homeless</th>
<th>Total Affected</th>
<th>Total Estimated Damage ('000 $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>6</td>
<td>84</td>
<td>9488</td>
<td>0</td>
<td>0</td>
<td>9488</td>
<td>1000</td>
</tr>
<tr>
<td>2001</td>
<td>5</td>
<td>25</td>
<td>33200</td>
<td>0</td>
<td>0</td>
<td>33200</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>2</td>
<td>12</td>
<td>155</td>
<td>0</td>
<td>0</td>
<td>155</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>4</td>
<td>10</td>
<td>18803</td>
<td>0</td>
<td>0</td>
<td>18803</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>6</td>
<td>97</td>
<td>57038</td>
<td>767</td>
<td>19296</td>
<td>77101</td>
<td>510000</td>
</tr>
<tr>
<td>2005</td>
<td>3</td>
<td>13</td>
<td>30600</td>
<td>0</td>
<td>0</td>
<td>30600</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>4</td>
<td>6</td>
<td>106518</td>
<td>0</td>
<td>0</td>
<td>106518</td>
<td>22000</td>
</tr>
<tr>
<td>2007</td>
<td>3</td>
<td>102</td>
<td>137533</td>
<td>0</td>
<td>29000</td>
<td>166533</td>
<td>968000</td>
</tr>
<tr>
<td>2008</td>
<td>2</td>
<td>0</td>
<td>8000</td>
<td>0</td>
<td>0</td>
<td>8000</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>2</td>
<td>0</td>
<td>10875</td>
<td>0</td>
<td>0</td>
<td>10875</td>
<td>0</td>
</tr>
<tr>
<td>Year</td>
<td>Occurrence</td>
<td>Killed / Deaths</td>
<td>Affected</td>
<td>Injured</td>
<td>Homeless</td>
<td>Total Affected</td>
<td>Total Estimated Damage (‘000 $)</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>----------------</td>
<td>----------</td>
<td>---------</td>
<td>----------</td>
<td>----------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td>26</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>2</td>
<td>18</td>
<td>20000</td>
<td>6</td>
<td>0</td>
<td>20006</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>4</td>
<td>104</td>
<td>75191</td>
<td>16</td>
<td>0</td>
<td>75207</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>1</td>
<td>239</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>45</td>
<td>736</td>
<td>507401</td>
<td>800</td>
<td>48296</td>
<td>556497</td>
<td>1501000</td>
</tr>
</tbody>
</table>

Source: Guha-Sapir, Hoyois and Below (2014)
## SPICE framework for literature search

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Definition</th>
<th>Main keyword</th>
<th>Alternative keywords (synonym)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Settings</strong> (Where?)</td>
<td>In which context are you addressing the question?</td>
<td>Disaster</td>
<td>Disaster (s) / Natural disaster(s) / Flood / Pandemic / Mass casualty incident / Tsunami / Landslide</td>
</tr>
<tr>
<td><strong>Perspectives</strong> (Whom?)</td>
<td>Who are the participants?</td>
<td>Nurse</td>
<td>Nurse / Nurses / Nursing / Emergency Nurse</td>
</tr>
<tr>
<td><strong>Intervention / Interest</strong> (What?)</td>
<td>What is being done to/for them?</td>
<td>Disaster response</td>
<td>Respond / Response / Involved / Involve / Involvement</td>
</tr>
<tr>
<td><strong>Comparison</strong> (Compare with what?)</td>
<td>What are your alternatives?</td>
<td>None</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Evaluation</strong> (With what result?)</td>
<td>How will you measure whether the intervention has succeeded?</td>
<td>Experience</td>
<td>Perceptions / Practices / Understanding / Views / Thought(s)</td>
</tr>
</tbody>
</table>
### Findings of literature search of qualitative study (2010 until recent)

<table>
<thead>
<tr>
<th>Authors</th>
<th>Titles</th>
<th>Methodology/Methods</th>
<th>Disaster type</th>
<th>Data collection</th>
<th>Limitation</th>
</tr>
</thead>
</table>
| Broussard & Myers (2010) | School nurse resilience: Experiences after multiple natural disasters | Qualitative descriptive (Methods guided by interpretive hermeneutics phenomenology) | 5 school nurses | Theoretical sampling             | - Only guided by Interpretive hermeneutics phenomenology for the methods, not entire study  
- Small sample of nurses  
- Specific to school nurse, so the findings would not be able to transferred to other field of nursing. |
| Yang et al. (2010)       | Chinese nurses’ experience in the Wenchuan earthquake relief           | Phenomenology - Gadamer’s philosophical hermeneutics                               | 10 General nurse | Purposive sampling               | - Unable to generalise due to qualitative approach but transferability  
- On-site experience, so it limits to this study only |
<p>| Sloand et al (2013)      | Experiences of nurse volunteers in Haiti after the 2010 earthquake     | Descriptive qualitative (methods guided by Corbin &amp; Strauss)                        | 12 nurse volunteers | Snowball sampling &amp; Maximum variation sampling | - It’s only guided by grounded theory, not using the methodology for the philosophical approach |</p>
<table>
<thead>
<tr>
<th>Authors</th>
<th>Titles</th>
<th>Methodology/Methods</th>
<th>Disaster type</th>
<th>Data collection</th>
<th>Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kayama et al (2014)</td>
<td>Experiences of municipal public health nurses following Japan’s earthquake, tsunami, and nuclear disaster</td>
<td>Qualitative descriptive</td>
<td>Earthquake Tsunami Power plant explosion</td>
<td>Interview - Focus group using semi-structured question</td>
<td>The process of data collection and analysis were not discussed in details, e.g.: The authors only mentioned about ‘the transcripts were read to develop categories’, yet no further explanation given on the process of data analysis.</td>
</tr>
<tr>
<td>Wenji et al (2015)</td>
<td>Chinese nurses’ relief experiences following two earthquakes: Implications for disaster education and policy development</td>
<td>Narrative analysis - Riessman’s narrative inquiry</td>
<td>Earthquake</td>
<td>Interview - Individual interview using semi-structured question</td>
<td>Limited participants only from 4 hospitals in Wuhan</td>
</tr>
<tr>
<td>Authors</td>
<td>Titles</td>
<td>Methodology/Methods</td>
<td>Disaster type</td>
<td>Data collection</td>
<td>Limitation</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Li, Y. et al. (2015)</td>
<td>A grounded theory study of ‘turning into a strong nurse’: Earthquake experiences and perspectives on disaster education</td>
<td>Grounded theory (Symbolic interactionism - Glaser)</td>
<td>Earthquake</td>
<td>In-depth interview, field notes</td>
<td>Used grounded theory, yet, it does not employed theoretical sampling due to difficult access to the participants</td>
</tr>
<tr>
<td>Li, Y.H. et al (2017)</td>
<td>Disaster nursing experiences of Chinese nurses responding to the Sichuan Ya’an earthquake</td>
<td>Qualitative descriptive</td>
<td>Earthquake</td>
<td>Semi-structured interview, Observation notes</td>
<td>A single incident experience, so could not transferrable to other type of disaster</td>
</tr>
<tr>
<td>Pourvakhshoori, N. et al (2017)</td>
<td>Nurse in limbo: A qualitative study of nursing in disasters in Iranian context</td>
<td>Inductive qualitative content analysis</td>
<td>Various disaster</td>
<td>Semi-structured interview</td>
<td>This study not guided by any methodological position</td>
</tr>
</tbody>
</table>
### Basic beliefs of alternative inquiry paradigms

<table>
<thead>
<tr>
<th>Issue</th>
<th>Positivism</th>
<th>Postpositivism</th>
<th>Critical theory et al</th>
<th>Constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology</td>
<td>Naïve realism – “real” reality but apprehendible</td>
<td>Critical realism – “real” reality but only imperfectly and probabilistically apprehendible</td>
<td>Historical realism – virtual reality shaped by social, political, cultural, economic, ethnic, and gender values; crystallized over time</td>
<td>Relativism – local and specific co-constructed realities</td>
</tr>
<tr>
<td>Epistemology</td>
<td>Dualist/objectivist; findings true</td>
<td>Modified dualist/objectivist; critical tradition/community; findings probably true</td>
<td>Transactional/subjectivist; value-mediated findings</td>
<td>Transactional/subjectivist; co-created findings</td>
</tr>
<tr>
<td>Methodology</td>
<td>Experimental/manipulative; verification of hypotheses; chiefly quantitative methods</td>
<td>Modified experimental/manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods</td>
<td>Dialogic/dialectical</td>
<td>Hermeneutical/dialectical</td>
</tr>
</tbody>
</table>

Adapted (with modification) from Christians (2005, p.195)
## Contrasting characteristics of different approaches of qualitative studies

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Narrative Research</th>
<th>Phenomenology</th>
<th>Grounded theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td>Explore the life of an individual</td>
<td>Understanding the essence of the experience</td>
<td>Developing a theory grounded in data from the field</td>
</tr>
<tr>
<td><strong>Type of problem best suited for design</strong></td>
<td>Needing to tell stories of individual experiences</td>
<td>Needing to describe the essence of a lived phenomenon</td>
<td>Grounding a theory in the views of participants</td>
</tr>
<tr>
<td><strong>Discipline background</strong></td>
<td>Drawing from humanities including anthropology, literature, history, psychology and sociology</td>
<td>Drawing from philosophy, psychology and education</td>
<td>Drawing from sociology</td>
</tr>
<tr>
<td><strong>Unit of analysis</strong></td>
<td>Studying one or more individuals</td>
<td>Studying several individuals that have shared the experience</td>
<td>Studying a process, action or interaction involving many individuals</td>
</tr>
<tr>
<td><strong>Data collection forms</strong></td>
<td>Using primarily interviews and documents</td>
<td>Using primarily interviews with individuals, although documents, observations and arts may also be considered</td>
<td>Using primarily interviews with 20 – 60 individuals</td>
</tr>
<tr>
<td><strong>Data analysis strategies</strong></td>
<td>Analysing data for stories, “restorying” stories, developing themes, often using a chronology</td>
<td>Analysing data for significant statements, meaning units, textural and structural description, description of the ‘essence’</td>
<td>Analysing data through open coding, axial coding, selective coding</td>
</tr>
<tr>
<td><strong>Written report</strong></td>
<td>Developing a narrative about the stories of an individual’s life</td>
<td>Describing the ‘essence’ of the experience</td>
<td>Generating a theory illustrated in a figure</td>
</tr>
</tbody>
</table>

Source: Creswell (2007)
### Common and differentiating aspects of grounded theory

<table>
<thead>
<tr>
<th>Common characteristics</th>
<th>GT approaches</th>
<th>Differentiating characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Philosophical basis</strong></td>
</tr>
<tr>
<td>• Theoretical sampling</td>
<td>Classic</td>
<td>Moderate positivism</td>
</tr>
<tr>
<td>• Constant comparative analysis</td>
<td>Straussian</td>
<td>Post-positivism and Symbolic interaction</td>
</tr>
<tr>
<td>• Memos</td>
<td>Constructivist</td>
<td>Constructivism and Symbolic interactionism</td>
</tr>
<tr>
<td>• Substantive theory versus formal theory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PRIVATE
Dr NurulAin Ahayalimudin
PhD in Nursing
Division of Health Sciences
Warwick Medical School

29th January 2016

Dear Dr Ahayalimudin,

**Study Title and BSREC Reference:** Exploring Malaysian nurses’ experience during disaster response: REGC-2018-1742

I thank you for submitting your revisions to the above-named study to the University of Warwick’s Biomedical and Scientific Research Ethics Sub-Committee for approval.

I am pleased to confirm that approval is granted and that your study may commence.

In undertaking your study, you are required to comply with the University of Warwick’s Research Data Management Policy, details of which may be found on the Research and Impact Services’ webpages, under “Codes of Practice & Policies” > “Research Code of Practice” > “Data & Records” > “Research Data Management Policy”, at: http://www2.warwick.ac.uk/services/rs/research-integrity/code-of-practice-and-policies/research-code-of-practice/data-collection-retention/research-data-mgt-policy

You are also required to comply with the University of Warwick’s Information Classification and Handling Procedure, details of which may be found on the University’s Governance webpages, under “Governance” > “Information Security” > “Information Classification and Handling Procedure”, at: http://www2.warwick.ac.uk/services/gov/infomationsecurity/handling

Investigators should familiarise themselves with the classifications of information defined therein, and the requirements for the storage and transportation of information within the different classifications:

Information Classifications:
http://www2.warwick.ac.uk/services/gov/infomationsecurity/handling/classifications

Handling Electronic Information:
http://www2.warwick.ac.uk/services/gov/infomationsecurity/handling/electronic/

Handling Paper or other media:
http://www2.warwick.ac.uk/services/gov/infomationsecurity/handling/paper/

Please also be aware that BSREC grants ethical approval for studies. The seeking and obtaining of all other necessary approvals is the responsibility of the investigator.

These other approvals may include, but are not limited to:
1. Any necessary agreements, approvals, or permissions required in order to comply with the University of Warwick’s Financial Regulations and Procedures.
2. Any necessary approval or permission required in order to comply with the University of Warwick’s Quality Management System and Standard Operating Procedures for the governance, acquisition, storage, use, and disposal of human samples for research.
3. All relevant University, Faculty, and Divisional/Departmental approvals, if an employee or student of the University of Warwick.
4. Approval from the applicant’s academic supervisor and course/module leader (as appropriate), if a student of the University of Warwick.
5. NHS Trust R&D Management Approval, for research studies undertaken in NHS Trusts.
6. NHS Trust Clinical Audit Approval, for clinical audit studies undertaken in NHS Trusts.
7. Approval from Departmental or Divisional Heads, as required under local procedures, within Health and Social Care organisations hosting the study.
8. Local ethical approval for studies undertaken overseas, or in other HE institutions in the UK.
9. Approval from Heads (or delegates thereof) of UK Medical Schools, for studies involving medical students as participants.
10. Permission from Warwick Medical School to access medical students or medical student data for research or evaluation purposes.
11. NHS Trust Caldicott Guardian Approval, for studies where identifiable data is being transferred outside of the direct clinical care team. Individual NHS Trust procedures vary in their implementation of Caldicott guidance, and local guidance must be sought.
12. Any other approval required by the institution hosting the study, or by the applicant’s employer.

There is no requirement to supply documentary evidence of any of the above to BSREC, but applicants should hold such evidence in their Study Master File for University of Warwick auditing and monitoring purposes. You may be required to supply evidence of any necessary approvals to other University functions, e.g. The Finance Office, Research & Impact Services (RIS), or your Department/School.

May I take this opportunity to wish you success with your study, and to remind you that any Substantial Amendments to your study require approval from BSREC before they may be implemented.

Yours sincerely

[Signature]

Professor Scott Weich
Chair
Biomedical and Scientific Research Ethics Sub-Committee

Biomedical and Scientific Research Ethics Sub-Committee
A210 Medical School Building
Warwick Medical School,
Coventry, CV4 7AL
T: 02476-528207
E: BSREC@Warwick.ac.uk

http://www2.warwick.ac.uk/services/ris/research_integrity/researchethicscommittees/bio_med/
Appendix 3.5

MREC Approval

NURUL AIN BINTI AHAYALIMUDIN
UNIVERSITY OF WARWICK
TUANPUAN,

NMRR-16-1782-28283 (IIIR)
EXPLORING NURSES’ EXPERIENCES DURING DISASTER RESPONSE.

LOKASI KAJIAN : JABATAN KESIHATAN NEGERI (JKN) TERENGGANU
: JABATAN KESIHATAN NEGERI JOHOR
: JABATAN KESIHATAN NEGERI KEDAH
: JABATAN KESIHATAN NEGERI KELANTAN
: JABATAN KESIHATAN NEGERI PULAU PINANG
: JABATAN KESIHATAN NEGERI SELANGOR
: JABATAN KESIHATAN WILAYAH PERSEKUTUAN KUALA LUMPUR
: MINISTRY OF HEALTH

Dengan hormatnya perkara di atas adalah dirujuk.

2. Jawatankusan Etika & Penyelidikan Perubatan (JEPP), Kementerian Kesihatan Malaysia (KKM) iaitu halangan, dari segi etika, ke atas pelaksanaan kajian tersebut. JEPP mengambil maslah bahawa kajian tersebut hanya melibatkan pengumpulan data menggunakan borang kajian selidik sahaja.

3. Segala rekod dan data subjek adalah SULIT dan hanya digunakan untuk tujuan kajian Ini dan semua itu serta prosedur pengeluaran data confidentialiti masih dipatuhi.

4. Keberatan daripada Pegawai Kesihatan Daerah/Pangkah Hospital dan Ketua-Ketua Jabatan atau pegawai yang bertanggungjawab disetiap lokasi kajian di mana kajian akan dilaksanakan mest supplies sebelum kajian dilaksanakan, Dato’Dr/’Tuan’ Puan perlu akur dan memastui keputusan tersebut.Sila rujuk kepada Garis Panduan Institu Kesihatan Negara mengenai penyelidikan di Insititu dan fasiliti Kementerian Kesihatan Malaysia (Pindaan 01/2015) serta lampiran Appendix 5 untuk kepelat surat memohon kebenaran tersebut.


1. Borang Continuing Review Form perlu dihantar ke JEPP selewat-lewatnya 2 bulan sebelum tamat tempoh kelulusan Ini bagi memperbaharui kelulusan etika.
II. **Study Final Report** perlu dihantar ke JEPP pada penghujung kajian.

III. Mencapai kelulusan etika sekitanya teka-teki pindaan keatas sebarang dokumen kajian/ lokai kajian/ penyelewikan.


Sekali terima kasih.

BERKHIDMAT UNTUK NEGARA

Saya yang manurut perintah,

..........................................................  
(DATO' DR. CHANG KIAN MENG)  
Pengerusi  
Jawatankuasa Etika & Penyelidikan Perubatan  
Kementerian Kesihatan Malaysia

Sk: HRRC: Hospital Tengku Ampuan Afzan, Pahang
The above is referred to.

2. The Medical Research & Ethical Committee (MREC), Ministry of Health Malaysia (MOH) has no objection, in terms of ethics, to the implementation of the study. MREC acknowledged that the study involved only data collection using questionnaire.

3. All records and subject data are CONFIDENTIAL and are used for the purpose of this study only and all issues and procedures regarding confidentiality data must be complied with.

4. Permission from the District Health Officer / Director of the Hospital and the Head of Department or the officer in charge of each study site where the study is to be conducted must be obtained before the study is conducted. You must obey and abide by the decision. Please refer to the guideline by the National Institutes of Health regarding conducting research at the Ministry of Health's facilities (Amendment 01/2015) and Appendix 5 is enclosed for the template on requesting such permission.

5. Please be informed that this approval is valid until January 6, 2017. You must submit the following to MREC upon compliance. The relevant forms can be downloaded from the MREC website (http://nih.gov.my/mrec).

- Signed -
Appendix 3.6
Approval from gatekeepers

Turn to the next page for English translation
Sir / Madam,

RESPOND TO APPLICATION FOR PERMISSION TO USE SULTANAH BAHYAH HOSPITAL TO CONDUCT THE STUDY

Name: Nurul'Ain binti Ahayalimudin

Title: Exploring Nurses' Experiences During Disaster Response

In due respects, your letter of application dated February 12, 2016 is referred to.

2. In this regard, please be informed that hospitals, departments and CRCs:

[✓] Allows research projects to be carried out

☐ Do not allow research projects to be carried out

3. You are required to contact the relevant Department directly for further affairs. We wish you all the best of luck. All your cooperation and attention is greatly appreciated.

- Signed -
Ps Nunu' Ain binti Ahayalimudin
Palaeo Pascalsiewazah
Warluci Medical School
University of Warwick
Coventn CV4 7AL
United Kingdom
Email: dainyamin@yahoo.co.uk

Tuan,

KESEBANARAN MENJALANKAN KAJIAN BERTAJUK ‘EXPLORING MALAYSIAN NURSES’ EXPERIENCES DURING DISASTER RESPONSE’

Dengan segala hormat saya merujuk kepada perkara tersebut di atas.


3. Sehubungan dengan itu, tuan diminta untuk mematuhi peraturan yang dilipatkan oleh Jawatankuasa CRC.

Sekian.

“PENILYANG, BEKERJA BERPAUSUKAN DAN PROFESIONALISMA ADALAH BUDAYA KERJA KITA”

“BERKISIMAT UNTUK NEGARA”

Saya yang menurut perintah,

[Signature]

*349*
<table>
<thead>
<tr>
<th>Perkara</th>
<th>KAJIAN: EXPLORING MALAYSIA NURSES’ EXPERIENCES DURING DISASTER RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daripada</td>
<td></td>
</tr>
<tr>
<td>kepada</td>
<td>Pengarah:</td>
</tr>
</tbody>
</table>

Dengan hormatnya saiyu merujuk kepada perkara diatas.

1. Pihak sCRC tiada hulangan pada kajian tersebut di atas. Namun perkara-perkara berikut perlu diberikan perhatian:
   a. Pihak Puan diminta menyimpan salinan dokumen penyelidikan dengan kerahsiaan.
   b. Mematuhi talatara dalam interaksi bersama nursing staff.
   c. Pihak Puan dimohon berbicang dengan Ketua Jururawat berkenaan untuk laporan penghujung.
   d. Mendapat kajian lokaksa sekmanya terdapat pinda ke atas sebarang dokumen kajian lokasi kajian penyeledik.

2. Salinan laporan penuh kajian perlu diserahkan pada pihak sCRC dalam tempoh sebulan selepas manuskrip lengkap.

3. Diharap kajian ini akan berjaya lancar dan jaya. Sebarang pertanyaan boleh dialihkan kepada saiyu di talian______.

Sekian untuk makluman, terima kasih.
Sir,

PERMISSION TO CONDUCT A STUDY ENTITLED 'EXPLORING MALAYSIAN NURSES' EXPERIENCES DURING DISASTER RESPONSE'

With all due respect I refer to the above.

2. We are pleased to inform you that we have no objection to allowing you to conduct a study at this hospital. Therefore, we enclose reports and reviews from [Name], Chairman of sCRC, Sultanah Nora Ismail Hospital, Batu Pahat, in relation to the study / poster: Exploring Malaysian Nurses’ Experiences During Disaster Response.

3. In this regard, you are required to comply with the guidelines set by the [Institution].

- Signed -
Sir,

**PERMISSION TO CONDUCT A STUDY ENTITLED 'EXPLORING MALAYSIAN NURSES' EXPERIENCES DURING DISASTER RESPONSE'**
NMRR-15-1782-26283 (IIR)

I respectfully refer to the above.

