HEALTH INEQUALITIES AND THE ARTICULATION OF GENDER, ETHNICITY AND
CLASS IN THE POST PARTUM HEALTH CARE OF NEGEV BEDOUIN

ARAB MOTHERS AND THEIR CHILDREN

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MARCH 1988
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ACKNOWLEDGEMENTS

There are many whom I need to acknowledge. First and foremost are the Negev Bedouin Arab women who participated in this study. I would also like to thank the interviewers and colleagues on the infant feeding study team, for their help in data collection and analysis.

In particular I owe a great deal to Professor L. Naggan and Dr. M. Forman for their encouragement, help and friendship and to Dr. B. Sarov for her work in cleaning the data set. There are some members of the Department of Sociology at Warwick who have been supportive during the period of analysis to whom I also extend my thanks. In particular I would like to thank Dr A. Phizacklea.

DECLARATION

I declare that the material in this thesis has been collected either by myself in fieldwork, or by interviewers in the infant feeding study team. I wrote the questionnaires together with Dr. M. Forman, trained and supervised the interviewers and analysed the statistical data with Dr. M. Forman. A few of the tables in this thesis are prepared for publication in the form of articles but as yet have not been published.
HEALTH INEQUALITIES AND THE ARTICULATION OF GENDER, ETHNICITY AND CLASS IN THE POST PARTUM HEALTH CARE OF NEGEV BEDOUIN ARAB MOTHERS AND CHILDREN

ABSTRACT

This thesis is a contribution to the literature and debate on health inequalities and in particular on health care delivery to ethnic minority women and children. Its argument is that when discussing the causes of health inequalities of ethnic minorities, a perspective which focuses solely on the gender, ethnicity, or class of the ethnic minority is inadequate. It is argued that health outcomes, service delivery and experience of patients is shaped by the way gender, ethnicity and class intermesh. The specific context of the research is the organisation, delivery and experience of formal and informal health care to Negev Bedouin Arab mothers and their infants during and after childbirth in hospital and during the first two months post partum.

Methodologically a combination of qualitative and quantitative data have been collected over a period of four years. The quantitative data are from an epidemiological infant feeding study which was carried out from 1981-83 and which the researcher coordinated. A subsample of 412 women and their infants in this study were interviewed after delivery, during their stay in hospital and subsequently at home between 40-50 days after birth. The qualitative data was gathered in 1984 by observation and unstructured interviewing with Bedouin Arab women both in the hospital setting and in two sub tribes, one of which was living in a neighbourhood of a planned urban settlement and the other was living in an encampment. The mothers and grandmothers interviewed during the fieldwork were women known to the researcher from fieldwork undertaken 12 years previously in the Negev. This thesis explores the way in which the quantitative and qualitative data complement each other.

In Part One there are three introductory chapters. Chapter 1 explores the literature on gender, ethnicity and class relations both in general and in relation to health inequalities. Chapter 2 sets out the gender, ethnicity and class relations of Negev Bedouin Arab society and Israeli society in general and in the delivery of health care. Chapter 3 sets out the methodology both theoretically and empirically. Part Two is comprised of Chapters 4 and 5 which deal with hospital care to mothers and infants at childbirth and post partum. Part Three focuses on the informal health care setting of the home. Chapter 6 deals with the care given to mothers in the home during the first 40 days. Chapters 7 and 8 explore the health of the infants in terms of their growth and development and how this is related to mother's infant feeding options and their socio economic environment. The way in which gender, ethnicity and class relations intermesh in Israeli and Bedouin Arab society influences both the living conditions and the health outcomes of the infants. Chapter 9 sets out the conclusions which are subdivided into those which are pertinent to the theoretical debate on gender, ethnicity and class relations and health inequalities, those which are methodological, and those which are pertinent to enhancing health service delivery in this setting.
PART ONE - THE THEORETICAL ETHNOGRAPHIC AND METHODOLOGICAL SETTING

CHAPTER 1 GENDER, CLASS AND ETHNICITY IN THE LITERATURE AND IN RELATION TO HEALTH INEQUALITIES

This thesis is a contribution to the literature and debate on the factors and processes affecting health in society. These have been called 'health inequalities' (Townsend & Davidson 1982), and 'the patterning of health by social position' (Macintyre 1986). The particular society under study is Israeli in which the Negev Bedouin Arabs form the main focus. This thesis focuses on the way in which gender, ethnicity and class relations, articulate in the area of childbirth and post partum care of Negev Bedouin Arab mothers and children in Israel. The perspective is that an approach to health inequalities that emphasises only gender or ethnicity or class relations is inadequate, for in all societies these three dimensions articulate together in a variety of ways. The patterns caused by the intermeshing of gender, ethnic and class relations within each society, may be viewed as a lightbeams passing through a three dimensional prism.

Part One of the thesis presents the theoretical ethnographic and methodological background of the research. Chapter 1 reviews the literature on gender, ethnicity and class orders in general and then in relation to the literature on health inequalities in particular. Chapter 2 outlines the position of Negev Bedouin Arabs
in Israel and the organisation of health care and Chapter 3 discusses the methodology used in this research study.

This chapter will discuss the way gender, class and ethnicity will be defined and used throughout the thesis with reference to both sociological and anthropological literature. It will also outline the way in which these three dimensions have been considered in the literature on health inequalities.

REVIEW OF LITERATURE ON GENDER RELATIONS -

Gender relations are the way in which social roles and relations of men and women are socially patterned and culturally evaluated. During the last twenty years, the nature, pattern and causes of gender relations has been a major issue which has influenced the development of sociological theory, and led to a re-evaluation of past sociological theory, some of which took the almost universal subordination of women and differential cultural evaluation of men's and women's roles for granted. In the field of anthropology, collections of articles such as those edited by Rosaldo and Lamphere (1974) challenged the traditional assumptions about gender relations and similarly in the field of sociological theory the volume of articles such as edited by Kuhn and Wolpe (1978) reviewed gender relations and Marxist theory. These books are only two examples of a large range of works which use a variety of perspectives in their analysis of gender relations.
In analysing the gender relations of the society in question, certain approaches within this literature, are of particular relevance to this research study. These useful approaches will be outlined here and their relevance to the particular perspective and setting of this thesis clarified both here and in Chapter 2.

THE SPHERES OF REPRODUCTION AND PRODUCTION

There is a general view that gender relations are embedded in relations of production and reproduction in a society, and the sexual division of labour in these spheres. Women are always the biological reproducers and as such are seen as closer to nature (Ortner 73:1974), but their role in production varies from society to society. Young, Wolkovitz and McCullagh explain in the introduction to their book 'Of Marriage and the Market'(viii:1981), that their concern is with the different forms of social relations of gender in different historical periods and socio economic formations. They examine the way in which asymmetrical gender relations articulate with different forms of economic organisation.

This view of gender relations articulating with different forms of economic organisation is useful to this research study. Empirically the subject of this thesis - Maternal and Child Health Care amongst Negev Bedouin Arabs in Israel - deals with gender relations within Bedouin Arab society and Israeli society in the spheres of reproduction and production. It looks at the way in which the transition from subsistence semi nomadism in Palestine to wage
labour in industrial Israel has altered gender relations, and it also analyses gender relations in the organisation of social reproduction. The subject matter is the sphere of reproduction against the backdrop of the sphere of production.

Two approaches which are particularly useful to this research study, are firstly the literature which looks at patriarchy and its link to the economic system, and the literature which focuses on the division of labour in the domestic and public sphere. These will be examined in turn and further discussed in relation to the particular setting in Chapter 2.

PATRIARCHY

Patriarchy has been defined in various ways. As Beechey (66:1980) points out, it can be used to describe male domination generally, or more specifically in the context of either relations of reproduction, or in connection with the relative subordination of women within production. She outlines how materialist feminism focuses on two modes of production, the industrial and the domestic and how patriarchy operates within both and is affected by capitalism. Beechey maintains that:

'while the economic organization of society may change, patriarchy which is located in the social relation of reproduction, provides a system of hierachial ordering and control which has been used in various forms of social organization, among them capitalism'(77:1980)
This view that patriarchy exists in various forms both within the relations of reproduction and production is expressed by other writers such as McDonough and Harrison (1978), Hartman (1979), and McIntosh (1981). Hartman writes that:

'it is necessary to place all of women's work in its social and historical context, not to focus only on reproduction.' (9:1979)

The view of patriarchy taken here is that it is a form of male domination which occurs in the spheres of reproduction and production. It is, as McDonough and Harrison write:

'a dual notion of patriarchy as first the control of women's fertility and sexuality and second the economic subordination of women through the sexual division of labour and property' (40:1978).

The economic organisation of Negev Bedouin Arab society has changed yet patriarchy continues in both the spheres of production and reproduction. Fertility continues to be controlled by the men in women's families who arrange marriages for their daughters and sisters. The men who used to own the flocks and land now own the trucks and houses and are able to earn money which they dispense to their women. The patriarchal control of women's fertility is explored further in Chapter 2.
It must also be added that patriarchy involves the domination of young men by older men too. Negev Bedouin Arab society is patriarchal and patrilineal. The transition from semi-nomadism to settlement has weakened the way in which fathers can dominate sons economically for the sons, instead of maintaining the family land and herd, work in wage labour and have some measure of economic independence. The Israeli State has also given Bedouin Arab women some economic independence through its system of Child Benefit to all mothers. However, other aspects of patriarchy such as arranged marriages and patrilocal sub tribal residence patterns continue.

THE SEXUAL DIVISION OF LABOUR IN THE DOMESTIC & PUBLIC DOMAINS

A particularly useful perspective for this research is that which focuses on the sexual division of labour. The pattern of the sexual division of labour varies according to the socio economic form of a society, but in all societies there is a domestic sphere and a non domestic sphere. The degree of separation between them, and the extent to which labour is differentiated, varies. There is a consensus amongst sociologists that capitalism and industrialisation result in an increased division between the sphere of reproduction/production, the domestic/non domestic.(Stacey and Price 1981, Mcintosh 1981,). Some sociologists writing from a feminist perspective, have been concerned that the division of labour in the marketplace has had more
attention in the development of sociological theory, than the area of the division of labour in the domestic sphere. Stacey summarises these concerns as follows:

'There appear to be two separate accounts of the division of labour: one that it all began with Adam Smith and the other that it began with Adam and Eve. The first has to do with production and the social control of workers and the second with reproduction and the social control of women. The problem is that the two accounts have never been reconciled. Indeed it is only as a result of the urgent insistence of feminists that the problematic nature of the social order related to reproduction has been recognised. (1983:172)

The division of labour is a useful concept for analysing the way in which gender and class relations are articulated in the spheres of reproduction and production. This piece of research is concerned with the articulation between reproduction and production, and with the way in which domestic and non domestic activities and concerns are linked. This is an approach adopted by Bujra:

'According to my position, to have any explanatory value, what must be investigated is the relationship, the character of articulation, between domestic and non domestic spheres of action. Domestic labour in some form or other, is universal, but takes on differing significance in contrasting modes of production.' (Bujra 21-22:1978)
Another approach to the division of labour is the public/private perspective. This has been used by sociologists and anthropologists, both cross culturally and in relation to Western societies. The public and the private dichotomy has been used lately as a general perspective for viewing gender relations. Gamarnikov (1983) writes in her introduction to a collection of articles using this approach:

'The public/private split is a metaphor for the social patterning of gender, a description of sociological practice, a category grounded in experience. As a model, it directs us to the structure of gender relations as expressed in institutional, spatial, symbolic and controlling mechanisms. Clearly, gender is mapped onto and across the divide.'

(1983:5-6)

In the field of social anthropology, much of the literature on Muslim women in semi nomadic and village life refers to a private sphere of activities for women, and a public one for men. Most studies of nomadic societies until the 1970s were undertaken by male anthropologists, whose primary focus was tribal organisation and structure (Cunnison 1966, Asad 1970, Barth 1961, Marx 1967). They promote a broadly similar view of the role of nomadic women, agreeing that women have control of activities in the domestic sphere of the home, and that they have no formal political role in their societies (Marx 1967:185, Cunnison 1966:116,). Women are also seen to have a passive political role in that, by being exchanged in marriage they create affinal links and provide men with children, labour and wealth.

'The prevalent assumption underlying this view of nomadic society is that the tent is the sphere of domestic life, the camp is where the political activity takes place and women play no part in this activity.'

Later work, by anthropologists on the role of women in nomadic societies and Mediterranean villages, has continued to use this dichotomy, either in spatial analysis, or as a way of delineating different realms of political and social activity determined by the division of labour within the societies. Work undertaken during the late 1960s and early 1970s by female anthropologists, has explored how women use segregation to exclude men from certain activities and form their own groupings (Farrag 1971, Maher 1972) and how they are socially controlling of each other and exercise political influence (Aswad 1967, Lewando Hundt 1978). The use of the public/private dichotomy is still continued, although the later work highlights that political activities occur within the private sphere and that women do function in the public sphere indirectly. What emerges is that the public/private dichotomy may not fit the reality of the division of labour in gender relations in Middle Eastern and Mediterranean nomadic and village life. As Nelson writes (1974:561):

'there exists internal evidence that our images are incomplete, that the dynamics of power and authority are much more subtle than we have been led to believe and that
our theoretical perspective about the position of women in Middle Eastern society must be the common sense world of the actors themselves'

Theoretical dichotomies are neat and often enlightening. They have been much used in sociological theory - the sacred and the profane (Douglas 1966), male and female being aligned with culture and nature (Levi Strauss 1966), production and reproduction (Engels 1891). There is a problem however, when the theoretical construct has no relation to the perspectives of the actors themselves, who may perceive and divide the social world according to other divisions and principles. For example Sciama (1981) discusses the concept of privacy in Mediterranean societies by reanalysing ethnographic literature. She shows that little value is attached to personal privacy (1981:99) and that the public/private dichotomy is based on a notion of the importance and autonomy of the individual as opposed to the group. This is a Western concept and principle which is not prevalent in many nomadic and village societies in the Mediterranean and the Middle East. The world may be divided into strangers / family, honour / shame, the home and family neighbourhood / the outside world but never into the public and the private.

There is no denying that dichotomies are useful but too strict adherence can be obscuring. In this thesis, the terms domestic and non domestic domains will be used to identify different arenas. In addition the term 'intermediate zone' will be used. Stacey (1982:84) developed this term in order to move beyond the dichotomies
of family/State, and domestic/public, by creating the notion of an intermediate zone. She writes that:

'The problem which led to the development of the notion of the intermediate zone arose as a consequence of the divorce in sociological theory between explanations of production and reproduction, studies of the professions and of health care occupations have been totally divorced from studies of the family' (1984:14)

This intermediate zone is where human service work in health and education is undertaken by paid and unpaid workers. The idea that mothers are unpaid health workers has also been developed by Stacey (1984). This study of Childbirth and Post Partum Care in Negev Bedouin Arab society in Israel is a study of unpaid and paid health workers in the formal and informal health care settings of the hospital and the home. Much of the analysis occurs in this intermediate zone of the hospital, the clinic and the sub tribal neighbourhood. In this thesis Bedouin Arab mother's health work includes not only caring for their children, husbands and relatives from day to day, but also caring for other women during their first 40 days post partum, and feeding their infants.

This analysis of gender relations in the domestic/intermediate/ and public spheres is however influenced also by the ethnic and class relations present in Negev Bedouin Arab and Israeli society. The next section of this chapter will review how these will be defined.
CLASS RELATIONS

All gender relations have dimensions of class and ethnicity. It is therefore necessary to clarify the way in which these concepts will be defined in this thesis and from what literature they are derived before showing their relevance to the particular setting. The discussion of gender relations refers to class implicitly in the Marxist sense of the term, by describing how the semi nomadic Negev Bedouin Arabs have been drawn into the capitalist mode of production. Not only have the spheres of production and reproduction become separated, but most Bedouin Arab men no longer own the means of production and are wage labourers in an industrial capitalist economy. This has altered gender relations, life style and the division of labour and social stratification within Bedouin Arab society.

This thesis will use the term 'class' to refer to a Marxist view of class as defined by the relations and mode of production and will use the term 'occupational categories' to refer to occupational groupings e.g. unskilled manual labour or skilled manual labour. The discussion of the position of Bedouin Arabs in Israel will utilise both meanings. It is not possible to outline the class position or occupational categories of Bedouin Arab men in Israeli society and by inference their families without dealing with the concept of ethnicity, for their ethnicity as Arabs in Israel strongly influences their class and occupational categories. Class and ethnicity are intermeshed in this setting as in many others.
The establishment of the state of Israel has transformed Negev Bedouin Arabs status both economically and politically. In brief the Negev Bedouin Arabs became part of the Arab minority both in numbers and power within the Jewish state of Israel. Access to land was altered and nomadic movement and activity was restricted by lack of land. Towns and agricultural settlements were built, and army manoeuvre areas developed on land that prior to 1948 was used by Bedouin Arabs for herding and agriculture. The Bedouin Arabs could only pursue semi nomadism with difficulty, could not live in the Jewish agricultural settlements nor in the towns, and were only able to work as wage labourers from the 1960s, when there was a shortage of labour. At that time they were given freedom of access and movement to work in the mainstream market economy as manual labourers.

There are several concepts that are useful in analysing this intermeshing of class and ethnicity. It is evident that there is labour market segmentation within Israeli society. Bedouin Arabs are semi skilled and skilled labourers, and Arabs from the occupied territories of the West Bank (8 miles from Beersheba) and Gaza (30 miles from Beersheba) are the unskilled day labourers. There is a complete absence of Negev Bedouin Arabs in irrigated agriculture which is organized in co-operative collectives (kibbutzim or moshavim). Membership of these is dependent on being Jewish, and would suggest that the concept of racialized class fractions as developed by Phizacklea and Miles (1980) is relevant to this setting. They have focused on how to analyse black migrant labour adequately in terms of class. They suggest that migrant labour has both an international form
(Turks going to Germany) and an intranational form (rural urban migration). They see black migrant labour in Britain as a racialized fraction of the working class.

Similarly Negev Bedouin Arabs and Arabs from the Occupied territories constitute distinct racialized fractions within manual occupational categories in Israel. Within one occupational category, there are relations of domination and subordination based on ethnicity. For example, some Negev Bedouin Arabs are labour contractors for labourers from the Occupied Territories. Other Negev Bedouin Arabs work as skilled labourers for Sephardi Jewish contractors. Bedouin Arab teachers only teach in schools for the Bedouin Arabs. None of them are employed in Jewish schools in Beersheva. This concept of racialized fractions within occupational categories begs the question what do we mean by 'racialized' or by 'ethnicity'.

RACE AND ETHNICITY

When considering 'race' and 'ethnicity' it is of course necessary to define the ways in which these terms will be used throughout this piece of research. The sociology of race relations and ethnicity have used the terms of 'race' and 'ethnicity' in a variety of different ways. The emphasis taken here is not typical of a particular approach but is eclectic in that it borrows bits from several different schools of thought. It is a commonly held view that the concept of 'race' has no biological reality but is a social construction and is used to denote differences and variation in skin hair and bone structure between peoples in an everyday sense (Rex
Race relations occur, according to Rex (1970:160), when two or more groups have to live together because of political and economic circumstance in one society, when there is a high degree of conflict, and when the disadvantaged group are identified by ascriptive criteria which are justified in terms of a deterministic theory. There is no doubt that these criteria are relevant to the situation of Arabs and Jews living in Israel. They are living in one society because of international agreements on the Partition of Palestine. There is a high degree of conflict between them, both within the society, and between the country of Israel and the surrounding Arab states. They are identified by birth as Arabs or Jews on their identity cards, and as a consequence of being Arab have different life choices - for example they cannot serve in the Israeli Army unless they are Druze or Bedouin, and then for the latter it is a matter of choice rather than duty.

Within the sociology of race relations there has developed a school of thought which emphasises ethnicity. This expanded during the 1970s when both anthropologists and sociologists studied ethnicity. Barth maintained that 'ethnic groups are categories of ascription and identification by the actors themselves and thus have the characteristic of organizing interaction between people' (1970:10). He defined ethnic groups as biologically perpetuating, sharing fundamental cultural values, making up a field of communication, and having a membership which identifies itself and is
identified by others (1970.10-11).

There have been a number of critiques within the study of race relations of the ethnicity approach as being one which focuses on cultural differences rather than differential access to power (Pearson 1986, Bourne and Sivanandan 1970). Some have looked at ethnicity in its political and economic context (Cohen 1974) and others have not. This has been a tendency which was linked to the notion of cultural pluralism and to the colonial legacy which lingered on in anthropology in particular (Asad 1973, Centre of Contemporary Cultural Studies 1982). Asad and others (1973) have shown how anthropologists in colonial situations have tended to focus on the groups they study and neglect the interaction between the administration and the group. This reflected the funding, the ideological bias of the research and the researchers. This issue is discussed in Chapter 3 on methodology in relation to Israeli anthropology and this thesis.

As Carby (1982) points out, the notion of ethnicity allows for differentiation both between groups and within groups which is why ethnicity is the term used throughout this thesis rather than race or racial hierarchies, despite the emphasis on differential access to and use of power. It facilitates analysis on the macro and micro level enabling one to trace lines of cleavage within Bedouin Arab society and in Israeli society in general. The definition of ethnicity used is derived from Anthias and Yuval Davis who have included dimensions of power. Ethnic groups are collectivities who
have some myths or ideology of common origin. They also have boundaries whereby people are excluded or included, and there are relations of dominance and subordination between different groups (Anthias and Yuval Davis 1983). The term 'race' will not be used to refer to different groups of people however the terms institutional racism or individual racism will be used in the analysis of particular patterns of service delivery or behaviour which are discriminatory in their effect owing to differential power relations.

This piece of research is concerned with differential access to power on various levels and between various groups. It is a study of the social relations of reproduction in the field of health inequalities. These social relations may be based on gender, class or ethnicity or a combination of these three dimensions. Some of these groups are based on ethnicity, some on gender, and some on occupational categories: Arabs and Jews, doctors and nurses, health personnel and patients, among different groups within Bedouin Arab society - those of imputed Bedouin origin and those of imputed peasant origin, between Bedouin Arab men and Bedouin Arab women, between women themselves.

There has been some recent debate in the literature on how to develop adequate analysis of gender, race/ethnicity and class relations together. It is felt that 'much of the recent race relations literature uses categories which are gender blind' (Parmar 1982:238) and that much of the recent feminist theorising of gender relations has been 'ethnocentric' (Barratt & McIntosh 1985) in its assumption
that the nuclear family and patriarchy operate in a uniform way for all women. It has been emphasised that patriarchy in a slave society affects black men and women differently from the way it affects white men and women (Amos & Parmar 1984), and that Asian women have been presented in cultural studies as passive and traditional with undue emphasis on purdah and too little attention being given to the way they organise or the way in which class and racism affect their gender relations (Parmar 1982:250). Some black feminists have written of the 'legacy of racism within feminism' (Bhavnani & Coulson 1986) and of the 'institutional racism' rather than ethnocentrism (Ramazanoglu 1986) which pervades feminist writing on patriarchy and gender relations in the family and society. Parmar has called for a widespread recognition that black women have 'racially constructed gender roles' (1982:237) and emphasises that 'racial and sexual divisions are not exogenous to the capitalist mode of production but endogenous to it' (1982:239).

This debate is of relevance to the perspective of this thesis which is pitched at the interface between Negev Bedouin Arab society and the wider Israeli society. The analysis of maternal and child health care in Israel will try to 'unpack' the way these relations intermesh. The delivery of health care may be seen as a microcosm of the way in which gender, ethnicity and class relations articulate generally in Israeli society. Before embarking on an exploration of this microcosm, the way in which the literature on health inequalities considers gender, ethnicity and class as factors affecting health needs reviewing.
CONCEPTS OF HEALTH

Before reviewing some of the literature on health inequalities and how they are affected by gender, ethnicity and class it is necessary to delineate the concept of health and its measurement. There is a WHO definition of health which is widely quoted: 'health is a state of complete physical mental and social well being, not merely the absence of disease or infirmity' (1978). This is widely viewed as an ideal which is unattainable and that the definition poses problems of measurement for there are few empirical measurements of good health. In this study, the WHO definition will be taken as an ideal and the health of Bedouin Arab women and children will be viewed as having physical, mental and social dimensions.

Levels of health are generally measured by the presence or absence of disease, by morbidity and mortality rates. Health is rarely measured by level of functioning or fitness. The measurements of health are less refined than those of disease and illness. In this study, the health indices used will not be mortality rates but will focus on areas of growth and development using measurements such as birthweight, height, and weight at two and nine months of age. In addition major and minor morbidity episodes will be used as indicators of illness and disease. This study looks at differential patterns of growth and development of children within the Negev Bedouin population. The study has few measurements of the health of mothers owing to its design as an infant feeding study which focused on the infants growth and feeding. (This will be discussed in
An exhaustive review of concepts of health is undertaken by Stacey (1976). She reviews the literature on concepts of health from different theoretical standpoints. The perspective taken in this research is one that is concerned with the social causes of health and ill health and with the causes and dynamics which result in health inequalities. The perspective of this thesis shares the outlook of Mckeeown (1976) who showed that health was affected by socio economic and environmental factors as well as by medical care and individual behaviour.