1. [Redacted] sCRC has **no objection** to the above study. However, the following should be noted:
   a. You are asked to keep a copy of the research document in confidentiality.
   b. Adhere to procedures in interaction with nursing staff.
   c. You are requested to speak to the Chief Nurse regarding local arrangements.
   d. Obtain ethical approval in the event of any amendment to any research document / research location / researcher.

2. A copy of the full report of the study should be submitted to the [Redacted] sCRC within one month of completion of the manuscript.

3. Hopefully this study will run smoothly and successfully. Any questions can be directed to me on [Redacted].

- Signed -
Subject: FW: Research Proposal
From: Nor Adina Yahaya (nosazinayahaya@yahoo.com)
To: a_anisah@yahoo.co.uk
Date: Wednesday, 18 May 2016, 21:52

Sent from Yahoo Mail on Android
On Mon, May 16, 2016 at 4:09 PM, Robaina Bisti Mohamad Yamas wrote:

Assalamualaikum w.b.t dan Selamat 1 Malaysia

Dimaklumkan pihak Hospital telah menolak surat permohonan dari Aun. Pihak Hospital tiada halangan bagi
permohonan Ruan tersebut. Sebarang cuestion berkhasian dengan Kajian ini Ruan boleh berterusan dengan

"BERGHIDMAT UNTUK NEGARA"

[Redacted content]

[Redacted content]
Assalamualaikum w.b.t. and Salam 1 Malaysia

Kindly be informed that the Hospital has received your application. The Hospital has **no objection** for the application. For further affairs you may deal with Pn. [Redacted]
Nama Penyelidik: Nurul Ain Binti Ahamidudin

Pihak hospital dengan ini membuat keputusan seperti berikut:

☐ Membentuk projek penyelidikan dijalankan

☐ Tidak membentuk projek penyelidikan dijalankan.

2. Jika terdapat sebarang perubahan pada kajian puam, dinantikan penemuan perubahan tersebut kepada unit leihah kami. Unit Leihah kami juga akan menyinggung dokumen yang puam tersebut ("proposa", surat kilatun MREC) secara sukt untuk tujuan rekod dan rujukan.

Sekian, terima kasih.

"BERHIDMAT UNTUK NEGERA"

[Signature]

KESIHATAN SEPANJANG HAYAT, KUALITI SEPANJANG MAKA

Appendix 3.7d

Turn to the next page for English translation
Madam,

RESPONSE TO THE APPLICATION FOR USING THE FACILITY OF HOSPITAL KEMAMAN, TERENGGANU IN CONDUCTING RESEARCH

Refer to the email dated March 01, 2016, regarding your request for permission to use the HKMN facility for your research project as follows:

Project title: “Exploring Nurse’s Experience During Disaster Response”

Research ID: NMRR-15-1782-26283 (IIR)

JEPP / MREC: January 7, 2016; (NMRR-1782-26283 IIR)

Name of Investigator: Nurul’Ain Binti Ahayalimudin

Department of Investigator: University Of Warwick, United Kingdom

The hospital makes the following decision:

☑ Allows research projects to be carried out

☐ Do not allow research projects to be carried out

2. If there are any changes in your study, please notify our training unit. Our Training Unit will also securely keep the included documents (proposal, MREC approval letter) for record and reference purposes.

Thank you.

- Signed -
Re: Permohonan untuk menjalankan kajian di

From: 
To: d_sinyanun@yahoo.co.uk
Cc: 
Date: Monday, 29 February 2016, 15:29 GMT+8

Dear Pn Nunul'Ah,

Sorry for the late response.
May I know actually what help that you need from my side?
Are you still in UK or already back to Malaysia to continue your study?
Since you already have the approval from MREC, the study can be carried out anytime.
If you are going to come and work at [redacted] to collect data, then I need you to provide a passport size photo and IC number so that I can apply a security pass for you.

Thanks and Regards,

---

On Mon, Feb 29, 2016 at 1:35 PM, Nurul'Ah <d_sinyanun@yahoo.co.uk> wrote:

Dear Madam,

I'm referring my previous email dated on 5 February 2016 on the application of conducting research in your hospital.
Could you advise me the status of the application?
I enclose as well the necessary documents for your attention.
1. Letter to the director
2. MREC approval
3. Summary of research proposal
4. Interview guide

Kindly do the needful.
Looking forward on your reply and feedback.
Thank you.

Warm regards,
Nurul'Ah
PhD researcher
Division of Health Sciences
Warwick Medical School
University of Warwick
United Kingdom
CV4 7AL Coventry

On Friday, 5 February 2016, 20:49, [redacted] wrote:

Dear Sir/Madam,

Thank you for your mail.
<table>
<thead>
<tr>
<th><strong>Research Title</strong></th>
<th>Exploring nurses’ experiences during disaster response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research ID</strong></td>
<td>26283</td>
</tr>
<tr>
<td><strong>Protocol Number</strong></td>
<td>(If available)</td>
</tr>
</tbody>
</table>

**INVESTIGATOR’S AGREEMENT (PERSETUJUAN PENYELIDIK)**

I have understood the above mentioned proposed research and I agree to participate as an investigator and being responsible to conduct the research.

Saya faham atas cadangan penyelidikan di atas dan bersedia untuk mengambil beban dan bertanggung jawab untuk melaksanakan penyelidikan tersebut.

**Name** (Nama)

Nurul Ain binti Mecik Alimuddin

**IC number** (Nomor KPI)

7812291359350

**Institute** (Institusi)

University of Warwick

**Signature and Official stamp** (Tanda tangan dan Cap Rasmi)


**HEAD OF DEPARTMENT AGREEMENT (PERSETUJUAN KETUA JABATAN)**

I agree to allow the above named investigator to conduct the above titled research.

Saya bersedia dan membenarkan pegawai seperti berdasarkan di atas untuk menyiapkan di dalam projek penyelidikan tersebut di atas.

**Name of Head** (Nama Ketua Jabatan)


**Signature and Official stamp** (Tanda tangan dan Cap Rasmi)


**ORGANISATIONAL / INSTITUTIONAL APPROVAL (KEBENARIAN ORGANISASI / INSTIUTUSI)**

I acknowledge and approve the named officer to conduct the above titled research.

Saya mengakui dan mengambil kebenaran penghakisan pegawai ini dalam penyelidikan tersebut.

**Name of Director** (Nama Pengarah)


**Signature and Official stamp** (Tanda tangan dan Cap Rasmi)


This is computer generated. Barang kali adalah cetakan komputer.
Fw: Kelulusan Menjalankan Penyelidikan Di [redacted]

From: Nor Adila Yashya (norazlinayahya@yahoo.com)
To: d_ainyarun@yahoo.co.uk
Date: Wednesday, 31 August 2016, 09:02 GMT+8

Sent from Yahoo Mail on Android

On Thu, Apr 28, 2016 at 3:28 PM, [redacted] wrote:

Assalamualaikum,


Mohon jasa baik puan untuk mendapatkan tarikh untuk memulakan proses pengumpulan data bagi membolehkan pihak kami untuk menyediakan ID pass penyelidik serta memo untuk makluman jabatan.

Namun demikian ada beberapa dokumen yang diperlukan oleh pihak kami sebelum memulakan proses pengumpulan data, iaitu:

1) Questionaire (jika berkaitan)
2) PIS (jika berkaitan)
3) CV Pi & Co-Pi
4) Iahod Form

Terima kasih.
Please note that the CRC of [Redacted] has received feedback from the Head of the Emergency and Nursing Department and the Director of [Redacted] who approved the study to be conducted at the [Redacted].

Please get a date to start the data collection process to enable us to provide investigator pass IDs and to disseminate memo for departmental information.

However, there are some documents that we need before you begin the data collection process, namely:

1) Questionnaire (if applicable)
2) PIS (if applicable)
3) CV PI & Co-PI
4) IaHOD Form

Thank you

- Name -
Appendix 3.7h

<table>
<thead>
<tr>
<th>Principal Investigator/Site PI</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Title</th>
<th>Title Penelitian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experience mentawani pasca experience during disaster response</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MMRR Registration No.</th>
<th>No. Pendaftaran MMRR</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMKE 15-17-87-24288</td>
<td></td>
</tr>
</tbody>
</table>

**HEAD OF DEPARTMENT AGREEMENT**

**PERSETUJUAN KETUA JABATAN**

1. I certify that I have read the project details in this research project application named above. Saya mengasahakan bahawa saya telah membaca bahan projek penyelidikan yang dinamakan di atas.

2. I certify that I am aware of this research project and the resource implications for this Department and site. Saya mengasahakan bahawa saya faham projek penyelidikan ini dan implikasi sumber bagi Jabatan ini dan diapit ini.

3. I certify that the research is appropriate to be conducted within this Department and at this site. Saya mengasahakan bahawa penjaraian ini adalah sesuai untuk dijalankan di Jabatan ini dan diapit ini.

4. I certify that there are suitable and adequate facilities and resources for the research project to be conducted at this site. This is for 'Actual costs' and 'in kind' contribution. Saya mengasahakan bahawa terdapat kemudahan dan sumber yang sesuai dan mencukupi untuk projek penyelidikan yang akan dijalankan di Jabatan. Ini adalah untuk 'kos sebenar' dan 'dalam jenis' sumberan.

5. My signature indicates that I support this research project being carried out using such resources. Tanda tangan saya menunjukkan bahawa saya menyokong projek penyelidikan ini dijalankan dengan menggunakan sumber-sumber tersebut.

<table>
<thead>
<tr>
<th>Department Jabatan</th>
<th>Name of Head of Department</th>
<th>Signature and official stamp</th>
<th>Date Tanda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jabatan</td>
<td>Name Kepala Jabatan</td>
<td>Tanda tangan dan Cap Rosmi</td>
<td>2016</td>
</tr>
</tbody>
</table>
My signature indicates that I:
Tanda tangan saya menunjukkan bahwa saya:

☑ Authorise this research project to commence in [underline]... in the condition that all the scientific and ethical aspects of the Medical Research Ethics Committee approved protocol are met. Membeber kebenaran projek penyelidikan ini bermula di [underline]... di bawah syarat semua aspek sains dan etika protokol yang telah ditetapkan oleh Jawatankuasa Perubatan Etika Perubatan KKM, dipenuhi oleh penyelidik.

☐ Do not authorise this research project to commence in [underline]... Tidak membeli kebenaran projek penyelidikan ini di [underline]...

<table>
<thead>
<tr>
<th>Name of Hospital Director</th>
<th>Nama Pengarah Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature and official stamp</th>
<th>Tanda tangan dan Cap Rosmi</th>
</tr>
</thead>
<tbody>
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<tr>
<th>Date</th>
<th>Tarikh</th>
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<td>3/2/14</td>
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<thead>
<tr>
<th>Name of Principal Investigator (PI)</th>
<th>NurulAin Abaysimudin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Title</td>
<td>Exploring Malaysia Nurses’ Experience during Disaster Response</td>
</tr>
<tr>
<td>NMMR Research ID</td>
<td>NMMR-15-1782-26283 (IIR)</td>
</tr>
<tr>
<td>CRC HKL Registration No.</td>
<td>HCRC.IIR-2016-02-029</td>
</tr>
<tr>
<td>Mobile Phone No.</td>
<td>+6017-6082224</td>
</tr>
<tr>
<td>Email Address</td>
<td><a href="mailto:d.ninyanum@yahoo.co.uk">d.ninyanum@yahoo.co.uk</a></td>
</tr>
<tr>
<td>PI’s Institution/Department</td>
<td>UNIVERSITY OF WARWICK (UK) / Jab. Recomansan</td>
</tr>
</tbody>
</table>

Registered By: [Name]

By signing the agreement:

1. I declare the information in this form is truthful and accurate to the best of my knowledge and belief and I take full responsibility for this project at this site.
   Saya mengaku maklumat di dalam borang ini adalah benar dan tepat sepangjang pengetahuan saya dan saya bertanggungjawab penuh untuk projek ini.

2. I certify that I and all members of the research team have the appropriate qualifications, training, experience and facilities to conduct the research set out in the proposal attached and to deal with any emergencies and contingencies related to the research that may arise.
   Saya mengaku bahawa saya dan semuanya ahli pasukan penyelidikan mempunyai kelayakan yang sesuai, latihan, pengalaman dan kemudahan untuk menjalankan penyelidikan yang dinyatakan dalam permbahasan yang disertakan dan untuk menangani sebarang kecemasan yang mungkin timbul di luar jangkauan yang berkaitan dengan penyelidikan.

3. I undertake to conduct this research project in accordance with the protocols and procedures as approved by the Medical Research Ethics Committee (MREC) and the ethical and research arrangements of the organisation(s) involved.
   Saya berjanji untuk menjalankan projek penyelidikan ini mengikut protokol dan prosedur yang diulik oleh Jawatankuasa Etika Penyelidikan Penubatan (IEPF) dan etika penyelidikan dengan organisasi yang terlibat.
4. I will adhere to the conditions of authorisation stipulated by the authorising authority at the site where I am the Principal Investigator including any monitoring/reporting requirements. I will discontinue the research if the authorising authority withdraws the authorisation at the site where I am the Principal Investigator.

Saya akan mematuhi syarat-syarat kekuasaan yang ditetapkan oleh pihak berkuasa yang memanfaatkan di tempat di mana saya, selaku Penyelidik Utama termasuk apa-apa keperluan pemantauan / pelaporan. Saya tidak akan meneruskan penyelidikan jika pihak berkuasa yang memberi kuasa menarik balik kekuasaan.

<table>
<thead>
<tr>
<th>Name of Principal Investigator / Principal Investigator at Site</th>
<th>The Principal Investigator (PI) takes responsibility for the overall conduct, management, monitoring and reporting of the project conducted at a site.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name Penyelidik Utama / Penyelidik Utama Setempat</td>
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<tr>
<td>Signature and Official Stamp</td>
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<td>Tandatangan dan Cup Rasmi</td>
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</tr>
<tr>
<td>Tarikh</td>
<td>23/02/2016</td>
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</table>

Below are the study's Co-Investigators (if applicable):

Berikut adalah butir-butir penyelidik bersama penyelidikan ini (jika berkenaan):

<table>
<thead>
<tr>
<th>Co-Investigators Penyelidik bersama</th>
<th>Position</th>
<th>Jawatan</th>
<th>Place of Work / Institution Tempat Bekerja / Institusi</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAKAR PERUBATAN</td>
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<td>JAB. KECIMASAN</td>
</tr>
</tbody>
</table>

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(FOR OFFICE USE)

The investigator named above has provided to me the commencement of his / her research, proof of:

- Head of Department(s) Agreement
- Director of Perubatan
- MIHRC approval

I hereby acknowledge the commencement of the investigation and the data collection, but I...

Saya telah mengetahui bahwa penyelidikan belaku dimulai, baik t...

Date & CRC stamp:

364
365
Subject: Fw: Permohonan menjalankan kajian di
From: Nor Azlina Yahaya (nrazlinayshaya@yahoo.com)
To: d_airyanun@yahoo.co.uk;
Date: Thursday, 28 April 2016, 8:47

Sent from Yahoo Mail on Android
On Wed, Apr 27, 2016 at 4:29 PM, ——- wrote:

Assalamualaikum w.b.t

Puan

Merujuk kepada email puan bertarikh 14 April 2016, pihak pengarah ——- tiada halangan untuk puan menjalankan kajian di ——-

Sekian, terima kasih.
- Email address -

Assalamualaikum w.b.t

Madam,

Referring to your email dated 14th April 2016, the Director of Hospital Kuala Krai has no objection for you to conduct the study in Hospital Kuala Krai.

Thank you.

- Name -
Approval from Economic Planning Unit, Malaysia

UNIT PERANCANG EKONOMI
Economic Planning Unit
Jabatan Perdana Merinti
Prime Minister’s Department
Block B5 & B6
Pusat Perancangan Persekutuan
62502 PUTRAJAYA
MALAYSIA

Ruj. Tuan:
Your Ref.:
Ruj. Kami:
Our Ref.:
Tarih:
Date:

NURUL’AIN BINTI AHAYALIMUDIN
NO 157, JALAN PERMATA 6
KAMPUNG PERMATA KUNDANG
48050 RAWANG
SELANGOR
Email : Nurul’ Ain <d_ayanun@yahoo.co.uk>

APPLICATION TO CONDUCT RESEARCH IN MALAYSIA

With reference to your application, I am pleased to inform you that your application to conduct research in Malaysia has been approved by the Research Promotion and Co-Ordination Committee, Economic Planning Unit, Prime Minister’s Department. The details of the approval are as follows:

Researcher’s name : NURUL’AIN BINTI AHAYALIMUDIN
Passport No./ LC No : 761229145950
Nationality : MALAYSIA
Title of Research : “EXPLORING NURSES’ EXPERIENCE DURING DISASTER RESPONSE”
Period of Research Approved : 2 years

2. Please collect your Research Pass in person from the Economic Planning Unit, Prime Minister’s Department, Parcel B, Level 4 Block B5, Federal Government Administrative Centre, 62502 Putrajaya, Malaysia. Bring along two (2) colour passport size photographs. Kindly, get an appointment date from us before you come to collect your research pass.

“Merancang Ke Arah Kecemerlangan”
3. Please take note that the study should avoid sensitive issues pertaining to local values and norms as well as political elements while undertaking your research project in Malaysia. You have to adhere to the conditions stated in the code of conduct for foreign researchers. You are also required to comply with the rules and regulations stipulated from time to time by the agencies with which you have dealings in the conduct of your research.

4. I would like to draw your attention to the undertaking signed by you that you will submit without cost to the Economic Planning Unit the following documents:
   a) A brief summary of your research findings on completion of your research and before you leave Malaysia; and
   b) Three (3) copies of your final dissertation/publication.

5. Lastly, please submit a copy of your preliminary and final report directly to the State Government where you carried out your research. Thank you.

Yours sincerely,

(MUNIRAH BT. ABD MANAN)
For Director General
Economic Planning Unit
E-mail: munirah@epu.gov.my
Tel: 03 88832809
Fax: 03 8883796

ATTENTION

This letter is only to inform you the status of your application and cannot be used as a research pass.
PARTICIPANT INFORMATION SHEET (NURSES)

Study Title: Exploring Nurses’ Experience during Disaster Response

Investigator: Nurul Ain Ahayalimudin

Introduction

You are invited to take part in a research study about nurses’ experience in disaster. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take the time to read the following information carefully. Talk to others about the study if you wish.

(Part 1 tells you the purpose of the study and what will happen to you if you take part. Part 2 gives you more detailed information about the conduct of the study)

Please ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Part 1

What is this study about? Explain the purpose of the study (please use lay language)

To understand what it is like for nurses to take part in a disaster response and any factors that contribute and hinder you during disaster response. What your views are of any training on disasters you have had and any additional training you think might
be useful for others. The findings may contribute to some changes in current syllabus for disaster training among nurses. Currently there is little literature exploring on nurses’ experience during disaster response in Malaysia.

**Do I have to take part?**

It is entirely up to you to decide. We will describe the study and go through this information sheet, which we will give you to keep. If you choose to participate, we will ask you to sign a consent form to confirm that you have agreed to take part (if part of this study is an online or postal questionnaire/survey, by returning a completed questionnaire/survey, you are giving your consent for the information that you have supplied to be used in this study and formal signed consent will not be collected where postal or online questionnaires/surveys are concerned). You will be free to withdraw at any time, without giving a reason and this will not affect you or your circumstances in any way.

**What will happen to me if I take part?** Explain details of what will happen to the participant in a step-by-step way so that there is no ambiguity regarding what their involvement will entail (please use lay language and keep it brief)

You will be asked to complete your background data sheet. If you agree to participate, you will be interviewed by the researcher. The interview may be last between 30 minutes to 90 minutes. We will arrange an interview at a time and place convenience to you. With your permission, we would like to record the interview so the researcher can concentrate on what you are saying. The interview will be typed up and the original tape recording deleted. The researcher will go through this Participant Information Sheet with you. Please ask if there is anything that is not clear or you would like more information. You will not be individually identified in any presentation or publication of the study.

**What are the possible disadvantages, side effects, risks and/or discomforts of taking part in this study?** Detail ANY possible disadvantages, side effects, risks and/or discomforts that the participant might experience. If anything is identified, detail what action will be taken. Think about this from the perspective of the participants.

If you take part you will be asked to share your experiences during the interview. Your experiences might be positive, negative or a mixture of those. If you feel uncomfortable or upset we can stop the interview if you would like to do this. The
interview will be ceased temporarily and might be rescheduled to some other time with participant’s permission. The researcher will closely deal with counsellor and psychologist or psychiatrist if there is any unlikely event occurred during this study. However, the decision to get the assistance or support will be determined by the participants themselves. In Malaysia, the support group from NGOs for psychological assistance are lacking unlike United Kingdom. So, medical advises are much better in this study.

The findings from this research will be utilised for publications and presentations, so if you are not willing to do so please let us know. However, for the purpose of publications and presentations your information will not be presented as individual.

**What are the possible benefits of taking part in this study?** Detail ANY possible benefits that the participants might get from taking part in this study. If you cannot think of anything that might be of benefit to the participant, include something about the future benefits to others.

There are no direct benefits of taking part but the information we get from this study may benefit others in the future.

**Expenses and payments?** Explain what reimbursements, if any, the participant will receive as a result of taking part in the study. If no expenses or payments will be made, please state this as everything should be made clear to the participant.

There will be no cash payment incurred during this study. However, you may be given a token of appreciation for being a participant (i.e. A bar of chocolate bought from supermarket in the United Kingdom) which cost about less than £5 per person.

**What will happen when the study ends?** Explain the details of what will happen to the participants and their data once the study has ended.

It will be made clear to you when your participation has finished at the end of the interview. However, if you are at all unsure you should contact the researcher for further information.

**Will my taking part be kept confidential?** Explain the details of what will happen to the participants and their data once the study has ended.

Yes. We will follow ethical and legal practice and all information about you will be handled in confidence. All information which is collected about you during the research will be kept strictly confidential, and any information about you will be
removed so that cannot be recognised by anyone. It will not be possible to identify you from any presentation or published material arising from this study. All personal information collected for the study is strictly confidential and is covered under the Data Protection Act 1998. Information about you will be held on a secure database and only authorised personnel (student and supervisors) can access this.

With your permission, we would like the study to hold a record of your personal details. These includes your age, gender, working experience and workplace. We may use this to send you other information by post. However, when you join this study you will be given a unique study number and we will use this and your initials only in any communication about you. We will strictly not use your name. If you choose to withdraw from the study we would still like to collect information about you. This will be useful for our research. If you have any objection to this please let your research team know if you do decide to leave the study. All information will be safely kept in locked filing cabinet in the locked room at the Warwick Medical School postgraduate student rooms.

**What if there is a problem?** Any complaint about the way you have been dealt with during the study or any possible harm that you might suffer will be addressed. Detailed information is given in Part 2.

If you have any problems or queries while taking part in the study, let the researcher know and they will be asked to notify the supervisor. More information will be given to you in Part 2 of this information sheet.

**This concludes Part 1.**

If the information in Part 1 has interested you and you are considering participation, please read the additional information in Part 2 before making any decision.
Part 2

Who is organising and funding the research? Explain who is organising and funding the project. If you are conducting this study as part of your University course and it is not funded by an external body, please state that here.

This study is as part of Doctor in Philosophy (Nursing) programme at Warwick Medical School, University of Warwick and received no fund from any parties.

What will happen if I don’t want to carry on being part of the study?

Participation in this study is entirely voluntary. Refusal to participate will not affect you in any way. If you decide to take part in the study, you will need to sign a consent form, which states that you have given your consent to participate. If you agree to participate, you may nevertheless withdraw from the study at any time without affecting you in any way. You have the right to withdraw from the study completely and decline any further contact by study staff after you withdraw.

What if there is a problem?

This study is covered by the University of Warwick’s insurance and indemnity cover. If you have an issue, please contact the Researcher and Supervisors of the study.

Who should I contact if I wish to make a complaint?

Any complaint about the way you have been dealt with during the study or any possible harm you might have suffered will be addressed. Please address your complaint to the person below, who is a senior University of Warwick official entirely independent of this study:

Director of Delivery Assurance
Registrar's Office
University House
University of Warwick
**Will my taking part in this study be kept confidential?**

The data obtained from the interviews and documents will be strictly kept confidential by the research team. All information will be treated anonymously and coded which only the research team knows. It only allow to be accessed by authorised person for instance researchers, supervisors, sponsors, authorities and auditors. The records documenting outcomes such as reports or monographs will be kept permanently. However, research data in ‘raw’ and ‘analysed’ forms will be reviewed ten years after the close of the project and can be considered for secure destruction at that point.

**What will happen to the results of the research study?**

The results will be published in professional and academic scientific journal after a number of years and presented at professional and academic conference, nationally or internationally. If you wish, we will send you a report of the results of the study. You will never be identified in person in any report about the study or in the study results. In any case, you may request for summary of the study and it will be made available for your view.

**Who has reviewed the study?**

The study received approval from Biomedical & Scientific Research Ethics Committee (BSREC), University of Warwick and Ministry of Health, Malaysia Research and Ethical Committee (MREC) and Economic Planning Unit, Prime Minister’s Department of Malaysia.

**What if I want more information about the study?**

If you have any questions about any aspect of the study, or your participation in it, not answered by this participant information leaflet, please contact:
Researcher:
Name: Nurul Ain binti Ahayalimudin
Email: N.A.Ahayalimudin@warwick.ac.uk
Telephone: +44(0)7407205532

Supervisors:
Name: Professor Kate Seers
Email: Kate.Seers@warwick.ac.uk
Office Number: +44(0)24 7615 0614

Name: Dr. Sophie Staniszewska
Email:
Sophie.Staniszewska@warwick.ac.uk
Office Number: +44(0)24 7615 0622

Thank you for taking time to read this Participant Information Sheet.
RISALAH MAKLUMAT PESERTA (JURURAWAT)

Tajuk Kajian: Exploring Nurses’ Experience during Disaster Response
Penyelidik: Nurul Ain Ahayalimudin

Pengenalan

Anda dijemput untuk mengambil bahagian dalam kajian penyelidikan tentang pengalaman jururawat dalam bencana. Sebelum anda membuat keputusan, anda perlu memahami mengapa penyelidikan sedang dilakukan dan apa yang akan melibatkan anda. Sila luangkan masa untuk membaca maklumat berikut dengan teliti. Berbual dengan orang lain mengenai kajian ini sekiranya anda mahu.

(Bahagian 1 memberitahu anda tujuan penyelidikan dan apa yang akan berlaku kepada anda sekiranya anda mengambil bahagian. Bahagian 2 memberikan anda maklumat yang lebih terperinci mengenai bagaimana kajian ini dijalankan)

Sila bertanya kepada kami sekiranya ada apa-apa yang tidak jelas atau jika anda ingin maklumat lanjut. Luangkan masa untuk membuat keputusan sama ada anda mahu mengambil bahagian atau tidak.
Bahagian 1

**Apakah kajian ini?** Terangkan tujuan kajian ini (sila gunakan bahasa biasa)

Untuk memahami bagaimana rasanya jururawat mengambil bahagian dalam tindak balas bencana dan sebarang faktor yang menyumbang dan menghalang anda semasa tindak balas bencana. Apa pandangan anda tentang apa-apa latihan mengenai bencana yang anda miliki dan apa-apa latihan tambahan yang anda fikir mungkin berguna untuk orang lain. Dapatkan ini boleh menyumbang kepada beberapa perubahan dalam sukan pelajaran semasa untuk latihan bencana dalam kalangan jururawat. Pada masa ini terdapat sedikit kajian yang meneroka pengalaman jururawat semasa tindak balas bencana di Malaysia.

**Adakah saya perlu mengambil bahagian?**

Ianya terpulang kepada anda untuk membuat keputusan. Kami akan menerangkan kajian ini dan melalui risalah maklumat ini, yang akan kami berikan kepada anda untuk disimpan. Jika anda memilih untuk mengambil bahagian, kami akan meminta anda menandatangani borang persetujuan untuk mengesahkan bahawa anda telah bersetuju untuk mengambil bahagian (jika sebahagian daripada kajian ini adalah soal selidik / tinjauan dalam talian atau pos, dengan mengembalikan soal selidik / kaji selidik yang lengkap, anda telah memberikan persetujuan untuk maklumat yang anda telah berikan digunakan dalam kajian ini dan persetujuan yang ditandatangani secara rasmi tidak akan dikumpulkan jika melibatkan soal selidik pos / dalam talian / kaji selidik). Anda bebas untuk menarik diri pada bila-bila masa, tanpa memberikan sebab dan ini tidak akan menjejaskan anda atau keadaan anda dengan apa-apa cara.

**Apa yang akan berlaku sekiranya saya mengambil bahagian?** Jelaskan butir-butir mengenai apa yang akan berlaku kepada peserta dalam langkah demi langkah supaya tidak ada kekaburan mengenai apa yang diperlukan dalam penglibatan mereka (sila gunakan bahasa biasa dan secara ringkas)

Anda akan diminta untuk melengkapkan risalah latarbelakang anda. Jika anda

**Apakah kelemahan, kesan sampingan, risiko dan / atau ketidakselesaan yang mungkin diambil dalam kajian ini?** Perincikan SEBARANG keburukan, kesan sampingan, risiko dan / atau ketidakselesaan yang mungkin dihadapi peserta. Sekiranya ada sesuatu yang dikenali pasti, apakah tindakan yang akan diambil. Fikirkan ini dari perspektif para peserta.


Penemuan dari kajian ini akan digunakan untuk penerbitan dan pembentangan, jadi jika anda tidak bersedia berbuat demikian sila maklumkan kami. Walau bagaimanapun, untuk tujuan penerbitan dan pembentangan maklumat anda tidak akan dipaparkan sebagai individu.
Apakah faedah yang boleh diambil dalam kajian ini? Perincian SEBARANG faedah yang mungkin diperoleh para peserta daripada mengambil bahagian dalam kajian ini. Jika anda tidak dapat memikirkan apa-apa yang mungkin memberi manfaat kepada peserta, masukkan sesuatu tentang faedah masa depan kepada orang lain.

Tidak ada manfaat secara langsung untuk mengambil bahagian tetapi maklumat yang kami perolehi dari kajian ini dapat memberi manfaat kepada orang lain di masa depan.

Perbelanjaan dan pembayaran? Terangkan apakah bayaran balik, jika ada, peserta akan menerima akibat daripada mengambil bahagian dalam kajian ini. Sekiranya tiada perbelanjaan atau bayaran akan dibuat, sila nyatakan ini kerana semuanya perlu dijelaskan kepada peserta.

Tiada bayaran tunai yang diberikan semasa kajian ini. Bagaimanapun, anda akan diberikan tanda penghargaan sebagai peserta (iaitu coklat yang dibeli di pasaraya di United Kingdom) yang berharga kurang daripada £5 seorang.

Apa yang akan berlaku apabila kajian berakhir? Jelaskan butir-butir mengenai apa yang akan berlaku kepada peserta dan data mereka sebaik sahaja kajian telah berakhir.

Ia akan menjelaskan kepada anda bilamana penyertaan anda telah selesai pada akhir temuduga. Walau bagaimanapun, jika anda tidak pasti, anda harus menghubungi penyelidik untuk mendapatkan maklumat lanjut.

Adakah penglibatan saya akan dirahsikan? Jelaskan butir-butir mengenai apa yang akan berlaku kepada peserta dan data mereka sebaik sahaja kajian telah berakhir.

Ya. Kami akan mengikuti amalan etika dan undang-undang dan semua maklumat mengenai anda akan dikendalikan dengan penuh keyakinan. Semua maklumat yang dikumpul mengenai anda semasa penyelidikan akan disimpan secara rahsia, dan sebarang maklumat mengenai anda akan dipadamkan supaya tidak dapat dikenalpasti oleh sesiapa sahaja. Ia akan menyukarkan anda untuk dikenalpasti dari sebarang pembentangan atau bahan yang diterbitkan yang terhasil daripada kajian ini. Semua maklumat peribadi yang dikumpul untuk kajian ini adalah sulit dan dilindungi di
bawah Akta Perlindungan Data 1998. Maklumat mengenai anda akan disimpan di pangkalan data yang selamat dan hanya kakitangan yang diberi kuasa (pelajar dan penyelia) boleh mengaksesnya.


**Bagaimana jika terdapat masalah?** Apa-apa aduan mengenai cara anda telah ditangani semasa kajian atau apa-apa kemudaratan yang mungkin anda alami akan ditangani. Maklumat terperinci diberikan dalam Bahagian 2.

Sekiranya anda mempunyai sebarang masalah atau pertanyaan semasa mengambil bahagian dalam kajian ini, maklumkan kepada penyelidik dan mereka akan diminta untuk memberitahu penyelidik. Maklumat lanjut akan diberikan kepada anda dalam Bahagian 2 risalah maklumat ini.

**Ini adalah kesimpulan Bahagian 1.**

Sekiranya maklumat dalam Bahagian 1 menarik perhatian anda dan anda sedang mempertimbangkan untuk menyertainya, sila baca maklumat tambahan di Bahagian 2 sebelum membuat sebarang keputusan.
Bahagian 2

Siapa yang menganjurkan dan membiayai penyelidikan? Jelaskan siapa yang menganjurkan dan membiayai projek itu. Jika anda menjalankan kajian ini sebagai sebahagian daripada kursus Universiti anda dan ia tidak dibiayai oleh badan luar, nyatakan di sini.

Kajian ini adalah sebahagian daripada program Doktor Falsafah (Kejururawatan) di Warwick Medical School, University of Warwick dan tiada pembiayaan dari mana-mana pihak.

Apa yang akan berlaku jika saya tidak mahu menjadi sebahagian daripada kajian ini?


Bagaimana jika terdapat masalah?

Kajian ini dilindungi oleh perlindungan insurans dan indemniti dari pihak University of Warwick. Sekiranya anda mempunyai masalah, sila hubungi Penyelidik dan Pengawas kajian ini.
Siapa yang patut saya hubungi jika saya ingin membuat aduan?

Apa-apa aduan mengenai cara anda telah ditangani semasa kajian atau apa-apa kemudaranata yang mungkin anda alami akan ditangani. Sila hubungi aduan anda kepada orang di bawah, yang merupakan seorang pegawai kanan Universiti Warwick yang sepenuhnya bebas daripada kajian ini:

Director of Delivery Assurance
Registrar's Office
University House
University of Warwick
Coventry
CV4 8UW
complaints@warwick.ac.uk
024 7657 4774

Adakah penglibatan saya dalam kajian ini akan dirahsiaikan?

Data yang diperolehi daripada temubual dan dokumen akan disimpan dengan ketatnya oleh pasukan penyelidikan. Semua maklumat akan dilayan secara tanpanama dan dikodkan yang hanya diketahui oleh pasukan penyelidikan. Ia hanya dibenarkan untuk diakses oleh orang yang diberi kuasa seperti penyelidik, penyelia, penaja, pihak berkuasa dan juruaudit. Rekod yang mendokumenkan hasil seperti laporan atau monograf akan disimpan secara ketat. Walau bagaimanapun, data penyelidikan dalam bentuk 'mentah' dan 'dianalisis' akan dikaji semula sepuluh tahun selepas penutupan projek dan boleh dipertimbangkan untuk kemusnahan yang selamat pada ketika itu.

Apa yang akan berlaku kepada hasil kajian penyelidikan?

Hasil ini akan diterbitkan dalam jurnal ilmiah profesional dan akademik selepas beberapa tahun dan dibentangkan di persidangan profesional dan akademik, di

**Siapa yang telah meneliti kajian ini?**

Kajian ini telah diluluskan oleh Jawatankuasa Etika Penyelidikan Biomedikal & Saintifik (BSREC), University of Warwick dan Jawatankuasa Etika dan Penyelidikan Perubatan Kementerian Kesihatan Malaysia, (JEPP) dan Unit Perancang Ekonomi, Jabatan Perdana Menteri Malaysia.

**Bagaimana jika saya mahukan lebih banyak maklumat mengenai kajian ini?**

Jika anda mempunyai sebarang soalan mengenai sebarang aspek kajian, atau penyertaan anda di dalamnya, yang tidak dijawab oleh risalah maklumat peserta ini, sila hubungi:

**Penyelidik:**
Nama: Nurul Ain binti Ahayalimudin  
E-mel: N.A.Ahayalimudin@warwick.ac.uk  
Telefon: +6017-6082224

**Penyelia:**
Nama: Profesor Kate Seers  
E-mel: Kate.Seers@warwick.ac.uk  
Pejabat Nombor: +44 (0) 24 7615 0614

Nama: Dr. Sophie Staniszewska  
E-mel: Sophie.Staniszewska@warwick.ac.uk  
Nombor Pejabat: +44 (0) 24 7615 0622

Terima kasih kerana mengambil masa untuk membaca Risalah Maklumat Peserta ini.
PARTICIPANT INFORMATION SHEET (DOCTOR)

Study Title: Exploring Nurses’ Experience during Disaster Response

Investigator: Nurul Ain Ahayalimudin

Introduction

You are invited to take part in a research study about nurses’ experience in disaster. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take the time to read the following information carefully. Talk to others about the study if you wish.

(Part 1 tells you the purpose of the study and what will happen to you if you take part. Part 2 gives you more detailed information about the conduct of the study)

Please ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Part 1

What is this study about? Explain the purpose of the study (please use lay language)

To understand what it is like for nurses to take part in a disaster response and any factors that contribute and hinder you during disaster response. What your views are of any training on disasters you have had and any additional training you think might be useful for others. The findings may contribute to some changes in current syllabus for disaster training among nurses. Currently there is little literature exploring on nurses’ experience during disaster response in Malaysia.
**Do I have to take part?**

It is entirely up to you to decide. We will describe the study and go through this information sheet, which we will give you to keep. If you choose to participate, we will ask you to sign a consent form to confirm that you have agreed to take part (if part of this study is an online or postal questionnaire/survey, by returning a completed questionnaire/survey, you are giving your consent for the information that you have supplied to be used in this study and formal signed consent will not be collected where postal or online questionnaires/surveys are concerned). You will be free to withdraw at any time, without giving a reason and this will not affect you or your circumstances in any way.

**What will happen to me if I take part?** Explain details of what will happen to the participant in a step-by-step way so that there is no ambiguity regarding what their involvement will entail (please use lay language and keep it brief)

You will be asked to complete your background data sheet. If you agree to participate, you will be interviewed by the researcher. The interview may be last between 30 minutes to 90 minutes. We will arrange an interview at a time and place convenience to you. With your permission, we would like to record the interview so the researcher can concentrate on what you are saying. The interview will be typed up and the original tape recording deleted. The researcher will go through this Participant Information Sheet with you. Please ask if there is anything that is not clear or you would like more information. You will not be individually identified in any presentation or publication of the study.

**What are the possible disadvantages, side effects, risks and/or discomforts of taking part in this study?** Detail ANY possible disadvantages, side effects, risks and/or discomforts that the participant might experience. If anything is identified, detail what action will be taken. Think about this from the perspective of the participants.

If you take part you will be asked to share your experiences during the interview. Your experiences might be positive, negative or a mixture of those. If you feel uncomfortable or upset we can stop the interview if you would like to do this. The interview will be ceased temporarily and might be rescheduled to some other time with participant’s permission. The researcher will closely deal with counsellor and psychologist or psychiatrist if there is any unlikely event occurred during this study. However, the decision to get the assistance or support will be determined by the participants themselves. In Malaysia, the support group from NGOs for psychological
assistance are lacking unlike United Kingdom. So, medical advises are much better in this study.

The findings from this research will be utilised for publications and presentations, so if you are not willing to do so please let us know. However, for the purpose of publications and presentations your information will not be presented as individual.

**What are the possible benefits of taking part in this study?** Detail ANY possible benefits that the participants might get from taking part in this study. If you cannot think of anything that might be of benefit to the participant, include something about the future benefits to others.

There are no direct benefits of taking part but the information we get from this study may benefit others in the future.

**Expenses and payments?** Explain what reimbursements, if any, the participant will receive as a result of taking part in the study. If no expenses or payments will be made, please state this as everything should be made clear to the participant.

There will be no cash payment incurred during this study. However, you may be given a token of appreciation for being a participant (i.e. A bar of chocolate bought from supermarket in the United Kingdom) which cost about less than £5 per person.

**What will happen when the study ends?** Explain the details of what will happen to the participants and their data once the study has ended.

It will be made clear to you when your participation has finished at the end of the interview. However, if you are at all unsure you should contact the researcher for further information.

**Will my taking part be kept confidential?** Explain the details of what will happen to the participants and their data once the study has ended.

Yes. We will follow ethical and legal practice and all information about you will be handled in confidence. All information which is collected about you during the research will be kept strictly confidential, and any information about you will be removed so that cannot be recognised by anyone. It will not be possible to identify you from any presentation or published material arising from this study. All personal information collected for the study is strictly confidential and is covered under the Data Protection Act 1998. Information about you will be held on a secure database and only authorised personnel (student and supervisors) can access this.
With your permission, we would like the study to hold a record of your personal details. These includes your age, gender, working experience and workplace. We may use this to send you other information by post. However, when you join this study you will be given a unique study number and we will use this and your initials only in any communication about you. We will strictly not use your name. If you choose to withdraw from the study we would still like to collect information about you. This will be useful for our research. If you have any objection to this please let your research team know if you do decide to leave the study. All information will be safely kept in locked filing cabinet in the locked room at the Warwick Medical School postgraduate student rooms.

**What if there is a problem?** Any complaint about the way you have been dealt with during the study or any possible harm that you might suffer will be addressed. Detailed information is given in Part 2.

If you have any problems or queries while taking part in the study, let the researcher know and they will be asked to notify the supervisor. More information will be given to you in Part 2 of this information sheet.

**This concludes Part 1.**

If the information in Part 1 has interested you and you are considering participation, please read the additional information in Part 2 before making any decision.
Part 2

Who is organising and funding the research? Explain who is organising and funding the project. If you are conducting this study as part of your University course and it is not funded by an external body, please state that here.

This study is as part of Doctor in Philosophy (Nursing) programme at Warwick Medical School, University of Warwick and received no fund from any parties.

What will happen if I don’t want to carry on being part of the study?

Participation in this study is entirely voluntary. Refusal to participate will not affect you in any way. If you decide to take part in the study, you will need to sign a consent form, which states that you have given your consent to participate. If you agree to participate, you may nevertheless withdraw from the study at any time without affecting you in any way. You have the right to withdraw from the study completely and decline any further contact by study staff after you withdraw.

What if there is a problem?

This study is covered by the University of Warwick’s insurance and indemnity cover. If you have an issue, please contact the Researcher and Supervisors of the study.

Who should I contact if I wish to make a complaint?

Any complaint about the way you have been dealt with during the study or any possible harm you might have suffered will be addressed. Please address your complaint to the person below, who is a senior University of Warwick official entirely independent of this study:

Director of Delivery Assurance
Registrar's Office
University House
University of Warwick
Will my taking part in this study be kept confidential?

The data obtained from the interviews and documents will be strictly kept confidential by the research team. All information will be treated anonymously and coded which only the research team knows. It only allow to be accessed by authorised person for instance researchers, supervisors, sponsors, authorities and auditors. The records documenting outcomes such as reports or monographs will be kept permanently. However, research data in ‘raw’ and ‘analysed’ forms will be reviewed ten years after the close of the project and can be considered for secure destruction at that point.

What will happen to the results of the research study?

The results will be published in professional and academic scientific journal after a number of years and presented at professional and academic conference, nationally or internationally. If you wish, we will send you a report of the results of the study. You will never be identified in person in any report about the study or in the study results. In any case, you may request for summary of the study and it will be made available for your view.

Who has reviewed the study?

The study received approval from Biomedical & Scientific Research Ethics Committee (BSREC), University of Warwick and Ministry of Health, Malaysia Research and Ethical Committee (MREC) and Economic Planning Unit, Prime Minister’s Department of Malaysia.

What if I want more information about the study?

If you have any questions about any aspect of the study, or your participation in it, not answered by this participant information leaflet, please contact:
Researcher:
Name: Nurul Ain binti Ahayalimudin
Email: N.A.Ahayalimudin@warwick.ac.uk
Telephone: +44(0)7407205532

Supervisors:
Name: Professor Kate Seers
Email: Kate.Seers@warwick.ac.uk
Office Number: +44(0)24 7615 0614

Name: Dr. Sophie Staniszewska
Email: Sophie.Staniszewska@warwick.ac.uk
Office Number: +44(0)24 7615 0622

Thank you for taking time to read this Participant Information Sheet.
RISALAH MAKLUMAT PESERTA (DOKTOR)

Tajuk Kajian: Exploring Nurses’ Experience during Disaster Response

Penyelidik: Nurul Ain Ahayalimudin

Pengenalan

Anda dijemput untuk mengambil bahagian dalam kajian penyelidikan tentang pengalaman jururawat dalam bencana. Sebelum anda membuat keputusan, anda perlu memahami mengapa penyelidikan sedang dilakukan dan apa yang akan melibatkan anda. Sila luangkan masa untuk membaca maklumat berikut dengan teliti. Berbual dengan orang lain mengenai kajian ini sekiranya anda mahu.