Mckeeown (1976) utilised historical data on declining mortality rates of infectious diseases to show that with the exception of smallpox, most infectious diseases which were airborne, waterborne or foodborne in England declined before the introduction of vaccination on a wide scale owing to improvements in nutrition, public health measures such as clean water and drainage. This view of the importance of the environment is not only pertinent to industrialising England but also to Third World countries or people experiencing rapid urban transition such as the Negev Bedouin Arabs in Israel. Implicit in this approach is a concern not only with the wealth of a country in terms of its GNP, but also concern with how this wealth is distributed. If one compares infant mortality rates from 1975-80 of Saudi Arabia and Sri Lanka, one finds, that although Saudi Arabia is a much wealthier country, its infant mortality rate is much higher - 121/1,000 live births compared to 48/1,000 live births in Sri Lanka, a poorer
country which distributes its wealth differently having a subsidised food policy and an extensive primary care programme (Table 2.4 p8 The Health of Nations U205 Open University).

HEALTH INEQUALITIES

Both international organisations such as WHO, and researchers in many countries are concerned about the range of health inequalities that exist in societies today. This was defined in relation to health in the following way at a WHO-meeting (1985) and quoted by Whitehead in the introduction of the recent Health Education Council report 'The Health Divide: Health Inequalities in the 80s' (Whitehead 1987:6).

"In health care the principle of social justice "leads to equal access to available care, equal treatment for equal cases and equal quality of care"

"In health terms, "ideally, everyone should have the same opportunity to attain the highest level of health and more pragmatically, none should be unduly disadvantaged."

It is generally accepted that health inequalities in both levels of health and health care delivery, occur as a result of the way in which societies are organised. Tudor Hart's inverse care law (1971) points out that those most in need, often receive the least health care and resources and that inequalities remain even when there
is a redistribution of health personnel and clinics, owing to the way in which other resources within societies are distributed.

There are four main approaches which are used to explain the causes of health inequalities. Townsend and Davidson in the book version of The Black Report refer to these four types of explanation of health inequalities as artefact explanations, theories of natural or social selection, materialist or structuralist explanations, and cultural/behavioural explanations (1982:112).

The approach used here is the materialist or structural explanation which emphasises that material and social deprivation influences health. It focuses on the distribution of wealth within a country and differential access to resources such as housing, education and health care. It primarily focuses on the health of groups, most commonly occupational categories and the conditions within which they work and live. In Britain the proponents of this approach argue that although the country's wealth has grown and health improved as a whole, the way in which both wealth and health is distributed remains unequal and the gap in levels of health between occupational categories appears to be widening.

The cultural/behavioural explanation looks at the behaviour of individuals in groups and emphasises the choices in health behaviour over actions such as smoking, drinking, diet and exercise. This approach tends to emphasise the individual's control over their health behaviour. It is however possible to view the
materialist and cultural behaviour explanations as less distinct from one another. There are research studies which support the linkage of the behavioural and structural/materialist explanations. An example of such a study is Graham's study of women's health work in the family (Graham 1985). In addition data from the General Household Survey shows relationships between occupational categories and patterns of alcohol, cigarette use, nutrition and exercise, the incidence of lung cancer and coronary heart disease (Whitehead 1987:63-69) indicating that these are group patterns of behaviour and choices which are influenced by environmental pressures and not just individual vagaries.

This thesis has a perspective which is looking at the health behaviour of patients and providers and health outcomes from both a structural/materialist approach and a cultural behavioural approach, and is a contribution to the growing literature on how they are interrelated. For example in Chapter 8 Negev Bedouin Arab mother's infant feeding options are viewed as choices which are constrained by the way in which health care is organised and the way in which health is perceived. Its consequences are influenced by the living conditions of the Negev Bedouin which are related to government settlement policy and subtribal household choices. The interface of the macro and micro politics of health are explored here in this analysis of the inequalities of post partum health care.
HEALTH INEQUALITIES AND CLASS

Much of the literature on health inequalities focuses on socio economic class differentials in mortality and morbidity rates. These show clearly the differences between classes, occupational categories and between countries or regions but are apt to mask rural urban differences or differences within areas of cities. There is a continuing debate over the limitations of using occupational categories as a measurement since these do not indicate pension level, housing or inherited wealth (Townsend and Davidson 1982:49). There has been a move recently to try and develop other indices such as the Social Index used in the Child Health and Education Cohort Study (Osborn and Morris 1979) which uses composite factors such as occupation, education, neighbourhood, tenure, type and extent of accommodation.

There has also been a concern that regional differences between different areas of a country or within a city are ignored by data which just focuses on occupational categories. Consequently a number of area studies have been undertaken in Britain which look at a number of indices of material deprivation and their correlation with health indices such as birthweight and infant and adult mortality. Those undertaken in Britain since 1980 are summarised by Whitehead (1987 Tables 5 and 17). This study of health care amongst the Negev Bedouin Arabs could be seen as a small area study looking at a group in an area of Israel and at the variation within that group as measured by a variety of indices. It is an example of a social group
where occupational categories are not a particularly useful measurement and where other measurements such as living conditions are more directly correlated with health. This is explored in Chapter 7.

HEALTH, CLASS AND GENDER

In the debate on the shortcomings of occupational categories as a measurement, it is argued that because women are classified according to their husband's or fathers occupational category, they are 'invisible' (McDowall 1983, West 1983). They become less so when the sex differentials of morbidity and mortality are reviewed although the categorisation of them according to their menfolk continues. Women have higher morbidity but lower mortality than men generally and the four approaches outlined can be applied to explanations of differences between men's and women's health. Useful reviews of the literature are those by Nathanson (1975, 1977), Waldron (1983) and Haavio-Manila (1986). In general the research looks at sex differences between occupational categories so that class and gender are analysed as intermeshing with each other.

The area of social reproduction has had some substantial work done on various issues. The focus has been primarily on gender. The medicalisation of childbirth and the contrast between medical and maternal perspectives is a subject which has been debated at some length by medical sociologists (Macintyre 1977, Graham and Oakley 1981). The way in which health care is organised, delivered and experienced by women before during and after childbirth deals with fundamental issues in the area of gender and health and the sociology
of reproduction. Chapter 4 & 5 & 6 of this thesis deals with the way in which primarily ethnicity but also class intermesh with gender in the area of post partum health care in the home, hospital and clinic.

HEALTH AND ETHNICITY

Health inequalities, as experienced by members of ethnic minorities, is an area of research which has been neglected until recently in Britain. Townsend and Davidson in their book on the Black Report have two pages on Race Ethnicity and Health (1982:58-60). They point out that there is little statistical information available since there is no question on ethnic origin in the census and ethnic monitoring by institutions is in its infancy: 'information on use of services by ethnic groups is sparse' (1982:87). Whitehead (1987:30-34) has four pages on health and ethnic origin. She points out that a major study of immigrant mortality focuses on people born outside the country (Marmot et al 1984) and this indicated that adult mortality was lower in England than in the countries of origin which may mean that healthy people migrate. A study by Balarajan et al (1984) of mortality in 1975-77 of people born in India, Pakistan and Bangladesh found that mortality was higher for infective and parasitic diseases and cerebrovascular disease and cirrhosis of the liver and lower for cancer and chronic bronchitis. There is also some information on stillbirth, perinatal and neonatal mortality of infants born in Bradford by the ethnic origin of the mother (Lumb 1981, Gillies et al 1984). This data showed that there was a higher perinatal mortality rate for Asian mothers which was not related to parity, class (as
measured by occupational category) or maternal age.

There are articles concerning the exotic diseases that ethnic minorities have such as sickle cell, rickets or thalessimia but little, as Donovan (1984) points out, on issues of access and health service utilization and perceptions and experiences of health and ill health. Donovan's recent study (1986) on the context of health beliefs and behaviour of Asian and Caribbean people based on qualitative interviewing illuminates some of these issues.

In Israel, there are data on mortality and morbidity differences between Jews and Arabs owing to the census recording of ethnic origin (Harlap et al 1977) but as in Britain, there is little exploration of the causes and dynamics of health inequalities. There are a few articles on exotic conditions amongst the Bedouin Arabs such as tuberculosis in the 1950s and 1960s (Ben Assa 1960, 1962) and various problematic aspects of nutrition and health (Berlyne et al 1973, Groen et al 1974, Blondheim et al 1982).

ETHNICITY, GENDER AND CLASS

In this research study, the issues of women's gender and class is explored along with the way in which the ethnicity of Bedouin women as Arabs articulates with their gender and class. As Bedouin Arabs they live out of town some distance from the hospital, they utilise the hospital for childbirth and postpartum care and are cared for by health personnel who are predominantly Jewish, most of
whom speak no Arabic. The experience of care of both the patients and the carers is shaped by the way in which ethnicity, gender and class relations intermesh in Israeli society.

Post partum health care in the home and clinic setting is explored in Chapters 6, 7, and 8. There is a contrast between the child oriented care of the formal setting and the mother oriented care of the home setting. The growth and development of the infants is discussed in the context of the infant feeding patterns and the living conditions of Negev Bedouin Arabs which are shaped by the intermeshing of ethnicity and class. The choice of infant feeding is influenced by the health care in the clinics, hospital and home but its consequences are differential depending on the living conditions of the families.

The material on health inequalities of adults and children largely views health in relation to occupational categories, gender or ethnicity. Some of the material combines gender and occupational categories, for example studies of ante natal care attendance, or ethnicity and occupational categories in comparing birthweights (Terry et al 1981, Lumb 1980, Gillies et al 1984). These studies of birthweights of babies born to mothers of Asian ethnic origin in Britain found that maternal parity, occupation and age was of less importance than whether the mother had been born in Asia or the United Kingdom.

The majority of the literature however deals with health in relation to one, or at the most, two factors. As Macintyre
points out in her review of factors influencing the patterning of health by social position (1986:399):

'few reviews systematically examine all (or even several) of these social positions in connection with health. There has been considerable interest recently in relationships between occupational class and health, and some interest in gender, marital status, ethnicity and area in relationship to health, but very little interest in examining health in relation to all of these social positions.'

The emphasis of this thesis is on how gender, ethnicity and class relations are interrelated in the post partum health care of Negev Bedouin Arab women in Israel. Since it is not possible to address the intermeshing of gender, ethnicity and class at once in every aspect of this study, the interrelationships are explored incrementally. Gender, ethnicity and class are not of equal importance in all aspects of the data and argument. At certain points one or two of these social orders will have primacy and the third will be less so, although it may be an important background factor. This is similar to the way in which an opthalmologist, when trying to create perfect vision for a short sighted client, places two or three lenses one after the other in front of the eyes of the client until clarity of vision is established.
For example the subject of Part Two of the thesis is care in the hospital setting. This is explored in Chapters 4 and 5. Gender has primacy in the care of women in childbirth and post partum and is focused on primarily in Chapter 4. Chapter 5 then deals with the intermeshing of gender and ethnicity in the care of Bedouin Arab women in this setting. There is little exploration of class or occupation in this setting other than when dealing with the division of labour amongst health personnel.

In Part Three of the thesis the context of home care is explored. Chapter 6 deals with post partum care in the home during the first 40 days and here the interrelationship of gender and ethnicity is of prime importance. Class, however, is addressed when discussing how the class of Bedouin Arab men in Israeli society as wage labourers has affected the 40 day visiting work of Bedouin Arab women. Class is interrelated here with gender and ethnicity but secondarily. In Chapter 7 the interrelationship of ethnicity and class in influencing living conditions, and Bedouin Arab men's occupations and education is of primary importance. Gender is not addressed. However, in Chapter 8 an articulated perspective is developed for discussing how gender, ethnicity and class intermesh in the social context of infant feeding. It is hoped that these interrelationships will illuminate, not only the particular setting, but also the general articulation of these social positions and their effect on health.
CHAPTER 2 THE MACRO AND MICRO SETTING - NEGEV BEDOUIN ARABS IN ISRAEL

HISTORICAL BACKGROUND

The present day state of Israel is situated on a piece of land which has accommodated many civilizations over the last four thousand years. It is geographically situated on the edge of the Mediterranean and Red Seas, linking Asia to Africa and has been described as 'the intercontinental bridgehead of Palestine' (Glueck 1959, 1968:1). The Negev is a semi arid region which comprises the southern two thirds of the pre 1967 borders of Israel.

Archaeologically there is evidence of early human settlement in the form of flints and skeletons from 150,000 - 120,000 years ago during the archaeological Middle Paleolithic period. The earliest settlements in the Negev are from the late Chalcolithic period 4,000-3,300 B.C. and mudbrick villages and copper tools have been excavated from this time in the Northern Negev. Subsequently the inhabitants of the Negev lived from hunting and gathering until the Middle Bronze period 21C-19C B.C. Remains of villages from this period have been found in the Northern and Central Negev. The Iron Age of 10C-6C B.C. was also a time of settlement, but the most intensive period was 200 B.C. - 700 A.D. This was the Nabatean and Byzantine period when 50,000 people lived in the Negev in walled cities and farms, built along the trade routes from Arabia to the Mediterranean.

All of these settlements were shortlived since owing
to the Negev's strategic position, there were always successive waves of invasion by others. Nomads lived in the Negev throughout this time. The amount of archaeological Tels and relics found throughout the area show that humans have for thousands of years built and destroyed. The long gaps between waves of settlement have led to speculation about the possibility of climatic change but it appears that the climate has remained stable and the humans living here have been truly human in their behaviour, both creative and destructive.

The Negev is a semi arid region which stretches from the Mediterranean in the east, to the Dead Sea and Arava Rift valley in the west (the border with Jordan), southwards to the northernmost tip of the Gulf of Aqaba, and northwards to the Hebron hills. Rainfall is meagre and irregular, falling more sparsely in the South East (2") than in the North West (8") (Glueck 1968). The area today comprises two thirds of the land mass of the state of Israel according to its pre 1967 borders. The Negev Bedouin Arabs of today live in the north-eastern and central parts of the Negev as shown on map 1. Prior to the establishment of the state of Israel in 1948, they lived throughout the Negev.

It would appear that from the Muslim invasion around 636 A.D. until the establishment of the state of Israel in 1948, semi nomadic Bedouin Arabs were the main inhabitants of the Negev along with a few villagers and farmers living in the areas with heavier rainfall in the North West. There was always a two way drift between peasants and nomads. Prosperous nomads would acquire land and settle
DISTRIBUTION OF THE BEDOUIN TRIBES IN THE NEGEV BEFORE 1948

MAP 1

International border
Arms trice line, 1948
Tribal boundary
Boundary of Bedouin area
Town

0 40 km

Map 1 is reproduced from Amir, Ben David & Shiner (1976:6)
as peasants and impoverished peasants would become nomads. Barth's analysis of this process amongst the Basseri tribe of Fars in Southern Persia (Barth 1964) is applicable here. He argues that when the herds got too big, they provided capital for land purchase, and when the herd was too small, employment would be sought in the villages. There was also a flow of villagers who, when impoverished or fleeing from a feud or conscription, would become nomads.

The semi nomads living in the Negev during the Turkish rule of Palestine probably came from the Arabian peninsula over the centuries. There was movement of tribes within and through the Negev which stopped in 1870 when the Turks ended tribal warfare by demarcating land for each tribe present in the Negev at that time. Any groups which arrived subsequent to this time were 'landless' and had to attach themselves to established tribes with land. Map 1 shows the tribal confederations that lived in the Negev during the Turkish and British mandates of Palestine.

When the Turks fixed fluid tribal boundaries and forbade tribal war in 1870, there were 80 tribes in the Negev organised into seven confederations. The population grew during the years of the British mandate and in 1947, it was estimated by a census, that was a combination of estimation and enumeration, that there were 95 tribes and a total population of between 55-70,000 in the Negev (Shimoni 1947). The end of the British mandate and the war that resulted in the establishment of the state of Israel was a time of great turbulence for the Palestinian Arabs, and most of the Negev
Bedouin left as refugees and went across the borders to Jordan or Egypt. In 1951 it was estimated that about 13,000 Bedouin Arabs remained in the Negev belonging to 19 tribes and three confederations. Table 2.1 illustrates the change in size and composition of the Bedouin population owing to the events of 1948.

Table 2.1  
CHANGES IN THE SIZE OF THE NEGEV BEDOUIN ARAB POPULATION

<table>
<thead>
<tr>
<th>Tribal Confederation</th>
<th>1947*</th>
<th>1951**</th>
<th>1972***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tarabin</td>
<td>21,000</td>
<td>730</td>
<td>1,839</td>
</tr>
<tr>
<td>Tayaha</td>
<td>18,000</td>
<td>11,270</td>
<td>26,406</td>
</tr>
<tr>
<td>Azazmeh</td>
<td>12,000</td>
<td>740</td>
<td>3,405</td>
</tr>
<tr>
<td>Gabarat</td>
<td>5,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hanagreh</td>
<td>7,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aheiwat</td>
<td>1,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Saidyin</td>
<td>1,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gahalin</td>
<td>.750</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>65,750</td>
<td>12,740</td>
<td>31,650</td>
</tr>
</tbody>
</table>

Sources *Shimoni 1947 ** Central Bureau of Statistics 1964 ***Central Bureau of Statistics 1975

The establishment of the state of Israel not only reduced the Bedouin Arab population but also severely disrupted the internal tribal composition at all levels. Tribal organisation has four structural levels. The sub tribe (rubi) is part of the tribe (ashirah). The tribe belongs to the tribal group and the tribal group belongs to the tribal confederation (gabilah). Five whole tribal confederations left in 1948 and the three remaining were incomplete, for some of their tribal groups, tribes, sub tribes and families had left. For example two out of the twelve tribes making up the Azazmeh
confederation were left, four out of the twenty five tribes of the Tarabin confederation remained, and thirteen out of the twenty five tribes of the Tayaha confederation remained. Since then, the only levels of tribal organisation which are important both for Bedouin Arabs and Jews are the levels of the tribe and sub tribe. Gradually since 1948, the population increased as the Bedouin Arabs who had stayed continued living in the Negev. Table 2.2 shows that the population increased by 416% from 1951 - 1983.

**TABLE 2.2 GROWTH OF NEGEV BEDOUIN ARAB POPULATION FROM 1951-1983**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SIZE OF POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>12,740</td>
</tr>
<tr>
<td>1961</td>
<td>18,300</td>
</tr>
<tr>
<td>1972</td>
<td>31,650</td>
</tr>
<tr>
<td>1975</td>
<td>37,948</td>
</tr>
<tr>
<td>1977</td>
<td>41,375</td>
</tr>
<tr>
<td>1980</td>
<td>49,200</td>
</tr>
<tr>
<td>1983</td>
<td>53,000</td>
</tr>
</tbody>
</table>

*SOURCE: Statistical Abstracts of Israel*

Those Bedouin Arabs who remained in the area and who with their children and grandchildren are Israeli citizens have spent the last thirty eight years living in a state which has an economic, social and political structure which is radically different from the preceding colonial regimes of the Turks and the British and is also different from the surrounding Arab States. They are part of an Arab minority living in a Jewish state, where ethnicity is crucial in defining status and access to resources. (The accompanying Maps 2 & 3 show where the Bedouin Arabs today are living in Israel).
Map 2. Distribution of Bedouin in Israel

Jakubowska, 1986
Map 3  Bedouin Habitation in the Restricted Area

Jakubowska, 1986
The state of Israel was established in 1948 after the end of the British rule of Palestine which was followed immediately by a war between Israel and its neighbouring states. Israel was perceived by Jews living within it and living outside it as a Jewish state, a homeland for the Jewish people. Zionism was a political movement and ideology which worked for the creation of a Jewish homeland and the establishment of the state of Israel was a step in this direction.

Over the years since the establishment of the state of Israel there have been successive waves of immigration of Jews to the country, most of them fleeing from oppression and persecution. Prior to 1948, the Jews who had come to Palestine were mainly from Russia and Poland. They had established agricultural settlements and villages mostly in the centre of the country although there were a few in the north and south of the country. The British applied strict limits on Jewish immigration during World War Two and so immediately after the end of the British mandate, there was a large wave of immigration of Jews from Eastern Europe, many of whom were survivors of concentration camps or had been in hiding. They came from Poland, Germany, Czechoslovakia, and Rumania and were Ashkenazi Jews.

During the late 1950s another wave of immigration took place of Oriental Sephardi Jews from North Africa and the Middle East, from countries such as Egypt, Iraq, Iran, Yemen, Morocco and
Tunisia. The impetus for this wave was the continuing lack of recognition of Israel's existence by Arab states and the consequent difficulties this raised for Jews living within these Arab countries. Latterly the immigration waves of the seventies and eighties have been from the USSR, South America and most recently, from Ethiopia.

These waves of immigration have meant that the new state has had to absorb many immigrants and that its Jewish population has increased rapidly. Israel has a policy of the right of return for any Jew so that the 'open door' encourages the growth of the Jewish population. The official language of the country is Hebrew and all towns, streets, mountains and valleys have been renamed, the Hebrew replacing the former Arabic or English name. Israeli society is organised politically as a socialist democracy with proportional representation of political parties. It is a culturally diverse society whose ethnic divisions are also socio economic ones. The Ashkenazi Jews who immigrated first, have dominated politics, trade unions, the professions, agriculture and business, until the late seventies. The Sephardi Jews who immigrated in the fifties and sixties have been trying to obtain more influence and power economically and politically. This was reflected in the ethnic parties of the last two general elections in 1984 and 1979 such as Tami. The Ashkenazi 'whites' on the whole vote for the left and centre parties - the Labour Alignment - (those that want a territorial compromise), and the Sephardi 'blacks' vote for the right - Likud and the religious parties. Demographically the Sephardis have large families and make up an increasing proportion of the Jewish population of Israel.
The 'cultural gap' between Eastern European and Oriental Jews is often talked and written about and the power aspects of this are being more openly acknowledged. Anyone in a prominent position who has an oriental sephardi background has this commented on such as the last President Navon, or the politician David Levi. The Israeli Arabs have even less power and representation than the Oriental Jews and the Arabs of the occupied territories have even less. Israeli media deal with socio economic differences in an ethnic idiom, emphasising the division between Jews, and Jews and Arabs, not only the cultural and educational differences but also the differential access to economic and political resources. The interrelationships between ethnicity and occupational categories in Israel are most graphically recorded by Amos Oz, himself an Ashkenaazi, member of a kibbutz and of a left of centre party in his book 'In the Land of Israel'(1983). The following extract is of two oriental Sephardi men talking to the eastern european author in a cafe in a development town:

"Really, think about this. When I was a little kid, my kindergarten teacher was white and her assistant was black. In training. In school, my teacher was Iraqi and the principal was Polish. On the construction site where I worked, my supervisor was some redhead from Solel Boneh. At the clinic the nurse is Egyptian and the doctor Ashkenaazi. In the army, we Moroccans are the corporals and the officers are from the kibbutz. All my life I have been on the bottom and you have been on the top.

"I'll tell you what shame is: they gave us houses, they gave
us the dirty work; they gave us education and took away our self respect. What did they bring my parents to Israel for? I'll tell you what for, but you won't write this. You'll think its just provocation. But wasn't it to do your dirty work? You didn't have Arabs then, so you needed our parents to be your servants and your laborers. And policemen, too. You brought our parents to be your Arabs. (Oz 1983:36)

Since 1948 the Arabs living in Israel have been an ethnic minority both numerically and in forms of political power. They found that they were no longer living at a Middle Eastern crossroads, for the railway line from Damascus to Alexandria stopped functioning, and the borders to all the neighbouring Arab states were closed from 1948-1967. It was therefore impossible to visit relatives and living in Israel meant living in a country where Arabs were perceived as the enemy without and possibly within. Furthermore once the borders were open in 1967 for visiting within the occupied territories and travel to Jordan or to Mecca, they found that their status as Arab Israelis, or Palestinians, meant that many Arabs were suspicious of them.

In addition Arab Israelis within Israel were not united and were not perceived as being one entity. The Israeli authorities fostered a divide and rule policy in the British indirect rule tradition which they had had ample time to observe and learn. The administrators nurtured factions between families and tribes and differences between Negev Bedouin Arabs and village Arabs in the north of the country. Negev Bedouin Arabs are called Bedouin by both Jewish and Arab Israelis, and the word Arab is rarely used. They are
generally believed to be less hostile to the State of Israel and more apolitical than the northern villagers, who are seen as Arab nationalists. Bedouin Arabs may volunteer for the Israeli Army but northern Arabs may not. The Bedouin Arabs call themselves Arab (al arab) and only refer to themselves as Bedouin when stressing the difference between themselves, and other village or town Arabs. In conversation they see themselves as Palestinians and that their homeland (watn) is Palestine, which at the moment is called Israel. The words Palestinian and Palestine are not used in daily conversation owing to the political controversy surrounding the Palestinian movement. In this thesis therefore the term Negev Bedouin Arabs will be used throughout.

Ethnicity in Israel not only affects status but also gives differential access to resources such as land and water and thereby shapes life styles and life chances. Negev Bedouin Arabs have had their access to land and water drastically altered by virtue of being Arabs in Israel. Their ownership of their means of production—land and flocks—has been altered and reduced since the establishment of the State of Israel. In Israel, ethnicity affects the class structure and shapes the membership of occupational categories.