(Bahagian 1 memberitahu anda tujuan penyelidikan dan apa yang akan berlaku kepada anda sekiranya anda mengambil bahagian. Bahagian 2 memberikan anda maklumat yang lebih terperinci mengenai bagaimana kajian ini dijalankan)

Sila bertanya kepada kami sekiranya ada apa-apa yang tidak jelas atau jika anda ingin maklumat lanjut. Luangkan masa untuk membuat keputusan sama ada anda mahu mengambil bahagian atau tidak.
Bahagian 1

**Apakah kajian ini?** Terangkan tujuan kajian ini (sila gunakan bahasa biasa)

Untuk memahami bagaimana rasanya jururawat mengambil bahagian dalam tindak balas bencana dan sebarang faktor yang menyumbang dan menghalang anda semasa tindak balas bencana. Apa pandangan anda tentang apa-apa latihan mengenai bencana yang anda miliki dan apa-apa latihan tambahan yang anda fikir mungkin berguna untuk orang lain. Dapatan ini boleh menyumbang kepada beberapa perubahan dalam sukan pelajaran semasa untuk latihan bencana dalam kalangan jururawat. Pada masa ini terdapat sedikit kajian yang meneroka pengalaman jururawat semasa tindak balas bencana di Malaysia.

**Adakah saya perlu mengambil bahagian?**

Ianya terpulang kepada anda untuk membuat keputusan. Kami akan menerangkan kajian ini dan melalui risalah maklumat ini, yang akan kami berikan kepada anda untuk disimpan. Jika anda memilih untuk mengambil bahagian, kami akan meminta anda menandatangani borang persetujuan untuk mengesahkan bahawa anda telah bersetuju untuk mengambil bahagian (jika sebahagian daripada kajian ini adalah soal selidik / tinjauan dalam talian atau pos, dengan mengembalikan soal selidik / kaji selidik yang lengkap, anda telah memberikan persetujuan untuk maklumat yang anda telah berikan digunakan dalam kajian ini dan persetujuan yang ditandatangani secara rasmi tidak akan dikumpulkan jika melibatkan soal selidik pos / dalam talian / kaji selidik). Anda bebas untuk menarik diri pada bila-bila masa, tanpa memberikan sebab dan ini tidak akan menjegaskan anda atau keadaan anda dengan apa-apa cara.

**Apa yang akan berlaku sekiranya saya mengambil bahagian?** Jelaskan butir-butir mengenai apa yang akan berlaku kepada peserta dalam langkah demi langkah supaya tidak ada kekaburan mengenai apa yang diperlukan dalam penglibatan mereka (sila gunakan bahasa biasa dan secara ringkas)

Anda akan diminta untuk melengkapkan risalah latarbelakang anda. Jika anda


Penemuan dari kajian ini akan digunakan untuk penerbitan dan pembentangan, jadi jika anda tidak bersedia berbuat demikian sila maklumkan kami. Walau bagaimanapun, untuk tujuan penerbitan dan pembentangan maklumat anda tidak akan dipaparkan sebagai individu.
Apakah faedah yang boleh diambil dalam kajian ini? Perincian SEBARANG faedah yang mungkin diperoleh para peserta daripada mengambil bahagian dalam kajian ini. Jika anda tidak dapat memikirkan apa-apa yang mungkin memberi manfaat kepada peserta, masukkan sesuatu tentang faedah masa depan kepada orang lain.

Tidak ada manfaat secara langsung untuk mengambil bahagian tetapi maklumat yang kami peroleh dari kajian ini dapat memberi manfaat kepada orang lain di masa depan.

Perbelanjaan dan pembayaran? Terangkan apakah bayaran balik, jika ada, peserta akan menerima akibat daripada mengambil bahagian dalam kajian ini. Sekiranya tiada perbelanjaan atau bayaran akan dibuat, sila nyatakan ini kerana semuanya perlu dijelaskan kepada peserta.

Tiada bayaran tunai yang diberikan semasa kajian ini. Bagaimanapun, anda akan diberikan tanda penghargaan sebagai peserta (iaitu coklat yang dibeli di pasaraya di United Kingdom) yang berharga kurang daripada £5 seorang.

Apa yang akan berlaku apabila kajian berakhir? Jelaskan butir-butir mengenai apa yang akan berlaku kepada peserta dan data mereka sebaik sahaja kajian telah berakhir.

Ia akan menjelaskan kepada anda bilamana penyertaan anda telah selesai pada akhir temuduga. Walau bagaimanapun, jika anda tidak pasti, anda harus menghubungi penyelidik untuk mendapatkan maklumat lanjut.

Adakah penglibatan saya akan dirahsikan? Jelaskan butir-butir mengenai apa yang akan berlaku kepada peserta dan data mereka sebaik sahaja kajian telah berakhir.

Ya. Kami akan mengikuti amalan etika dan undang-undang dan semua maklumat mengenai anda akan dikendalikan dengan penuh keyakinan. Semua maklumat yang dikumpul mengenai anda semasa penyelidikan akan disimpan secara rahsia, dan sebarang maklumat mengenai anda akan dipadamkan supaya tidak dapat dikenalpasti oleh sesiapa sahaja. Ia akan menyukarkan anda untuk dikenalpasti dari sebarang pembentangan atau bahan yang diterbitkan yang terhasil daripada kajian ini. Semua maklumat peribadi yang dikumpul untuk kajian ini adalah sulit dan dilindungi di
bawah Akta Perlindungan Data 1998. Maklumat mengenai anda akan disimpan di
pangkalan data yang selamat dan hanya kakitangan yang diberi kuasa (pelajar dan
penyelia) boleh mengaksesnya.

Dengan izin anda, kami ingin kajian ini memegang rekod maklumat peribadi anda. Ini
termasuk umur, jantina, pengalaman kerja dan tempat kerja anda. Kami bermungkinan
menggunakanannya untuk menghantar maklumat lain melalui pos. Walau
bagaimanapun, apabila anda menyertai kajian ini, anda akan diberi nombor kajian
yang unik di mana kami hanya akan menggunakan serta parap anda dalam
sebarang komunikasi mengenai anda. Kami dengan tegasnya tidak akan menggunakan
nama anda. Jika anda memilih untuk menarik diri dari kajian kami masih ingin
mengumpul maklumat tentang anda. Ini berguna untuk penyelidikan kami. Jika anda
mempunyai sebarang bantahan terhadap ini, sila maklumkan pasukan penyelidikan
anda jika anda memutuskan untuk meninggalkan kajian tersebut. Semua maklumat
akan disimpan dengan selamat di kabinet pemfailan terkunci di bilik yang berkunci di
bilik pelajar pascasiswa pascasiswa Warwick Medical School.

**Bagaimana jika terdapat masalah?** Apa-apa aduan mengenai cara anda telah ditangani
semasa kajian atau apa-apa kemudaratan yang mungkin anda alami akan ditangani. Maklumat terperinci
diberikan dalam Bahagian 2.

Sekiranya anda mempunyai sebarang masalah atau pertanyaan semasa mengambil
bahagian dalam kajian ini, maklumkan kepada penyelidik dan mereka akan diminta
untuk memberitahu penyelidik. Maklumat lanjut akan diberikan kepada anda dalam
Bahagian 2 risalah maklumat ini.

**Ini adalah kesimpulan Bahagian 1.**

Sekiranya maklumat dalam Bahagian 1 menarik perhatian anda dan anda
sedang mempertimbangkan untuk menyertainya, sila baca maklumat tambahan di Bahagian 2 sebelum membuat sebarang keputusan.
Bahagian 2

Siapa yang menganjurkan dan membiayai penyelidikan? Jelaskan siapa yang menganjurkan dan membiayai projek itu. Jika anda menjalankan kajian ini sebagai sebahagian daripada kursus Universiti anda dan ia tidak dibiyai oleh badan luar, nyatakan di sini.

Kajian ini adalah sebahagian daripada program Doktor Falsafah (Kejururawatan) di Warwick Medical School, University of Warwick dan tiada pembiayaan dari mana-mana pihak.

Apa yang akan berlaku jika saya tidak mahu menjadi sebahagian daripada kajian ini?


Bagaimana jika terdapat masalah?

Kajian ini dilindungi oleh perlindungan insurans dan indemniti dari pihak University of Warwick. Sekiranya anda mempunyai masalah, sila hubungi Penyelidik dan Pengawas kajian ini.
Siapa yang patut saya hubungi jika saya ingin membuat aduan?

Apa-apa aduan mengenai cara anda telah ditangani semasa kajian atau apa-apa kemudaratan yang mungkin anda alami akan ditangani. Sila hubungi aduan anda kepada orang di bawah, yang merupakan seorang pegawai kanan Universiti Warwick yang sepenuhnya bebas daripada kajian ini:

Director of Delivery Assurance
Registrar's Office
University House
University of Warwick
Coventry
CV4 8UW
complaints@warwick.ac.uk
024 7657 4774

Adakah penglibatan saya dalam kajian ini akan dirahsiakan?

Data yang diperolehi daripada temubual dan dokumen akan disimpan dengan ketatnya oleh pasukan penyelidikan. Semua maklumat akan dilayan secara tanpanama dan dikodkan yang hanya diketahui oleh pasukan penyelidikan. Ia hanya dibenarkan untuk diakses oleh orang yang diberi kuasa seperti penyelidik, penyelia, penaja, pihak berkuasa dan juruaudit. Rekod yang mendokumenkan hasil seperti laporan atau monografi akan disimpan secara ketat. Walau bagaimanapun, data penyelidikan dalam bentuk 'mentah' dan 'dianalisis' akan dikaji semula sepuluh tahun selepas penutupan projek dan boleh dipertimbangkan untuk kemusnahan yang selamat pada ketika itu.

Apa yang akan berlaku kepada hasil kajian penyelidikan?

Hasil ini akan diterbitkan dalam jurnal ilmiah profesional dan akademik selepas beberapa tahun dan dibentangkan di persidangan profesional dan akademik, di

**Siapa yang telah meneliti kajian ini?**

Kajian ini telah diluluskan oleh Jawatankuasa Etika Penyelidikan Biomedikal & Saintifik (BSREC), University of Warwick dan Jawatankuasa Etika dan Penyelidikan Perubatan Kementerian Kesihatan Malaysia, (JEPP) dan Unit Perancang Ekonomi, Jabatan Perdana Menteri Malaysia.

**Bagaimana jika saya mahukan lebih banyak maklumat mengenai kajian ini?**

Jika anda mempunyai sebarang soalan mengenai sebarang aspek kajian, atau penyertaan anda di dalamnya, yang tidak dijawab oleh risalah maklumat peserta ini, sila hubungi:

**Penyelidik:**
Nama: Nurul Ain binti Ahayalimudin
E-mel: N.A.Ahayalimudin@warwick.ac.uk
Telefon: +6017-6082224

**Penyelia:**
Nama: Profesor Kate Seers
E-mel: Kate.Seers@warwick.ac.uk
Pejabat Nombor: +44 (0) 24 7615 0614

Nama: Dr. Sophie Staniszewska
E-mel: Sophie.Staniszewska@warwick.ac.uk
Nombor Pejabat: +44 (0) 24 7615 0622

Terima kasih kerana mengambil masa untuk membaca Risalah Maklumat Peserta ini.
BIOMEDICAL AND SCIENTIFIC RESEARCH ETHICS COMMITTEE
TEMPLATE CONSENT FORM

Study Number:

Patient Identification Number for this study:

Title of Project: Exploring Malaysian Nurses’ Experience during Disaster Response

Name of Researcher(s): Nurul Ain binti Ahayalimudin (postgraduate student),
Professor Kate Seers & Dr. Sophie Staniszewska (supervisors)

Please initial all boxes

1. I confirm that I have read and understand the information sheet dated .......... for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical, social care, education, or legal rights* (*delete as appropriate) being affected.

3. I understand that relevant sections of my medical notes and data collected during the study, may be looked at by individuals from The University of Warwick, from regulatory authorities (or from a relevant NHS Trust* (*delete if inapplicable)), where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.

4. I agree to my GP being informed of my participation in the study.* (*delete if inapplicable)

5. I agree to take part in the above study.

_________________________  ___________________  ____________
Name of Participant        Date                        Signature

_________________________  ___________________  ____________
Name of Person taking consent         Date                        Signature

Appendix 3.10
Nombor Kajian:

Pengenalan Nombor Pesakit bagi penyelidikan ini:

Tajuk Projek: Exploring Malaysian Nurses’ Experience during Disaster Response

Nama Penyelidik: Nurul Ain binti Ahayalimudin (pelajar pascasiswa), Professor Kate Seers & Dr. Sophie Staniszewska (penyelia)


2. Saya memahami bahawa penyertaan saya adalah secara sukarela dan saya bebas pada bila-bila masa untuk menarik balik penyertaan tanpa memberi sebarang sebab, tanpa menjejaskan hak saya terhadap penjagaan perubatan, sosial, pendidikan, atau perundangan (*potong yang berkenaan).

3. Saya memahami bahawa bahagian nota perubatan dan data saya yang dikumpulkan semasa penyelidikan ini boleh dilihat oleh individu dari University of Warwick, dari pihak berkuasa pengawalseliaan (atau dari pihak NHS Trust * yang berkaitan) (*potong yang berkenaan), di mana yang berkaitan penglibatan saya dalam penyelidikan ini. Saya memberi kebenaran kepada individu-individu ini untuk mengakses rekod saya.

4. Saya bersetuju sekiranya GP saya dimaklumkan mengenai penyertaan saya dalam kajian ini. * (*potong yang berkenaan)

5. Saya bersetuju untuk mengambil bahagian dalam penyelidikan di atas.

________________________  ___________________  __________________
Nama peserta              Tarikh               Tandatangan

________________________  ___________________  __________________
Nama Pihak yang memohon kebenaran  Tarikh  Tandatangan
EXPLORING MALAYSIAN NURSES’ EXPERIENCE DURING DISASTER RESPONSE

INTERVIEW TOPIC GUIDE: A SEMI-STRUCTURED INTERVIEW (NURSES)

SECTION A (SOCIODEMOGRAPHIC)

1. Age
2. Gender
3. Current workplace
4. Working experience
5. Attending disaster training: Type
6. Involvement in disaster (Type, Frequency, Time)

SECTION B (EXPERIENCE)

a) Their opinion about disaster response
   1. What do you understand about disaster response?
      • Prompt: What did you know about disaster response?
   2. Are you familiar with disaster response?
      • Prompt: Have you involved in any previous disaster response?

b) What do they feel about disaster response
   3. What was it like for you being involved in a disaster response?
   4. What helped you during a disaster response?
   5. What hindered you during a disaster response?
c) Their opinion on nurses’ involvement in disaster response
6. What is your opinion on nurses’ involvement during disaster response?

d) Nurses’ roles
7. From your opinion, what are the nurses’ main roles during disaster events?
8. What are other roles should nurses perform?
9. What is the expectation of the doctor on your role during disaster response?
   - Prompt: What do the doctors want you to do?

e) Previous experience
10. Does your previous experience involving in disaster affect nurses’ respond during a disaster?
11. Does previous experience help you for the future disaster?

f) About training
12. Do nurses need to undertake any short courses prior to involve in disaster response?
13. Could you tell the type of training prerequisite for nurses?
14. What are the preferred methods of disaster training should nurses undertake?
15. Does the training attended equip you for disaster response?
16. Is there any subject/topic need to be focused or added during the disaster training?
17. What is your opinion with the current syllabus of disaster training?
18. Does it fulfil nurses’ roles in regards to physical, psychological and emotional?
19. Any other training needed?

g) Miscellaneous
20. Any other support needed despite training?
EXPLORING MALAYSIAN NURSES’ EXPERIENCE DURING DISASTER RESPONSE

PANDUAN TOPIK BAGI TEMUBUAL: TEMUBUAL SEPARA BERSTRUKTUR (JURURAWAT)

SEKSYEN A (SOSIODEMOGRAFIK)
1. Umur
2. Jantina
3. Tempat kerja semasa
4. Pengalaman kerja
5. Menghadiri latihan bencana: Jenis
6. Penglibatan dalam tindak balas (respon) bencana (Jenis, Kekerapan, Masa)

SEKSYEN B (PENGALAMAN)
a) Pendapat mereka mengenai tindak balas (respon) bencana
   1. Apa yang anda faham mengenai tindak balas (respon) bencana?
      • Prompt: Apa yang anda tahu tentang tindak balas (respon) bencana?
   2. Adakah anda biasa dengan tindak balas (respon) bencana?
      • Prompt: Pernahkah anda terlibat dalam sebarang tindak balas (respon) bencana sebelum ini?

b) Perasaan mereka mengenai tindak balas (respon) terhadap bencana
   3. Bagaimanakah anda terlibat dalam tindak balas (respon) terhadap bencana?
   4. Apa yang membantu anda semasa tindak balas (respon) terhadap bencana?
   5. Apakah yang menghalang anda semasa tindak balas (respon) terhadap bencana?

c) Pendapat jururawat tentang penglibatan mereka dalam tindak balas (respon) terhadap bencana
   6. Apakah pendapat anda tentang penglibatan jururawat semasa tindak balas (respon) terhadap bencana?

d) Peranan jururawat
   7. Menurut pendapat anda, apakah peranan utama jururawat semasa kejadian bencana?
8. Apakah peranan lain yang perlu dilakukan oleh jururawat?

9. Apakah harapan doktor terhadap peranan anda semasa tindak balas (respon) terhadap bencana?
   • Prompt: Apakah yang dikehendaki oleh doktor anda?

e) Pengalaman sebelumnya

10. Adakah pengalaman anda yang terdahulu yang terlibat dalam bencana memberi kesan terhadap tindak balas (respon) jururawat semasa bencana?
11. Adakah pengalaman sebelumnya dapat membantu anda menghadapi bencana di masa depan?

f) Mengenai latihan

12. Adakah jururawat perlu menjalankan kursus-kursus pendek sebelum melibatkan diri dalam tindak balas (respon) bencana?
13. Bolehkah anda memberitahu jenis latihan prasyarat untuk jururawat?
14. Apakah kaedah latihan bencana pilihan yang perlu dijalani oleh jururawat?
15. Adakah latihan ini menyediakan anda untuk tindak balas (respon) bencana?
16. Adakah terdapat subjek / topik yang perlu difokuskan atau ditambah untuk latihan bencana?
17. Apakah pendapat anda mengenai sukatan pelajaran untuk latihan bencana?
18. Adakah ia memenuhi peranan jururawat berkaitan fizikal, psikologi dan emosi?
19. Adakah ada sebarang latihan lain yang diperlukan?

g) Lain-lain

20. Apa-apa sokongan lain yang diperlukan selain menghadiri latihan?
EXPLORING MALAYSIAN NURSES’ EXPERIENCE DURING DISASTER RESPONSE

INTERVIEW TOPIC GUIDE: A SEMI-STRUCTURED INTERVIEW (DOCTOR)

SECTION A (SOCIODEMOGRAPHIC)

7. Age
8. Gender
9. Current workplace
10. Working experience

SECTION B (EXPERIENCE)

1. What are your opinions about nurses’ involvement in disaster response?
2. What do you think the factors that helped and hindered nurses during disaster response?
3. What are nurses’ roles during disaster response?
4. What are your expectation on nurses’ roles during disaster response?
5. Does previous experience involving in disaster affect nurses’ respond during disaster?
6. Does previous experience help the nurses for the future disaster?
7. Do nurses need to undertake any short courses prior to involve in disaster response?
8. Could you tell the type of training are prerequisite for nurses?
9. Does the training attended equip nurses for disaster response?
10. What are the preferred methods of disaster training should nurses undertake?
11. Is there any subject/topic need to be focused or added during the disaster training?
12. What is your opinion on the current syllabus of disaster training for nurses?
13. Does it fulfil nurses’ roles in regards to physical, psychological and emotional?
14. Any other training needed?
15. Any other support needed despite training?
EXPLORING MALAYSIAN NURSES’ EXPERIENCE DURING DISASTER RESPONSE

PANDUAN TOPIK BAGI TEMUBUAL: TEMUBUAL SEPARA BERSTRUKTUR (DOKTOR)

SEKSYEN A (SOSIODEMOGRAFIK)
1. Umur
2. Jantina
3. Tempat kerja semasa
4. Pengalaman kerja

SEKSYEN B (PENGALAMAN)
1. Apakah pendapat anda tentang penglibatan jururawat dalam tindak balas (respon) bencana?
2. Apa yang anda fikir faktor-faktor yang membantu dan menghalang jururawat semasa tindak balas (respon) bencana?
3. Apakah peranan jururawat semasa tindak balas (respon) bencana?
4. Apakah harapan anda terhadap peranan jururawat semasa tindak balas (respon) bencana?
5. Adakah pengalaman terdahulu yang terlibat dalam bencana mempengaruhi tanggapan jururawat terhadap tindak balas (respon) bencana?
6. Adakah pengalaman sebelumnya membantu jururawat untuk menghadapi bencana pada masa akan datang?
7. Adakah jururawat perlu mengambil kursus pendek sebelum melibatkan diri dalam tindak balas (respon) bencana?
8. Bolehkah anda memberitahu jenis latihan sebagai prasyarat untuk jururawat?
9. Adakah latihan yang dihadiri melengkapkan jururawat untuk tindak balas (respon) bencana?
10. Apakah kaedah latihan bencana yang menjadi pilihan yang perlu dijalani oleh jururawat?

11. Adakah terdapat subjek / topik yang perlu difokuskan atau ditambah bagi latihan bencana?

12. Apakah pendapat anda tentang sukatan pelajaran bagi latihan bencana untuk jururawat?

13. Adakah latihan tersebut memenuhi peranan jururawat berkaitan fizikal, psikologi dan emosi?

14. Adakah terdapat sebarang latihan lain yang diperlukan?

15. Adakah terdapat apa-apa bantuan lain yang diperlukan selain latihan?
EXAMPLE OF THE ENTIRE CODING PROCESS

REFLECTION ON THE INTERVIEWS

Faizal (pseudonym)

He has an experience of 8 years working in the emergency department of HSgB as a staff nurse. He was working at the semi-critical zone during the interview. With his permission as well as her superior (head nurse), I was able to carry out the interview for about 48:37 minutes, smoothly without interruption except when the bell buzzed to indicate the arrival of the critical case to the department.

His position as a staff nurse in the clinical area shapes his thought and views. He commonly talked on his experience in clinical. He is actively involved in disaster training organised by the emergency department as well as at the hospital level. Apart from that, he also involved in the training organised by other agencies, for instance, the fire brigade and neighbouring company that operated nearby the hospital.

During the interview he was narrated about his experience when he was despatched as a second medical team to the mass casualty incident (MCI) site, nearby the highway which under the territory of Hospital Sungai Buloh. According to him, at the Emergency Department of Hospital Sungai Buloh, nurses are relatively uncommon to be involved as a medical team member, except response that requires more staff to be deployed.

At first few minutes, he enthusiastically shares his experience during the response to the MCI that he been despatched to. Then, he mentioned about the collaborative action taken amongst various agencies during the response to incident site. The agencies involved were fire brigade to assist in evacuation of the victims, police patrol to control the crowd, ambulance from nearest health clinic, Civil Defence Department, Malaysia as well as other ambulance from non-governmental organisation (NGOs) such as St. John ambulance and Red Crescent Society of Malaysia. Each of the agencies has their own role to ensure the rapid action could be taken and bring the victims immediately to get further hospital care.
As a staff nurse that mainly work in clinical area, he emphasised on the important to regularly expose nurses in disaster training and involve ward staff in the training to make them familiar with emergency setting. He concerns on nurse’s preparedness prior to their deployment and suggested to hands-on to improve their self-confidence and self-esteem in managing disaster victims regardless of the situation. He suggested the higher authority to organise the training frequently since the turnover staff at the emergency department is slightly high.

Sn Faizal mentioned about multiple roles of nurses during disaster response, for instance, being a triage officer besides carrying out nursing care tasks. Despite the duties, he mentioned about the necessity to expose nurses on emotional and psychological preparedness to have self-control when facing terrible situation at the disaster scene. He suggested nurses to be trained at the initial stage when they received their basic training, so they will be prepared whenever they have to respond to any type of disaster.
TRANSLATION OF THE TRANSCRIPTION FROM MALAY TO ENGLISH

<table>
<thead>
<tr>
<th>TIME</th>
<th>MALAY</th>
<th>ENGLISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Assalamualaikum warahmatullahi wabarakaatu. Saya Nurul’Ain binti Ahayalimudin. Saya difahamkan cik pernah terlibat dalam respon semasa bencana, sebelum ini. Terima kasih kerana terlibat dalam kajian ini. Saya sedang menjalankan kajian kualitatif di mana menggunakan temubual sebagai alat untuk mengetahui bagaimana pengalaman cik dalam respon bencana dan apa pendapat cik dan pandangan cik berkaitan dengan perkara ini. Semasa sesi ini, saya akan bertanya beberapa soalan berkenaan dengan diri cik serta pengalaman cik semasa bencana tersebut dan beberapa soalan sampingan yang lain.</td>
<td>Good morning. I am Nurul’Ain binti Ahayalimudin. I understood that you have been involved in disaster response. Thank you for your willingness to join this study. I am conducting a qualitative study, in which utilise an interview as a tool to tell your experience during disaster response and your thoughts as well as your views. During this session, I will ask few questions about yourself and your experience during, including few other questions.</td>
</tr>
<tr>
<td>R</td>
<td>Okey boleh. Silakan.</td>
<td>Okay, yes. It is my pleasure.</td>
</tr>
<tr>
<td>I</td>
<td>Okey terima kasih. Sebelum saya mulakan boleh cik beritahu nama cik?</td>
<td>Okay. Thank you. Before I start, could you tell me your name?</td>
</tr>
<tr>
<td>R</td>
<td>Nama saya Sabrina.</td>
<td>My name is Sabrina.</td>
</tr>
<tr>
<td>TIME</td>
<td>MALAY</td>
<td>ENGLISH</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>I</td>
<td>Okey. Boleh saya panggil cik, Sabrina?</td>
<td>Okay. Can I call you Sabrina?</td>
</tr>
<tr>
<td>R</td>
<td>Boleh, boleh.</td>
<td>Yes, for sure.</td>
</tr>
<tr>
<td>00:01:29</td>
<td>Okey. Sebelum ini, saya ada berikan information sheet berkaitan dengan kajian yang saya akan jalankan saya ada beri penerangan, ringkasannya daripada participant information sheet sebentar tadi. So, sebelum saya teruskan dengan soalan-soalan itu, ada tak apa-apa yang cik kurang pasti atau ada perkara-perkara yang berkaitan dengan information tadi yang cik hendak tanyakan pada saya.</td>
<td>Okay. Prior to this, I have given you an information sheet about the study that I have conducted and briefly explained to you just now. So, before I proceed with the questions, are there any enquiries, anything that you do not understand the information that has been given earlier?</td>
</tr>
<tr>
<td>00:02:06</td>
<td>Setakat ini saya rasa takde apa-apa masalah lagi lah.</td>
<td>So far, I have no question at all.</td>
</tr>
<tr>
<td>I</td>
<td>Okey. Terima kasih ya Sabrina. Saya akan mulakan dengan pengalaman Sabrina dalam bidang ini. Berapa lama dah Sabrina bekerja sebagai jururawat?</td>
<td>Okay. Thank you, Sabrina. I will start with your experience in this field. For how long have you been worked as a nurse?</td>
</tr>
<tr>
<td>R</td>
<td>Saya bekerja sebagai jururawat selama sudah 13 tahun.</td>
<td>I work as a nurse for about 13 years.</td>
</tr>
<tr>
<td>I</td>
<td>Oh! Lama juga ye. 13 tahun itu adaakah di merata-rata unit, di merata-rata hospital?</td>
<td>Oh! It is quite long. For the 13 years of services, does it everywhere, in the hospitals?</td>
</tr>
<tr>
<td>00:02:43</td>
<td>Oh ya! Saya da pengalaman di [Redacted] selama 4 tahun, di [Redacted] 5 tahun. Kemudian saya transfer ke [Redacted]. Sekarang saya berkhidmat di Jabatan Kecemasan [Redacted].</td>
<td>Oh! Yes. I have an experience worked in [Redacted] for 4 years, at the [Redacted] for 5 years. Then, I was transferred to the [Redacted]. Now, I am working in the Emergency Department, [Redacted].</td>
</tr>
<tr>
<td>I</td>
<td>Oh okey. Jabatan kecemasan itu tempat yang memang sibuk la di mana-mana hospital kan?</td>
<td>Oh okay. The emergency department is the busiest place in any hospitals, right?</td>
</tr>
<tr>
<td>R</td>
<td>Ahha...</td>
<td>Ahha...</td>
</tr>
<tr>
<td>I</td>
<td>Saya juga dimaklumkan bahawa Sabrina pun pernah terlibat dalam disaster response atau bencana, apa...respon pada bencana lah. Terlibat dalam medical team atau disaster relief team. Pada masa itu di mana Sabrina bekerja?</td>
<td>I was informed that Sabrina was involved in disaster response or disaster, respond to the disaster. Being involved in medical team or disaster relief team. Where were you worked at that time?</td>
</tr>
<tr>
<td>00:03:30</td>
<td>Hurmm.. Masa itu saya memang ada respon, kes 2014, bulan 12, 28hb sampai January berkaitan dengan banjir besar di Temerloh, Pahang. Masa itu</td>
<td>Hurmm.. I was responded to a case in 2014, on December, 28th until January related to the massive floods at Temerloh, Pahang. At that</td>
</tr>
</tbody>
</table>
**TIME** | **MALAY** | **ENGLISH**
---|---|---
- | saya berkhidmat di Hospital Sungai Buloh. Saya diarahkan oleh JKNS dan beberapa orang di Lembah Klang, untuk respon ke sana. Sebenarnya, nama saya di Kuala Krai Kelantan, tapi masa itu masalah flight, macam mana ntah dia ada masalah, lepas tu tak boleh.. sebab hujan masalah cuaca, jadi kami kena berada di.. hurrmmm, di mana saya tak ingat. Lepas tu 1 hari kat situ.. dekat Wisma Masalam dekat Shah Alam juga, pastu esoknya kami di bawa naik bas pergi ke Temerloh. Sebab kat sana pun diorang cakap cakap banjir besar. So, kami di bawah JKNS seramai 40 orang, pergi ke Temerloh Pahang. | time, I worked with [Redacted]. I and few others of Klang Valley were instructed by the JKNS, to respond to the area. Initially, my name was listed to Kuala Krai, Kelantan, but due to a flight problem, it seems there was a problem, and they can not, due to the weather problem, so we have to be in the area, I forgot where it was. After 1 day been there, nearby to Wisma Masalam at Shah Alam, then tomorrow we were transported by bus to Temerloh. People said Temerloh also affected by the massive floods. So, we, under the purview of JKNS went to Temerloh, Pahang.

00:05:00 | I Arr.. Menaiki bas? | Arr.. By bus?
- | R 2 buah bas. Hurmm.. | 2 buses. Hrmm..

00:05:50 | I Okey. Boleh bagitau saya yang macam mana keadaan yang sepatutnya Sabrina dapat pergi ke Kuala Krai tapi ke Temerloh. Flight tue, apa yang berlaku sebenarnya? | Okay. Could you tell me how did that happen when you were supposed to go to Kuala Krai, instead, to Temerloh? The flight, what happened actually?
- | R Sebenarnya, flight tue mula-mula delay, lepas tu sebab keadaan cuaca dia memang tak boleh sampai dekat Subang (airport). Lepas tu, kitorang bermalam di satu penempatan di Shah Alam. Saya tak ingat nama tempat tue apa ye. Saya tak pasti tapi yang pagi esoknya kitorang briefing lagi. Kita, pastu dihantar ke Temerloh. | Actually, the flight was delayed, then due to the weather the flight was unable to arrive at the Subang (airport). Then, all of us overnight at one place near Shah Alam. I couldn’t recall the place. I was so sure but the next morning we had a briefing again. Then, were sent to Temerloh.

00:06:26 | I Okey, tadi, awal tadi, Sabrina ada bagitau yang Sabrina menerima arahan daripada JKNS untuk terlibat dalam ni. Adakah Sabrina rasa walaupun atas arahan tapi adakah Sabrina rasa itu adalah satu tanggungjawab atau rasa sukarela untuk membantu mangsa-mangsa atau membantu rakan-rakan sepejajaran di sana yang menghadapi masalah ketika banjir? | Okay, just now, earlier, you (Sabrina) did tell me that you (Sabrina) was received instruction from the JKNS to involve in this. Although it was an order, did you (Sabrina) fell that it was your responsibility or feeling of a volunteer to help those victims or helping your counterpart there which were in trouble during the floods?
- | R Saya memang teruja dengan macam, saya anggap ini sebagai cabaran saya sebagai nurse, dengan dan tanggungjawab tu memang tanggungjawablah, kita rasa memang nak tolong. Lepas tu saya nak...saya nak pengalaman ni, sebab saya rasa saya dah lama berkhidmat pastu saya nak pengalaman disaster. | I was so excited, I think it was a challenge for me as a nurse, with the responsibilities, I feel like to help those needed. Then, I want this experience, I want it because I think that I have been in nursing for quite sometimes and I need this kind of experience in disaster.
I Adakah ini pertama kali Sabrina terlibat dalam disaster response?

Does it your (Sabrina) first time being involved?

R Ya, ini first time.

Yes, this is my first time.

I Apa perasaan Sabrina? Bila menerima arahan itu?

How do you feel? When you received the order?

R Saya teruja, saya nak bantu orang, saya nak tengok keadaan disaster, saya nak dapatkan pengalaman macam mana orang berada di tempat yang kita dok
dengar aje, dengar daripada berita, dengar daripada radio, tengok daripada
berita, pastu saya rasa nak pergi ke tempat tue sebab mula-mula memang
diarahkan ke Kuala Krai, jadik macam kita nak tau perkara sebenar, benar ke
kita tengok dalam whatsapp, dalam FB.

I was so enthusiastic, I want to help people, I want to look at disaster
situation. I want to get the experience how to be in the place
whereby we only heard about it, listened from the news, listened
from the radio, watched the news. Then, I feel like wanted to go to
the place although I was initially instructed to go to Kuala Krai. So, I
want to know the real situation, is it true what have been watched in
the WhatsApp, in the FB.

R Hurm.. pasal disaster, saya tak pernah alami yang real ni, cuma disaster
training apa semua itu je lah. Aa, itu je lah. hurmm.. Saya tak pernah terlibat.

I Okay. Dan, sebelum ni pernah tak Sabrina macam, familiar dengan disaster
response itu sendiri? Maksud saya bukan dari segi pengalaman tapi berkaitan
dengan disaster response. Pernah tak macam dengar, ataupun membaca,
ataupun adalah penerangan yang diterima daripada siapa-siapa saja?

Okay. And, prior to this, have you (Sabrina) familiar with disaster
response itself? What do I mean here not regarding the experience
but disaster response itself? Have you heard, or read or even
received an explanation from anybody?

R Hurm.. about the disaster, I haven’t experienced this real situation,
only disaster training and others. Aa, that was it. Hurmm.. I have not
involved.

I Okey. Sabrina tak pernah terlibat dalam disaster response tapi Sabrina pernah
dalam latihan lah, training. So, apa bentuk latihan yang Sabrina ikuti?

Okay. You haven’t involved in disaster response but you’ve received
a training. So, what kind of training you’ve (Sabrina) exposed with?

R Saya pernah pergi ke disaster management dekat Nilai, Negeri Sembilan.
Dalam posbasik pun di train jugak disaster. Aa.. bomba, .. aa.. dekat Kuantan
rasanya kita ada buat disaster gak.. apa nama dia gak? Aa.. drill.. disaster
drill, tak ingat (ketawa).

I (Sabrina) was involved in disaster management nearby Nilai,
Negeri Sembilan. Within post basic training also, we were trained in
disaster. Aa.. fire brigade.. aa.. in Kuantan I think we also did a
disaster.. what was it name? Aa, drill. A disaster drill, I forgot
(laughing).

I Okey takpe. Mungkin nanti kemudian Sabrina akan ingat. Berkaitan dengan
disaster management yang di Nilai tadi, Seremban, Negeri Sembilan. Boleh
tak ceritakan bentuk latihan yang, adakah daripada segi syarahan, ataupun
ada praktikal?

It’s okay. Maybe later, if Sabrina could recall it back. In relation to
disaster management at Nilai just now, Seremban, Negeri Sembilan.
Could you explain the form of training, is it a lecture, or practical?
<table>
<thead>
<tr>
<th>TIME</th>
<th>MALAY</th>
<th>ENGLISH</th>
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</thead>
<tbody>
<tr>
<td>00:09:33</td>
<td>R Okey. Dia ada, dia bagi (apa nie kak Ain-she asked me and showed the desktop), (I: arrr.. lecture), ahh... lecture, tabletop (I: arrr.. ok) dengan arrr taining, training ke tempat kejadian..</td>
<td>Okay. They gave a lecture (she asked me and showed the desktop to get the correct word of lecture). Ahh lecture, tabletop exercise and also training to the scene.</td>
</tr>
<tr>
<td></td>
<td>I Simulation ataupun, macam disaster drill?</td>
<td>Simulation or, like a disaster drill?</td>
</tr>
<tr>
<td></td>
<td>R Simulation (ketawa)</td>
<td>Simulation (laughing)</td>
</tr>
<tr>
<td>00:10:06</td>
<td>I Simulation. Oh okey. Boleh tak terangkan lebih lanjut berkaitan dengan simulation tu tadi?</td>
<td>Simulation. Oh okay. Could you (Sabrina) tell me about the simulation?</td>
</tr>
<tr>
<td></td>
<td>R Simulation tu dia bagi kita macam hospital mana-mana, kita sebagai apa, pastu apa situasi disaster tu, landslide ke, aaa.. pastu kita respon yang ke berapa? Dia dah bagi ambulan-ambulan. Saya masa tu, pengalaman saya respon yang kedua. Dah ada orang respon pada landslide tue, dia call kita untuk respon, saya bawak bersama MA, driver dengan specialist. 4 orang ke Kuantan, sampai di sana kita lapor diri kepada komander. Lepas tu saya diarahkan untuk set up base la. Resus, yellow, green, pastu saya ambillah senarai nama-nama mereka yang terlibat dan pastu saya manage la.</td>
<td>The simulation is likely the situation where they divide us to the particular hospital, what we should be, what will be the disaster event whether it is a landslide, then which group of the response. They already divide the ambulances. Me, at that time, experienced with the second ambulance. There was a team responded to the landslide event, they asked for us to respond, I brought the MA, driver and the specialist. 4 of us went to Kuantan, once arrived we report duty to the Commander. After that, I was instructed to set up [the medical] base. Resus, yellow, green, and then I get the list of those involved and managed them later.</td>
</tr>
<tr>
<td>00:11:09</td>
<td>I Tadi Sabrina ada bagitau yang Sabrina ada terlibat dalam latihan seperti mendengar lecture, (R: tabletop) tabletop, dan simulation berkaitan dengan bencana. So, adakah Sabrina rasa latihan yang Sabrina ikut itu menyediakan ataupun mampu membantu Sabrina semasa kejadian disaster yang sebenar apabila Sabrina respon pada bencana yang sebenar di Temerloh tu.</td>
<td>Just now you (Sabrina) told that you (Sabrina) was involved in the training, for instance, tabletop, and simulation related to the disaster. So, do you (Sabrina) think the training that you’ve enrolled could prepare or even assist you (Sabrina) during the real disaster event when you (Sabrina) responded to the real disaster in Temerloh?</td>
</tr>
</tbody>
</table>
| 00:11:52 | R Hurm... Saya rasa ada. Dia mengambil kira rohani kitapun, kita punya mentaliti kita, pastu apa-apa je dalam disaster tu apa yang ada je, kita kena provide pastu semana pengetahuan kita, apa yang kita perlu manage pesakit yang datang macam-macam mana pun, pastu kita kena, kena faham apa yang, apa macam kehendak kita. Kehendak kita perlu makan, kita perlu eliminasi, kita perlu pakaian. Mana-mana yang.. macam mana ye saya nak cakap.. | Hurm... I think there was. They takes into account our spiritual as well, our own mentality, then anything that we had during the disaster, we should provide as what we know, what should be done in managing our patient who came to us in different condition, then we should, should understand, similar to our desire. A desire to eat, a need for elimination, a need for clothing. Anything... how could I