For Negev Bedouin Arabs semi nomadism as a way of life became very difficult to maintain. The two major reasons were that the Negev was developed by Jewish settlers as an area of agricultural settlements in the West, and of development towns and light industry in the East. Access to land and water was no longer controlled by the
tribe but by a central government whose priority was to develop the region. There became increasingly little room ecologically for Negev Bedouin Arabs to live as semi nomads, and simultaneously there developed more and more wage labour opportunities.

In 1980 the Jewish population living in the Negev was 226,600 and the Bedouin Arab population was 49,200 (Israeli Statistical Abstract 1980). Very few Bedouin Arab families today live as semi nomads, most live from men's wages as wage labourers or a from a combination of herding and wage labour. Bedouin Arab men have increasingly tended to work as skilled and semi skilled labourers - many of them are truck drivers or factory workers. This process has taken place through lack of access to land and water and through employment opportunities, which developed along with a settlement policy.

According to the National Census of 1972, at that time 44% of Bedouin Arab men were working in agriculture as paid labourers, 9% were working in the construction industry, 5% in other industries, 4% in trucking and and 5% in services. 33% were not working in wage labour. Figures from the Education Ministry in 1979 show a shift away from agricultural labour to industry and trucking and the number of those men who do not work in wage labour is halved. In 1979, 21% of Negev Bedouin Arab men were working in agriculture, 26% on the construction industry, 9% in other industries, 20% in trucking, 8% in other services and 16% were unemployed.
According to the data from the infant feeding study analysed in this thesis in chapter 7, this trend continues with fewer and fewer people living from agriculture or herding, and more and more working in skilled manual and non manual occupational categories. Bedouin Arabs have made the transition from a domestic mode of production in which the men owned the flocks, the tribe owned the land and the women and children were an important part of the labour force, to a capitalist industrial mode of production, in which the men earn wages as skilled and unskilled labourers. They form a 'racialized class fraction' (Phizacklea & Miles 1980). They are more skilled and secure than the Arabs from the Occupied Territories, who work as day labourers, but less well established than the Oriental Jews. They form a Negev urban proletariat. The policies and processes which brought this change in economic livelihood and lifestyle will be outlined below.

ACCESS TO LAND

The decline of semi nomadism as a way of life since 1948 can largely be attributed to the increasing scarcity of land available for pasture and cultivation in the Negev owing to Jewish agricultural settlements and towns and industries, whose development was accompanied by the State appropriation of land.

Land is a vital resource for semi nomadic Bedouin Arabs, as they need pasture for their flocks and agricultural land for the growing of winter crops. The wheat provides flour for the family
and the barley provides fodder for the flock. During the Turkish and British mandates pasture land was loosely defined within tribal boundaries and all members of the tribe had access to it. The agricultural land was distributed within the tribe to each family and passed from father to son. Latecomers to the Negev, the Bedouin of peasant social origin (fellaheen), obtained access to agricultural land by sharecropping. Bedouin society was stratified by ownership of land and access to land was an important factor in the arrangement of marriage patterns and the make up of sub-tribes. (Granott 1952:213. Marx 1967: 10,75,196.)

After 1948, the means of access to land changed as did the amount available. The Bedouin tribes who remained in the area lived in a 'closed area' in the north eastern Negev as delineated on Map 2. The tribes which had always lived within this area were able to continue using their cultivated land. The tribes displaced to this area from the eastern Negev were landless. They could rent land annually for cultivation from the Land Administration but the land they had used for cultivation prior to 1948 was expropriated for development by the Law of Acquisition of Lands of 1953. It is estimated by Zohar that over 62,500 acres were expropriated by 1959 and in 1972 there were an additional 187,500 acres in dispute (Zohar 1980).
**TABLE 2.3**

LIST OF TRIBES WHO WERE DISPLACED AND NOT DISPLACED IN 1948

<table>
<thead>
<tr>
<th>DISPLACED</th>
<th>NOT DISPLACED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Huzail (partly)</td>
<td>Abu Rabeeyah *</td>
</tr>
<tr>
<td>Abu Abdun</td>
<td>Abu Juweid*</td>
</tr>
<tr>
<td>Abu Rgaiq (partly)</td>
<td>Abu Qrenat*</td>
</tr>
<tr>
<td>Al Ataune (partly)</td>
<td></td>
</tr>
<tr>
<td>Al Ugbi</td>
<td>Al Asad</td>
</tr>
<tr>
<td>Al Affinish</td>
<td>Al Assam</td>
</tr>
<tr>
<td>Quedirat el Sane</td>
<td>Al Huzail (partly)</td>
</tr>
<tr>
<td>Abu Bilal</td>
<td>Abu Rgaiq (partly)</td>
</tr>
<tr>
<td>Abu Amra</td>
<td>Al Ataune (partly)</td>
</tr>
<tr>
<td>Tarabin-e-Sane</td>
<td></td>
</tr>
<tr>
<td>Sarahin</td>
<td></td>
</tr>
<tr>
<td>Al Kawain</td>
<td></td>
</tr>
<tr>
<td>el Azazme **</td>
<td></td>
</tr>
</tbody>
</table>

* These tribes have had their land expropriated in 1980 for the building of an airport as part of the changes which took place when Israel withdrew from the Sinai.

** This tribe is the most semi-nomadic, living in the central Highlands and has been the most harassed by the Green Patrol.

Until 1980, half the land cultivated in the Negev by Bedouin Arabs was owned by tribes who were not displaced. According to the Land Administration Office this totalled 54,088 acres. Members of displaced tribes were only able to lease land from the State and there
were approximately 50,000 acres available for leasing at a symbolic rent. Each family leasing land would be allocated a minimum of 25 acres providing it was eligible according to criteria which reflected central government policy. More land is given to sheikhs and government employees and those who settle in planned villages. Consequently individuals with 'desirable' characteristics tend to apply for land on behalf of others and there is a lot of subleasing.

It is not only the availability and means of access to land which has changed since 1948 but also the definition of what constitutes land ownership. The Bedouin Arab concept of ownership differs from that legally defined by the State although one word 'mulk' originally a Turkish term denoting private ownership is used by both. The state's view is legalistic and requires documentary proof of ownership from the Turkish Land Register. The Bedouin Arab view considers use of the land over several generations as ownership. This conflict over what constitutes ownership between a State and an indigenous minority population is by no means unique to the Negev and Israel. North American Indians and Eskimos, Guatemalan Indians and Australian Aborigines have all had land expropriated 'legally' with little to no compensation.

The State's view of land ownership is based on Turkish law which had five categories of land ownership (Granott 1952).
1. mulk - unrestricted private ownership requiring registration in the Land Register
2. waqf - land held by the religious authorities
3. miri - ownership by the State but right of usage and transfer left to the cultivator
4. metruke - land for the common use of the community
5. mewat - land belonging to the State and used by no one. Defined as beyond shouting distance from a village (2 1/2 kilometers).

According to Ottoman law the Negev is mostly mewat land. During the mandates, a Land Register was drawn up, but only a few of those cultivating land, registered as a means of avoiding taxation. Therefore most Bedouin Arabs have no documentary proof of Land ownership of 'mulk', although they have rights through occupancy. There are deep feelings of bitterness that there has, to this day, been no compensation for land lost in 1948, and there are ongoing disputes over land at present, which illustrate these conflicting views. There are many sayings which illustrate feelings about land. 'Land is holy' or 'He who has no private land can only defaecate in the palm of his hand' (alli maluh milk yihra fi kaffuh).

Since the election of the Begin led government in 1978 there has been a growing polarisation amongst Jews and between Jew and Arab in Israel. For the Negev Bedouin Arabs, there are two main issues in addition to the national ones of continued occupation of the territories and the Lebanon war. These are the harassment of semi nomads by the Green Patrol and the requisitioning of land for the
building of an airport in the North Eastern Negev. Both issues have at their core the dispute over what constitutes land ownership and the increased shortage of land for use by Bedouin Arabs owing to the withdrawal of the army from Sinai.

In the late 1970s, the Nature Protection Authority under the sponsorship of the then Minister of Agriculture Arik Sharon, established a small unit called the Green Patrol whose mandate was to protect cultivated land, nature reserves and areas used for military purposes from being grazed by Bedouin Arab flocks of sheep and goats. In addition the black goat was declared an environmental hazard as it overgrazes the vegetation and this Patrol could confiscate black goats above the quota allowed and also any flocks grazing in prohibited areas. These prohibited areas have increased owing to the use of increasingly large areas of the central and southern Negev for army manoeuvres and the building of two airports. The Green Patrol pursued its job of protecting land, which was off limits for grazing, with excessive zeal and without legal authority. They not only confiscated flocks, but also knocked down tents, moved families and their herds, and detained members of families. The aim of the pressure being exerted on the semi nomads living in the Negev Highlands, was and is, to induce them to abandon semi nomadism and settle in the planned settlement being built for the tribe. As a result of the Green Patrol's activities, the semi nomadic Bedouin Arabs living in the Negev Highlands are taking legal action which is proving costly and lengthy, in order to prove their right to continue cultivating their land in this area and their right to live as semi nomads in the area.
There is also a lobby led by the National Association of Civil Rights against the illegal activities of the Green Patrol.

As mentioned, the Peace Treaty with Egypt which involved the return of Sinai to Egypt has resulted in increased competition for land in the Negev between the Bedouin Arabs, the army and Jewish agricultural settlements. Since the 1980 withdrawal, two airports have been built - one in the Negev Highlands where the semi-nomadic Azazmeh Bedouin Arabs live and one in the North Eastern Negev where tribes were not displaced in 1948 and where 8,000 people were living. The land of the Abu Juweid, Abu Rabeeyah and Abu Grenat tribes was appropriated by the State with the aid of a new law passed in the Israeli Parliament in 1980. The law is called the Requisition of Land in the Negev (Peace Treaty with Egypt) Law and is without a right of appeal. The area requisitioned for the airport was 20,000 acres, much of which was used for cultivation and residence. A rate of compensation was fixed which recognised the Bedouin right of occupancy of the land but not their ownership of it. This rate of compensation was much lower than that given to Jewish settlers, who were being evacuated from new settlements in Northern Sinai, but a positive feature of it was that some land with water for irrigation was allotted to those who had lost cultivated unirrigated land. Plans were accelerated and extra money budgeted for the building of two planned settlements for the displaced Bedouin Arabs on either side of the airport - Aroer and Kseife.

As access to land became more and more difficult, the
Negev Bedouin Arabs changed the economic basis of their way of life from semi nomadism to employment in the market economy. They have not become agriculturists either as peasants in villages, or as members of collective settlements. They had neither access to land for agriculture, nor access to water for irrigation. Water for irrigation is given to Jewish settlements. The national water carrier brings water to the Negev from the Jordan and Dan rivers via the Sea of Galilee. This water goes to the moshavim and kibbutzim and is piped to the towns in the Negev. The Bedouin Arabs obtain water from the outlets in the pipelines for their domestic purposes. The agreement to give irrigated agricultural land to those who were moved from Tel el Milh for the construction of the airport was a new development, but the quantity of land was small so that the policy of the continuing urban settlement of the Bedouin Arabs remains unchanged.

The ethnicity of Negev Bedouin Arabs has determined their access to land and water in Israel. The ownership of their traditional means of production - flocks and land - is barely possible today. Without land, semi nomadism is not viable and so the only means of livelihood is wage labour in the Israeli market economy and the only form of settlement possible is urban settlement.
URBAN SETTLEMENT- POLICY AND PROCESS

The transition from semi nomadism to sedentarization has been ongoing amongst the Negev Bedouin Arabs since 1948. This process has been influenced by exogenous factors such as changes in the political and economic environment like the changed means of access to land and water, and also by endogenous factors such as patterns of land ownership within tribes.

Whilst the Negev Bedouin Arabs lived in the 'closed area' without free access to the labour market, they continued living from their flocks and land with difficulty. Extra grain was distributed by the Military Government through the sheikhs, and a meagre living was supplemented by smuggling or paid work if a work permit could be obtained. Once there was freedom of movement and work in the 1960s, there was a rapid increase in the number of families obtaining their main subsistence from their menfolk's wage labour and a corresponding decrease in the number of families living principally from their flocks and lands. Tents began to be relinquished as a form of dwelling once it was no longer necessary or possible to roam, and huts and shacks of asbestos and wood were erected in sub tribal groupings on areas of traditional land ownership, or close to an outlet from the main water pipeline. The north eastern Negev was covered in dispersed settling groups of families and sub tribes.

The central government began actively to encourage the urban settlement of Negev Bedouin Arabs from the late 1960s. The
arguments that were frequently publicly stated were that it would be easier to provide facilities such as schools, clinics, roads and drains if people lived in settlements of a higher density and that it was necessary to have parts of the Negev where there were dispersed settlements cleared, for there were plans for future industrial and Jewish agricultural development.

There are at present five planned urban settlements in the Negev where Bedouin Arabs are living - these are Tel Sheva, Rahat, Aroer, Kseife and Shegeb. It is difficult to estimate the proportion of Bedouin Arabs living in the planned settlements today but it is approximately between 40-50%. The first settlement was built in the late 1960s, the second in the seventies and the third and fourth simultaneously in the early 1980s. All of them are still growing in size and the settlements of each decade differ in structure owing to the development of ideas and policy about urban settlement.

The first settlement that was developed was Tel Sheva. In 1966, the Ministry of Housing built 49 houses on 400 square metre lots. The houses were built close together around a centre with shops, a clinic and a community centre. There were a number of financial incentives to encourage a move into the settlement. The land was sold at a cheap price below market value, and the mortgage on the house was with a fixed interest rate and part of it was a non repayable loan. The original 49 houses are still twenty years later not fully occupied. Three different family groups moved into the settlement shortly after it was established. They belonged to different tribes
and different social strata — one group was from the sheikh's family of a tribe in the area, another was a peasant origin family attached to that tribe and another was another peasant origin family who had been attached to a different tribe. These groups were living close together and yet had no social links. The population of the settlement was young, for only families who had a regular income could afford to keep up payments on a mortgage, and electricity bills. The older or less wage labour oriented members of the families in the settlements lived in huts and tents outside the settlement along with a number of sub tribal groups who wanted to use the school, shops, clinic and bus service but did not want to live with the groups present in the settlement (Lewando Hundt 1979). During the last decade the number of people living in houses has increased owing to the development of sub tribal neighbourhoods on the principle used for the planning of the second settlement Rahat.

In planning Rahat, a different approach was used. There were still the financial incentives of a subsidised plot of land and mortgage and in addition it was possible to rent land if one moved into the settlement. The difference was that the settlement was planned in separate neighbourhoods and building plots were available which purchasers then built on according to their own preferences in style and size. The spatial planning of the town reflected the social structure of the Negev Bedouin Arabs as the planners perceived it.
FIG 2.1 THE CONCEPT OF RAHAT'S SOCIO URBAN ORGANISATION

<table>
<thead>
<tr>
<th>URBAN ELEMENT</th>
<th>SOCIAL ELEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town-----------------------------------</td>
<td>Aggregation of Tribes</td>
</tr>
<tr>
<td></td>
<td>and Sub Tribes and</td>
</tr>
<tr>
<td></td>
<td>Descent Groups</td>
</tr>
<tr>
<td>Neighbourhood--------------------------</td>
<td>One Tribe or Sub Tribe</td>
</tr>
<tr>
<td></td>
<td>or Descent Group</td>
</tr>
<tr>
<td>Street----------------------------------</td>
<td>Hamula-Extended Family</td>
</tr>
<tr>
<td></td>
<td>Single Family</td>
</tr>
</tbody>
</table>


Rahat grew rapidly and the people who moved into the settlement were mostly Bedouin Arabs of peasant origin who had had no land prior to 1948 and also Bedouin Arabs of slave origin ('abid') who like those of peasant origin ('fellaheen') were attached in small groups to different tribes. The growth of the settlement in cohesive neighbourhood groups altered the relationship between these peasant origin groups and the tribes they had been affiliated to. As Jakubowska writes in her study of urban settlement in Rahat:
'As a result of moving to the settlement the traditional tribal structure broke down and new alliances came into existence. The peasant groups disassociated themselves from membership in tribes of the landowning Bedouin proper. Their members, who were dispersed among various tribes, have unified and merged with like groups of the same category (a conglomerate of descent groups of common place of origin in a distant past) creating a new political and territorial unit, that of the neighbourhood.' (1985:334-5)

Tel Sheva like Rahat has developed neighbourhoods, some based on sub tribes and others on descent groups, and the two new urban settlements that are being built for those displaced by the airport - Aroer and Kseife - are also being built on a neighbourhood planning principle. These settlements are not similar in size for Rahat is large and fast growing with a population of approximately 20,000, Tel Sheva is smaller with a population of approximately 7,000, Aroer and Kseife are embryonic with a population of between 1-2,000, and Shegeb is even smaller. In addition to the planned settlements, there are spontaneous settlements of huts tents and houses which vary in size from Lagiya (5,000) to groups of a few households.

The Negev area therefore contains a combination of Jewish agricultural and urban settlements and Bedouin Arab planned urban settlements. New Bedouin Arab planned settlements are being built at the same time as new Jewish agricultural settlements are being established. It could be said that all of the Negev Bedouin
Arabs are in transition from semi nomadism to sedentarization but that there are various forms of this - ranging from limited movement, herding without moving the tent, combining herding with wage labour, spontaneous settlement and planned urban settlement with wage labour as the means of livelihood. The forms of settlement are influenced greatly by factors exogenous to Bedouin Arab society - the establishment of the state of Israel, the development of the Negev for primarily Jewish agricultural and urban settlement, the changed access and ownership of land, the lack of space and freedom for semi nomadism and the government sponsored incentives for planned urban settlement. The Negev Bedouin Arabs are an ethnic minority both in the Negev and Israel, and have become a Negev proletariat, with the men working primarily in skilled and unskilled manual occupations and the women caring for the home and the children.

This overview of the way ethnicity and class orders are articulated in both Israeli and Bedouin Arab society sets a partial background to the subject of this thesis. The additional dimension is that of the gender order. The change in the mode of production from semi-nomadism to wage labour has affected the division of labour, family structure and gender relations in Bedouin Arab society. This will be explored in the following section of this chapter.
GENDER RELATIONS IN NEGEV BEDOUIN ARAB SOCIETY -

The chapter up to this point has been dealing with changes in the political and economic environment relating to ethnicity and class. The emphasis has been on the exogenous factors which have affected the allocation of resources and the position of Negev Bedouin Arabs in Israeli society. Gender relations within Negev Bedouin Arab society have also been affected and these changes will be outlined in this section with particular reference to the patterns of division of labour, family structure and the control of fertility through the social relations of reproduction.

Negev Bedouin Arab society like most Middle Eastern groups is patriarchal and patrilocal in organisation and ideology. Property in the form of land and flocks, houses and trucks is owned by men and passed from father to son. Daughters rarely inherit although the Koran stipulates that they should inherit half the amount given to sons. Widows may administer property held in trust for their sons and often do so (Aswad 1967). Marriage is patrilocal with sons and their wives living close by their parents. The normal family developmental cycle is for sons to live close to their parents whether in an encampment or a sub tribal neighbourhood and after their parent's death, to continue living close to their brothers. The amount of nucleation of property, economic resources and of the division of labour is influenced by whether the family are semi-nomadic or settled or living from a mixed economy.
The transition from semi-nomadism to wage labour has increased the separation of the domestic and non domestic spheres and altered the pattern of division of labour of men, women and children. Semi nomadism has a domestic mode of production in the same way that agricultural villages based on small holdings run by families do. Although land and herds are owned by the men in the family, the women as wives, daughters and sisters are a vital part of the labour force. They help maintain the herds and the land on a daily basis together with the men and the children. Women herd and teach children how to herd, they water the flock at wells or cisterns, they process the products of the flock, spinning and weaving the fleeces that the men shear, making cheese and yoghurt from the milk in spring. They take part in discussion over which sheep to sell and generally are part of the productive labour force - subordinate yet skilled, a worker not an owner of the means of production. Women combine their work with the herd with their childcare and cooking. They do not undertake all tasks. The gathering of information concerning water sources and grazing is done by meeting other men in the marketplace or in encampments or by walking. The decision on where to pitch the tent is taken by the men. The buying and selling is generally undertaken by men unless they are absent. The following account describes the division of labour in a semi nomadic family during the lifetime of one woman.
"I didn't know Awad before we married. I had seen him in the distance when I was herding in the hills. He was from another sub tribe. When we married, his mother and brother were alive and when we were first married, we cared for a lot of other people who were living in an encampment with us. There was his mother and brother, my uncle mother and unmarried sister. My mother died five months after I was married and Awad's mother died a month later. My sister lived with my uncle and their tent was pitched near ours. She and I herded the flock, worked the land, and made bread and food for everyone.

When I was a girl living with my parents, I only had to herd the sheep and sew. But when a woman gets married that's when the hard work begins. I was the only woman looking after my mother, mother in law, my uncle, sister and husband. When the three old people died and my sister married, Awad's brother came to live with us until he died.

When the children were young, I used to take them herding with me and when they had learnt enough, they went herding on their own. As the children have grown up, they have begun to help in different ways. One drives a truck, another looks after the camels, my eldest daughter herds with the two youngest boys. The men sit at home during the day and on days when I am home, I make a midday meal for them. On a day when I am away gathering wood or doing something else, neighbouring women feed them in the guest tent which is in our tent.
The men eat together and the women take it in turns to prepare food for them. That's Bedouin life."

In semi nomadic life domestic and non domestic activities, production and reproduction take place in and around the home and encampment. There is little spatial or symbolic separation. The introduction of wage labour alters this and results in a greater separation of the two spheres. The type of wage labour that Negev Bedouin men do is generally skilled manual labour and often involves absences of days at a time when they work as trackers in the army, or watchmen on oil pipelines or building sites. Other types of work in factories, or fields may mean they are away during the day. Immediately the world of work is physically removed from the domestic sphere and is also out of the reach and beyond the ken of the women for it takes place in the mainstream of Israeli society.

Similarly children's lives and labour have been affected. They are no longer a vital source of labour. Most of them attend elementary school and some of them attend secondary school. There are 10 elementary schools and 4 secondary school situated amongst sub tribal clusters or within planned settlements.

The extent to which the domestic and non domestic spheres are separated varies according to how reliant the family are on wage labour. Some live entirely from wage labour whilst others maintain a mixed economy with their herds and land. Many families maintain a mixed economy until their employment is reasonably secure
and during this period the women become responsible for overseeing the running of the flock and the home in the absence of their men. The introduction of wage labour then results in a separation of the domestic and non domestic sphere, a reallocation of labour within the family and a nucleation of the extended family household. Fathers and their married sons live with their wives and children contiguously, whether they are in a semi nomadic encampment, a cluster of huts or a neighbourhood of houses. Once they derive their income from wage labour, they no longer share ownership or management of flocks or land so that they eat together less, and help each other less on a day to day basis. This separation of material interests means that the women live close to each other also but need to cooperate with each other less (Lewando Hundt 1978).

Life without a flock is physically less onerous but a shared responsibility and knowledge base has disappeared. Women are less involved in the process of production and are dependent as consumers on the wages that their husbands bring home. Their only access to independent financial resources is through their own domestic livestock - hens, turkeys, goats, and sheep, through selling carpets and through Children's Allowances which are paid to them. Another way of access to money is to send children to the village shop to purchase goods on credit, but since these shops are more expensive than those in the main market in Beersheva, they are only used in a limited way. Men are the purchasers of most of the groceries unless the woman has gone to town to collect her Childrens Allowances.
The pattern of social life in the sub tribal neighbourhood has been altered by families living close to each other, children being at school and men being away from home at work. Women have developed new forms of social activity both within the sub tribal community, in the field of health care of themselves and their children, focusing round the clinic and hospital and around the marketplace as a consequence of receiving State Allowances in the form of Childrens Benefit. The tribe is a residential unit and through living close to relatives, intricate visiting patterns have developed between related women based on reciprocity and focusing on life events such as birth and marriage which make up the social relations of reproduction. The work of visiting will be discussed in greater detail in Chapter 6. These activities are beyond the confines of the domestic sphere and occur at the interface of Arab / Jewish society. The significance of women's work beyond the domestic private sphere of the home will be a major theme throughout this thesis, as will be the nature of the social relations of reproduction. These like the pattern of the division of labour are controlled by a patriarchal principle.

GENDER AND THE SOCIAL RELATIONS OF REPRODUCTION

In many Muslim societies, women's sexuality and fertility is strictly controlled by men, through marriages being arranged as contracts between families, the family's honour being associated with women's 'correct' behaviour, and through the limitation of physical and social contact with unrelated men by segregation,
separate activities and a covering of the body. The degrees of control of reproduction vary from society to society, from family to family and from village to village within these parameters.