say it. That in which we could have at that time. We can’t think so much, what we want to eat, it doesn’t matter. It should be everything that we could have at that time. Then, during the disaster at Temerloh, I stayed at the ED, ambulance call, I responded to a case, which was stuck, then I saw on my own the houses emerged, went there by boat, then the aunties who have a haemodialysis were having problems because they need to clean the blood. Then, have to fetch patients, need to wait for the boat, rode a Hilux. Hurm.. there were a lot.. a lot. Such example, the shop nearby, within hospital compound, the hospice mart, when the time of my arrival, it was chaotic, they bought the foods until nothing left. Then, we ourselves haven’t provided with the placement, we just slept at the auditorium, was given a prayer mat and blanket, sleep there, bath nearby the auditorium’s toilet, close to toilet bowl and so on, at the toilet, even drying our clothes at the toilet. I stayed there for about.. 10 days until stand down, then I went back. After that, I was assigned every day at the MECC, I looked on the staff nurse, whoever couldn’t come to work, they called in. Those who are not working in the ED, which working in the wards, that means they need to replace those nurses who didn’t not turn up to work. About the cloth, they just need to wear whatever clothes they have, it could be a T-shirt, uniform without iron, and whatever. Then, the foods, weren’t enough, cooked by the HO, in fact, they were struggled to get the foods (laughing). Everyone evacuate nearby to the hospital, on the outside, they erected the tents for the flood victims. Uh... the last place I was located was at the Sekolah Menengah Mentakab. I was there for 1 day. Loads of assistance and seeing all the ‘big shots’ came and brought along totes [blanket], anything. In fact, Dr Abu Hassan also
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<td>came. Aaa… I was at the clinic, stayed overnight. The clinic was</td>
<td>came. Aaa… I was at the clinic, stayed overnight. The clinic was</td>
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<td>looked like merely an office by the school but we set up it as a clinic,</td>
<td>looked like merely an office by the school but we set up it as a clinic,</td>
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<td>together with the pharmacist, with the doctor. Then, we encamped in</td>
<td>together with the pharmacist, with the doctor. Then, we encamped in</td>
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<td>the area, cooked there. Humm… that what had happened. We</td>
<td>the area, cooked there. Humm… that what had happened. We</td>
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<td>opened up the clinic for 24 hours.</td>
<td>opened up the clinic for 24 hours.</td>
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<td>00:15:39</td>
<td>Wow… okey. Ada apa-apa lagi Sabrina nak share, nak kongsikan</td>
<td>Wow… okey. Is there anything else you (Sabrina) would like to share, your experience?</td>
</tr>
<tr>
<td>R</td>
<td>Okey, saya akan menceritakan. (gelak). Nanti saya ada idea saya akan</td>
<td>Okay. I will tell the story (laughing). When the idea comes, I will let you know.</td>
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<td></td>
<td>masuk-masukkan</td>
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<td>I</td>
<td>Okey. Tadi Sabrina menceritakan berkenaan pengalaman Sabrina semasa tiba</td>
<td>Okay. Just now you (Sabrina) shared about your experience when</td>
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<td>di kawasan banjir, di auditorium hospital tadi dan bagaimana keadaan</td>
<td>arrived at the flood area, at the hospital’s auditorium, the situation of</td>
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<td></td>
<td>Sabrina dan pasukan yang lain, ahli-ahli dalam pasukan yang sama dengan</td>
<td>you and your team, the members of the team, together with you.</td>
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<td>Sabrina. Daripada situ, adakah Sabrina rasa Sabrina memenuhi</td>
<td>From the situation, did you (Sabrina) ever think that you have</td>
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<td>tanggungjawab sebagai jururawat semasa memberikan khidmat pada mangsa-</td>
<td>fulfilled the responsibilities needed when delivered your services to</td>
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<td>mangsa banjir tu?</td>
<td>the flood victims?</td>
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<td>00:16:46</td>
<td>Saya rasa bidang kejururawatan ni luas. Humm... mana-mana pun kita boleh</td>
<td>I think the nursing field is broad. Humm… we can provide</td>
</tr>
<tr>
<td>R</td>
<td>beri bantuan. Kita punya sokongan emosi kita, dari dulu dari kolej sampai</td>
<td>assistance in anywhere. We do have our emotional support since we</td>
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<td>sekarang. Kita kena faham macam mana pesakit, apa komplen dia. Kita..</td>
<td>learnt it from the college until now. We need to understand the</td>
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<td>rawatan mengikut apa yang dia komplen. Saya rasa itu pengalaman yang,</td>
<td>patients, what are their complaints. We.. treat them according to their</td>
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<td></td>
<td>pengalaman dalam kejururawatan ni macam... sangat berhargalah kalau</td>
<td>complaints. I think that the experience, the experience of nursing…</td>
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<td>disaster ni. Saya rasa tak semua staffnurse dapat peluang ni kecuali staffnurse</td>
<td>such a valuable for disaster. I think, not all nurses were giving the</td>
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<td>di emergency department.</td>
<td>opportunities, except that staff nurse in the emergency department.</td>
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<td>00:17:48</td>
<td>Haa. Okay. Apa pendapat berkenaan dengan penglibatan jururawat dalam</td>
<td>Haa. Okay. What is your opinion on nurses’ involvement during a</td>
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<td>I</td>
<td>bencana?</td>
<td>disaster?</td>
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<tr>
<td>00:17:48</td>
<td>Sangat-sangat bagus. Saya rasa kita boleh luaskan lagi benda ni. Kita boleh</td>
<td>It is much better. I think we can expand this thing. We could involve</td>
</tr>
<tr>
<td>R</td>
<td>involvekan lagi jururawat-jururawat dalam management, dalam disaster</td>
<td>more nurses in the management, I mean in disaster management.</td>
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<td></td>
<td>management maksud saya. Sebab, itulah saya cakap, benda ni macam sangat.</td>
<td>Because, as what I said, these things are real. Ooh, for me, it was so</td>
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<td>Ooo macam saya rasa sangat berharga sangat pengalaman. Saya takkan dapat pengalaman macam ni. Kalau macam dipanggil untuk respon ke mana-mana.</td>
<td>priceless. I won’t get the experience like this. If we were called to respond anywhere.</td>
</tr>
<tr>
<td>I</td>
<td>So, adakah Sabrina akan pergi kalau (dipilih)?</td>
<td>So, would you go if (selected)?</td>
</tr>
<tr>
<td>R</td>
<td>Oh! sudah tentu! Saya sangat berminat.</td>
<td>Oh! Of course! I really interested.</td>
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<tr>
<td>I</td>
<td>Ha...Okey. Bagus Sabrina. Okay. Sabrina ada bagitau yang...berkaitan dengan penglibatan jururawat, perlu dalam disaster management. So, dari segi apa jururawat tu perlu? Adakah dari segi respon saja?</td>
<td>Ha… Okay. That’s great Sabrina. Okay, You did mention… about nurses’ involvement, it is needed in the disaster management. So, which aspect do we need nurses? Is that merely during response?</td>
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<td>00:18:49</td>
<td>Hurmm... Dari segi kita, memberi rawatan kepada pesakit, dan dari segi macam kita kena tahu situasi apa, bencana apa, rawatan apa. Macam ini saya kata macam, macam mana ya nak cakap? Benda baru. Ha.. Sesuatu yang baru.</td>
<td>Hurmm… In the aspect of, providing care to our patients, and the way we need to know what are the situation, what kind of disaster, what treatment should be given.Is it like this…how to say it? It’s a something new. Ha.. Something new.</td>
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<td>I</td>
<td>Penglibatan jururawat, bagi pendapat Sabrina dari segi respon. Bagaimana sebelum kejadian disaster?</td>
<td>On your opinion, the involvement of nurses focusing on the response. What about before the disaster?</td>
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<td>R</td>
<td>Dari segi respon, sebelum kejadian disaster. (muka berkerut)</td>
<td>In regard to the response, before the disaster event (frowning)</td>
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<tr>
<td>I</td>
<td>Selain dariapda respon ketika bencana? Penglibatan jururawat sebelum kejadian bencana? Adakah perlu? Adakah Sabrina faham soalan saya? Okey, disaster management ni luas. Dia bukan semata berkaitan dengan respon saja. Sebelum disaster pun kita ada preparation, preparedness. Adakah Sabrina berpendapat? Apakah pendapat Sabrina berkaitan dengan penglibatan jururawat sebelum bencana berlaku? Sebelum taahap respon tu sendiri?</td>
<td>Apart from the response during a disaster? The involvement of nurses before the disaster events? Is it necessary? Did you get my question? Okay, the disaster management is broad. It is not merely related to response. We do have a preparation, preparedness. What are your thoughts? What are your opinions on nurses’ involvement prior to the disaster event? Before the response itself?</td>
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<td>00:20:29</td>
<td>Saya rasa perlu, perlu diambil kira jugalah. Sebab daripada segi mental dia, daripada segi apa yang, dia tau apa disaster tue. Macam kalau banjir, mesti orang akan dapat penyakit... penyakit apa tu? (I: Bawaan air?). Haaa, bawaan air... kebersihan, ubatan-ubatan... semua tu kena prepare, sebelum. Tapi kita kena tau disaster apa yang akan kita involve.</td>
<td>I think it is needed, need to think about it. Because of, from the mental aspect, from the aspects of, they knows what disasters are? Such an example of floods, people might expose with diseases… what are the disasters?... Haha, water-borne diseases… the sanitation, the medications… all those things need to be prepared, before. But, we need to know what type of disasters that we might involve.</td>
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<tr>
<td>I</td>
<td>Okey. Adakah... Salah satunya adalah training. So, training tu, adakah setiap jururawat perlu untuk menghadiri training berkaitan dengan disaster ni sendiri?</td>
<td>Okay. Is it… One of it is training. So, the training, does every nurse need to attend training related to the disaster themselves?</td>
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<tr>
<td>R</td>
<td>Saya rasa perlu. Saya rasa perlu, sebab kita pun tak tahu satu hari nanti macam mana, ada disaster besar ke semua terlibat ke. Kalau dionrang takde pengalaman, macam kerja dalam wad aje, ambil vital signs, ambil observation. Lepas tu bila terlepas keluar dionrang tercengang-cengang apa semua kan? Benda, benda lagi baru. Kita yang duduk kat kecemasan pun rasa benda tu baru, dionrang kat wad tu lagi lah nie, kena... Saya rasa perlu, sangat. Kena expose lah dionrang jugak.</td>
<td>I think it is necessary. It is necessary because we not even know one day, it might be a huge disaster and involved everyone. If they don’t have an experience, such as working in the wards only, taking vital signs, taking an observation. Then, when they coming out (from their comfort zone), they will be astonished, right? Things, everything is new. Even we in the emergency feels it is a something new, not to mention those nurses in the wards. It is necessary… I think it is necessary, really. We need to expose them as well.</td>
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<td>I</td>
<td>Okey. Maksud Sabrina, Sabrina rasa walaupun Sabrina bekerja di kecemasan, dalam 13 tahun pun rasa sesuatu benda yang baru, pengalaman yang baru. Apatah lagi jururawat yang bukan bekerja di kecemasan yang tak selalu expose dengan kecemasan. Jadi, jururawat ni perlu didedahkanlah dengan pengurusan bencana?</td>
<td>Okay. You mean that, you (Sabrina) think although you have an experience of working in emergency, for about 13 years, you also feel that it was something new, a new experience. Moreover, nurses who are not working in the emergency, seldom expose with an emergency. So, the nurse needs to be exposed as well with disaster management?</td>
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<td>00:22:33</td>
<td>Sebab, masa saya dekat Temerloh tu jugak, saya ada dalam bilik, dalam auditorium tu, ada dipecah-pecahkan. Saya ada 20 orang, yang lain pun terlibat pada yang dalam wad, dalam hospital. Dionrang pun cakap, kenapa kita pun terlibat ket kecemasan? Kita pun nak ambik pengalaman (ketawa) menyelamatkan mangsa apa semua. Macam dia, dia rasa macam, ‘saya dah sampai kat sini, tapi saya tak boleh tengok kat luar, saya tak boleh tengok rumah tenggelam (ketawa). Saya nak tolong orang kat luar jugak’. Staffnurse kat atas (beliau merujuk kepada staffnurse di ward) saya rasa macam, saya rasa kita pun kena involve jugak la staffnurse di atas, bukan saja di jabatan kecemasan, diutamakan jabatan kecemasan la.</td>
<td>Because, when I was in Temerloh, I was in the room, inside the auditorium, we were divided. I have 20 other people, others also involved in the ward, inside the hospital. They said that why we were not involved in the emergency? We also want to get an experience (laughing) rescue the victims, everything. They thought that ‘I was already there, but I couldn’t see what had happened outside, couldn’t see the house submerged (laughing). I also want to help other people’. The other staff nurse, I think they should be involved, not merely those in emergency prioritised the staff of emergency department</td>
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<tr>
<td>I</td>
<td>Tapi perlu melibatkan jururawat selain daripada yang, yang bertugas di kecemasan la? Okey, tadi saya berminat dengan Sabrina bagaimana berkenaan dengan persediaan seorang jururawat sebelum. Sebab Sabrina ada bagaimana yang perlu latihan, lepas tu Sabrina ada bagaimana dengan, bukan setakat fizikal tapi mental jugak. So, adakah latihan yang Sabrina ikuti sebelum nie, mencukupi untuk in term of bukan setakat fizikal tapi mental. Adakah ditekankan berkenaan dengan persediaan mental, ataupun psikologi, untuk menghadapi keadaan-keadaan seperti disaster ni?</td>
<td>But, we need to involve those who are not working in the emergency, is it? Okay, I’m interested in your statement about the preparation of the nurse before the event. Because you said the need for training, then you also said not only about physical preparation but mental as well. So, did the training you underwent before enough to equip the preparation of not only for physical but also mental? Do they emphasise the mental or psychological preparation for facing such situation like a disaster?</td>
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<td>00:24:24</td>
<td>Saya rasa adalah, dalam 80%.</td>
<td>I think around, 80%.</td>
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<tr>
<td>I</td>
<td>Psikologi?</td>
<td>Psychology?</td>
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<td>R</td>
<td>Ha... Sebab ya lah, masa waktu latihan pun kita buat betul-betul. Kita pun ada preparation, kita pun kena tua apa yang kita nak pergi, apa yang kita ada, sama jugak kita pergi respon situasi yang betul. Ha... saya rasa semua kena ada jugak, preparation.</td>
<td>Ha... Because, yes you know, we make it real although during the training. We also have a preparation, we should know where we want to go to, what do we have, it is the same as when we respond to the real situation. Ha... I think we need all for the preparation.</td>
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<td>00:25:22</td>
<td>Saya rasa perlu, kaunseling dulu, sebelum pergi ke kejadian betul.</td>
<td>I think, we need counselling, before deploy to the disaster area.</td>
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<tr>
<td>I</td>
<td>Kaunseling dalam bentuk apa tu? Dari segi apa?</td>
<td>What form of counselling? In what aspects?</td>
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<tr>
<td>R</td>
<td>Dari segi mentaliti kita. Hurmm... Kita kena faham, mangsa tu, mungkin mangsa tu dah kehilangan emak dia ke, adik dia ke. Kita kena ambik, kita sebagai dia. Macam mana perasaan dia kita kena dengar. Kita jangan cakap 'ha...sekejap-sekejap. kita nak tengok orang ni'. Tak boleh, kita kena empati pada dia. Sebab mangsa tu trauma, tengah trauma. Kita kena tolong dia dari segi psikologi. Itu pun macam kerja nurse jugak kan?</td>
<td>From our mentality. Hurmm... We should understand, the victims, the victims might lose his/her mother, his/her sisters/brothers. We should put ourselves in their shoes. How they feel, we need to listen. Don’t say ‘ha... wait a minute, I have another person to look after’. No, you couldn’t, we need to empathy to them. Because the victims are trauma, they are in trauma. We need to help them in regard to psychology. That is a part of our duty as well, right?</td>
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<td>00:27:15</td>
<td>Ada, kerja nurse ni aaa... kena, kerja nurse ni lemah lembut, faham situasi...aaa... kita memang tumpukan daripada nurse lagi kita masuk macam tu. Jadi, saya rasa banyak tugas-tugas nurse ni boleh bantu pergi ke disaster...hurmm...</td>
<td>Yes, they are, because being a nurse, we have to work gently, understand the situation… aaa… We were focusing since during the training. So, I think there are lots of nursing duty could help nurses to go for disaster…hurmm…</td>
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<tr>
<td>I</td>
<td>Ada apa-apa nak dikatakan?</td>
<td>Do you have anything to say?</td>
</tr>
<tr>
<td>R</td>
<td>Takde.</td>
<td>No.</td>
</tr>
<tr>
<td>I</td>
<td>Dalam tugas-tugas jururawat tu, apakah tugas yang paling penting yang perlu ada pada setiap jururawat masa disaster respon tu?</td>
<td>Within the duties of nurses, which duty is very important that of every nurse should have during disaster response.</td>
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<tr>
<td>R</td>
<td>Hurmm...</td>
<td>Hurmm…</td>
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<tr>
<td>I</td>
<td>Yang paling,kira...</td>
<td>Such example…</td>
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<td>R</td>
<td>Dia macam, sensitiviti, faham jiwa. Kebanyakannya sokongan emosi. Sokongan emosi nombor satu. Lepas tu, dengar -dengar dia punya luahan dia. Masa terlibat tu. Dalam hospital pun kita macam tu. Sebab kita jumpa ramai pesakit yang macam-macam ada masalah, kita kena jadi pendengar setia dia.</td>
<td>It could be a sensitive, understand the people. Most of it are emotional support. The emotional support should be the priority. Then, listen to their expression. During the time. We did the same within the hospital compound. Because we see a lot of patients with any kind of problems, so we have to be a good listener.</td>
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<td>I</td>
<td>Adakah Sabrina rasa bila Sabrina pergi ke disaster respon tu, Sabrina dapat memenuhi segala, mempergunakan sehabis mungkin pengalaman-pengalaman yang ada sebelum, ataupun pengalaman sebelum, semasa bertugas? Adakah dapat mempergunakan segala pengalaman tu untuk membantu?</td>
<td>Do you (Sabrina) think that when you respond to the disaster area you will fulfil, utilise all the experiences you had before, during? Do you utilise all experience to assist you during the disaster?</td>
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<td>00:29:16</td>
<td>Hurmm.. ada. Ya lah saya praktikkan apa yang saya aplikasikan apa yang saya tahu tentang perubatan. macam set line ke apa semua kan. Takde la ada nurse tu tak tau nak set line apa semua. Kita dah boleh buat dah... Hah... Urrmm macam kita daripada kecemasan ni kita terap ABC. Jadi saya, sokongan emosi tu ada, ABC tu ada, saya ingat pada airway sebab saya ambulan call, respon kes, saya treat dia atas airway, breathing, circulation. Saya apply apa yang saya jadi nurse kat kecemasan ni, saya aplikasi masa respon kes.</td>
<td>Hurmm.. Yes, I did practise and apply whatever things I know about medical, for instance, cannula insertion and anything related. So, the nurses won’t say that they don’t know to do something that has been ordered. We can do it. Hah.. Urrmm.. such example of those who from emergency we use ABC in our practice. So, I do have emotional support, ABC as well, I know the airway because I was in ambulance call, respond to the case, I treated them accordingly from the airway, breathing, circulation. I applied the knowledge while working in the emergency, within respond time.</td>
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<td>00:30:48</td>
<td>Okey, selalunya dalam pasukan perubatan untuk bantuan bencana, bukan saja melibatkan jururawat tapi melibatkan doktor, pembantu..eh penolong pegawai perubatan. So, bagaimana hubungan dalam team tu?</td>
<td>Okay, usually the medical team for the disaster relief, not merely involving nurses but also doctors, the medical assistants. So, how is your relationship within the team?</td>
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<td>00:33:16</td>
<td>Kita jadi memang macam satu team sebab saya pun pergi dengan pharmacist, dengan doktor, dengan MA. Lepas tu kita punya kumpulan pun dah ada kaunselor. Jadi, kalau dia macam trauma ke apa semua, kita hantar ke kaunselor. Lepas tu memang kita jadi satu team la. Kita jadik adik-beradik gak. Bila dah orang ni takde, kita tanya, 'eh mana yang ni pergi? Aaa macam tu. Kerja berpasukan.</td>
<td>We did develop a team since I went there with the pharmacists, the doctors, the Mas. In fact, we have a counsellor in our team. So, if they seem traumatised or anything, we send them to the counsellor. Then, we being a team. Just like siblings. Whenever anyone of us wasn’t around, we will ask ‘where is this guy?’ Aaa… just like that. Teamwork.</td>
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<td>00:33:16</td>
<td>Dalam tu tadi Sabrina ada bagitau ada kaunselor dalam tu. Adakah kaunselor tu hanya untuk mangsa atau pun boleh juga melibatkan pasukan kesihatan yang lain (pasukan perubatan maksud saya).</td>
<td>Just now you (Sabrina) told me that there is a counsellor within the team. Does the counsellor merely for the victims or it could be for the medical team as well?</td>
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<tr>
<td>00:33:16</td>
<td>Dia terlibat sesiapa saja.</td>
<td>The counsellor is for everyone.</td>
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<td>00:33:16</td>
<td>Walaupun pasukan Perubatan?</td>
<td>Even the medical team?</td>
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<tr>
<td>00:33:16</td>
<td>Ya, antara mangsa dengan pasukan perubatan.</td>
<td>Yes, from the victims to the medical team</td>
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<tr>
<td>00:33:16</td>
<td>Okey. Tidak hanya pada, tidak hanya tertumpu pada mangsa sajalah. So, boleh Sabrina ceritakan bagaimana perasaan Sabrina ketika membantu mangsa-mangsa tu?</td>
<td>Okay. Not merely focuses on the victims, right? So, could you (Sabrina) tell me your feeling when you assist the victims?</td>
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<tr>
<td>00:32:01</td>
<td>R 超级rasa sedih sebab mangsa kebanyakannya dah takde apa-apa, tinggal baju yang dia pakai je sebab dia cerita pun air pun naik, air sungai, dia naik cepat. Lepas tu, tapi Alhamdullillah la takde yang kehilangan nyawa. Cuma harta benda je. Lepas tu dia, mangsa macam nak marah pun ada, dia tak boleh diaju soalan-soalan yang sensitif, dia cepat marah. pastu, kita pun tak boleh nak ni, kita kena cool down dia, kena faham situasi mangsa.</td>
<td>I feel sad because most of them had nothing left, only the clothes that they wear because they said that the water, the river, increases too fast. Then, thank God that no casualties. Only the properties lost. Then, the victims feel irritable, couldn’t ask them sensitive questions, easily to get angry and we shouldn’t be influenced, we need to calm them down, understand their situation.</td>
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<td>00:33:25</td>
<td>I 還有其他东西要分享吗？Sabra terlibat dalam bencana, respon, disaster respon, dalam lebih kurang sepuluh hari, betulkan? So, selepas daripada penglibatan tu, apa proses-proses yang berlaku?</td>
<td>Do you have any things to share with? You have been involved in disaster response, about 10 days, right? So, what had happened after your involvement, what are the processes?</td>
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<td>00:34:51</td>
<td>R 青马penglibatan saya tu, saya rasa saya, mata saya lebih terbuka (ketawa), saya macam rasa...ohhh, saya lebih macam...macam mana ye...hurmm...jiwa saya tu macam lebih (ketawa) ohhh, macam saya fikir ada lagi orang ada masalah semua ni. Lepas tu saya jadi, saya jadi daripada sikap agresif jadi lembut, macam mana ye nak cerita. Saya macam, lain tau, lepas pada saya balik disaster tu saya faham erti kehidupan ni. Bila macam pasal kerohanian, bila tuhan nak, Dia nak sekejap je. Bila Dia berkethendak, ha macam tu la. Jadi macam lebih terbuka. Saya tak macam mana saya nak explain.</td>
<td>After my involvement in the disaster, I think that open up my mind (laughing), I think… it’s more like… how to say it… hurmm…My soul is like a (laughing) oh, I realise that there are still people having these problems. After that I become, my attitudes have changed from aggressive to gentle, how I should say it. I feel like I become different after came back from that disaster, I understand the meaning of this life. It is all about spirituality when God wants, He could do whatever things He wants. Whenever He wants, it is like that. Be like more open mind. I don’t know how to explain.</td>
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<tr>
<td>00:35:00</td>
<td>I 青马 advisory itu menyebabkan perubahan dari segi fizikal, atau emosional atau psikologikal? atau religion? Boleh tak ceritakan lebih lanjut berkaitan perkara ni?</td>
<td>Does it change your physical or emotional or psychological? Or religion? Could you explain more about this matter?</td>
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<td>00:35:31</td>
<td>R 青马dulu pun saya, saya kerja macam, diorang suruh buat ni saya buat tu, saya buat ikut arahan dia aje... saya macam tak faham apa hati orang, apa perasaan dia. Tapi lepas balik disaster, saya rasa macam, kita kena faham situasi pesakit tu, kadang-kadang kita tak tau dia punya masalah dia kat rumah dia macam mana. Macam dulu kan marah-marah (ketawa) ke apa ke kan. Padahal dia takde duit ke apa, lepas tu sekarang ni macam saya rasa dewasa lah sikit (ketawa).</td>