The transition to settlement has not altered the control of fertility. Marriages are arranged between families with a preferential pattern of parallel cousin marriage and endogamy. Formally fathers of sons approach fathers of daughters but informally the mothers are consulted by their sons and consult other women concerning their daughters before any formal overture is made (Lewando Hundt 1978). There may be consultation with a girl over whom she will marry, although few girls feel they have much choice. Similarly there is much variation over whether a girl is told of her impending marriage and to whom she will be married. Older women maintain that they didn't tell their daughters about their impending marriage and that they themselves weren't told. However, they also admit that most girls find out whom they will marry from their friends, and from their mother's behaviour. Marriage is either by sister exchange or by exchange of brideprice. The money can then be used by the family to find a wife for one of their sons. Children born to a woman belong to her husband's family so that when divorced she loses her children. However, her status and influence is also derived from bearing children. Her reproductive role is central but owned and controlled by others. The following account by a mother of the two marriages of her fourth daughter gives an overview of the control of fertility. In this family the girl's father is dead, so her brothers control her marriage arrangements.
"Camila my youngest daughter married young when she was fifteen and a half. They asked her eldest brother Sultan for her. I was upset that they (her brothers) had agreed to give her to a man from a different tribe but with us, once all the brothers agree, a woman has no say in the matter. I didn't tell her that she was going to get married for that was our custom then (1970). Today they tell the girl and ask her if she agrees with the choice but then they didn't tell the girls. The bridegroom would come by surprise to collect her and she would only know the evening he came. I suppose she wouldn't be told in case she would make problems and say that she didn't want him. Camila knew that she was going to get married but she didn't know who the man was. She saw the new clothes and that I was crying. She knew who it was finally before she married from her friends, but she still didn't know what he was like.

She was happy with him until she had her son. When he married her, he said that he had been married before but that now he was divorced. The truth was that his first wife was living with her family estranged from him. A year after marrying Camila, he brought back his first wife and his two daughters to live with him. She and Camila did not get along, they began to argue and things got very bad. She came to me with her baby son and stayed for four months. She didn't want to remain with him and she was at the end of her tether. Her brothers told her husband that he should have told the truth and
informed them that he had a first wife and that they demand that he divorce their sister.

A few months after she was divorced, her eldest brother came and told me that people were asking to marry her. He wanted to know if I preferred people from our tribe or from another tribe. He asked me whilst she was there listening. I told him that relatives would be better than strangers, but that he should do as he thinks best. I asked Camila what did she think, but she didn't reply and moved to the back of the tent, as if to say whatever my brothers decide will be acceptable. I won't get involved because if there are problems later, they will remind me that I wanted to marry this particular person. So she said nothing. Her brother said that if she preferred relatives then she could be given to one of Hassan's sons. He negotiated with the family and reached agreement with them that Camila would marry Saker.

A month after she married him, her first husband arrived one day and took her son away. She knew that he would have to go to his father one day but she thought they would wait until he was 7 years old. He was only 2 years old. Bedouin Arab law rules that the husband's family own the children and can take them after a divorce. Muslim law rules that although they belong to the husband's family they should stay with the mother while they are very young. Her first husband didn't bother with Muslim law since she was married to him only by Bedouin custom. What could she have done? She was very upset and angry and so was I. Her first husband's mother brought him to visit once secretly but then she died."
The above separation and divorce occurred during the researchers first period of fieldwork in the Negev 1971-2. During the six months of separation prior to remarriage, Camila hardly left her mother's home and was severely socially restricted. This case history shows clearly that Negev Bedouin women's sexuality is controlled by seclusion and segregation and lack of information and their fertility is controlled by their fathers, brothers and husbands supported by their mothers. Women have more social freedom when they are past menopause and therefore socially neuter. They no longer can reproduce. They may then sit in the men's guest tent, and cross spatial and behavioural boundaries which would heretofore have been unthinkable. The control of reproduction in Bedouin Arab society is explored further in Chapter 6.

Men's control of women's reproduction is a typical feature of patriarchal Muslim societies. Their control, however is not absolute since the Israeli health care system also influences women's reproduction and children's health. The health care system will be viewed as a microcosm of the way in which ethnicity, class and gender articulate in this setting. Its basic organisation is outlined in the following final section of this background chapter.
HEALTH CARE DELIVERY IN ISRAEL

There is no government sponsored comprehensive national health system. The preventive and curative health services are organised separately. The Ministry of Health runs the preventive health care and the union based Sick Funds organise the curative health care. Each settlement and neighbourhood in a town have therefore two clinics with two different health teams, employed by two employers. There is the Ministry of Health Well Baby Clinic which gives ante natal care, and immunizations and may do some care of the elderly, and there is a Sick Fund clinic which cares for anyone who is sick providing they belong to the Sick Fund.

There are three Sick Funds, the largest of which is run by the main Labour Union, the Histradrut. By joining the union, one joins the Sick Fund and the regular dues paid each month cover all health care and covers the cost of the clinics and hospitals run by the Sick Fund. For example in the Negev, the 600 bed hospital in Beersheba is run by the Histradrut Sick Fund, the medical school based in the hospital is subsidised by the Sick Fund, and there are 10 Histradrut Sick Fund clinics and 10 Ministry of Health Well Baby clinics based in neighbourhoods of the city. There are two small additional Sick Funds - Meuhedet and Mizrachi- these provide care for relatively few people nationally.

Besides this organisational split of the curative and preventive health care services, there are a few other relevant general features of the system of health care delivery. The tertiary
sector of hospital care is of a better standard and has a higher status than primary care delivery. There are a number of reasons for this. Firstly a high proportion of medical graduates trained in Israel work in the hospitals as specialists, and the clinics are staffed preponderantly by doctors who are new immigrants from a wide variety of different countries and medical training - Russia, Argentina, Chile, to name a few. These doctors may have been well trained but often have difficulty with the Hebrew language, and may not have had family medicine as their first choice of specialty.

Secondly the working conditions and status of family doctors are problematic, owing to the way in which primary care is organised by the Sick Fund. Unlike GPs in this country, they are not self employed medical practitioners hiring their own staff and drawing high incomes. They are employees of the Sick Fund, working in a clinic where the nurses are allocated to them, and the Secretary/Administrator (maskir) is the titular administrative head of the clinic. They are paid according to the number of patients registered with them which is based on the principle of quantity of care rather than quality. They have little contact with hospital specialists, and few facilities at the clinic for developing innovative forms of primary care, such as a small laboratory, ambulatory surgery, or specialist consultations on site.

The gap between the hospitals and the clinics had become so general a feature of the curative care system, that it was the main reason for creating the fourth medical school in
Israel. This medical school which is based in Beersheba, was established with the main goal of training family doctors, of improving the level of care in the clinics and of bridging the gap between the primary and tertiary sectors.

Israelis visit a doctor on average 13.5 times a year according to Antonovsky's study (1972:447). There are a number of possible explanations for this high rate of visiting. There is a high rate of doctors per capita - in 1970 there was a doctor for every 412 people in Israel (ibid 1972:450). Doctors in the clinics have generally 2,500 patients registered with each of them and they are near at hand in neighbourhood clinics with free access. There is a high rate of revisiting. Antonovsky suggests that this is partly due to the very short consultations and to the common tendency to over prescribe, (medicines were free then and have a symbolic prescription charge at present). In addition it is suggested by Shuval et al (1970) that the clinic has a number of latent functions in addition to its manifest one of curing the ill. These were suggested to be a means of resolving a magic / science conflict for many of the new immigrants in the population, who had used folk healing extensively, a way of coping with the failure and difficulties that accompany immigration to a new country, and a way of countering social isolation by using the clinic waiting room as a social forum. Antonovsky also suggests that health is perceived as very important by all, its importance transcending economic and social difficulties. One of the commonest phrases used in conversation in Israel, rather like the weather in England, is 'Health is the main thing' (Ha ikar habrioot).
For most Israelis living in urban and agricultural settlements, access to a clinic is easy—physically, socially and economically and may be a source of social support, despite the widespread recognition that the quality of care may not be first rate. Does the delivery of primary care to Negev Bedouin Arabs have the same characteristics—is there the same ease of access? Do Negev Bedouin Arabs have the same needs? The answer is that Negev Bedouin Arabs do have particular needs and do not have the same ease of access—physically, socially or economically. Prior to looking at the pattern of service delivery and utilization, it is apposite to look at the demographic structure of the Negev Bedouin Arab population for this affects both their health needs and the way in which they utilize the health services. The following table contrasts the birth rate of the Jewish and Arab populations in Israel with the Negev Bedouin Arabs.

**TABLE 2.4 TRENDS IN BIRTH RATES OF NEGEV BEDOUIN ARABS IN COMPARISON TO THE JEWISH AND NON JEWISH POPULATION IN ISRAEL**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NEGEV BEDOUIN</th>
<th>NON JEWS</th>
<th>JEWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>685</td>
<td>-</td>
<td>11,150 49.3</td>
</tr>
<tr>
<td>1966</td>
<td>1,223</td>
<td>54.4</td>
<td>15,160 49.6</td>
</tr>
<tr>
<td>1971</td>
<td>1,714</td>
<td>62.5</td>
<td>20,436 45.5</td>
</tr>
<tr>
<td>1978</td>
<td>2,135</td>
<td>50.8</td>
<td>23,315 39.8</td>
</tr>
<tr>
<td>1979</td>
<td>2,291</td>
<td>52.0</td>
<td>23,814 39.2</td>
</tr>
</tbody>
</table>

*SOURCE: STATISTICAL ABSTRACT OF ISRAEL 1981*
Table 2.4 shows that the Negev Bedouin Arabs have a higher birth rate than both Jews and other Arabs (those in the North in villages and towns) in Israel. In 1979 the birth rate /1,000 was 52.0 for Negev Bedouin Arabs, 39.2 for all non Jews in Israel, and 22.0 for Jews in Israel. This would seem to indicate, that whereas Jews and other Arabs in Israel have a lower birth rate in response to a lowered infant mortality rate, the Negev Bedouin Arabs do not seem to be lowering their birth rate. The obvious consequence of the high birth rate is a young population and Table 2.5 shows that whereas 35% of the Jews living in the Beersheba sub district were under 14 in 1980, 54% of the Negev Bedouin Arabs were under 14. As would be expected more than twice as many Jews were over 65 (6% / 3%) (Israel Statistical Abstract 1981).

TABLE 2.5 DISTRIBUTION OF THE BEDOUIN ARAB AND JEWISH POPULATION IN THE BEERSHEVA DISTRICT BY AGE GROUPS IN 1980

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>JEWS</th>
<th>%</th>
<th>BEDOUIN</th>
<th>%</th>
<th>TOTAL</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>80,897</td>
<td>35.7</td>
<td>26,470</td>
<td>53.8</td>
<td>107,367</td>
<td>38.9</td>
</tr>
<tr>
<td>15-18</td>
<td>17,222</td>
<td>7.6</td>
<td>4,526</td>
<td>9.2</td>
<td>21,748</td>
<td>7.9</td>
</tr>
<tr>
<td>19-24</td>
<td>27,419</td>
<td>12.1</td>
<td>4,920</td>
<td>10.0</td>
<td>32,339</td>
<td>11.7</td>
</tr>
<tr>
<td>25-29</td>
<td>22,206</td>
<td>9.8</td>
<td>2,755</td>
<td>5.6</td>
<td>24,961</td>
<td>9.0</td>
</tr>
<tr>
<td>30-44</td>
<td>38,295</td>
<td>16.9</td>
<td>5,855</td>
<td>11.9</td>
<td>44,150</td>
<td>16.0</td>
</tr>
<tr>
<td>45-64</td>
<td>28,098</td>
<td>12.4</td>
<td>3,444</td>
<td>7.0</td>
<td>31,542</td>
<td>11.4</td>
</tr>
<tr>
<td>65+</td>
<td>12,643</td>
<td>5.5</td>
<td>1,230</td>
<td>2.5</td>
<td>13,693</td>
<td>4.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>226,600</td>
<td>100.0</td>
<td>49,200</td>
<td>100.0</td>
<td>275,800</td>
<td>100.0</td>
</tr>
</tbody>
</table>

SOURCE: STATISTICAL ABSTRACT OF ISRAEL 1981
Another demographic feature of the Negev Bedouin Arabs is that the infant mortality rate is twice as high for Negev Bedouin Arabs than for Jews in the Negev. Table 2.6 shows that in 1980 the infant mortality rate per 1,000 was 28.3 for Negev Bedouin Arabs and 14.1 for Jews living in the Negev.

**TABLE 2.6 TRENDS IN INFANT MORTALITY RATES OF THE BEDOUIN ARAB AND JEWISH POPULATION IN THE BEERSHEVA DISTRICT**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BEDOUIN ARAB INFANTS</th>
<th>JEWISH INFANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N of Births</td>
<td>N of Deaths /1000 Live Births</td>
</tr>
<tr>
<td>1977</td>
<td>2079</td>
<td>61</td>
</tr>
<tr>
<td>1978</td>
<td>2254</td>
<td>54</td>
</tr>
<tr>
<td>1979</td>
<td>2289</td>
<td>62</td>
</tr>
<tr>
<td>1980</td>
<td>2295</td>
<td>65</td>
</tr>
<tr>
<td>TOTALS</td>
<td>8917</td>
<td>242</td>
</tr>
</tbody>
</table>

**SOURCE: STATISTICAL ABSTRACT OF ISRAEL 1981**

The high birth rate, the young population and the relatively high infant mortality rate is reflected in the way in which Negev Bedouin Arabs use the Soroka Medical Centre which is the only hospital serving the Negev. It is situated in Beersheba and is between 5 - 40 kilometres distant from all Bedouin Arabs living in the Negev region. There is a particularly high utilization of the Obstetric and Pediatric Wards and of the Emergency Room. Table 2.7 shows that during the last ten years, Bedouin Arab women have increased their usage of the Delivery Room. Whereas in 1972, 63% of Bedouin births were in the hospital and 37% at home, in 1981 97% Bedouin births were in the hospital and only 4% were home births. In 1982, the year of
In this research study, 8,318 women gave birth in the hospital, of which 2,397 were Bedouin Arab births.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>HOSPITAL</th>
<th></th>
<th>HOME</th>
<th></th>
<th>TOTAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1972</td>
<td>1183</td>
<td>62.6</td>
<td>706</td>
<td>37.4</td>
<td>1889</td>
<td>100</td>
</tr>
<tr>
<td>1973</td>
<td>1225</td>
<td>66.0</td>
<td>631</td>
<td>34.0</td>
<td>1856</td>
<td>100</td>
</tr>
<tr>
<td>1977</td>
<td>1732</td>
<td>83.3</td>
<td>347</td>
<td>16.7</td>
<td>2079</td>
<td>100</td>
</tr>
<tr>
<td>1981</td>
<td>2215</td>
<td>96.5</td>
<td>80</td>
<td>3.5</td>
<td>2295</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Birth certificates Ministry of Interior, Epidemiology Unit Faculty of Health Sciences Ben Gurion University of the Negev.

The hospital setting and the experience of childbirth and post partum care in the hospital Obstetric Wards are the subject of Chapters 4 and 5 of this thesis. The analysis will utilise quantitative and qualitative data to look at the articulation of gender and ethnicity in the hospital setting.

The Pediatric Ward is also heavily utilized by Negev Bedouin Arab children. Data collected in the Pediatric Wards in 1981 shows that during the first year of life, 35% of Jewish children were hospitalized and 44% of Bedouin children were hospitalized. In other words for every three Jewish children on the wards there are four Bedouin Arab children. There is a difference in the duration of stay
in the hospital. During the study in 1982 the average duration of stay was much longer for Bedouin Arab children than Jewish children (15.4 days/9.8 days) so that the proportion of Bedouin children in the wards at any one time is higher than the initial percentages of hospitalization.

These figures show that hospitalization rates are high for both groups and that the difference between them is not so large considering that many of the Bedouin Arabs are living without running water, sewage, and quite a distance from a clinic, whereas all the Jews have running water, sewage and neighbourhood clinics. The length of stay may possibly reflect not only the severity of illness but also the physicians wanting the children to stay in hospital till they are 'really' well, or the way in which some of the parents visit erratically owing to distance, expense and other commitments so that they are unaware when the child is ready for discharge. There are no figures available but it could be hypothesised that the rate of secondary infections amongst Bedouin children is perhaps higher for these reasons.

This account of the demographic structure of the Negev Bedouin Arab population and the way in which they use the Obstetric and Pediatric facilities of the hospital shows that this population has specific needs related to the age structure of the population and their living conditions. In addition, care on the wards is influenced by communication difficulties arising from linguistic and ethnic differences between the paid carers and the patients and their
families. Care of Negev Bedouin Arabs in the hospital setting is an interface between Bedouin Arabs and the wider Israeli society and will be explored in Chapters 4 and 5.

PRIMARY CARE DELIVERY TO NEGEV BEDOUIN ARABS

Primary curative care is provided by the Sick Fund clinics and by private doctors. Both are used by those who have no health insurance as well as those who do. According to the Histadrut Sick Fund in 1983 27,612 Bedouin Arabs were members of the Sick Fund out of a population of 53,000 (51%).

The Sick Fund has clinics in the four planned Bedouin Arab settlements and a clinic in Beersheba for other Bedouin Arabs not living near a planned settlement. The neighbourhood clinics in Bedouin Arab settlements are organised on the same principle as their clinics in Jewish neighbourhoods with an equal number of doctors and nurses and a pharmacist and administrator. The staff may speak Arabic to some degree or may not. There are fewer doctors per capita provided for the Bedouin population than the Jewish population. The Sick Fund gave an undertaking to the Ministry of Health when they took over curative care in the late 1950s that they would provide primary care to all Bedouin Arabs regardless of whether they were insured. In 1983 there were eight and a half doctors working in the Bedouin Arab clinics - that is one doctor for every 3,194 patients if one counts only the people insured, and 1 doctor for every 6,235 persons if one considers the whole population. The least well served are those
Bedouin not living in planned settlements for they (8,061) are registered at the clinic in Beersheba which had two half-time physicians, neither of whom spoke Arabic and where only one of the two nurses and the pharmacist spoke Arabic.

<table>
<thead>
<tr>
<th>Persons insured</th>
<th>Beersheva</th>
<th>Tel Sheva</th>
<th>Rahat A</th>
<th>Rahat B</th>
<th>Ksaeffe</th>
<th>Aroer</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8061</td>
<td>3029</td>
<td>7097</td>
<td>2300</td>
<td>5975</td>
<td>700</td>
<td>27,162</td>
</tr>
<tr>
<td></td>
<td>1x5</td>
<td>1x8</td>
<td>4x8</td>
<td>1x8</td>
<td>2x8</td>
<td>3x8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2x5</td>
<td>1x8</td>
<td>4x8</td>
<td>1x8</td>
<td>1x8</td>
<td>3x8</td>
<td></td>
</tr>
<tr>
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**TABLE 2.8 PRIMARY CARE CLINICS FOR THE NEGEV BEDOUIN ARAB POPULATION IN THE BEERSHEVA DISTRICT - 1985**

*(size of insured population, size of staff)*

In 1982 the Sick Fund had barely modified or altered its service delivery to meet any special needs of the Bedouin population. There was no increased number of paediatric staff or nurse practitioners, no emphasis on Arabic as a language, no development of a mobile service. As the planned settlements develop, the clinics in them are of a higher standard, particularly the main clinic in Rahat which is sponsored by the Medical School. The level of primary care in
the clinics illustrates the problem operating throughout the system of primary care of the inadequate network of clinics and quality of care in contrast to a large hospital offering high technology care. The gap between the two sectors of care is somewhat greater in the Bedouin Arab sector. The delivery of care is characterised by an attitude which is prevalent in the delivery of health care to ethnic minorities. It is based on the premise that care can be delivered to them in the same way as to everyone and they are not different and have no special needs. When they stop being different - in this case stop being dispersed and speak Hebrew - then care can be delivered more adequately. As three health administrators pointed out to me on different occasions -

'We don't give the Bedouin Arabs the health care they need, Arabs are shit'

and

'No one wants to work with the Bedouin - who knows how many of them are terrorists.'

and

'It is difficult to serve this population when they are so dispersed.'

Since 1981 there has been a slight improvement in the delivery of curative care in that a Mobile Follow up Pediatric Unit was established and oral rehydration was introduced in the clinics in the summer. Both these innovations were made possible by project
funding but the Sick Fund took over their administration and financing from 1983. In addition Beersheva medical school graduates spend a year working in Rahat clinic and if they are not Arabic speaking, learn to be. In the last two years a Day Hospital has been opened in this clinic. Rahat clinic therefore is better resourced than the other clinics which have not changed apart from the addition of one small part time clinic in Lagiya.

Preventive health care is slightly more adapted to Bedouin needs in that the nurses staffing the Well Baby clinics all speak fluent Arabic. The service is provided on a neighbourhood clinic model in planned settlements and in addition there are two clinics in Beersheba, one of which is sited close to the central market and bus station to enable easy access. Of the 2,000 Bedouin babies born in 1982, 75% of them were registered in the Well Baby clinics, however only about one third of pregnant women were registered, and only 50% of the children continued to use the clinics up to five years of age. This would seem to indicate that the coverage of the population for immunization is incomplete and that ante natal care is only being given to one third of the women. In planned settlements a high proportion of women attend, but when access is difficult, because of the clinic being 15-20 kilometres away, then attendance is lower. There is also a mobile immunization unit but this is unsystematic in its travels and gives no antenatal care.

This chapter has given an overview of the setting of this piece of research by reviewing the way in which gender, ethnicity
and class orders have an impact on the lives of Negev Bedouin Arab men, women and children. The first part of the chapter dealt with the position of Negev Bedouin Arabs in Israeli society, and the way in which gender relations have been influenced by the changed mode of production. Finally, the organisation of health care to the Negev Bedouin Arabs reveals how the pattern of health care delivery is a microcosm of the general way in which gender and ethnicity articulate in Israel today.
CHAPTER 3    METHODOLOGY

This thesis explores dimensions of power and social control in maternal and child health care amongst Negev Bedouin Arab women in Israel. In particular, it analyses how the intermeshing of gender, ethnicity and class shapes the organisation and experience of childbirth and postpartum care in the hospital and home settings. This methodology chapter will explore how gender and ethnicity were aspects of the research setting and the implications this had for the process of data collection.

The data being used in this thesis was collected using a variety of methods in three phases. It is an example of multiple strategies or 'triangulation' (Denzin 1970). There is an early first phase of fieldwork in 1972-3, a second phase comprising an epidemiological study when data was collected by interviewers from a cohort of Negev Bedouin Arab mothers in 1982-3, and a third phase of qualitative data gathered by the researcher during fieldwork in 1984. The fieldwork of phase 3 explored some of the issues and assumptions which were tangential to the objectives and parameters of the epidemiological study and looked at some of the same topics using different methods. The discussion here will examine the parameters and assumptions of the research methods, and the influence of the cross cultural setting in which they were used. The approach being taken here is that all methods have their usefulness and that areas of complementarity are as valuable as the areas of non complementarity.
The view taken here of methodology is that it is not just an exposition of research techniques but is also an analysis of the context of the research setting - the world that both the researchers and those researched live in. This world has both personal and social dimensions. Stanley and Wise have pointed out that 'the personal is the political' (1983:53), that there is no value free research, that experience, theory and research must be explored, and that an integral part of the research process is the analysis of the assumptions governing hypothesis formulation, data collection and analysis.

This chapter will review aspects of ethnicity and gender in the three phases of data collection and analysis. Phase One was fieldwork undertaken in 1972-3 by myself as a study of the power and influence of Negev Bedouin Arab women in the context of settlement. Although almost none of the data from this study is used in this thesis, this study influenced my approach to many of the issues in the next two phases, and the informants in Phase Three were the same as in Phase One. The fieldwork in Phase One took eighteen months and took place in two areas of the Negev - a sub tribe living in and around the settlement of Tel Sheva, and a sub tribe living as semi nomads south of Beersheba.

Phase Two was an epidemiological study of infant feeding patterns and infant health which was planned and carried out by a research team of which I was a member. This study took place from 1981-1983 and during this time two cohorts of Bedouin Arab
mothers were interviewed. The 1981 cohort I consisted of 2,152 mothers and their infants and the 1982 cohort II consisted of 2,013 mothers and infants. The mothers were interviewed both in the hospital and in their homes. The mothers were interviewed at home when their infants were either 2 months and 9 months old, or when they were 6 months, 12 months and 18 months old. This thesis uses interviews with 412 of the mothers and infants from the 1982 cohort II in this survey who were interviewed at two and nine months after giving birth. Some data from Cohort I will be used in Chapter 7 concerning morbidity of infants, otherwise the data used here is from the 412 mothers and infants in the subsample of Cohort II who were re-interviewed at home at two and nine months after birth.

Phase Three was fieldwork carried out by myself during six weeks in 1984. This involved participant observation both in the hospital and in the community. The fieldwork in the community took place amongst the sub tribes I lived with during Phase One. In each of these three phases of research, ethnicity and gender impinged and influenced data collection. During these twelve years my own view of ethnicity, and gender changed. In addition, the research setting of the survey in Phase Two reflected the social dynamics around it. As Bell and Newby state:

'All research is political from the micropolitics of interpersonal relationships, through the politics of research units, institutions and universities to those of government departments and finally to the state'

(1977:9-10)
The following account, will explore the implications of ethnicity and gender in these three phases of research.

PHASE ONE - ETHNICITY IN FIELDWORK 1972-3

My own fieldwork in 1972-3 involved both Negev Bedouin Arabs and myself in coping with issues of my and their ethnicity and gender roles; that I was English, Jewish, a 'girl' and later a 'woman'; that they were Muslim Arabs living in Israel with prescribed behaviour for both men and women which was different and which, on a personal level, was often difficult to understand.

I came to the field having completed my first degree and after having learnt the rudiments of colloquial Arabic. My access to the research was through two Israeli researchers - an orientalist Dr Clinton Bailey, who was collecting and translating Bedouin poetry, a previously unrecorded oral tradition, and Professor Emmanuel Marx who had undertaken his doctoral fieldwork amongst a tribe of Negev Bedouin some years previously. They provided me with research grants from two Israeli institutions and facilitated a part time position as an English teacher in a Bedouin Arab elementary school. The circumstances of this fieldwork and its themes are different and yet linked to this present piece of research, for this study continues where the previous one left off, and the qualitative fieldwork is carried out amongst the same two groups of Negev Bedouin Arabs.

My role in the field in 1972-3 was described by an
informant in the following way - 'Gillian is English. She is a girl but she has the freedom of a man.' (Gillian hiya Engleezeeya. Hiya bint laakin indhaa Hureeya zayyarajul). This statement has two parts - the perceived ethnic and national identity and the perceived gender role. I will deal with first one and then the other.

Firstly I was seen and presented myself as English. I and they stressed this, rather than my being Jewish. I spoke and knew little Hebrew and was trying to improve my Arabic. I knew few Jewish Israelis and learnt quickly that to be seen going around with local civil servants from the Ministry of Agriculture or the Interior was a certain way to make me distrusted. The sheikh of the tribe who had a longstanding feud with the family I lived with, used to joke openly that I was a spy and I found that when visiting families, two members of the sub tribe would keep on arriving, too often to be dismissed as coincidence. It was only after I completed my fieldwork, that I learnt that these two men were paid informers for the police and distrusted by everyone. It is clear that both the Bedouin Arabs and the Israeli Police were suspicious!

Older Bedouin Arabs remembered the British mandate (1918-1948) with nostalgia - it was a golden era between the Turkish mandate and the Israeli state. As part of the British policy of indirect rule, sheikh's sons were sent to boarding school and served in the police force. It seemed to be a time of remembered freedom when borders were open or non existent and Arabs comprised the majority of the population being governed by benevolent British officers and
strong sheikhs.

When I was asked, as happened frequently, was I a Christian or a Jew, I would explain that I was Jewish and that just as they were Muslim Arabs and Israeli citizens, so I was Jewish and English; just as many of them were not religiously observant, neither was I. People would often say when introducing me to strangers 'She is English and Jewish but she is all right. She belongs to our tribe.' (Hiya engleezeeya wa jehudiya laakin hiya quaesaa. Hiya min ashirahtnaa.) The idea that it was possible to have a religious or ethnic identity which was not the dominant organising principle in politics or social stratification was a difficult one to communicate and this was when I began to realise how closely ethnicity, class and religion are interwoven in Israeli society.

I wrote up this fieldwork whilst living in Beersheba. The writing up focused on the division of labour and the dynamics of power and authority within the Bedouin Arab family in the context of settlement. Life outside Bedouin Arab society was of little relevance to the research. I had perceived Bedouin women and myself to be encapsulated in Bedouin society. I spoke little Hebrew and therefore had understood little of any interaction at the interface of Bedouin Arab and Israeli life. I was ignorant about Israeli politics and life and as part of my presentation of self in the field had needed to remain so. The writing up was done using a perspective which reflected my ignorance about the interface, an ignorance that was shared to a certain extent by Bedouin Arab women but not men. In retrospect i
also reflected the emphasis of British social anthropology which was to look at the society being studied as a functional whole, and to ignore the power relationships with the administration. Any encounters with government officials, the health care setting, the market place and with the social security system were not used in the analysis.

During this writing up period, I worked in the hospital in Beersheba as a social worker, and later at the Medical School as a social scientist. I learnt Hebrew and became an Israeli citizen and learnt what Bedouin Arabs appear to be like to most Jewish Israelis. I was constantly being asked how could I have lived with people who are so dirty? Wasn't it dangerous and uncomfortable? Wasn't I clever to talk Arabic? (and yet the Bedouin weren't clever to talk Hebrew). The general ignorance and prejudice was painfully shocking.

During the years between the two bouts of fieldwork, I maintained close links with the families I knew well by frequent two way visiting. There continued to be an emphasis on 'foreignness'. It would often be mentioned that my husband, whom I married after leaving the field, was a German Christian and that our families were living in England and Germany respectively. Political discussions were frequent and our views concerning developments in the Negev and on the West Bank and in Lebanon were identically critical and 'dovish' (a term used to describe those who want peace and the return of the occupied territories).

It may be apposite to mention here, that in all the
anthropological and sociological work written by Jewish Israelis about Arab Israelis, there has been no discussion of the methodological issues raised by the researcher's ethnic identity. This is a topic not discussed in papers or at informal meetings. There is a lack of questioning of colonialism and the power relationships within Israel. It is yet another example of how personal, theoretical concerns and methodological issues are closely linked.

A Dutch anthropologist, Van Teeffelen, carried out a study of anthropologists in Israel in 1977 from the perspective of the sociology of knowledge by reading their work and interviewing them, myself included. He recorded that at that time 36/40 Israeli anthropologists had done their research in Israel. Of these 15 had done research work amongst Arabs. 6 of these 15 had completed research amongst Arabs and Jews and only 2 were Arabs. He propounded he was treating 'Israeli anthropological writings not as a comment on Zionist ideology but as an expression of it'(1977.9). He contrasted the perspective of the work done amongst Jews and the work done amongst Arabs and had this to say:

'In contrast to studies of Jews, where the tension between local or ethnic affiliation and national identification and integration appears often in the analyses, there is almost no concern with the tension between local/religious/ethnic affiliations of Israeli Arabs and a broader national or cultural identification. I think this can be partly explained by assuming an overall basic sympathy of Jewish anthropologists for Jewish national values and not for Arab (Palestinian) nationalism.'(1977.21)
From 1974-1983, I experienced a transition from being a visiting English Jewish social anthropologist to becoming a resident English Jewish Israeli health worker / researcher / teacher. Also another aspect of my personal status changed which was important for both me and the Bedouin Arabs - by marrying and giving birth to two children I went from 'girl'(bint) to 'woman'(Hurma) and began to realise how my gender status had affected and would affect my past and future research.

PHASE ONE   GENDER IN FIELDWORK

During my initial fieldwork, I was seen, as mentioned, as a girl with the freedom of a man. A girl is unmarried or recently married with no children. She is heavily socially restricted and has low status with little autonomy. A woman is married with children. I was of the biological age of a woman according to Bedouin custom and practice but was a girl socially. I was not however a Bedouin girl for no group of agnates had control over my potential fecundity. I was foreign, educated and independent. I was an outsider who learnt the language, wore modest clothes and adapted her behaviour to conform to the prevailing norms of modesty - less eye contact with men, a constant checking out with older women about what was appropriate to say and do. I was perceived as neuter in gender and could move freely between men's activities in men's space such as playing 'seeje' (a form of draughts using white snail shells and goat droppings as counters and dips in the sand as squares on a board) in the guest tent, to women's activities in women's space like bread making and
weaving parties.

On reflection I think I negotiated this freedom as an indirect way of making a protest about the segregation of women from public life. I also at that time was not interested in childrearing or weaning and found much of women's daily life boring. Data were available day after day, about women's work in child care and health but went unrecorded and questions went unasked. It was all part of the taken for granted background of every day life. I was not perceived as a woman but rather as an inept younger sister whose bread was always long instead of round. The only social settings where women and men interacted together was the home, so my study focused on family life, the area which male researchers had not studied through lack of interest and lack of access.

I found that I could identify more easily and feel closer to women past menopause for they, like me, had more autonomy and independence. This reflected my own ethnocentrism and self absorption at the time and the way that a comparative value free approach to research is a fiction which even fieldworkers themselves sometimes believe in. I thought that I was exploring the general view of the Muslim Arab woman as oppressed and placing it in a comparative value free context. I focused on the flexibility and room for manipulation within the constraints of Bedouin Arab women's lives. However my own values influenced who my informants were, and what I chose to see as data. Subsequently when writing up, the emphasis of the analysis was influenced by the need to explain that these ways are not so strange,
to all those who were around me who didn't understand these people. Pettigrew, in her study of feuding factions amongst the Jats in India, writes about her approach to fieldwork then which focused on men's factions and ignored women's lives although she was living in purdah. She writes:

'Value commitments, whatever their nature, rarely determined the foci of research topics. Research was seen as being primarily responsive to theoretical concerns and developments within the discipline and there was no conception that anthropological theory could be developed through a praxis outside that of traditional fieldwork.......

...Indeed had one been operating within an integrated consciousness that accepted that knowledge could be generated from feeling and that action in turn must follow from knowledge, the life of your women in the villages could not possibly have escaped serious attention.' (1981:79)

Five years after completing the initial period of fieldwork, I gave birth to my first child. This meant that I had finally become a 'woman' (Hurma) for marriage alone had not been enough. There was now common ground and status. Lengthy discussions developed about nursing, weaning, and sleeping patterns. It was not
only that I was asking questions and observing behaviour that I had previously been unaware of, but there was also a qualitative difference of mutual acceptance and recognition.

The combination of mothering and working at that time in pediatric health care made me aware that my previous research had explored the division of labour and family life in the context of settlement within Negev Bedouin Arab society but had left out the areas of parenting, health work, and the interface between Bedouin Arab and Jewish Israeli life, between the domestic domain of the home and the intermediate sphere of the hospital and clinics. The epidemiological study and the subsequent fieldwork provided me with an opportunity to explore these previously neglected areas.
Phase two of the data collection took place as part of an epidemiological study of Negev Bedouin Infant Feeding and Infant Health which was carried out from 1981-1983 by the Epidemiological Unit of the Faculty of Health Sciences of Ben Gurion University of the Negev, Israel. The study was funded by the National Institute of Child Health and Human Development, Bethesda, Maryland, USA. The survey was the first attempt to collect baseline health data on the Bedouin Arab infant population using a combination of retrospective and prospective interviews. The only previous epidemiological study had been a retrospective study of hospital records by Harlap et al (1977) which estimated Bedouin Arab infant mortality to be somewhere between 50-150 per 1,000. At the time of the survey over 90% of Bedouin Arab women were giving birth in the Soroka Medical Centre and of the 800 births a month more than 200 were Bedouin Arab children. The utilization of both the Obstetric and Pediatric facilities was high and therefore it was felt important both academically and in terms of health services research to record not only changes in infant feeding patterns but also how changing living conditions and clinic utilization were affecting the health of Bedouin Arab infants.

The aim of the epidemiological study was to delineate differential patterns of infant feeding, growth, morbidity and living conditions amongst Negev Bedouin Arab infants and to explore the interrelationships between these variables. It was designed as a large cohort study of Negev Bedouin Arab mothers and infants. No Jewish
mothers and infants were included in the study, since the aim of the research was to delineate internal differentiation within Bedouin Arab society.

Eighty six per cent of all Bedouin Arab women delivering newborns in the 1982 Cohort II were interviewed in hospital or at home about 48 hours after giving birth. Those excluded from birth interviews were women who had still births or infant deaths occurring within 24 hours of delivery, hospital births identified 10 or more days after delivery and women who left hospital before they could be identified. Subsequently the women were interviewed at home when their infants were either 2 months and 9 months old, or when their infants were 6, 12, and 18 months old.

Only a small part of the data of the N.I.C.H. study is used in this thesis. From among the 2013 Bedouin women interviewed after giving birth, a sub cohort of 412 mothers were selected and interviewed at home two months later. 397 mother/infant pairs were seen in their homes at two months. 400 of these women gave birth in the Soroka Medical Centre between February and June 1982 and were interviewed at home between April to August 1982. 12 of these mothers gave birth at home. The 412 women were interviewed by interviewers who were using a questionnaire which was designed by myself in collaboration with others in the research team, and were being supervised and trained by me. (Details of interviewer training are in Appendix 1)
ASPECTS OF THE SURVEY SETTING - GENDER AND ETHNICITY

The social context of the research setting was a microcosm of Israeli social stratification and exemplified how power is part of the research process for both the research team and the objects of the study. The following diagram illustrates the hierarchy of the research team and their gender, ethnicity and occupations.

FIG 3.1
DIAGRAM OF RESEARCH TEAM HIERARCHY

2 PROJECT OFFICERS NICH
1 male medical epidemiologist, 1 female nutritional epidemiologist
American    American

PRINCIPAL INVESTIGATOR
Professor of Epidemiology, Dean of the Faculty of Health Sciences
Male Jewish Ashkenazi Israeli

ADVISOR
Professor of Paediatrics
Male Jewish Ashkenazi Israeli

CO-ORDINATORS
2 epidemiologists, 1 medical sociologist
Female Jewish Ashkenazi Israelis

CODERS
medical students
male and female Jewish Israelis

INTERVIEWERS
students
female Arab Israelis

DRIVERS
2 male Bedouin Arab Israelis
This diagram shows that the hierarchy of the research team was differentiated by ethnicity and gender. In terms of the research team within Israel, the top two positions were held by male physicians who were Ashkenazi Jewish Israelis. This reflects the way that within Israeli society, Ashkenazi Jews hold many of the key positions in politics and in educational and business institutions. It is derived from the fact that Ashkenazi Jews from Eastern Europe made up the earliest wave of immigration to Palestine and only subsequently, after the establishment of the State of Israel, did the Sephardi Oriental Jews come to settle in large numbers. The lower ranking co-ordinators were female Ashkenazi Jews - one Israeli born, one Argentinian, and one English born - and held positions as research fellows, in the same way that within British universities more women hold research fellowships and assistantships than they do lectureships.

The coders and interviewers were all students but were differentiated by the fact that the medical students were all Ashkenazi Jewish Israelis and all male with the exception of one, and the interviewers were all female Arab Israelis. This reflects the fact that there are few Arab Israelis as medical students in Israel (fewer than expected from their proportion in the population) just as Sephardi Jews are also underrepresented in medical schools in the country. This is similar to the underrepresentation of black people in Britain in universities and in prominent positions in institutions. This is illustrated clearly in Smith's work on Overseas Doctors in the National Health Service (1983) and by Doyal's work on Migrant Workers
in the National Health Service (Doyal 1982).

It becomes clear that occupational categories in Israel are expressed in an ethnic idiom, that socio-economic and educational differences are almost co-terminous with ethnicity, and that within occupational categories there are racialized fractions (Phizacklea & Miles 1980). The Arab interviewers came from villages in the North of the country and were both Muslim and Christian. They were the first generation of Arab women in Israel to go to university. The thirteen students were a sizeable proportion of the female Arab students at the university at this time. The two Bedouin Arab drivers had studied at elementary school for five years, but the whole research team was dependent on their knowledge of encampments and settlements for access to the women being sought for interview. So an analysis of the research team's hierarchy reveals that Ashkenazi Jewish Israeli men held positions of the most authority, that Ashkenazi Jewish women were subordinate to them, and that Bedouin Arab women supplied information to female Arab students, who then passed it on to the Jewish data processing team, the bottom echelon of which was the Jewish medical students working as coders.

Just as the ethnic composition of the research team in Israel was a mirror image of Israeli social stratification so too was the link between the Israeli research team and the sponsoring American research institution, a reflection of Israel's present dependence on American funding and sponsorship. The United States of America is Israel's main ally and the Israeli government receives a considerable
amount of financial aid from the U.S.A. every year. The funding of research projects overseas is often related to the political interests of nations. At present there are many North American epidemiologists and anthropologists doing research funded by American institutions in South America. Similarly in the 1950s and 1960s there was British funding available to finance anthropological research in Africa. As Feuchtwang states:

'If government funds, or the funds of government-supporting agencies are used and foreign government permission to conduct investigations needed, then the work will be limited according to government diplomatic policy.'(1973:76)

The basic research design and objectives were set out by the Project Officers at the NICHD in Washington, focusing on the link between infant feeding and the impact of Westernization on a traditional society. This related to the NICHD's interests in patterns of breast and bottle feeding in different settings in the U.S.A. where they had financed research on this topic in the inner city of Washington D.C. and on an Indian reservation. The Principal Investigator added an objective concerning the link between infant feeding and morbidity which related to issues of service utilization and delivery at the Soroka Medical Centre - the high hospitalization rate of Bedouin children. Once the contract for the research was signed, the study was planned and carried out in Beersheva and the data was initially cleaned there. Analysis was planned to be carried out both in the U.S.A. and in Israel. The research design was planned by the Project Officers of the sponsoring institution, and the data collection carried out by the research team in Israel. Co-ordination
was maintained by visits by the Project Officers, one of whom participated in planning the questionaires, and by the Principal Investigator visiting the N.I.C.H.D. and by telex and telephone calls. Decisions concerning the staffing and division of labour within the research team were made in Israel but decisions concerning research design were made in consultation with the Project Officers in Washington D.C.. For example, the pilot study was administered by five female interviewers - two of them were Jewish students who spoke fluent Bedouin Arabic and two of them were Arab students and one was a Bedouin Arab girl. In the course of the pilot study it became clear that Bedouin Arab women preferred being interviewed by Arab students rather than Jewish students, so the research team in Israel decided to hire only Arab students. An example of a change in the research design was the discovery during analysis of the pilot that weaning takes place fairly late amongst Negev Bedouin Arabs. After discussions within the team in Beersheva and with the Project Officers at NICHD, the period of follow up of mothers and infants was extended from 6 months to 18 months.

There were other decisions made during the course of the survey which reflected both the ethnic composition of the team and the distribution of power amongst them. The Arab interviewers were interviewing Bedouin Arab women in the Obstetric Wards shortly after they had given birth. This meant that they visited the wards to carry out interviews seven days a week for a year. The Obstetric Wards were very crowded and the interviewers became concerned about the treatment of Bedouin Arab women as patients by the staff. They worked
increasingly as health advocates responding to requests for information and help from the women they were interviewing. After some discussion with the interviewers, I presented a proposal to the research team that the interviewers should keep a record of field observations concerning staff patient interaction and the type of help Bedouin Arab women were asking for. This could have provided an important source of contextual data and would have monitored the ongoing action research which then later could have been used to alter staffing or policy. The other members of the research team perceived this proposal as tantamount to 'spying' on staff and it was rejected outright. This difference of opinion also reflected that all the research team apart from myself and the interviewers and drivers perceived that this research was 'on' women and not 'for' women (Duelli Klein 1983) and that in addition to being Jewish Israelis, they had great social distance from Bedouin Arabs, neither knowing their language or life style.

Another example of how the ethnic and ideological composition of the research team affected the data collection is the colour of the car used in the study. A white Renault 4 was bought in order to enable the interviewing to be carried out. This make of car is particularly suitable for travelling on dirt track roads, but the problem with this brand new car was that it was white. White Renault 4s are the standard type of car used by Army officers and Government officials when driving on business around the Negev area. The interviewers, the drivers, and myself felt that the car had to be sprayed a different colour - preferably a bright unique colour. The
rest of the research team felt that this was a fairly bizarre use of research funds and were convinced only once some interviewing was tried and women wouldn't come out of their homes or be available for interviews. The car was sprayed a bright blue.

There were inevitably the usual interdisciplinary conflicts over priorities, hypotheses and procedures which derived from differing professional perspectives. Bulmer (1982) has written extensively about the process of incorporating social research into policy making. He comments on interdisciplinary studies in which a single discipline dominates (in this case epidemiology): 'Different sorts of factors are taken into account within an explanatory framework provided by a single discipline'(1982:37). The basic categories and assumptions underlying the study were epidemiological and my role within the team was to do sociology in medicine and not sociology of health.

Added to the difference of professional perspective there were ideological differences. My position in the team was not only that of the only social scientist but I was also the only Jewish member of the research team who was Arabic speaking, or had any knowledge or experience of Bedouin Arab life and society. I felt frequently that I was expected to be the social engineer - to facilitate access and data collection. If, however, I questioned the parameters of the study or its assumptions this was viewed as 'trouble'. This was partly because of the hierarchy within the research team, partly because of being a social scientist working with
epidemiologists, but also because I was perceived often primarily as a 'Bedouin expert' rather than a social scientist, which made points of difference seem political rather than academic. None of the Jewish research team members had ever visited a Bedouin Arab family until the study took place. Two of them lived in a suburb adjacent to a planned Bedouin settlement. One member of the team has tents and shacks 100 yards from her home and she wanted trick questions placed in the questionnaire in order to double check that Bedouin women weren't lying about their children's health, for her only experience of Bedouin Arabs was that they steal washing off clothes lines!

The research setting was therefore reminiscent of British anthropological studies in Africa which Asad describes as: 'a description and analysis-carried out by Europeans for a European audience of non-European societies dominated by European power' (1973:14-15). Asad (ibid) points out that anthropological studies in Africa did not focus on the power relationship between dominating (European) and dominated (non-European) cultures and that they focused rather on the equilibrium within these societies as whole functional systems while ignoring the interface between the group and the colonial administration. In the epidemiological study, the design focused on child health without looking at the interface between Bedouin Arabs and Israelis in relation to housing, water supply or health care. There was no data collected on Jewish Israelis. This is partly because of the biomedical parameters of the study design but it is also in line with the 'cultural' approach. The fieldwork part of this research focuses on the interface between Jews and Arabs in
health care delivery since this was not part of the research design of the epidemiological survey.

Israeli anthropology like Israeli society has a British legacy. Several Israeli anthropologists were trained in Manchester and three who have done fieldwork amongst Arab Israelis - E.Marx (1967), A.Cohen (1965), J.Ginat (1982) - worked prior to their anthropological training in the Prime Minister's Office of Arab Affairs as administrators. Feuchtwang (1973:88) has remarked on how closely anthropology was linked to the administration of indirect rule, particularly when the administration was retreating from direct coercive rule. This is relevant to the Negev setting where indirect rule through sheikhs was set up during the British mandate of Palestine 1918-1948, was continued by the Israelis and is becoming increasingly residual. Indirect rule means that the central government administration formally appoints the tribal leaders, that the administration relies on the tribal leaders for the implementation of policy decisions, and that the administration when necessary bolsters the tribal leader's authority. It is residual in nature because the government has taken over the distribution of vital resources and services. Access to some of these resources, such as land and water, was formerly available to Bedouin through tribal leaders. During the military administration of 1948-1966, these resources were controlled by the central government but access to them was still through the sheikhs. Since 1966, access to land, water, housing and work have been available to Bedouin Arabs through government offices.
Another aspect of power relations between the researchers and the researched is that it often involves the study of 'poor' people by 'rich' people who often by doing the research become richer. This occurs within societies and between societies (Bleek 1979, van Binsbergen 1979). The information proffered by the 'poor' people has an exchange value for the 'rich' people in the form of articles and theses and too often there is little feedback to the field or policy change which improves the situation of the 'poor' people or the problem investigated. The data from this study is being written up by various members of the research team including myself. As yet the findings have not been disseminated to the Negev Bedouin Arabs nor amongst health personnel and the planning of future health service delivery has as yet not incorporated the findings of the study.

The Bedouin Arab women interviewed however, set limits on the degree of cooperation they gave to the interviewers by refusing to answer questions they found inappropriate. Access was not problematic for 98% of the women giving birth agreed to be interviewed in the hospital and at home. However, certain questions had a very low response rate. These were the questions involving other women. For example in the hospital women were asked how many other Bedouin Arab women they had talked to and 19% gave no response. They were asked what had they talked about - nursing 40% no response, use of bottles 68% no response, contraception 75% no response. This would seem to indicate that the Bedouin Arab women perceived themselves as unable to refuse to give an interview but when the information requested involved others, they refused to give it.
PHASE TWO - ETHNICITY AND GENDER OF INTERVIEWERS AND INTERVIEWEES

There were issues of ethnicity and gender which affected both the way in which the interviewers presented themselves and the women they interviewed. A description of the training and administration of the questionnaires can be found in Appendix 1. The following review of the interviewers and interview focuses on issues of ethnicity and gender and cross cultural validity.

The interviewers had cards with the name of the women who had been interviewed in the hospital, their husbands names, the type of dwelling they lived in (tent hut or house) and the approximate location as described by the women when interviewed in the hospital. On arriving at the home of the woman she wanted to interview, the interviewer would ascertain, by talking to the children or the woman herself, that she was at the right home talking to the right person and then she would arrange with the driver to be collected in about 45 minutes or leave the driver waiting in the car until the interview was completed. The interviewer would then introduce herself by name and state that she was an Arab student at the university. She would chat with the woman about herself and the health of the baby and there was a lot of sharing of reciprocal information before during and after administering the questionnaire, for the Bedouin Arab women were as curious about these town and village Arab girls from the North who were studying away from home, as the girls were about the Bedouin Arab women most of whom had no formal education.
The reason that the interviewers would introduce themselves as Arab students in their first few moments of interaction was that during the period of the survey there was a growing polarisation between Jews and Arabs in Israel because of a number of concurrent political events. Negev Bedouin Arabs were suspicious and wary of outsiders and were unable to tell visually if the interviewers were Jewish or Arab. By the time the survey was over both the car and the interviewers were well known, but initially the ethnic identification was important.