<td>I used to be like them, whenever people asked to do something, I just followed their orders… I didn’t get it, people’s heart, people’s feeling. But after I came back from the disaster, I feel like, we need to understand the patient’s situation, sometimes we didn’t know what are their problems at their house, how is it. Last time, I used to angry on them (laughing) or whatever things. Maybe they don’t have monies or anything. Then, after that, I feel more mature.</td>
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<tr>
<td>00:36:01</td>
<td>Ada. JKNS. Dia panggil balik selepas seminggu saya kembali bertugas. Dia panggil balik, dia tanya balik, dia psikologi balik. Dia tanya ada sape-sape yang trauma tak. Ha... macam tu la...</td>
<td>Yes, it does. JKNS. They called us back after a week I return to work. They called, they asked, they did the psychology (assessment). They did ask whether anyone developed any trauma. Ha.. just like that…</td>
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<td>00:36:39</td>
<td>Saya faham macam dia kata kita tak tau masalah pesakit tu lah. Pastu, kita tengok sendiri, kita trauma dengan persekitaran bencana tu. Dia tanya tapi Alhamdullillah lah takde yang kena refer kat psikologi ke apa semua, takde. kaunselor ke.</td>
<td>I do, such example they said that we didn’t know about the patient’s problems. Then, when we look on our own, we traumatised with the environment within the disaster area. They did asked but thank God that none of us need to be referred to the psychology (psychologist) even counsellor.</td>
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<td>00:37:48</td>
<td>Tak jugak, saya ada, tak sangat la... Ada juga sekali sekala. tapi saya ceritakan pengalaman saya pada kawan-kawan saya, itu boleh mengurangkan saya punya, macam ingat sorang-sorang je. Tak. Saya cerita pada kawan-kawan saya, pengalaman saya. Ha, macam tu. Saya kena kuat jati diri. Jati diri saya kena kuat.</td>
<td>No, not really. I did but not really… Once a while but I share my experience with my friends, which could reduce my, which sometimes I used to think about them. No. I share the story among friends, just like that.Ha, just like that. I have to be strong. I should have a strong identity.</td>
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<td>I</td>
<td>Bagaimana respon kawan-kawan bila Sabrina menceritakan berkaitan dengan pengalaman, pengalaman dan kesedihan yang Sabrina alami apabila melihat mangsa?</td>
<td>How were your friend’s responses when you share your experience, the experience and the sorrow when you saw the victims?</td>
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<td>00:38:28</td>
<td>Sesetengah mereka ada excited, nak mencuba nak pergi ke, nak menolong, expose dengan disaster. Ada setengah-setengahnya takut, takut, tak boleh terima. Tidur-tidur macam mana pun, tak selesa ke, ada setengah-setengah orang tak nak la.</td>
<td>Some of them were very excited, wanted to try to involve, to help, and exposed to disaster. Some were a bit hesitant, scared to accept the condition. Some of them demand the comfortable environment and some do not want to involve.</td>
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<td>I</td>
<td>Jadi, tadi saya ada bertanyakan berkenaan dengan pasukan lain dalam Sabrina nie? Selalunya kita bekerja close dengan doctor. So, apa opinion doktor berkenaan dengan tugas-tugas jururawat dalam respon bencana ni?</td>
<td>So, just now I did ask you about the team members. Usually, we work closely with the doctors. So, what are their opinions about nurses’ duties during disaster response?</td>
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<td>R</td>
<td>Aa... Doktor cakap nurse ni kalau pasal sokongan emosi lebih hebat daripada diorang, sebab diorang hanya treat apa penyakit apa ke apa ke. Takde psikologikal sangat.</td>
<td>Aa… The doctors said that when it comes to emotional support, the nurse is way better than themselves because they are treating the diseases. There is no psychological.</td>
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<td>I</td>
<td>Adakah, bagi mereka adakah mencapai tahap seperti yang mereka kehendaki, daripada segi aktiviti-aktiviti lah, yang dilakukan atau dijalankan. Maksudnya daripada segi tugas jururawat tu sendiri?</td>
<td>Did nurses achieve the standard that they required us to do in relation to the activities during disaster response? What I mean here is in relation to nurse’s duties?</td>
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<td>00:40:08</td>
<td>Hurmm.. Saya rasa nurse di Jabatan kecemasan lah aktif dengan benda ni. Kalau dekat, kat atas tu bukan diorang tak baik, tapi diorang tak berapa banyak expose. Sebab sekarang ni Jabatan kecemasan, saya syorkan pergilah response kes, nurse buat PHC, prehospital care ke sebab tu pun macam menolong kita pergi ke tempat disaster sebab kita tak tau kes macam mana kita ambik, macam mana situasi dia, kita dengar, dengar, dengar kita pergi, lain. hah... Saya rasa sape-sape yang beminat nurse ni kita boleh bukan sikit lagi bukan, bukan, bukan, bukan sikit lagi. Jangan duduk setakat tu aje.</td>
<td>Hurmm... I think, the nurses in the emergency department are quite active with this things. But, it does not mean that other nurse are not good, but they are lacking in exposure. Because nowadays, in the emergency department I recommend them to involve in respond of case, nurses involve in PHC, prehospital care, since it will help nurses to get ready for disaster because we do not what will be the case, what are the situation, we heard repeatedly but when we went there, it was very different. Hah… I think anyone that interested with this could open up their mind. Don’t accept the status quo.</td>
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<td>I</td>
<td>Apa pendapat doktor terhadap jururawat yang respon dalam disaster ni?</td>
<td>What is the opinion of the doctors towards nurses who responded during a disaster?</td>
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<td>00:41:08</td>
<td>Hurm... hati-hati sebab sekarang nie ada jururawat lelaki. Jururawat lelaki kadang dionang ambik, ambik lagi senang dionang pergi ke desaister daripada jururawat perempuan.. Tapi saya rasa, hurmm.. apa kak Ain tanya tadi? (ketawa)</td>
<td>Hurmm... Be vigilant because now we do have male nurses. Sometimes they invite the male nurse, so it will be easy to deploy them to the disaster area as compared to a female nurse. But I think... Hurmm… what did you ask just now? (laughing)</td>
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<td>00:41:33</td>
<td>Tadi saya tanyakan berkenaan dengan jururawat, sorry doktor. Apa pendapat dia tentang tugas-tugas jururawat ni. Adakah tugas-tugas tu berjaya dilakukan dengan baik oleh doktor? Ehhh. oleh jururawat? Maaf.</td>
<td>Just now I did ask the nurse, sorry, the doctors. What are you thoughts about the nurse’s duties? Did they manage to carry out their duties very well by the doctor? Ehhh, by the nurse? I am sorry.</td>
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<td>00:41:59</td>
<td>Pendapat doktor, pendapat doktor, kita mesti ada bersama-sama dia sebab macam apa-apa treatment pun dia, yang menolong dia tu nurse lah. Sebab saya rasa, dia kita pun orang, orang kuat lah di sebelah doktor.</td>
<td>The doctors thought, their thoughts, the nurses should be together with them since all the treatment rendered, it carried out by the nurse. Because I think, they might think that we are their right hand.</td>
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<td>Okey. Ada tak apa-apa tugas lain yang perlu dilakukan oleh jururawat selain daripada tugas yang dia lakukan di hospital atau di tempat bertugas tu? Ada tak tugas tambahan atau pun role dionang, role sebagai seorang jururawat yang lain daripada apa yang role dia di hospital atau di tempat dia bertugas?</td>
<td>Okay. Are there other duties should be done despite hospital or your workplace duties? Are there any other additional roles or duties, role as a nurse other than what are they done in their workplace?</td>
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<td>00:43:11</td>
<td>Kalau dekat ED nie, PHC la kot, tugas baru. Yang lain, sama je saya rasa.</td>
<td>If in the ED, perhaps PHC is something new. The rest are more or less the same.</td>
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<td>Bagaimana pula dengan tugas-tugas semasa respon, semasa disaster tu? Adakah tugas yang, adakah terdapat tugas yang tak pernah dilakukan semasa di prehospital care atau dalam jabatan atau mana-mana tempat bertugas. Tugas yang tak pernah dilakukan?</td>
<td>How about the duties during the response, within the disaster area. Do the duties, Are there any other that never been carried out during prehospital care or in any departments or workplace? The duties that never been carried out?</td>
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<td>00:43:54</td>
<td>Macam mana ye? Sebab...</td>
<td>What does it like? Because…</td>
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<td></td>
<td>Adakah tugas tu tugas yang sama? Seperti yang dilakukan di hospital atau ditempat bertugas sekarang dengan di tempat bencana? Adakah, mungkin ada terdapat tugas yang berlainan atau mungkin sama.</td>
<td>Are the duties the same? Similar to what have been carried out in the hospital or current workplace compared to at the disaster area? Could it have different duties?</td>
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<td>Disaster tu saya ditempatkan di MECC, saya terima panggilan call, saya catat apa-apa, apa-apa masalah yang dipanggil untuk respon kes ke apa ke. Lepas tu saya pergi respon kes. Saya rasa tu macam tugas yang berlainan la. Pastu</td>
<td>At the disaster area, I was placed at the MECC, I received calls, I wrote down any notes about the response cases or anything. Other than that, I responded to cases. I think that might be the different duties that I did during a disaster. Then, I need to use walkie-talkie.</td>
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<td>00:45:08</td>
<td>saya kena pakai walkie-talkie, komunikasi, present case sebab ye la kat sini kan kat dalam ni je.</td>
<td>communication, present cases because we merely in this department all the while.</td>
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<td>I</td>
<td>Bagaimana dengan in term of coordination? Koordinasi agensi-agensi dalam bantuan tu?</td>
<td>How about coordination? Coordination between agencies in assisting the authorities?</td>
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<td>00:45:08</td>
<td>Ramai, ramai yang datang, MERCY, St John, JPA, datang menghulurkan segala jenis bantuan.</td>
<td>A load of agencies came, MERCY, St. John, JPA, they came to help with all things they had.</td>
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<td>I</td>
<td>Bagaimana? Adakah mudah atau adakah macam bila kita nak koordinat bantuan tu? Adakah mendapat kerjasama daripada pasukan-pasukan atau agensi-agensi yang lain?</td>
<td>How is it? Does it easy in coordinating all the assistance? Did all teams and agencies give their full cooperation?</td>
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<td>00:45:41</td>
<td>Masa hari tu macam saya tidak ada masalah lah. Semua orang respon kat Temerloh, Pahang masa tu dengan Kuala Krai. Dari, dari segenap Malaysia ni, Bomba, JPA, apa semua-semuu turun, Polis. Saya rasa macam takde masalah. Kita, okey, lepas daripada masa dua tiga hari tu memang suah nak dapat makanan tapi selepas daripada tue bantuan demi bantuan datang, dekat kecemasan. Daripada segi pakaian, makanan hantar, khemah, sejadal, semua dapat. Toto.</td>
<td>On the day, I think, there was no problem arise. All were responded at Temerloh and Kuala Krai. From all over Malaysia. Fire brigade, JPA and all of them came over. Police. I think there was no problem at all. We were okay, within few days it might be difficult for us to get access to food but after that, assistance came, one by one to the emergency. In regard to clothes, foods, they sent tents, prayer mats, they got all. Toto.</td>
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<td>I</td>
<td>Ini untuk mangsa ataupun untuk provider ataupun pasukan?</td>
<td>Does this for the victims or the health care providers?</td>
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<td>00:46:27</td>
<td>Masa kat kecemasan untuk provider. Untuk mangsa diagihkan di rumah atau di sekolah-sekolah, penempatan banjir. Susu, semua dapat.</td>
<td>At the emergency, all were given to the health care provider. While, for the victims, they put everything to distribute to the houses, schools, flood shelter. They all got milk as well.</td>
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<td>I</td>
<td>Ada tak apa-apa information yang selain daripada yang Sabrina ada bagitahu tu? Mungkin ada yang Sabrina ingin kongsikan. Mungkin saya takde timbulkan soalan tu tapi mungkin Sabrina nak kongsikan dalam ni.</td>
<td>Are there any information other than what have told just now? Perhaps you want to share with us. Maybe any information that I didn’t ask previously</td>
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<td>R</td>
<td>Pengalaman?</td>
<td>Experience?</td>
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<td>I</td>
<td>Selain daripada yang Sabrina dah beritahu. Mungkin benda tu saya takde tanya jadi Sabrina nak bagitahu benda ni.</td>
<td>Other than what have you told me just now. Maybe there are something else?</td>
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| 00:47:11  | Dalam situasi disaster tu, macam-macam boleh jadi. Ada macam-macam orang. Saya dah duduk kat penempatan banjir tu dengan 2 orang pharmacist, | In the disaster situation, anything can happen. There are many types of people. I’ve been placed into the flood shelter together with 2
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<td>dengan doctors, berlainan bilik, tapi pada malam tu, pharmacist hilang pulak handset dia. Jadi, kita tolong orang, macam dalam penempatan banjir tu ada orang yang mencuri, padahal waktu tu kita dah tak ingat apa dah. Kita nak tolong sama-sama kita. Tapi, macam ambil kesempatan pulak. Macam tu, macam, tak elok lah. Tapi macam ambik kesempatan pulak. Cam tu macam tak elok lah. Jadi, kalau saya pergi disaster lain kali, saya kena beringatlah benda barang berharga (I: kita kena ambik extra precautious). Hurm.. itu aje la. Lepas tu pengalaman tidur apa semua tue, saya rasa saya tak kisah mana-mana sebab kita kena ada mentaliti kita tu dah tau tempat macam mana kan? Itu aje la.</td>
<td>pharmacists, with the doctors, different room, but at one night, the pharmacists lost his phone. So, we help other people and at the same time within the flood shelter, there was someone steal his phone, although we never think it might happen. We help each other. But that person took advantage during a disaster. It is not good. They take advantage during the event. Next time I will vigilant on my personal belonging, whenever to involve in disaster response. Hamm… that’s it. Then, my experience when to sleep and any other things, I don’t care much because we have set our mentality on how is the situation during a disaster. That’s all.</td>
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<td>I Kita dah hampir ke hujung perbualan kita. So, ada tak apa-apa yang</td>
<td>We are now towards the end of our conversation. So, are there anything that you (Sabrina) think it might be important to consider</td>
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<td>Sabrina rasa benda ni sesuatu yang penting yang perlu diambil kira oleh</td>
<td>by the nurse or the authorities who involved nurses in this disaster response? Do you think something should be told? Or could be</td>
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<td>jururawat sendiri ataupun oleh pihak-pihak yang berkenaan yang melibatkan</td>
<td>suggested and recommended by the authorities, in particular, the Ministry of Health.</td>
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<td>jururawat dalam disaster respon. Ada tak yang hendak diberitahu? Atau</td>
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<td>pun perlu diberi apa ni, diberi suggestion atau recommendation kepada</td>
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<td>pihak-pihak berkenaan especially Ministry of Health.</td>
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<td>00:50:51</td>
<td>R Saya ambil peluang ni untuk saya memohonlah kepada mana-mana jawatan</td>
<td>I take this opportunity to demand any respective person. These nurses could be exposed to any disciplines, expand it. We could</td>
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<td>yang bertanggungjawablah. Macam jururawat ni boleh expose, boleh ke</td>
<td>make them respond to the cases, could treat a patient at home. In any circumstances, we are a capable person, I want it to be like that.</td>
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<td>bidang yang lebih luas lagi. Kita buat jururawat ni boleh respon kes, boleh</td>
<td>There are training, not merely like this, the nurse becomes the third person after the doctors, after the MAs then the nurses.</td>
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<td>treat patient dekat rumah. Macam mana keadaan sekalipun, kita, kita serba</td>
<td>Sometimes, people not even realised the existence of nurses around. I want nurses who side by side with the doctors then the MAs</td>
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<td>boleh, saya nak macam tu la. Ada latihan, bukan setakat macam, nurse ni</td>
<td>(laughing). I want it because nurses are known worldwide. MAs are just MAs, but nurses are known worldwide. So, I want this big</td>
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<td>orang yang ketiga selepas doktor, lepas MA baru nurse. Kadang-kadang tak</td>
<td>name, as huge as their responsibilities, the advantages in caring (profession). Not merely in the hospital but wherever they are.</td>
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<td>nampak pun nurse, nampak MA. Saya nak nurse ni sebelah doktor baru</td>
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<td>nampak MA (ketawa). Saya nak sebab kita sampai dunia luar. MA setakat</td>
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<td>MA, macam nurse ni satu dunia kenal nurse. Jadi saya nak nama besar ni</td>
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<td>pun, besar juga lah tanggungjawab dia, besar juga dia punya kelebihan dia</td>
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<td>dalam perawatan. (I: Bukan di hospital saja) Bukan setakat hospital saja,</td>
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<td>mana-mana pun boleh.</td>
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<td></td>
<td>I Ada tak pendapat atau pandangan Sabrina yang nak dikongsikan berkaitan</td>
<td>Do you have any opinions or views that you want to share with us about the training provided by the hospitals or the Ministry of Health?</td>
</tr>
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<td></td>
<td>dengan latihan yang ada dianjurkan sekarang ni oleh pihak hospital atau</td>
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<td></td>
<td>pihak kementerian kesihatan?</td>
<td></td>
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<tr>
<td>00:52:36</td>
<td>R Saya rasa kena lebih banyak lagi buat pendedahan tentang disaster</td>
<td>I think we need to enhance and expose nurses, but we need to collaborate with the doctors, being a team dan work together. After</td>
</tr>
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<td></td>
<td>untuk nurse-nurse, tapi dia kena berkumpulalahan, dengan ada doktornya,</td>
<td>that, involved many cases, such as first responder, working out-of-hospital. But, don’t forget about our core duties in the wards.</td>
</tr>
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<td></td>
<td>dengan, jadi satu pasukan dan kita bekerjasama. Lepas tu involve banyak</td>
<td>Don’t merely doing outside duties whereas we neglect our duties in the wards. Ah… must be balanced. That’s it.</td>
</tr>
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<td></td>
<td>kes, first responder macam mana, kena kerja luar.Tapi jangan lupa kerja</td>
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<td></td>
<td>hakiki kita kat dalam wad. Jangan kita suka kat luar aje, kat dalam wad</td>
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<tr>
<td></td>
<td>kita macam tak nak pulak. Ah... balancekan. Tu aje lah.</td>
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<td>ENGLISH</td>
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<tr>
<td>00:54:02</td>
<td>Okay, ada apa-apa informasi ataupun pendapat lain yang Sabrina hendak</td>
<td>Okay, are there any other information or opinions that you want to</td>
</tr>
<tr>
<td></td>
<td>kongsi lain daripada yang telah diceritakan berkaitan dengan</td>
<td>share other than what have been told about your experience, your</td>
</tr>
<tr>
<td></td>
<td>pengalaman Sabrina, pandangan Sabrina berkaitan dengan penglibatan</td>
<td>views on nurses’ involvement. In regards to the nurses’ exposure on</td>
</tr>
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<td></td>
<td>jururawat. Berkaitan dengan pendedahan dengan disaster management,</td>
<td>disaster management and nurses’ involvement in all the training. Do</td>
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<td></td>
<td>dan penglibatan jururawat dalam latihan semua. Ada tak Sabrina ingin</td>
<td>you want to share or give opinions other than what have been</td>
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<td></td>
<td>ceritakan atau pun bagi pandangan selain daripada apa yang Sabrina</td>
<td>shared?</td>
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<td></td>
<td>bagitau sebentar tadi.</td>
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<tr>
<td>00:54:02</td>
<td>Saya kalau boleh nak nurse ni berpengetahuan, dah improve la dari segi</td>
<td>If possible, I want nurses have knowledge, improve their duties,</td>
</tr>
<tr>
<td></td>
<td>tugas, dari segi education dia. Sampai bila kita nak macam duduk takuk</td>
<td>from the education aspect. Until when should we be like this. We</td>
</tr>
<tr>
<td></td>
<td>lama. Kita kena buat bidang baru, terutamanya jabatan kecemasan lah.</td>
<td>have to create new fields, in particular, the emergency department.</td>
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<tr>
<td></td>
<td>Pastu kita punya tip top, kita punya management dalam trauma, apa-apa</td>
<td>Then, we should tip-top on our management in trauma, whatever it</td>
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<td></td>
<td>pun nurse ni serba boleh la. Saya nak yang macam tu.</td>
<td>is, the nurse should be capable. I just want that way.</td>
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<tr>
<td>00:56:15</td>
<td>Okay, saya rasa setakat ni dan banyak informasi yang Sabrina telah</td>
<td>Okay. I think we should end here and there was a lot of information</td>
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<tr>
<td></td>
<td>kongsikan berkaitan dengan pengalaman Sabrina sendiri dan pandangan</td>
<td>have been shared including your views on the disaster, disaster</td>
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<td></td>
<td>Sabrina berkaitan semua; disaster management, disaster respon. Saya rasa</td>
<td>management and disaster response. I feel honour because you have</td>
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<td></td>
<td>berbesar hati kerana Sabrina dapat berkongsi semua pengalaman tu dan</td>
<td>shared that information and your views, which not merely to us but</td>
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<td></td>
<td>pandangan yang kita bukan sahaja kita boleh gunakan. Mungkin Sabrina</td>
<td>to other nurses as well. You might get such priceless experiences but</td>
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<td></td>
<td>memperolehi pengalaman yang tak ternilai tapi bila Sabrina kongsikan dalam</td>
<td>if you share it for the study, we might forward the information to the</td>
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<td></td>
<td>kajian yang akan saya jalankan ini, so kita akan panjangkan atau pun kita akan</td>
<td>authorities and to the nurses themselves. So, this information not</td>
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<td></td>
<td>usulkan pada pihak-pihak yang berkaitan atau dengan jururawat sendiri.</td>
<td>merely for you but to those who never been involved in the disaster.</td>
</tr>
<tr>
<td></td>
<td>So, benda ni bukan sahaja berguna untuk Sabrina tapi untuk jururawat2 yang lain</td>
<td>So, I am delighted and would like to thank you for willing to sharing</td>
</tr>
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<td></td>
<td>yang tak pernah lagi terlibat dalam bencana. So, saya rasa berbesar hati</td>
<td>these experiences. Okay, before I end up our conversation, you may</td>
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<td></td>
<td>sangat dan terima kasih yang tak terhingga pada Sabrina kerana sudi</td>
<td>have something to say which could inspire nurses and to guide them</td>
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<tr>
<td></td>
<td>berkongsii pengalaman ini. Okey, sebelum saya akhir perbuatan kita,</td>
<td>as well.</td>
</tr>
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<td></td>
<td>mungkin Sabrina ada kata-kata yang boleh mungkin memberi panduan dan</td>
<td></td>
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<td></td>
<td>membakar semangat jururawat.</td>
<td></td>
</tr>
<tr>
<td>00:56:15</td>
<td>Sama-sama. Terima kasih pada kak Ain yang sudi datang dan sudi</td>
<td>Thanks to you for coming and willing to listen to the experience that</td>
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<td></td>
<td>mendengar pengalaman saya ni sebab makin lama makin okay saya pun dah</td>
<td>slowly fading away. But, when you came here, I gladly to recall</td>
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<tr>
<td>TIME</td>
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<tr>
<td>00:57:03</td>
<td>tak berapa ingat. Tapi kak Ain datang ni saya recall balik apa-apa lepas tu saya rasa macam seronok dan saya macam, dengan adanya kak Ain ni saya nak, nak saya boleh bersuara, staffnurse ni macam nak boleh pergi jauh lagi. Tak nak la kita ditukuk ni lagi. Okay, itu je.</td>
<td>those experience and feel pleasure to share with you and others. With you here, I could vocalise that nurses could be ahead forward from what we are now. I do not want we keep ourselves status quo. Okay, that is all.</td>
</tr>
<tr>
<td>I</td>
<td>Okay, terima kasih Sabrina.</td>
<td>Okay, thank you, Sabrina.</td>
</tr>
<tr>
<td>00:57:03</td>
<td>End of session</td>
<td>End of session.</td>
</tr>
</tbody>
</table>
Example of initial coding