As a result of the withdrawal of the army from Sinai, three airports were being built in the Negev, one of which was sited on land where 8,000 of the 50,000 Bedouin in the area had been living since 1870. The removal of these families and their re-allocation in two settlements occurred during this survey. Simultaneously seminomadic families were being harassed by a small unit of agricultural 'wardens' whose job was to prevent flocks from trespassing onto land being used for agricultural, military or nature reserve purposes. This Green Patrol used to confiscate flocks but in their 'zeal' would sometimes level tents and fire shots in the air. In addition the war in Lebanon broke out during the interviewing. This war was perceived by both Bedouin women and the interviewers, myself and many others, as being against the Palestinians. Most of the interviewers had relatives who had left Palestine in 1948 and were living in Lebanon and the Bedouin Arab women also perceived themselves as Palestinians so that their shared ethnicity increased in importance during this study.
The interviewers shared not only their ethnicity with the Bedouin Arab women but also their gender, although they were at a different stage in their life cycles since they were all unmarried. The Bedouin women perceived the interviewers as being 'unknowing' (jaahil) about married life and child rearing. There was a social distance of life experience. The Bedouin Arab women practised traditional forms of modesty and segregation from unrelated men which the interviewers did not. The interviewers wore trousers and skirts and mixed freely with unrelated men. They were living away from their families, working and studying. Bedouin Arab women perceived these things as being impossible for themselves, although perhaps possible for their daughters.

Finch (1984) writes about the politics of interviewing when women interview women and highlights that women interviewers and interviewees often share a powerlessness which makes it 'easy to talk' but also allows for the possibility of betrayal for the women interviewers are often powerless in their position in the research team (1984:81). In this survey setting, the interviewers and interviewees shared being Arab women in Israel and neither group had much control over the information being gathered neither in its form nor its analysis. As Oakley (1981) says: 'Both interviewer and interviewee are thus depersonalised participants in the research process.' Oakley maintains that in repeated interviewing their develops an element of reciprocity, of mutuality, and that the relationship becomes more non hierachial. In the epidemiological survey, there were elements of reciprocity in the mutual exchange of
information and the health advocating activities of the interviewers on the ward, but the educational and life experience differences remained. It seems simplistic and inaccurate to describe the relationship between interviewers and interviewees as 'non hierachical'. There were bonds and barriers - areas of mutual identification as Palestinian Arabs in Israel for example, and areas of difference such as aspects of gender behaviour and education.

PHASE TWO - PROBLEMS OF CROSS CULTURAL VALIDITY IN THE DATA AND METHOD

There were problems of cross cultural validity in the epidemiological study. These were evident in the health measurements used, in some of the questions used and were in part a consequence of the use of a questionnaire survey in this setting. These three areas will be discussed in relation to the limitations of them in a cross cultural setting.

The objectives of the epidemiological study were the following -

1) to record the trend of infant feeding practices
2) to record the change in infant feeding practices by collecting information about previous children
3) to identify factors which influence the choice of infant feeding using prospective and retrospective data
4) to explore the links between infant feeding and hospital admission data and growth
These objectives have features shared by many epidemiological studies. Firstly there is an intention to document a group pattern of health behaviour, in this case Negev Bedouin Arab mother's infant feeding patterns. Secondly, health is viewed as a state of physical well being which can be measured by mortality and morbidity episodes which require hospitalization and by measuring physical development - weight, length, head circumference, skinfolds - at birth, and then at two months and nine months or at 6, 12 and 18 months. This view of health is a biomedical view which sees health as the absence of disease and as a physical property of an individual's body and therefore it is measured as such. Health is not perceived as being part of mental well being nor of level of functioning nor of the allocation of resources in society - it is measured in the survey on an individual organic level.

The definition of health used was derived from Western biomedical thought and concepts which are dominated by a concept of health which is based on the absence of disease. It is clear that the biomedical individualised disease model of health is very compatible with research by survey method which also views individuals as equivalent social units. Graham (1983) summarises the main principles of social surveys as being that they deal with social units, that the units are equivalent, that the units and their products have an object form external to the individual, can be verbalised and are stable and that the units and their outputs are measurable. She writes: 'These principles appear to accord well with those embodied in the ideology of nineteenth century capitalism.' (1983:139)
It is not only survey method that appears to be linked ideologically to the industrial revolution but also the western view of health. Health as defined in the absence of disease in an individual's body gained ascendancy at this time over the previous theories of disease which were based on ideas of miasma and humours. Clinical medicine and epidemiology differ from each other in that the former focuses on the diagnosis and cure of the individual and the latter focuses on the incidence and distribution of disease in a population but they both share the view that health is the absence of disease.

For example, the hospitalization of a Bedouin Arab infant with bronchitis may be viewed as a measurement of morbidity and a measurement of the health status of a child. Alternatively analysis of case notes, along with observation and chatting, may highlight that hospitalization of a Bedouin Arab child is not just an indication of their physical state. Jewish children with the same degree of bronchitis may have been seen in the Pediatric Emergency Room and not been admitted to hospital. Physicians may explain that their criteria for hospitalization are not only physical but include their perceptions and feelings that Bedouin Arab children live in shacks and tents often far from clinics and they would rather admit the child so that he/she is under observation rather than rely on the parents to return if the child's condition worsens. Observation and conversation may reveal that the duration of hospitalization is linked to the time that elapses between when the child is ready for discharge and when the parents come to visit. Sometimes a few days pass and the child...
picks up a secondary infection. Or physicians may state that they like to keep the Bedouin Arab children in a little longer so they are really strong before going home. Thus hospitalization rates may be used as measurements of individual children's health and be generalised to reflect a population or if other methods of data collection are used in addition to the basic statistical ones, a web of interrelated factors are highlighted which show that hospitalization rates are related to Jewish Arab relations in Israeli society, to different cultures and differential access to resources.

Besides morbidity and mortality, the other measurements of physical health used in the survey were weight, length, skinfold, and head circumference. These are international measurements of growth and development and the relationship between weight and height give growth percentiles which are used to chart a child's development. In Israel, the growth percentiles used as average patterns of development are those derived from North American children. This means that a large proportion of Bedouin Arab children fall beneath the third percentile and are seen as suffering from a 'failure to thrive' syndrome.

There is no statistical data giving an idea of the general developmental patterns of Bedouin Arab children nor of how the process of settlement and wage labour is affecting this. The growth and development data of the survey therefore had an importance beyond that of its connection to infant feeding, for it was a means of providing baseline data on patterns of growth amongst this population.
The growth measurements of the children in the sample will be discussed in Chapters 7 and 8.

The use of growth percentiles based on an American population to provide a mean against which the Bedouin Arab children are measured raises issues of cross cultural validity. Is it legitimate to use standards of growth and development of a Western post industrial country for assessing the growth of Third World Countries? It tends to pathologise the growth pattern for the majority of children cluster below the mean. On the other hand if one uses locally developed percentiles, then one could argue that poor nutrition, and socio economic deprivation are being normalised. This problem will be discussed in Chapter 7.

The survey interviews in phase two were carried out in the hospital and the home on a one to one basis and yet when they took place, the women being interviewed were either in a hospital room of eight to ten other women or were at home with other women and men present. The figures of the survey show that only 6% of the interviews in the home were conducted with the mother by herself, and 26% of the interviews were with the mother and her other children. The remaining 68% of the interviews were carried out in the presence of other men and women. Yet despite the general presence of a group of people, the interview was still geared to an individual.

This raises the issue that perhaps the procedure of interviewing individuals by questionnaire is not only 'context
stripping' but it is also ethnocentric and inappropriate when doing research on women in a non Western cultural setting. Currer (1983) in her work amongst Pathan women in Bradford discusses this limitation of questionnaires in certain settings. Negev Bedouin Arab women live in a society where the emphasis on the individual is very muted. Individual's obligations to their families are more important than their individual freedom. A conversation with one other person is a rare occurrence which others try to prevent. When a woman has a visitor, other women join her. In Bedouin Arab society when you are sitting with a group of people and you want to talk alone with one person who is there, you have to ask permission for the talk by stating 'I wish to have a private talk with X' (bidee mukhlaweeya maa X). Then you get up and leave to talk with X, usually in full view of the others, but some distance removed from the tent or dwelling. Women control other women by going to see them when they have visitors, or by sending their children to collect information when they cannot go themselves.

It is a social setting where individuation is limited and this is maintained by sharing social events, maintaining gossip and living, when not nomadic in sub tribal residential clusters where everyone is interrelated. It is clear than in these conditions, the interviews are rarely one to one, are based on 'public' accounts and that very little is 'private' in the way that it is in Western individualistic societies.

Another problem was the way that some of the questions
were based on cultural assumptions which were inappropriate for Negev Bedouin Arab society and resulted in partial answers of limited validity. For example there were questions in the questionnaires which were aimed to provide information on the Bedouin Arab family structure, living conditions and general economic conditions. The objective was to cross tabulate this information with the health status of the infants surveyed and their infant feeding patterns. Some of the background variables such as type of dwelling and source of water supply were asked and answered in a way that makes the information unreliable. For example when collecting economic information, questions were only asked concerning the occupation of the child's father and grandfather, and not the child's brothers or uncles who live in an extended family often pooling financial resources with the child's father (69,32-41 Appendix 2).

There were some questions concerning furniture in the home (70, 24-31, Appendix 2). Some indication of the degree of westernization was sought from the presence or absence of chairs, sofas, beds, and books. Yet the furnishings in a home reflect the taste and spending power of the men in the family. One mother of six children lives in a large house with every modern convenience and appliance, yet her daughters cook in the kitchen, her husband and sons sit in the sitting room and she cooks over a fire in the garden and sits on the floor in a recess near the kitchen. This reflects her preference but also the female and male space in the house which is split in terms of being organised on traditional or modern lines. In general although information was collected about the economic and
social environment, some of it was ethnocentrically distorted. Despite these limitations, the survey did however collect data on physical growth and development patterns and social conditions which had never been collected before on this population.

The survey research had linguistic and conceptual problems which are typical of research carried out in cross cultural settings. The questionnaires were planned in English, and translated into Hebrew with Bedouin Arabic keywords. The interviewers read them in Hebrew and administered them in Arabic. The coders coded in Hebrew. How far does this invalidate the data? In areas of indubitable fact such as weight, dwelling, type of feeding - very little. Some questions consistently had a low response because of conceptual problems such as the way in which many women didn't know if they were anaemic or had blood pressure problems for these were Western medical categories (Question 35 -17-18 Appendix 2). Some areas of fact were shaky too. For example many older women did not know their exact age and the date in their identity card was an estimate. However despite these limitations, it can be said the most of the data was reliable owing to the quality of the interviewing and the cooperation of the interviewees.

The data was prepared in Beersheva and analysed both there and at the N.I.C.H.D. in Washington using Statistical Analysis for Social Scientists. The researcher worked in Washington on the data analysis in 1985 and 1986 together with the original Project Officer for the study, Dr. M. Forman.
PHASE TWO - THE RELATION OF THE SUBSAMPLE TO THE SAMPLE

The survey was based on non-probability sampling of two cohorts of all Negev Bedouin Arab women who gave birth to babies during 1982 and 1981 at home or in the hospital and who stayed in the hospital less than ten days. The normal length of stay was two nights and three days but after a Caesarean section or a birth on the way to the hospital mothers and infants would stay for 7-9 days. The interviewers would interview mothers in the hospital between 24-48 hours after childbirth. This was done by two interviewers who visited the Obstetric Wards every day and obtained a list of newly admitted women from the Delivery Room Record Book. It was more complicated to trace home births. One of the drivers would regularly visit the tribal registrars to whom home births are reported a few days to weeks after their occurrence by the father. The interviewers generally interviewed mothers who had had their babies at home a few weeks after childbirth.

In Cohort II of 1982 there were 2,428 births to Negev Bedouin Arab women, and of these 2013 mother and infant pairs were part of the study. Some were interviewed shortly after birth, and then at home when the infants were 6, 12, and 18 months old and these are not part of the data analysed here. The subsample used in this research study are 412 mother and infant pairs who were interviewed shortly after birth. 397 of the original 412 mother/infant pairs were re-interviewed at two months. 15 pairs were excluded owing to the fact that 12 of them were home births and 3 were interviewed before 40 days had passed since their birth. Subsequently 385 pairs were
interviewed at nine months of age. The following table summarises this information.

**TABLE 3.1 SAMPLE OF EPIDEMIOLOGICAL SURVEY**

<table>
<thead>
<tr>
<th>N</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2428</td>
<td>Births in 1982 to Negev Bedouin Arab Women</td>
</tr>
<tr>
<td>2013</td>
<td>Birth interviews both in the hospital and at home</td>
</tr>
<tr>
<td>412</td>
<td>Re-interviewed at 2-3 months</td>
</tr>
</tbody>
</table>

**SAMPLE FOR ANALYSIS**

<table>
<thead>
<tr>
<th>N</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>412</td>
<td>Mother-Infant pairs</td>
</tr>
<tr>
<td>12</td>
<td>Home Births</td>
</tr>
<tr>
<td>3</td>
<td>Aged &lt; 40 days</td>
</tr>
</tbody>
</table>

TOTAL 397

All the tables in this thesis will be presented with frequencies and percentages to one decimal point. Owing to the size of the sample, almost every table has one or two cells whose frequencies are below 30. It was however decided to retain the decimal points for percentages of all frequencies, although it is necessary to advise the reader that when the frequencies are small the decimal place is of spurious scientific value. When using a subsample of a large cohort based study the representativeness of the subsample needs to be explored. The following tables outline the differences and similarities between the 412 mother infant pairs of the subsample as compared to the 2013 of the total sample. The subsample has a higher proportion of home births and fewer babies born on their way to hospital than in the total cohort. It is not clear what the reasons for this were. Subsequently the 12 home births were not included in
the follow up at two months and nine months. Table 3.2 shows these differences.

TABLE 3.2

COMPARISON OF CHILD'S PLACE OF BIRTH IN THE TWO MONTHS SAMPLE WITH ALL OTHERS IN THE 1982 BIRTH COHORT

<table>
<thead>
<tr>
<th>CHILD'S PLACE OF BIRTH</th>
<th>2 month cohort</th>
<th>All others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Hospital</td>
<td>376</td>
<td>1544</td>
</tr>
<tr>
<td>On the Way</td>
<td>24</td>
<td>102</td>
</tr>
<tr>
<td>Totals</td>
<td>412</td>
<td>1673</td>
</tr>
</tbody>
</table>

Note: Excluded from the 'All others' column are 340 cases where the place of birth is unknown.

There is also a difference in the birthweights of the sample and the Cohort. Table 3.3 shows a major difference in birthweights between the two groups. There is a lower incidence of low birthweight babies (over 4% in the sample as against 14% in the 1982 Birth Cohort).

TABLE 3.3 COMPARISON OF BIRTHWEIGHTS OF INFANTS IN THE SAMPLE WHO WERE FOLLOWED FOR TWO MONTHS WITH ALL OTHERS IN THE 1982 BIRTH COHORT

<table>
<thead>
<tr>
<th>Birthweight</th>
<th>2 months</th>
<th>All others</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2499 gms</td>
<td>19</td>
<td>285</td>
</tr>
<tr>
<td>&gt;2500 gms</td>
<td>387</td>
<td>1679</td>
</tr>
<tr>
<td>Unknown</td>
<td>6</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>412</td>
<td>2013</td>
</tr>
</tbody>
</table>
This difference in birthweights may be partly explained by the fact that there are fewer primipara or mothers aged between 18-24 in the subsample. This is shown in Tables 3.4.

**TABLE 3.4 COMPARISON OF MATERNAL AGE IN THE SAMPLE FOLLOWED FOR 2 MONTHS WITH ALL OTHERS IN THE 1982 BIRTH COHORT**

<table>
<thead>
<tr>
<th>Maternal Age</th>
<th>2 months</th>
<th>All Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>&lt;20</td>
<td>19</td>
<td>4.6</td>
</tr>
<tr>
<td>20-24</td>
<td>86</td>
<td>20.9</td>
</tr>
<tr>
<td>25-29</td>
<td>116</td>
<td>28.2</td>
</tr>
<tr>
<td>30-34</td>
<td>79</td>
<td>19.2</td>
</tr>
<tr>
<td>35-39</td>
<td>72</td>
<td>17.5</td>
</tr>
<tr>
<td>40-44</td>
<td>30</td>
<td>7.3</td>
</tr>
<tr>
<td>45+</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Unknown</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>412</td>
<td>100</td>
</tr>
</tbody>
</table>

There is also a difference in parity between the two groups as Table 3.5 shows that the sample has fewer women with 1-2 children and more women who are mothers of more than 7 children. It is also due to an over representation of mothers living in the planned urban settlements of Rahat and Tel Sheva. This occurred in the follow up at two months when great care was taken to interview mothers between 40-60 days after childbirth. This meant that mothers who were difficult to locate were dropped from the subsample when the drivers had been unable to locate them by the time their infant was 60 days old. Families living in planned urban settlements are relatively accessible so that they are over represented in this subsample.
TABLE 3.5 COMPARISON OF LIVE BIRTHS OF THE SAMPLE FOLLOWED FOR 2 MONTHS WITH ALL OTHERS IN THE 1982 BIRTH COHORT

<table>
<thead>
<tr>
<th>Live Births</th>
<th>2 months</th>
<th>All Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0</td>
<td>45</td>
<td>10.9</td>
</tr>
<tr>
<td>1</td>
<td>36</td>
<td>8.7</td>
</tr>
<tr>
<td>2-3</td>
<td>101</td>
<td>24.5</td>
</tr>
<tr>
<td>4-6</td>
<td>98</td>
<td>23.8</td>
</tr>
<tr>
<td>7+</td>
<td>123</td>
<td>29.9</td>
</tr>
<tr>
<td>DK</td>
<td>9</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>412</td>
<td>100</td>
</tr>
</tbody>
</table>

The preceding tables clearly outline the differences and similarities between the total cohort and the subsample of 412 mother/infant pairs. This discussion of the epidemiological study which comprises Phase Two of the data collection discussed in this thesis has reviewed not only the parameters of the subsample, but also the way in which the epidemiological survey measured the health and development of Negev Bedouin infants and recorded changes in their infant feeding patterns and social factors which may have influenced them. This section has also discussed the cross cultural limitations of using a survey questionnaire in this particular setting and discussed how ethnicity and gender were embedded in the research setting. The final section of this chapter will outline the fieldwork of Phase Three which complements the survey data gathered in Phase Two.
The fieldwork data of phase 3 is supplementary to the survey data of phase 2. Its perspective is derived from my anthropological training and previous fieldwork which used participant observation more than structured interviews. The awareness of ethnicity and gender developed during the years after the completion of Phase 1. I became aware of the interface between Bedouin Arab society and the wider Israeli society through working in the health care setting and living in the country. This interface could be seen particularly clearly in the hospital setting where Bedouin Arab women and children were a large proportion of the patients in the Obstetric and Pediatric Wards and the rest of the patients and most of the staff were Jews. The interaction in this setting is multilayered - gender, ethnicity and occupational categories being sometimes interwoven and sometimes separate.

Another influence on the perspective of the fieldwork in Phase 3, was the year prior to the fieldwork spent at the Sociology Department of the University of Warwick. I read and discussed with others much of the recently published work and ongoing research that was being done on feminist research in the health field, in particular in the area of the sociology of reproduction. I began to wonder about the juxtaposition and intermeshing of Bedouin Arab women as unpaid health workers with Jewish women as paid health workers in the context of post partum care. Feminist research methodology in its emphasis on the importance of making values explicit and the usefulness of
exploring fully the link between experience, theory and research enabled me to reflect on some of the values held by myself and others in the research team.

The debate about quantitative and qualitative research methods has been ongoing for years. It has been presented as a debate between the two disciplines of anthropology and sociology. The debate is also within sociology with the quantitative being seen as having an andocentric bias and the qualitative in the form of oral history, narrative, participant observation and unstructured interviewing as more appropriate for feminist research.

Some feminist researchers feel that survey methods are limited in their usefulness as a methodology for feminist research. Graham (1983), Duelli-Klein (1983) and Mies (1983) have all written that survey method has an andocentric bias. It is not only 'context stripping' (Duelli-Klein ibid), but also an example of masculinist sociology based on the individual and the rational. Reinharz (1983) states that survey methodology reflects the values and ideology of not only sociologists but also the wider social order which is male dominated, hierachial, and dominated by scientific objective 'value free' methods. This piece of research has used both quantitative and qualitative methods in order to illuminate a complex area of social life. It is not seen as either primarily sociological or anthropological nor as a piece of feminist research or an epidemiological study. It is influenced by all these schools of thought.
Another aspect which influenced the approach taken here in the fieldwork in phase 3 was the snapshot quality of much research which records the behaviour of people in a society at one moment in time. The fieldwork in phase 1 was in the early 70s and in phase 2 during 1982. The survey collected data over time for there was follow up of mothers for 18 months and in addition an obstetric and infant feeding history was taken from each mother about her previous children. The fieldwork in phase 3 also attempted to have a dimension over time by talking with women of different generations who were related to each other, and whom had known the researcher for 12 years. Grandmothers, mothers and daughters, great aunts, aunts and nieces were involved and contributed their experiences, practices and views.

The fieldwork was undertaken in the summer of 1984 for 8 weeks. There were two settings - the Delivery and Obstetric Wards of the hospital and the homes of the families from two sub tribes that I had lived amongst during the fieldwork of phase 1 in 1972. The access and presentation of self in each setting was different so that they will be discussed separately.

Access to the Delivery and Obstetric Wards was negotiated formally through the Professor of Obstetrics. I wrote to him and on arrival asked his permission to observe the staff and patients in the wards. He agreed that I could have access to the Delivery Room and to one of the Obstetric Wards. He asked me not to observe in his ward. The aim of the observation was presented as an attempt to gather data which would supplement some of the findings of
the epidemiological survey. He did not facilitate my access by introducing me to the medical personnel.

Owing to my previous work in the Medical School, I was known not only to the Professor of Obstetrics but also to the midwives for I had some years previously helped them with some research work on a comparison of childbirth experiences of Bedouin Arab and Jewish women. I was unknown to almost all the physicians in the Wards owing to the way in which junior doctors rotate between departments. I did not formally introduce myself to the physicians. Access was easier to negotiate through the midwives and nurses whom I already knew and this helped me to maintain a low profile.

Being neither a member of the health personnel nor a woman giving birth, I had no clear role. Both Bedouin Arab women using the wards and the nursing staff quickly gave me a role of interpreter and advocate. Staff used me as an interpreter even when they spoke some Arabic. For example, a midwife admitting a mother in labour asked me to check that this was really her third pregnancy for although she had said that she had 2 children at home, her labour seemed slow. Bedouin Arab women asked me questions about procedures for the staff were not always forthcoming with information and did not always speak Arabic. For example, a woman who had been on a foetal monitor for 15 minutes, was then told to go to the Labour Room. She asked me if the machine had showed that the baby was all right? (al walad quaes bil makina?).

Owing to the hospital protocols on 'cleanliness', I
had to wear a gown. In the Delivery Room, I wore a gown identical to that worn by patients, and in the ward too. I explained to both staff and patients when asked, that I was there to understand more about the health care of Bedouin Arab mothers.

One way to resolve the incongruity of my role, was to accompany some women during their labour, delivery and post partum stay in the hospital. I asked three women who came to deliver if I could do so, and although puzzled they were happy to have the company, particularly during labour. By accompanying them throughout their stay in the hospital, I was able to record to a certain extent what they heard and saw going on around them. During these three days, I met and talked with 13 Bedouin Arab women who had given birth, 5 Jewish women who had given birth, 9 midwives who were on shift while I was in the Delivery Room, 5 doctors and 10 nurses. I also observed interactions between Jewish women patients and health personnel and between Jewish women patients and Bedouin Arab women patients. In addition there were 4 Bedouin Arab women who came to the Delivery Ward but who were not in labour.

As previously mentioned in this chapter, the focus of the epidemiological study was differentiation within Bedouin Arab society rather than between Bedouin Arabs and Jews. Consequently no statistical data was collected on Jewish mothers and infants for comparative purposes. The qualitative fieldwork which I undertook in 1984 was looking at the context of childbirth and post partum care in the home and hospital setting. In the hospital setting both Jewish and
Bedouin Arab women were receiving care. Although the qualitative fieldwork was focused on Bedouin Arab mothers, I nevertheless conversed with 5 Jewish women patients at some length and observed others receiving care. In addition I had some previous experience of patterns of care in the Delivery Wards through working with the midwives in 1977 on a research study comparing Bedouin Arab and Jewish women's childbirth experiences. This research involved frequent visits to the Delivery Ward over a two month period. Further background knowledge of the Obstetric Wards is derived from visiting Jewish and Arab friends after childbirth during the years 1972-83 and from contact with a Women's Group which submitted a report to the Professor of Gynaecology in 1978 concerning aspects of care in the Delivery and Obstetric Wards.