dapatkan pengalaman **macam mana orang berada di tempat yang kita dok dengar aja**, dengar
daripada berita, dengar daripada radio, tengok daripada berita, pastu saya rasa nak pergi ke
tempat tu sebab mula-mula memang diarahkan ke Kuala Krai, jadi macam kita nak tahu
perkara sebenar benar ke kita tengok dalam whatsapp, dalam FB.

[00:07:43] I: Ok. Dan, sebelum ni pernah tak Sabrina macam, familiar dengan disaster response
itu sendiri. Maksud saya bukan dari segi pengalaman tapi berkaitan dengan disaster response,

[00:08:08] R: **Hummm, pasal disaster, saya tal pernah alami yang real ni, cuma disaster training**
apa semua itu je lah. Aaa... Itu je lah. Hummm. Saya tal pernah terlibat.

[00:08:23] I: Ok. Sabrina tal pernah terlibat dalam disaster response tapi Sabrina pernah dalam
latihanlah. Training. So, apa bentuk latihan yang Sabrina ikuti?

[00:08:36] R: **Saya pernah pergi ke disaster management [training] dekat Nilai, Negeri Sembilan. Dalam posbusik pun di train juga� disaster** Ahh... bomba, ahh... dekat Kuantan
rasanya kita ada buat disaster gak... Apa nama dia gak? [I prompt the answer, drill] Ahh... drill, disaster drill, tak ingat... (She was laughing).

[00:09:08] I: Okey takpe. Mungkin nanti kemudian Sabrina akan ingat. Berkaitan dengan
disaster management yang di Nilai tadi, boleh, di Nilai, Serebangan, Negeri Sembilan, betulkan?
Boleh tak ceritakan bentuk latihan yang [diskutii], adakah daripada segi syarahron, ataupun ada
praktikal?

[00:09:33] R. Okey. Dia ada, dia bagi... (apa nie kah Ain-she asked me and showed the
desktop), (I prompt the answer of lecture), ahh... lecture, tabletop, dengan art... training,
training ke tempat kerjadian.
semasa kejadian dispar yang sebenar apabila Sabrina respon pada bencana yang sebenar di
Temerloh?
[00:11:52] R: Hummm... Saya rasa ada. Dia mengambil kira robani kitaapun, aam... kita punya
mentaliti kita, pastu apa-apa je dalam dispar tu apa yang ada je, kita kena provide pasti

semasa pengetahan kita, jadi yang kita perlu manage pasokan yang datang macam-macam
masa pun pastu kita kena faham apa yang, apa macam kahandak kita. Kahandak kita perlu
makan, kita perlu elimini, kita perlu pakai... aam... mana-mana yang... macam mana ya saya
nak cakap, banding tu mana yang boleh je waktu dispersi Kita tak boleh nak skir-skir apa
semua, makan apa semua, tak masalah. Itu yang mana boleh je. Pastu waktu dispersi dekat
Temerloh, saya sudah brah ED, ambulans call, saya respon ke aam... yang terdekat, lepas tu saya
tengok sendiri rumah rumah yang tenggelam, pergi suka boleh, pastu makick-makick yang kita
hamodalisis yang bermasalah jahab dia kana cuci darah dia. Pastu kana ambik patient tu,
kena ferment bot, nak hilih hum... banyak la... banyak... Macam kedai pun dekat hospital, kat
dalam hospital tu, hospital mart tu, waktu saya sampai semua orang huru-hara, beli-belii makanan
apa sampai kosong keda. Lepas tu kami tu tidak penempat, kami hanya tidur di
auditorium, dibagi sejaddah dengan blanket je, tidur kat situ, mandi dekat toilet auditorium,
mandi dekat toilet bowl apa semua tu, kat situ, semur baju pun kat situ. Saya duduk selama

10 hari di sama sampai stand down, baru saya balik. Lepas tu saya hari hari saya duduk di
MECC saya tengok staffhouse, kena orang yang tak boleh datang kenja darah orang. Yang mana
yang bawak duduk dekat ED, dia bawak dekat ward, makananya dia cover balik staffhouse yang
iai datang datang. Jadi pun cang pakai baju apa-ap aje lah, baju T-shirt je, baju uniform
yang tak bergosok apa semula. Pastu makan makanan massa sampai x cukup, yang masaki
[makannya tersebut] HO, itu pun basat-basat (kia was laughing), makan, semua orang
berculik banyak dekat hospital. Kat luar perkaraan kawasan hospital Temerloh tu dia
pasang kemasah, kemasah, kemasah untuk mangsa-mangi mangsa. Yang last adalah saya
ditempaliskan di penempatkan bazar di sekolah menengah mentakab. Kat situ saya duduk 1 hari.
Banyak bantuan, nampak orang-orang bawat datang apa semua bawat toto, macam-macam.
Dengan Dr. Abu Hassan pun datang. Saya duduk klinik, saya bermasalah di klinik. Klinik tu
macam pajarah dalam sekolah tu je tapi kami set up sebagai klinik dengan farmasi dengan
kami pakai klinik 24 jam...]

[00:15:39] I: Wow... okey. Ada apa-apa lagi Sabrina nak share, nak kongkakan pengalaman?

R: Okey. Saya akan menceritakan (she was laughing). Nanti saya ada idea saya akan masuk-
masukkan.
R: Okey. Saya akan menceritakan (she was laughing). Nanti saya ada idea saya akan masuk-masukkan.

I: Okey... Tadi Sabrina menceritakan berkenaan pengalaman Sabrina semasa tiba di kawasan banjir, di auditorium hospital tadi dan bagaimana kesadaran Sabrina dan pasukannya yang lain, ahli-ahli dalam pasukan yang sama dengan Sabrina. Dan pada situ, adalah Sabrina rasa Sabrina memenuhi tanggungjawab sebagai jururawat semasa memberikan khidmat pada mangsa-mangsa banjir tu?

[00:16:46] I: Saya rasa bidang kejururawatan ini buas. Mana-mana pun kita boleh berang susah.

Kita punya sokongan semasa kita dari duh dari kolej sampai sekarang. Kita kena faham macam mana pesakit, apa kompen dia kita. Jawatan mengikut apa yang dia kompen. Saya rasa itu pengalaman yang, pengalaman dalam kejururawatan ni macam, sangat berharga kalau

disaster ni. Saya rasa tak semua stafnurse dapat peluang ni kecuali stafnurse di emergency department.

I: Haah... Okey. Apa pandap bercakap dengan penglibatan jururawat dalam bancana?

[00:17:48] R: Sangat-sangat bagus. Saya rasa kita boleh luaskan lagi benda ini. Kita boleh involvakan lagi jururawat-jururawat dalam management, dalam disaster management maksud saya. Suatu, itu suatu apa cakap, benda ni macam sangat... oooh macam saya rasa sangat berharga sangat pengalaman. Saya tahu dapat pengalaman macam ni. Kalau macam dipanggil untuk respon ke mana-mana,

I: So, adakah Sabrina akan pergi kalau...

R: Oh sudah tentu (she was answering enthusiastically). Saya sangat berminat.

I: Ha! Okey... bagus Sabrina. Okey, Sabrina ada bagian yang berkaitan dengan penglibatan jururawat, perlu dalam disaster management. So, dari segi apa jururawat tu perlu? Adakah dari segi respon saja?


I: Penglibatan jururawat, bagi pandap Sabrina dari segi respon. Bagaimana sebelum kejadian disaster?
Example of focused coding
Postgraduate Community

*Mised involvement*

- Involvement of nurses
- Involvement of nurses in the acute care team
- Show the story of a nurse

*Great opportunity*

- Experience for a new role
- PItC is very helpful for learning to communicate
- Getting to work with passionate people
- Fear of extra shifts

Postgraduate Community

*Advantages as an Emergency Nurse*

- Enjoys being in the fast-paced PItC
- Encourages ENs to move on PItC

ENs are active & autonomous
FIRST RESPONDENT.

1. SUPPORT SYSTEM
2. ADAPTABLE TO THE LIMITED RESOURCES
3. WORK COLLABORATION
4. NURSES OPPORTUNITIES
5. TRAINING
6. KNOWLEDGE & SKILLS APPLICATION
7. NURSES INVOLVEMENT
8. ADVANTAGES OF EMERGENCY NURSE
9. PREPARATION
10. TREATMENT PROVISION

11. ABOUT DISASTER
12. NURSES' CHARACTERISTICS
13. NURSES' ATTITUDE
14. CHALLENGES
15. OVERCOME NEGATIVE THOUGHTS
16. MISCELLANEOUS

12/4/2018
CODING SUMMARY

1. PRE-DISASTER
1.1 RELATED TO NURSES

1.1.1 Being involved
1.1.2 Feeling frustrated
1.1.3 Being prepared
1.1.4 Feeling enthusiastic
1.1.5 Being a nurse
1.1.6 Fulfilling responsibilities
1.1.7 Being curious
1.1.8 Being aspirational
1.1.9 Being exposed
1.1.10 Integrating core components
1.1.11 Being empathetic
1.1.12 Identifying shortfalls

2. DURING AND POST DISASTER

2.1 RELATED TO VICTIMS
2.1.1 Rendering assistance
2.1.2 Managing victims
2.1.3 Being empathetic
2.1.4 Being compassionate
2.1.5 Being helpful
2.1.6 Feeling thankful
2.1.7 Devoting God

2.2 RELATED TO NURSES
2.2.1 Gaining experiences
2.2.2 Feeling frustrated
2.2.3 Being exposed
2.2.4 Being involved
2.2.5 Experiencing drawbacks
2.2.6 Fulfilling responsibilities
2.2.7 Receiving support
2.2.8 Establishing network
2.2.9 Having advantage
2.2.10 Feeling enthusiastic
2.2.11 Learning new things
2.2.12 Involving others
2.2.13 Being a nurse
2.2.14 Being attentive
2.2.15 Diverting inconvenience
2.2.16 Portraying personal value
INITIAL CODING

1.1.1 Being instructed to be involved in disaster response (2)
1.1.2 Facing problem due to weather unpermitted prior to deployment (2)
1.1.2 Feeling frustrated on unforeseen circumstances about the weather
1.1.3 Attending pre-deployment briefing (3)
1.1.4 Feeling excited for being chosen in the team (3)
1.1.5 Facing challenges as a nurse (3)
1.1.6 Holding responsibilities as a nurse (3)
1.1.5 Having a long service as a nurse (3)
1.1.3 Feeling the necessity to have experience in disaster (3)
1.1.4 Feeling excited for the chance to be involved (3)
1.1.7 Feeling inquisitive to know about situation during disaster (3)
1.1.8 Feeling desire to gain experience in disaster situation (3)
1.1.7 Hoping to confirm about the news that is spreading in mass media (3)

1.1.1 Feeling frustrated on unforeseen circumstances about the weather

2.1.3 Feeling the need to assist people affected (3)
2.1.2 Managing victims accordingly (5)
2.1.3 Being empathetic on their situation (5)
2.1.4 Understanding the needs of people affected (5)
2.1.4 Concerning on ADLs of victims (5)
2.1.2 Handling victims with medical condition - treatment provision (5)
2.1.2 Treating the victims accordingly
2.1.5 Feeling intended to helping people affected (7)
2.1.3 Being empathetic for the victim’s loss (7)
2.1.4 Being concerned with people affected (7)
2.1.1 Providing emotional support to people affected (7)
2.1.4 Understanding people affected by disaster (8)
2.1.4 Being sensitive to the needs of people affected (8)

2.2.1 Getting experiences in disaster response (3)
2.2.2 Feeling frustrated on no involvement in disaster (4)
2.2.3 Getting exposure on disaster response (4)
2.2.4 Realising the importance of nurses’ involvement during disaster (11)
2.2.5 Managing disaster within own capabilities (4)
2.2.5 Being restricted to perform during disaster (5)
2.2.5 Having limitation thinking about basic needs requirement (5)
2.2.5 Experiencing the impact of disaster on the community (5)
2.2.5 Having improper placement and limited basic needs (5)
2.2.5 Being incapable to come for work and helping others (5)
2.2.6 Upholding others’ duties that unable to come (5)
2.2.5 Being limited to wearing cloth (wear whatever available) (5)
2.2.5 Facing inadequate of food supply (5)
1.1.3 Attending disaster training organised by other agencies (4)
1.1.3 Attending disaster training organised by other agencies (4)
1.1.1 Being involved in various training methods (4)
1.1.9 Being exposed to disaster simulation training (4)
1.1.10 Informing on involvement of spirituality within training (4)
1.1.10 Concerning on spiritual and mentality (4)
1.1.9 Being exposed on emotional support endlessness since nursing school (5)
1.1.11 Being empathetic on the needs (5)
1.1.8 Expanding nurses’ roles in disaster management (6)
1.1.3 Realising the importance of nurses being prepared; physically and mentally (6)
1.1.3 Being prepared with the knowledge about disaster impact (6)
1.1.1 Realising the necessity of nurses to be involved in disaster (6)
1.1.9 Feeling the necessity for nurses need to be exposed (7)

2.1.4 Being an active listener (8)
2.1.1 Providing emotional support to people affected (8)
2.1.1 Providing emotional support to people affected (8)
2.1.1 Providing counselling to victims and HCPs (9)
2.1.3 Feeling sorrow for their loss (9)
2.1.6 Feeling thankful for no fatality (9)
2.1.3 Feeling empathetic to people affected (9)
2.1.4 Understanding their sorrows (9)
2.1.4 Understanding their sorrows (9)
2.1.6 Feeling appreciated to be at disaster area (9)
2.1.4 Understanding the meaning of life (9)
2.1.7 Admitting that everything happened with God wills
2.1.3 Being empathetic on people’s situation (10)
2.1.4 Feeling sensitive to surrounding (9)
2.1.4 Understanding their sorrows (9)
2.1.6 Feeling appreciated to be at disaster area (9)
2.1.4 Understanding the meaning of life (9)
2.1.7 Admitting that everything happened with God wills
2.1.3 Being empathetic on people’s situation (10)

2.2.6 Setting up tents for shelter (5)
2.2.7 Getting assistance from higher authorities (5)
2.2.6 Setting up clinic within school compound (5)
2.2.8 Establishing teamwork with other professions (5)
2.2.9 Feeling the advantages of being a nurse (5)
2.2.9 Realising the importance of being a nurse (5)
2.2.1 Experiencing priceless moment (5)
2.2.5 Noticing on limited opportunity of the non-emergency nurse (6)
2.2.9 Having advantages as emergency nurse (6)
2.2.1 Having precious moment during disaster response (6)
2.2.10 Feeling enthusiastic for future disaster involvement (6)
2.2.11 Feeling that learning has taken place (6)
2.2.11 Learning new things in disaster (6)
27 1.1.3 Acting for real during training (7)
27 2.1.4 Knowing nothing about victim’s condition prior to disaster (10)
27 2.1.5 Intending to help people affected (10)
28 2.2.2 Feeling frustrated on the ordinary tasks carried out by the nurses (6)
28 2.2.11 Learning new things in disaster (7)
29 2.2.11 Experiencing rapid changes (7)
29 2.2.12 Feeling obliged to involve nurses other than emergency (7)
30 2.2.2 Feeling frustrated of the non-emergency nurses for being excluded (7)
30 2.2.12 Feeling the necessity to involve non-emergency nurses (7)
30 2.2.13 Demonstrating characteristics of a nurse (8)
30 2.2.6 Fulfilling duties as a nurse to help during disaster (8)
31 2.2.6 Playing effective roles as a nurse (8)
31 2.2.6 Applying nursing skills during disaster (8)
32 2.2.6 Performing task accordingly (8)
32 2.2.6 Initiating emergency procedure as necessary (8)
32 2.2.12 Having involvement of counsellor (9)
32 2.2.8 Working closely with another profession (9)
33 2.2.6 Demonstrating characteristics of a nurse (8)
33 2.2.6 Fulfilling duties as a nurses to help during disaster (8)
34 2.2.6 Playing effective roles as a nurses (8)
34 2.2.6 Applying nursing skills during disaster (8)
35 2.2.6 Performing task accordingly (8)
35 2.2.6 Initiating emergency procedure as necessary (8)
35 2.2.12 Having involvement of counsellor (9)
36 2.2.8 Working closely with another profession (9)
2.2.8 Establishing good networking (9)
2.2.9 Transforming to better attitude (9)
2.2.14 Being aware of surrounding (9)
2.2.9 Performing duties as being instructed earlier (10)
2.2.5 Lacking in utilisation of critical thinking (10)
2.2.11 Learning has taken place (10)
2.2.9 Developing maturity once involved in disaster (10)
2.2.7 Being called for assessment after a week back to work (10)
2.2.7 Being examined on post-traumatic symptoms (10)
2.2.5 Being vulnerable to surrounding (10)
2.2.9 Being thankful when none of them referred to the counsellor or psychologist (10)
2.2.15 Sharing experiences with friends (10)
2.2.15 Diverting memories by sharing with friends (10)
2.2.16 Having strong self-identity, integrity (10)
2.2.1 Accepting the experience differently during disaster (10)
Ensuring equal attention to in-hospital and out-of-hospital duties (13)
Encouraging on expansion of nursing field into disaster management (11)
Feeling of the wide-ranging of nursing field (5)

2.2.13 Rendering the best for psychological support (11)

2.2.13 Providing emotional support is nurses expertise (11)

2.2.9 Having advantage as an emergency nurse (11)

2.2.4 Realising the importance of nurses’ involvement during disaster (11)

2.2.3 Encouraging on exposure in basic management e.g.: PHC (11)

2.2.1 Participating in disaster as it gives different experience (11)

2.2.5 Experiencing gender discrimination since the male nurse are more actively involved in the field (11)

2.2.8 Working closely with other professions (11)

2.2.8 Relying on nurses to help doctors (11)

2.2.11 Exploring on new roles in pre-hospital care (11)

2.2.3 Being exposed to new role in communication (11)

2.2.11 Familiarising with new gadgets related to communication (12)

2.2.8 Involving other agencies during disaster (12)
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| 1.1.5 / 2.2.13 | Being a nurse  
Any information related to service and challenges in nursing | PRE | POST |
| 1.1.6 / 2.2.6 | Fulfilling responsibilities  
Related to responsibilities in handling cases and any matters | PRE | POST |
| 2.1.2 | Managing victims  
Providing care for victims | POST |
| 2.1.4 | Being compassionate  
Understand and concern about people's needs | POST |
| 2.1.5 | Being helpful  
Helping people affected | POST |
| 2.1.6 | Being patriotic  
Shaping patriotism towards the country | POST |
| 2.1.7 | Transferring knowledge  
Using knowledge and skills at disaster area | POST |
| 1.1.12 | Identifying shortfalls  
Flaws identified during disaster response | PRE | POST |
| 2.2.5 | Experiencing drawbacks  
Any drawbacks experienced by the nurses | PRE | POST |
| 2.1.1 | Lacking of urgency  
Urgency on providing services during emergency | PRE | POST |
| 2.1.2 | Being evacuated  
When danger approached, the nurses were pulled out from disaster scene | POST |
| 2.1.3 | Being disregarded  
Left out, abandon in regard to their needs | POST |
| 2.1.4 | Feeling threatened  
Facing danger when on scene | POST |
| 2.1.5 | Rendering assistance  
Provide goods, assist those people in needs | POST |
| 2.1.6 | Devoting God  
Put faith on God on everything happened | POST |
| 2.1.7 | Receiving support  
Get assistance and support from others; psychology, monetary | POST |
| 2.1.8 | Establishing network  
Develop network and working with others | POST |
| 2.2.11 | Involving others  
Involve non-emergency nurses and counsellor in the management | POST |
| 2.2.12 | Receiving support  
Get support and aid from others | POST |
| 2.2.13 | Establishing network  
Networking with different services such as factories, fire brigade, etc | POST |
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<td>Having advantage</td>
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<td>Learning new things</td>
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<td>Adapting to circumstances</td>
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<td>Being curious</td>
<td>Wish to know about the disaster</td>
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<td>Being aspirational</td>
<td>Desire to know about the situation and action should be taken</td>
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<td>Being empathetic</td>
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<td>2.2.14</td>
<td>Being attentive</td>
<td>Aware of surrounding</td>
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Diverting inconvenience

<p>| Feeling fatigue | Divert any awful situation |
| Motivation to be involved |
| Confidence in performing task and deployed to disaster area |
| Scared if something bad might happened |
| They were away for at least 2 weeks so they miss their families |
| Support from family members |
| Training related to disaster |
| Assistance from other units/hospitals |
| Facilities required such as accommodation, equipment and etc |
| Nurses requirement on task to be carried out |
| Providing information |
| Organising training |
| Arranging assistance |
| Supplying facilities |
| Concerning requirement |
| Devoting God |
| Integrating religious practices |
| Performing spiritual activities |
| Relying on God |</p>
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### Criteria for social justice inquiry

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| 1. Credibility | Has the researcher achieved intimate familiarity with the setting or topic?  
Are the data sufficient to merit the researcher’s claims?  
Consider the range, number and depth of observations contained in the data.  
Has the researcher made systematic comparisons between observations and between categories?  
Do the categories cover a wide range of empirical observations?  
Are there strong logical links between the gathered data and the researcher’s argument and analysis?  
Has the researcher provided enough evidence for his and her claims to allow the reader to form an independent assessment—and agree with the researcher’s claims? |
| 2. Originality | Are the categories fresh? Do they offer new insights?  
Does the analysis provide a new conceptual rendering of the data?  
What is the social and theoretical significance of the work?  
How does the work challenge, extend or refine current ideas, concepts and practices? |
| 3. Resonance | Do the categories portray the fullness of the studied experience?  
Has the researcher revealed liminal and taken-for-granted meanings?  
Has the researcher drawn links between larger collectivities and individual lives, when the data co indicate?  
Do the analytic interpretation make sense to members and offer them deeper insights about their lives and worlds? |
| 4. Usefulness | Does the analysis offer interpretations that people can use in their everyday worlds?  
Do the analytic categories speak to generic processes?  
Have these generic processes been examined for hidden social justice implications?  
Can the analysis spark further research in other substantive areas?  
How does the work contribute to making a better society? |

Excerpt from Charmaz (2005, p.528)