The second setting of the qualitative fieldwork was amongst the families whom I had lived with 12 years previously. I visited women I knew, both those who had young babies and those who didn't. I talked with 8 mothers of new born babies under two months of age and 35 women who were either mothers, or mothers and grandmothers. Although they were sometimes alone doing their domestic chores, they were never so for long, and many conversations took place whilst weaving, sewing, washing clothes and cooking with other women. The interviews resembled leisurely conversations and would vary in length and pace depending on the time of day, the demands of children and husbands, whether someone was telling a narrative of their past experience or whether there was an ongoing discussion of views. The limited number of one to one conversations was not because I was being
'watched', but because visiting and domestic work are often group activities which are both socially supportive and socially controlled. The first 6 weeks of this fieldwork were undertaken alone. During the last 2 weeks, the children joined me, much to the relief of the Bedouin Arab women who thought it was odd that I had come without them.

The reason the fieldwork was amongst a network of informants and families whom I had lived with 12 years previously was that I wanted to be able to be with women whom I knew well in order to hear more 'private' or 'semi-public' statements concerning childbirth, child care and health care. I had access to both present and past experiences through talking with grandmothers, mothers and daughters. I also had a limited amount of time available for this fieldwork and knew that acceptance would take a long time to negotiate in a group of strangers, particularly in view of the polarised political climate. One of the sub tribes lived in a planned settlement and the other lived in an encampment and were still flock owners.

How far the quantitative and qualitative data can be complementary when they have different starting points and objectives is questionable. As Trend (1978:352) states:

'The problems we faced involved not only the nature of the observations versus statistical inferences but two sets of preferences and biases within the entire research team.'
As previously mentioned the data in this thesis were collected using a variety of methods in three phases. The survey was planned as an inter-disciplinary study but my later fieldwork, which was an adjunct to the study, is perhaps an example of a multi-disciplinary study, using the distinction as pinpointed by Stacey (1969). In an inter-disciplinary study, the members of the research team are drawn from different disciplines and in the latter, team members do separate studies within a broad area. My fieldwork explored some of the issues which were tangential to the objectives of the epidemiological survey such as the interface between Bedouin Arabs and Jews in health care or the social context of health care in the hospital and home setting. It also explored some of the same topics using a different method such as infant feeding patterns or patterns of interaction in the hospital setting.

The ethnicity and gender of the researchers and the researched were an integral part of the research design and data collection in all three phases of the research. Cottle writing about his work as a white researcher amongst black Americans describes the experience of the research in a way that is generalisable to the Israeli context of this research.

'Nothing then, is more troublesome than to leave these families each day, realising how much empty space remains between them and me, and that all of us are aware of this space. It is a space of politics, receiving my blind spots and patronising gestures, as well as their feelings of attachment,'identification', ambivalence or just
plain caring. It is where the politics begin and end, where disenfranchisement oppression and colonisation breed and where research of the sort I have reported takes place. Words, intellects and emotions live in this space, as do laws, customs, history and scholarship....it is the site of the distallates of America's political system in this one moment, and in this one context.' (1973, 1982:126)

It remains to be seen in the following analysis to what extent an understanding of gender, ethnicity and class in the context of post partum health care of Negev Bedouin Arab women and their children can emerge from these different phases of research which were done with such different methods and with so much social and political distance between the researchers and the researched.
This thesis argues that the control and organisation of reproduction is shaped by the articulation of gender, ethnicity, and class. The modes of production and reproduction are part of the political and economic structure of a society. A gender, ethnic, or class perspective focuses on one of the three as an organising principle and avoids focusing on how the three dimensions are articulated to shape both the organisation and experiences of social life.

The area of social life focused on here, is that of childbirth and post partum care. The setting is Negev Bedouin Arab women in Israel. The power relations articulated in the gender, ethnicity, and class orders in this setting, intermesh to affect childbirth, post partum care, and infant health.

Part Two of the thesis analyses the organisation of childbirth and post partum obstetric care in the hospital setting. Its argument is that although a gender perspective can illuminate much of the organisation of hospital childbirth and obstetric care – the medical management of childbirth, the way in which the wards are organised, the role of technology in medicine, the control of a male
medical hierarchy over female patients - it is the intermeshing of gender and ethnicity which can explain more fully the way in which health care in this setting is delivered and experienced by both Negev Bedouin Arab women and the predominantly Jewish health personnel. Chapter Four explores the gender perspective in relation to the management of childbirth and post partum hospital care and Chapter Five explores a two dimensional perspective of the intermeshing of gender and ethnicity in the Negev hospital obstetric setting.

There is a combination of quantitative and qualitative data being used here. The quantitative is based on 412 interviews administered in 1982, to Bedouin Arab women in the Obstetric Wards 24-48 hours after giving birth. The interviewers were trained and supervised by the researcher, and this is fully described in the preceding methodology chapter and Appendix 1. The qualitative data is based on observation in the Delivery and Obstetric Wards, where three Bedouin women were followed through their delivery and hospital stay by the researcher. There is also data from other women in the wards and in the community concerning their experience and views of hospital childbirth. The numbers involved were 12 midwives, 13 Bedouin Arab women in the hospital, 5 Jewish mothers in hospital, 10 nurses and conversations with 47 Bedouin Arab women in the community. The two types of data give different types of information, some of which overlaps, and some of which doesn't. The quantitative data gives information on the physical status of the mothers and babies, and some limited information on interaction in this setting. The qualitative data provides additional information, concerning patterns and types of
interaction and care, and also on the use of space in this setting.

ISSUES IN THE LITERATURE AND THEIR RELEVANCE TO THE SETTING

The management of childbirth and obstetric care, has been the subject of a considerable amount of sociological research, and the literature has been summarised in different ways by Macintyre (1977) and Oakley (1979). Macintyre reviews the literature on two issues - the place of confinement and the active management of labour. She explores how these issues have been, and could be researched, from four different perspectives - an historical professional approach, an anthropological approach emphasising beliefs and cultural practices, a patient oriented approach, or an approach which explores patient and service provider interaction. The latter approach exploring patient and service provider interaction is that developed in these two chapters, but the chapter also includes an account of the development of midwifery and obstetrics in Israel, and some anthropological information on beliefs and values in Bedouin Arab culture and the wider Israeli society.

Feminist sociologists have shown considerable interest in this area of health care. The patriarchal control of reproduction is a fundamental issue in the feminist perspective, and the management of childbirth is seen to be organized in a way which reflects patriarchy in the wider society. In the field of obstetrics, women are the patients and the midwives, and men are the gynaecologists. Savage (1986:59) states that women constitute only 11.5% of the members of
Oakley (1977, 1979) reviews the medicalization of childbirth and the growth of obstetrics and explores the way there are two paradigms of pregnancy (Graham and Oakley 1981). The one emphasises the natural healthy aspects of pregnancy and childbirth as a part of the life cycle, and the other emphasises the clinical mechanical and medical aspects of the condition, focusing more narrowly on the issue of the mother being a vessel for a healthy foetus. As Oakley points out 'childbirth stands uncomfortably at the junction of the two worlds of nature and culture'(1979:608) and consequently is viewed by both sociologists, the health professions and women themselves ambiguously.

There are therefore three main strands within the gender perspective on the management of childbirth and post partum care. These are the different paradigms of pregnancy and childbirth which Oakley (1979), Graham and Oakley (1981), and Comaroff (1977) have written about, the development of the medical profession and the way it has superseded midwives (Arney 1982, Oakley 1976), and the management of childbirth which the aforementioned and Macintyre (1977) have dealt with. Each one of these themes will be discussed in relation to how they relate to the organisation of childbirth and post partum care in the Negev setting.
PARADIGMS OF PREGNANCY AND CHILDBIRTH

The gender perspective on human reproduction has emphasised that there are two paradigms of childbirth. One is the natural normal paradigm, when childbirth is part of living and is handled within the context of a woman's total life, and attended by a midwife. This is the paradigm that Oakley, Graham and Arney have discussed and compared to the other mechanical pathological paradigm. In this paradigm the woman is a vessel for a healthy baby, and childbirth requires regular maintenance and surveillance of the mother's body and if necessary surgical intervention. It is simplistic to see these two paradigms as occurring in two different time periods. Comaroff (1977) in her analysis of ante natal care shows how midwives, physiotherapists and women in one clinic operated according to the two different paradigms. The physiotherapists used the natural model and the midwives used the medical model of looking for abnormalities. Pregnant women themselves would choose between the two paradigms depending on how they felt and how they wanted others to treat them.

The ambiguity of pregnancy and childbirth is discussed in relation to the Parsonian sick role by Mackinlay (1972) and Hern(1975). Mackinlay maintains that it does not fit the sick role for it is a normal state and can only be considered an illness in particular circumstances, whereas Hern (ibid) maintains that pregnancy should be considered an illness requiring an elaborate system of prevention and treatment. The emphasis placed on these two paradigms by both the formal health care system and a country's population
depends on the particular society's approach to childbirth and to the way in which the obstetricians handle the 'residual normalcy' (Arney 1982) of normal childbirth.

In Israeli society there is a strong tradition that childbirth is normal and natural, and ideologically large families are encouraged. Politically Israel, as a new State at war with the neighbouring Arab countries who have larger populations, needs to increase its population rapidly by high immigration and a high birth rate. There are incentives to encourage both immigration and bearing children. Childbirth is paid for by the Ministry of Health, and a woman can deliver free anywhere in the country. A mother receives a maternity grant after delivery. There is statutory Maternity Leave of three months for women in paid employment, and jobs are held for a year subsequent to delivery. Paid childcare and part-time work are easily available. There are also substantial Children's Allowances.

Women who do paid work, continue to do so up to the time of delivery. They will only take maternity leave prior to delivery, if they have complications which are medically certified such as high blood pressure or swelling ankles. Pregnancy is seen as bringing 'discomforts' (Homans 1986) but being part of everyday living. Other roles can be sustained simultaneously or resumed with only a brief interruption. This approach and use of the 'natural' paradigm is not unique to paid work or Jewish Israelis but also applies within Negev Bedouin Arab society. Women continue herding, watering flocks, gathering fuel throughout pregnancy and only rest
from these activities during the 40 days post partum.

For both Jewish and Arab Israelis, women are the bearers of children which are socially and politically essential on a number of different levels. Both Arab and Jewish Israelis live with these social incentives to have large families. There is clear evidence however, that an Arab Israeli is valued differently from a Jewish Israeli by the State in the way that Children's Allowances are paid at a different level depending on whether the children are Arabs or Jews. Both Jewish Israeli and Muslim Arab Israeli ideologies see childbearing as a normal and important part of a woman's role and of political importance in ensuring the survival of their respective peoples (Anthias & Yuval Davis 1983:70). Negev Bedouin Arab mothers have often told me that they have their children for the income, their husband's families, and for the Palestinian people (alashaan al maash, al aghle, wa alamm). The importance of the three, obviously varies from woman to woman, but it needs to be stressed that Children's Allowances are paid directly to mothers, and so give Bedouin Arab mothers some financial independence. The ideological prominence of the 'natural' paradigm however, does not mean that the mechanical pathological paradigm is not in evidence, or that it is necessarily in opposition to the 'natural paradigm'. This can be explored by examining the medicalization of childbirth in this setting.
THE MEDICALIZATION OF CHILDBIRTH

The topic of the medicalization of childbirth has both historical and contemporary aspects. The change in the division of labour of doctors and midwives and the changes in the place of confinement are historical and the active management of labour is contemporary. The discussion here will start with the past since our understanding of the present is linked to a knowledge of the past.

Oakley in her article 'Wise woman and Medicine man' (1976) outlines how childbirth used to be the province of women both as patients and practitioners. She traces how gradually physicians have taken over childbirth firstly by using surgical intervention for difficult births, then by G.P.s competing with midwives for home births, and then through the normalisation and growth of hospital deliveries, so that midwives began to work only under medical direction and control. The terms of reference of the article are Europe and the U.S.A.. Has there been a similar process in this setting during this century? Or is the shift from midwife to doctor and from home to hospital confinements particular to Europe and the U.S.A.?

During the Turkish and British mandates of Palestine, the Negev and Gaza area had almost no Jewish population. The Palestinian Arabs in the area gave birth at home, and were attended by lay midwives. Hospital childbirth has only been available as an option for women in the Negev area of Israel since the mid 1950s, when a
hospital was established in Beersheba. (I am not aware if there was a hospital in the town during the Turkish and British mandates. There were probably hospitals in Gaza but only in unusual circumstances for childbirth). In the Negev in Israel, there has been a transition from home births and lay midwifery, to hospital deliveries attended by obstetricians and professional midwives, which has occurred over thirty years rather than over a few centuries as in Europe. The process has been similar but the timescale much shorter.

THE PLACE OF CONFINEMENT - FROM HOME TO HOSPITAL

The most comprehensive account of childbirth in Palestine during the British mandate, is that of Hilma Gramquist in her third book Birth and Childhood among the Arabs (1947:55-71). This is a description of childbirth as practised in the village of Artas a few miles south of Bethlehem, where the author lived from 1925-31. Since this is an account of village life, it differs slightly from Bedouin Arab practice. For example, she reported the use of a birthing stool, or stone, and of the presence of a midwife, if the birth was difficult or if the family could afford to have one attend. Usually there were a number of women present, who supported the mother physically and emotionally, and gave her instructions concerning her breathing and squatting.

Negev Bedouin Arab women relate, that they delivered squatting holding onto a tent pole or being supported by other women. All Bedouin women over 40 years of age have delivered some of their
children at home, and many in their fifties and sixties have attended their daughters in law or sisters in law at childbirth. Amongst the Negev Bedouin Arabs, midwifery was learnt by experience and there was no formal training. It is a tradition which has almost disappeared owing to the fact that today 97% of Negev Bedouin Arab women attend the hospital for childbirth.

One Bedouin lay midwife, described to me how her mother had learnt about midwifery when she grew up in Gaza from her grandmother. Her mother came to live on a farm in the Negev near the town of Beersheba, and would attend women at childbirth both in the town and amongst the Bedouin tribes. She would help the woman give birth, cut the umbilical cord, wash and wrap the baby, and wash the woman. She would then visit the woman every other day for a week, and on these visits would unwrap and wash the baby, and help the woman bathe any tears in hot water with a particular powder dissolved in it. The informant learnt from watching her mother and then after her marriage to a Bedouin sheikh, attended other women until the mid 1960s, when women in her tribe began to go routinely to the hospital to give birth. She would manipulate babies into the correct position for delivery, support the mother during her labour, both physically, verbally and emotionally, and visit her and the infant after the birth.

A number of themes emerge from conversations about home deliveries with Bedouin Arab women, who have delivered both at home and in the hospital. Many semi nomadic women recall delivering on
their own or with only their mother in law present. One delivered her first born whilst out herding the camels and walked home with the baby. Another preferred to give birth in her tent without telling anyone since she was modest (ana bustahee). The two wives of the semi nomadic family I lived with in the early 1970s, have both given birth at home and in the hospital. The first wife has delivered four babies at home, with her mother in law cutting the umbilical cord and washing the baby, and had another two in the hospital. She feels that the hospital is useful when a labour is prolonged and there is some doubt as to the safety of the baby. She notified her husband that she wished to go to hospital only when she had two difficult labours. Her co wife also felt that home deliveries were preferable if the childbirth was uncomplicated, but also went to hospital when her labour was prolonged.

Few Bedouin Arab women today prefer home births. The younger women who have not delivered at home frequently say that they could die in childbirth at home (ana bamoot fil beit!) and that they know the baby will be safer in hospital. The pattern today is to give birth in the hospital and mothers in their twenties know no other way. Older women have experienced both home and hospital confinements. The following account is that of a woman in her early forties with 2 married daughters, and a youngest child of four. She lives in the planned settlement of Tel Sheva.
AN OBSTETRIC HISTORY OF A MOTHER OF FORTY YEARS OLD IN 1984

My first four children were born at home. I was married when I was thirteen and I was fourteen when I had my first child (1958). My eldest was born at home and my mother in law helped me. When my second child was born I was alone for it was nighttime. I gave birth to her and swaddled her without washing her and then lay down and went to sleep after trying to cut the cord in the way that my mother in law had done with the first. When my mother in law came over to see me the next day she asked why I hadn't come over? I told her that I couldn't and showed her the baby. I find that giving birth lying down is more comfortable for me although I know that many women squat when delivering babies at home. I delivered the third baby alone too and with the fourth, sent my husband to get a car to take me to hospital. When he arrived with the car, he came with my mother. The baby was almost out and so my mother cut the cord and dealt with everything. I then had two miscarriages. I went to the hospital for one and stayed at home with the other. During my fifth pregnancy I didn't feel well. I felt tired in a way that I hadn't before. I worried that maybe something was wrong with the pregnancy. So I went to the ante natal clinic in the village for the first time and went to the hospital to have the baby (1976).'

For Negev Bedouin Arab women there is no 'Golden Age' of natural childbirth (Macintyre 1977). Home births are seen by some as preferable if the birth is straightforward, but by most as hazardous, and only to be experienced when there is no alternative.
Macintyre (1977) has pointed out that some accounts of the male medicalization of childbirth (Arms 1975, Shaw 1974,) have idealized natural childbirth handled at home by women, and ignored the high maternal and infant mortality rates and the way that midwives were often as controlling as physicians and midwives in a labour ward. This is close to the consensus of opinion and behaviour amongst Negev Bedouin Arab women today. The following table shows the rapid increase in hospital childbirth amongst Negev Bedouin Arab women.

**TABLE 4.1 PLACE OF DELIVERY OF NEGEV BEDOUIN WOMEN OVER A DECADE**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SOROKA HOSPITAL</th>
<th>HOME</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nos</td>
<td>Nos</td>
<td>Nos</td>
</tr>
<tr>
<td>1972</td>
<td>1183</td>
<td>706</td>
<td>1889</td>
</tr>
<tr>
<td>1973</td>
<td>1225</td>
<td>631</td>
<td>1856</td>
</tr>
<tr>
<td>1977</td>
<td>1732</td>
<td>347</td>
<td>2079</td>
</tr>
<tr>
<td>1981</td>
<td>2215</td>
<td>80</td>
<td>2295</td>
</tr>
</tbody>
</table>

Sources: Harlap et al (1977), NIH infant feeding study data base

This shows that the percentage of home births decreased rapidly over a decade. Bedouin Arab women started delivering in the hospital around 1966-7. In the tribe where I carried out fieldwork in the 1970s and 1980s, the first woman to deliver in hospital did so after a prolonged labour during the Six Day War of 1967. Her child was called Harba which means war.

The transition to hospital confinement occurred in Britain during half a century. Oakley (1976) reports that in 1927 15% of live births were in hospital, that by 1946 54% were in hospital
and in 1972 91.2% (JCRCOG 1949:48-9, DHSS 1972:21 in Oakley 1977). The increase in hospital confinements was slightly faster amongst the Bedouin Arabs.

Along with the transition to hospital births occurred a change in the autonomy and status of the midwife, for obstetricians and general practitioners took more and more interest in childbirth as a field of medicine. In Israel today professional midwives only practise in hospital and there has been no development of home births with professional midwives or physicians in attendance. All births are expected to take place in the hospitals and the Negev Bedouin Arabs have the highest rate of home births of any group with approximately 3%.

This contrasts with the way in which childbirth developed in Gaza under the Egyptian administration and for the last twenty years under the Israeli Ministry of Health. In Gaza the lay midwives continue to attend home deliveries and professionally trained midwives also do home deliveries. Today there are three options for delivery - a home delivery attended by a lay midwife (daya), a birth in a birthing clinic attended by a lay midwife and a professional midwife, with return home after 2-4 hours, and a birth in hospital. The last two require health insurance. According to a retired professional midwife in Gaza, women seem to use all three options equally. In Israel, however, childbirth takes place in hospitals for Jews and Arabs, and women are attended by midwives and obstetricians.
The issue of the active management of labour, has attracted much attention on a number of different levels. Consumer organisations such as the National Childbirth Trust, have taken up the issue of unnecessary medical intervention in childbirth and epidemiological research has been investigating whether interventions such as induction or epidurals reduce the infant perinatal mortality rate (Chalmers et al 1976) and sociological research has been carried out on the feelings of staff and patients concerning procedures and management of childbirth (Hart 1977). The main issues have been the rate of induction, the rate of Caesarean section, general obstetrical procedures, and the quality of interaction between mothers and health personnel. The following discussion will deal with these issues, both in the Negev hospital and in the literature. The debate is often presented as a polarisation between high technology and low technology and between woman oriented care and baby oriented care. It remains to be seen where on this continuum is the pattern of practice of the Soroka Medical Centre Obstetric Department, and whether the use of opposing paradigms as models of childbirth is useful in this setting.

There are two hospitals in the Negev. The Soroka Medical Centre in Beersheba takes all patients in the central, and northern Negev. Ashquelon hospital takes patients from the western Negev. The Bedouin live in the northern, eastern and central Negev and so attend the Soroka Medical Centre. This is owned by the Trade Union Sick Fund and has 600 beds. It has 150 beds in the two Obstetric wards
and handles 800 births a month. It is the only centre of tertiary care for 6 towns, many Jewish agricultural settlements and all Negev Bedouin Arabs.

In 1974 a medical school was established at the Ben Gurion University of the Negev in Beersheba. This meant that the Soroka Medical Centre became a major teaching hospital. All departments have a major teaching role. Many departments recruited new heads, who became professors in the medical school. The new Professor of Gynaecology and Obstetrics was appointed in 1979, and in the last few years there have been more financial resources available to spend on developing a more sophisticated management of childbirth, which uses more high technology. The number of residents training to be gynaecologists has increased and also there are now medical students of all years doing 'clerkships' in obstetrics.

Foetal monitors were installed in 1978, and are now used routinely on all women as part of the admittance procedure unless they arrive when their labour is too far advanced. An ultrasound machine has been installed, which is used only by the doctors as a diagnostic tool. Vacuum deliveries occur. Induction occurs after the 41st week of pregnancy which is in marked contrast to the practice and protocol of the other hospital in the Negev in Asquelon which only induces at 42 weeks.

There is a new ward for high risk pregnancies where women who arrive at the Delivery Ward in early labour are sent. Before
this new ward was opened, women in early labour would be sent home till labour was more advanced. Now they are hospitalised in the new ward A2. A physician on duty, while I was observing in the Delivery Ward, said that he felt that many women in early labour were sent to the ward for half a day when a few years previously they would have been sent home and told to come back when their contractions had increased in frequency. In the course of my observations during one afternoon, I saw 4 out of 8 women admitted to hospital to Ward A2, for observation in early labour. The opening of the ward has extended hospital care to early labour.

It is difficult to assess the rate of induction, monitoring and Caesarian Section at Soroka in comparison to other hospitals in Israel or indeed to practice in Britain. This is firstly because there is variation between hospitals, and secondly because the statistics available from the study, relate only to Bedouin Arab women and not to Jewish women using the same ward. Despite these limitations an attempt needs to be made. There has been an increasing Caesarian section rate both in Britain and the U.S.A. since 1958. According to Savage (1986), the national Caesarian section rates of both countries have risen steadily as listed below:
TABLE 4.2 CAESARIAN SECTION RATES IN BRITAIN AND USA

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BRITAIN</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>2.6%</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>4.8%</td>
<td>5.5%</td>
</tr>
<tr>
<td>1980</td>
<td>8.7%</td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>10.1%</td>
<td>20.3%</td>
</tr>
</tbody>
</table>

Source: Savage 1986:83-84

There is also variation in practice, both between hospitals and between practitioners in the same department. The following figures comparing Mile End Hospital with Whitechapel demonstrate this. Savage's own rate of Caesarian section was 6.5%. She worked at Mile End.

TABLE 4.3 CAESARIAN SECTION RATES IN MILE END AND WHITECHAPEL HOSPITALS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MILE END</th>
<th>WHITECHAPEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>1977 -1984</td>
<td>9.5%-10%</td>
<td>1985 17%</td>
</tr>
</tbody>
</table>

Source: Savage 1986:86

There are figures available from a study carried out in 1972-3, of the Perinatal Mortality of Bedouin and Jews in Southern Israel by Harlap et al (1977) which enable comparison over a ten year period of types of delivery. These give some indication of changes in management of labour in the Negev.
### TABLE 4.4  INTERVENTION IN LABOUR OF BEDOUIN ARABS AND JEWS DELIVERED IN THE SOROKA MEDICAL CENTRE

<table>
<thead>
<tr>
<th>INTERVENTION</th>
<th>JEWS NOS</th>
<th>JEWS %</th>
<th>BEDOUIN NOS</th>
<th>BEDOUIN %</th>
<th>BEDOUIN NOS</th>
<th>BEDOUIN %</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL DELIVERY</td>
<td>7,687</td>
<td>86.6</td>
<td>1,827</td>
<td>93.3</td>
<td>339</td>
<td>80.7</td>
</tr>
<tr>
<td>INDUCTION OF LABOUR</td>
<td>121</td>
<td>1.4</td>
<td>5</td>
<td>(0.3)</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>FORCEPS</td>
<td>19</td>
<td>(0.2)</td>
<td>2</td>
<td>(0.1)</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>VACCUUM EXTRACTION</td>
<td>437</td>
<td>4.9</td>
<td>64</td>
<td>3.3</td>
<td>12</td>
<td>3.0</td>
</tr>
<tr>
<td>C.SECTION</td>
<td>381</td>
<td>4.3</td>
<td>35</td>
<td>1.8</td>
<td>17</td>
<td>4.2</td>
</tr>
<tr>
<td>BREECH</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>INTERVENTION 3RD STAGE</td>
<td>304</td>
<td>3.4</td>
<td>29</td>
<td>1.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HYSTERECTOMY</td>
<td>4</td>
<td>(0.1)</td>
<td>2</td>
<td>(0.1)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OTHER</td>
<td>22</td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNKNOWN</td>
<td>9</td>
<td>(0.2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO OF BIRTHS</td>
<td>8,877</td>
<td>100</td>
<td>1,959</td>
<td>100</td>
<td>412</td>
<td>100</td>
</tr>
</tbody>
</table>

Sources: Harlap et al 1977, NICHD Bedouin infant feeding study data

Note: The percentages will add up to more than 100% since some births had more than one type of intervention. ( ) for percentages less than 1%

This table suggests that at the time of the earlier study, there may have been a tendency to a higher level of intervention in Jewish births than Bedouin Arab births. Harlap et al write (1977:525-6):
'There were fewer interventions in Bedouin labors, with fewer inductions, caesarean sections and interventions in the third stage, such as removal of the placenta. These differences are not explained on the basis of lower risk because the recorded complication rates in Tables 7 and 8 show that Bedouin differed little from Jews in this respect. Furthermore intrapartum mortality was actually slightly higher in Bedouin women delivering in the Soroka Medical Center (Table 5) suggesting that more intervention may have been indicated.'

It is clear from this table that the Bedouin Arab childbirths in the 1981-2 study showed a lower rate of spontaneous delivery than of either the Jews or the Bedouin Arabs ten years previously, and that the Bedouin Arab Caesarian Section rate in 1981-2 was similar to the Jews in 1972. The rate of vacuum deliveries have decreased and the rate of forcep deliveries have increased. There has been an increase in intervention in Bedouin births but the level of Caesarian section is still lower than the levels reported in the U.S.A. and Britain. The rate of induction is not available for the 1981-2 data. The data is lacking on the rate of intervention in Jewish births in 1981-2 so it is not possible to know if the intervention rate is higher amongst the Jewish births than the Arab births. One of the areas of obstetrical practice that is different in the Israeli setting is that epidurals are rarely given, which may partly explain the relatively low level of forcep delivery. On the basis of this data there appears to be a more active management of labour in 1981-2 than in 1972-3.
Amidst this emphasis on the active management of labour, the personal needs of the women themselves are given little emphasis. The production of a healthy baby is paramount. Pain is neither obliterated or managed but still considered a natural and normal part of childbirth. Arney and Neill (1982:2) outlined three stages in the history of childbirth. In the first pain was natural and normal, in the second it was obliterated by medical control through anaesthesia and epidurals, and in the third it was managed by medical and socially supportive management.

In this setting the management of pain has elements of the first and third stage without going through the second stage. Anaesthesia is used for Caesarian sections, but not for spontaneous childbirth. There are no epidurals given. Pethidine is given during labour, but there is little emphasis on the management of pain by medical or social management other than by allowing husbands to accompany their wives.

Few Jewish women attend natural childbirth classes. They mostly have their knowledge of childbirth from friends and relatives and their own previous experiences. Prior to the establishment of the medical school, pain was not managed. In 1977 I carried out some research with midwives in the hospital and never once entered the delivery room without hearing women scream. There was little attempt to deal with the psychological or physical well being
of the woman apart from using Pethidine when it was felt necessary. No husbands were allowed in attendance.

During the last six years, there has been an expansion of childbirth preparation classes, but they are still attended by a minority of middle class Ashkenazi women using the delivery room. Husbands have been allowed to accompany wives during labour and delivery from 1980, but no other companion is allowed. Women may not be accompanied by sisters or mothers.

There is a wide range of different cultural behaviour and belief concerning pain in childbirth by Jewish and Arab women using the Soroka Medical Centre. This was often commented on by the midwives. Some North African women believe that by screaming, they protect themselves and their baby from the evil eye. Bedouin Arab women do not tell their daughters about childbirth and labour, and several mothers have explained this to me by saying that in their culture they are modest, and that it would scare the girl. The midwives perceive the Bedouin Arab women as quieter and easier to handle in childbirth, but this may not just be due to cultural norms of behaviour as will be explored in the following chapter.

The active management of childbirth emphasises that the delivery of a healthy baby is paramount and that the needs of the woman carrying the baby and later caring for the infant are secondary. One example of this is the way in which during labour and delivery women in this setting are horizontally immobile so that they can be
monitored and examined easily, although there is abundant literature that this is not the most effective position for the duration of labour or childbirth. Bedouin Arab women who in the past have tried to squat to deliver have been actively helped onto the delivery beds by midwives. The researcher observed this both in the 1970s and 1980s. The routine use of foetal monitors and hospitalization in early labour has also decreased the amount of walking about that women do during labour. The mother is a passive and sometimes transparent vessel for the foetus and this is reflected in the way in which the division of labour of health personnel is organised.

THE MANAGEMENT OF CHILDBIRTH AND THE DIVISION OF LABOUR

The combination of the increase in high technology and the increase in medical staff has altered the division of labour between the midwives and the physicians in the Delivery Room. The midwives work on a shift system of four at a time. They feel strongly that the use of monitors in a routine way has been deskilling for them. As one said — 'Before the monitors came in the summer of 1978, we used to sit next to the woman, feel her stomach, know how long her contraction was taking and know the position of the baby from an external examination. Now we just look at the monitor and the doctors look at the monitor and decide what to do'.

The midwives seemed to be able to work fairly independently during the night shifts when there is only one resident on call. One told me that it is sometimes possible to deliver 15
babies on a night shift without seeing a doctor at all. The midwives deliver normal births, can break waters, and give pethidine without calling a doctor. They do all this on their own on the night shifts and as one midwife said 'the bosses don't know about it' (ve habossim lo yodim). They cannot, however, sew up episiotomies which are routine for first births but not for subsequent ones.

Daytime in the Delivery Room has quite a different feel to it, for as another midwife said 'the doctors do everything'. I observed on a number of occasions, women who came to be admitted for delivery. The midwife on duty took a history, examined them, put them on a monitor for a short time and then told each one to wait for the doctor. The reason the midwife told the women to wait for the doctor was always because she felt that they were in either early labour or pre labour or that there were complications. For example in two cases the women were at different stages of pregnancy but were carrying twins, and in another instance the woman's waters had broken. The doctor then came and proceeded to take the same history and do the same examination. The decision to use the ultrasound or send a woman for admittance to the high risk ward can only be taken by a doctor. The women suitable for this are picked out by the midwives, but the ritual of information gathering is gone through twice, with the women having to wait about in between. The whole procedure from entering the delivery ward, to being processed and getting a decision on discharge or admittance took in each case more than two hours.
There was one case of a Jewish woman who had been in slow labour having her baby induced for two days in the Labour section of the Delivery Ward. The midwives over tea discussed the case and commented that probably she had had her waters broken too early and pethidine given too early by a resident so that the labour had slowed down. The consensus was that the doctors are more interventionist than the midwives.

Most accounts of the management of pregnancy and childbirth using the gender perspective focus on the active management of childbirth by the medical profession without dealing with the power relations and the division of labour between doctors and midwives. The discussion is rather a dichotomous one of doctors using high technology on women patients. The use of high technology involves the midwives in this hospital setting in a loss of autonomy and status which some of them regain by choosing to work nights to avoid the constraints of the daytime routine in this setting and in Britain they may choose to work in the community.

Midwives not only have to follow medical protocol and leave decision making to the training residents but they also have to tolerate behaviour towards them which they see as objectionable but feel powerless to change. The following incident illustrates the power relations between doctor, midwife and patient. The researcher observed this while sitting next to a woman in labour in the Delivery Room.
A resident and midwife were standing next to a Bedouin Arab mother on a delivery bed in the Delivery Room who was in fairly advanced labour. The resident was taking a medical history from the woman on her previous children. He was doing this while joking with the midwife about the patient's low intelligence, for she was answering his questions slowly or not at all (she was in pain with limited Hebrew). Throughout the three-cornered conversation, the resident was stroking the midwife's back. The midwife was trying to ignore that he was doing this. When he left, I asked her why she did not ask him to stop, to which she replied - 'I am not his girlfriend and I do not like it, but he is the doctor and I am just a midwife. There is nothing one can do' (Ani lo havera shel ve ani lo ohevet et ze aval huh harofeh ve ani mealedet. En ma lasot).

The power differential between midwives and women in labour is somewhat unexplored in literature on lay and professional midwifery and Macintyre (1977) has commented on this. The gender perspective has lent itself more easily to the analysis of the power differentials between male physicians and female patients than that between nursing staff and patients. The latter will be explored further in this setting in the next chapter for the power relations between midwives and Bedouin Arab patients is shaped by ethnicity as well as by professional status.
The medical mechanical model of pregnancy and childbirth regards the mother and baby as separate from each other, and not as a symbiotic unit. This is clear, not only from the way that childbirth is managed but also from the way staff and patients are organised into different wards. As the technology of childbirth gets more sophisticated, the diagnostic tools such as monitors and ultrasound render the mother a transparent vessel for the foetus during pregnancy. Once delivered, the baby seems to be viewed as separate from the mother apart from brief contact at feeding times.

The mother and baby are separated almost immediately after childbirth. The baby is washed, weighed, given an Apgar test, shown to the mother and her husband if he is present, and then wheeled off to the Infant Department, whilst the mother is taken to one of the Obstetric Wards. The two wards are separate with separate staff and separate occupants. They meet only at feeding times and at discharge. The physicians in charge of each are from different specialities - the gynaecologists are in charge of the Obstetric Wards as they are of the Delivery Ward, and the pediatricians are in charge of the Infant Department. Each of these three wards, have different nursing staff which do not rotate round the wards.

Until 1984, babies were kept in the infant department for observation for twelve hours after birth, and only then brought in
for nursing. This was altered to a protocol which states that all babies should be nursed at the first feeding time after birth. This difference in procedure is reflected in the data. The 400 mothers interviewed in the hospital, all nursed their babies between 12-18 hours after birth. Whereas the mothers who were observed in 1984, fed their babies at the first feeding time after their arrival in the Obstetric Ward.

The Obstetric Wards have the structure of the day outlined by the regular four hourly feeds which occur from dawn till late evening - 5.30am, 9.30am, 1.30 pm, 5.30 pm, 9.30 pm. When it is feeding time all visitors are barred from the wards and the infant ward nurses wheel in the babies and give them to each mother. They are in trolleys which are latched together according to rooms. The babies are left with their mothers for 30 minutes. During this time, the nurses from the infant department urge the mothers to nurse whenever they see someone not doing so. These are the mothers only periods of contact with their infants. One nurse from the infant department commented that frequently the nurses from the Obstetric Ward choose nursing times for taking temperatures, which hardly facilitates counselling over infant feeding, uninterrupted nursing and fondling.

During these three days on the Obstetric Ward, the mothers receive little medical attention. The nurses' routine is task oriented and built round feeding times, visiting times and meal times. Meals at 7am, 12.00am and 6.00pm are distributed by the nurses. The
trolleys are brought into the ward by the orderlies and the nurses urge the women to collect their trays. The doctor's ward round is a daily feature between 8.00-9.00am. Visiting hours occur in the morning afternoon and evening - 10 - 11.00am, 3.00 - 4.00pm, and 7.00 - 8.00pm. The nurses together with the doorguards are strict gatekeepers of the morning and afternoon visiting hours, although they are lax about the access in the evening. The only other routine activities involve handing out aspirins, taking temperatures twice a day, and notifying women who may go home. The notification of discharge arrives between midmorning and noon, and depends on the result of the paediatric examination of the babies. The nurses and mothers are totally uninformed about the state of the babies, and this information is passed to the ward at an irregular time each day, since the completion of the examination depends on the availability of a pediatrician.

The peripheral role of mothers with their infants in the hospital post partum period is underlined not only by the physical separation into separate wards, and the limited feeding times, but also by the way in which the nurses in the Infant Ward totally look after the babies apart from feeding. They change their nappies five times a day, wash them and arrange them within the ward spatially to reflect the position of their mothers in the other ward. At discharge, the mother has to bring new clothes, and stands by while the nurse undresses the baby, removes the hospital clothing and puts on the clothes brought by the mother. She then wraps the baby in a blanket provided by the mother and hands the infant to her like a parcel.
congratulating her. Is this then the point at which the baby and mother are 'ritually incorporated' back into society as a symbiotic unit? Are the three days in the hospital a liminal period during which they are both in transition? (Turner 1967 Douglas 1966)

Hospitals have various forms of ward organisation post partum. The separation between mothers and babies is less emphasised in hospitals which have the babies rooming in with the mothers. Rooming in is practised at various hospitals in Israel, and results in more flexible feeding and care of the babies. It is an option which has never been pursued in Soroka, owing to the lack of space available and the high number of births.

The spatial segregation of the mothers and their babies, and the type of space allocated underlines not only the way the medical model perceives the two as separate and requiring different care, but also the way in which the baby is primarily important. This is further underlined on examination of the way the wards are spatially organized. Ardener (1981:12) points out the difference between 'space defining people', and 'people defining space'. The way the wards are organised is an instance of the first whereas the way staff and patients use this space is the second. The latter will be explored in Chapter 5, and the former here.

So how does 'space define people' in this setting? I would argue that the way space is used suggests that the babies are sacred, the families are profane, and the mothers are in between, more
sacred during childbirth and more profane post partum owing to their being separate from their infants.

Rosengren and Devault (1978) have written about the spatial distribution of activities within a Birthing Ward, and how there is a rhythm, tempo and timing of activities. They observed that space allocation defines activities. Space allocation can also express, in a concrete way, power relations and symbolic values. In the Obstetric Wards of the Soroka Medical Centre, there is a segregation of activities and participants, for mothers are separated from infants, families from mothers and infants, staff from each other or different parts of the wards and Jewish patients are separated from Arab patients.

The space allocated to babies and mothers is qualitatively different. When looking at the ward organisation in the Soroka Medical Centre, the first obvious principle is that the new buildings are those where the health of the baby is critical. There is a new Delivery Room, a new ward for high risk pregnancies, and a new Infants Department with a newly established Premature Babies Unit. These facilities are modern and spacious. On the other hand, the areas where women spend most of their time before delivery and after it, are cramped and overcrowded. The Labour room is a small room with 6 beds, positioned closely together with curtains separating them from each other. The Obstetric Wards have rooms which mostly have 8 beds in them. (Women who have had Caesarians or are personnel are in the one room of each ward with three beds.) Often there are beds lining
the corridors, when there have been too many births to accommodate all the women. The showers and toilets are in the corridor at the end of the ward, and are too few for the number of women using them.

Another aspect of the spatial organisation is the unequal access afforded to various areas for the medical staff, the mothers and their families. Nurses stay within the wards they work in. Midwives go into the Obstetric Wards when they are wheeling a woman in after childbirth, and infant nurses go in the Obstetric Wards, when they bring the babies in for feeding. Apart from this, they stay within their patch. The doctors, on the other hand, visit all wards at various times, and are the only ones with an overall view of a woman's time spent delivering and postpartum. The gynaecologists, however, do not visit the infant ward although the paediatricians may attend a difficult delivery to be on hand to deal with the baby.

Access for families of mothers and babies is strictly controlled. This reflects the paramount importance of the hospital routine, and the limited importance given to the social context of the woman and child. Families are outsiders and intruders who are tolerated within strict limits. They may wait outside the Delivery and Labour Section. There are closed doors on both sides of this area preventing them on one side entering the Obstetric Wards unless it is visiting time, and on the other side from entering the Labour and Delivery Rooms. These doors are guarded by gatekeepers. There is a security guard at the entrance to the Obstetric Wards, and there is an automatic locking door with an intercom and a lady who can operate it.
barring entrance to the Birthing Rooms. Relatives however manage to pass these doors when they want to. They wait for a staff member to operate the intercom to open the doors to the Birthing Rooms, and then go in behind them, or they go in when someone comes out. However, once inside the Birthing Rooms, they do not progress beyond the bench area outside the admittance room and the Labour room, unless they are a husband wearing a gown. The staff generally send them back to wait outside for news fairly promptly.

Similarly, family members have limited access to both the Obstetric Wards and the Infant Department. They can visit in visiting hours when the babies are not being nursed, and they can look at the babies in the Infant Department through viewing mirrors. However, if they send a message to the woman they want to see, she will come out to sit with them in the reception area or outside on the grass.

The limited access that families have to mothers is paralleled in the limited access that mothers have to their babies. They see them at feeding times. They may go to the Infant ward to visit them but very few do so for it is not encouraged. The only mothers who nurse there, are those with babies who are under two and half kilos for they are put on a three and a half hour feeding regime. There is no feeding on demand as in a rooming in ward. The babies do not regulate their own needs, neither do the mothers. Their needs and the pattern of care are dictated by hospital routine for the first two - three days after birth.
There is little literature on the organisation of post partum care in the hospital setting. The material tends to focus on mother infant bonding or on infant feeding practices in the hospital setting (Salber 1956). A somewhat neglected area is the division of labour of medical staff post partum, and the experience of mothers during this time. In this setting, the power relations governing care, social interactions, the division of labour, and use of space post partum is influenced by not only the gender of the physicians, nurses and mothers, but also by their ethnicity. Bedouin Arab mothers are perceived differently, and perceive themselves differently.

SUMMARY AND CONCLUSIONS OF CHAPTER

This chapter has analysed the way in which childbirth and post partum care is organised in this setting in the context of issues raised in the literature within a gender perspective. It has reviewed the way hospital confinements have developed in this setting, and discussed the paradigms of pregnancy, the active management of childbirth, and the division of labour in childbirth and post partum care.

Childbirth and post partum care in the Soroka Medical Centre in Beersheva in Israel shares many of the organisational features of care in England and the U.S.A.. Births are in hospital and are actively managed although possibly less so than in some places in England and the U.S.A.. The division of labour between doctors and midwives, and the use of space and wards have features which are
similar to those within the Western medical world where care is focused on the delivery and care of a healthy baby and the comfort and needs of the mother is secondary.

The gender perspective illuminates the power relations between physicians and patients, and the emphasis placed on the infant in the way medical care is organised. The emphasis within the literature on two contrasting paradigms of pregnancy is perhaps of limited usefulness in this setting, for both patients and staff and the society they live in appear to subscribe to both to a certain degree. The gender perspective also somewhat neglects the power relations between nursing staff and mothers and in this setting. These cannot be analysed adequately without considering how gender and ethnicity articulate together. It is possible to argue that the experience of ethnic minority women in any setting can only be analysed adequately by using a perspective which considers the interplay of gender and ethnicity. The following chapter will explore the way in which care given and experienced in this hospital setting is shaped by gender and ethnicity.
The previous chapter explored the organisation of childbirth and post partum care in the hospital setting from a gender perspective drawing on the issues raised in the sociological literature in this field. This chapter sets out to explore the articulation of gender and ethnicity amongst the actors in this setting, who are Bedouin Arab and Jewish women as patients and Jewish nurses and doctors.

There are a number of questions posed here. Firstly, how is the management of childbirth and post partum care in the hospital affected by the gender and ethnicity of patients and personnel? Secondly are the issues raised here both those of a theoretical and an applied nature, generalisable beyond this particular setting to the health care delivery ethnic minority women receive elsewhere? The argument is that although a gender perspective focuses on how obstetric care is organised and experienced by all women patients in this setting, Bedouin Arab women both utilise the service differently and are treated differently because of their ethnicity. The chapter will look at the articulation of gender and ethnicity in the Delivery Ward and subsequently the Obstetric Ward and will then review the way an articulated perspective focusing on the way gender and ethnicity intermesh, highlights different issues.
Literature on Service Delivery to Ethnic Minorities in the Health and Social Welfare field, utilises several concepts which will be referred to in this chapter. A review of them will clarify the parameters and perspective of the subsequent discussion. Donovan (1984) in her review of literature on the health of ethnic minorities highlighted that the exotic pathological conditions seem to be studied more than issues of access and service delivery. Pearson (1983) has emphasised that focusing on cultural differences often leads to power relationships being neglected, and the minority patients being blamed. Norman in her study of black elderly, used the concept of 'triple jeopardy' to depict the fact that they are not only old, but black and poor. This could be applied to Bedouin Arab women as being female, Arab and poor. The concept of institutional racism is one that is being increasingly used in the field of health, education and social welfare (Troyna 1987). It focuses attention on the processes within institutions which disadvantage ethnic minority people. Troyna points out that it is a concept which has been used in a loose taken for granted way. He writes:

'As a result, the processes through which racial inequality is perpetuated are neither linked with or understood in conjunction with those that reproduce class and gender inequalities' (1987.57)

The perspective of this chapter is to use an articulated perspective which links gender and ethnicity in its analysis of childbirth and post partum care in the hospital setting.
As Table 4.1 in chapter 4 showed, all but 3% of Negev Bedouin Arab women today deliver their babies in hospital. Almost all women in their 20s and 30s have had all their babies in the hospital. Settled women in their 40s today seem to have started going to the hospital to deliver midway through their childbearing. The trigger for those women who start going to the hospital, breaking a pattern of previous home births, seems to be an unusual pregnancy or labour which leads them to fear that the baby or themselves is endangered (Chapter 4). When childbirth at home is discussed with groups of women, a number of themes are regularly expressed. First, all concur that the baby and mother are safer in the hospital. The older women tell stories of how in bygone days a mother had died having twins, and another had died because she waited too long before she went to the hospital. The frequently expressed view is that you and your baby are safer in hospital.

PLACE OF BIRTH

Negev Bedouin Arab women live outside Beersheba, and so going to the hospital to deliver requires getting access to transport. Since 97% deliver there, this is available but it is not always in time. The following table shows that 6% of the births in the sample occurred on the way to the hospital.
TABLE 5.1  PLACE OF BIRTH ACCORDING TO PARITY

<table>
<thead>
<tr>
<th>PLACE OF BIRTH</th>
<th>1st-2nd</th>
<th>3rd-4th</th>
<th>5th-6th</th>
<th>6+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOME</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.0</td>
<td>4</td>
</tr>
<tr>
<td>HOSPITAL</td>
<td>79</td>
<td>97.5</td>
<td>94</td>
<td>93.1</td>
<td>88</td>
</tr>
<tr>
<td>ON THE WAY</td>
<td>2</td>
<td>2.5</td>
<td>6</td>
<td>5.9</td>
<td>6</td>
</tr>
<tr>
<td>TOTALS</td>
<td>81</td>
<td>100</td>
<td>101</td>
<td>100</td>
<td>98</td>
</tr>
</tbody>
</table>

Note 1: Parity Unknown for 5 home births, 3 hospital births and 1 delivered 'on the way'

Note 2: The Z test of proportions demonstrates that at the 0.05% level, there is a significant difference between 1st and 2nd births as compared to higher parities in giving birth in the hospital.

The women most likely to give birth on the way to hospital were multipara, whose labour was shorter. Those who were least likely to were the primapara, or those having their second child. It is quite certain that ease of access in getting to the hospital, also influences whether the baby is born on the way. The following table shows that those women living in the planned settlements are most unlikely to give birth at home (1%) or on the way (3%), whereas those living in unplanned settlements or encampments, are more likely to do both - 4% have home births and 8% deliver on the way.
TABLE 5.2  PLACE OF BIRTH BY PLANNED OR UNPLANNED SETTLEMENT

<table>
<thead>
<tr>
<th>PLACE OF BIRTH</th>
<th>PLANNED</th>
<th>UNPLANNED</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOME</td>
<td>2 1.2</td>
<td>10 4.1</td>
<td>12 2.9</td>
</tr>
<tr>
<td>HOSPITAL</td>
<td>164 95.9</td>
<td>212 88.0</td>
<td>376 91.3</td>
</tr>
<tr>
<td>ON WAY</td>
<td>5 2.9</td>
<td>19 7.9</td>
<td>24 5.8</td>
</tr>
<tr>
<td>TOTALS</td>
<td>171 100</td>
<td>241 100</td>
<td>412 100</td>
</tr>
</tbody>
</table>

Chi square = 8.06, d.f. = 2, p < 0.02

There is a possible confounding of parity and age with place of settlement in this table, since younger people tend to move to the planned settlements before the older people owing to the need for a steady earned income when house building (Lewando Hundt 1979). However since families live in sub tribal groups, and husbands are generally older than wives, this has a limited effect.

TIMING OF ARRIVAL AT THE HOSPITAL - STRATEGIES TO AVOID INTERVENTION

Finding transport to the hospital, once a woman has announced she is in labour and needs to go there, is not always a straightforward or speedy procedure. Cars and trucks are owned and driven by men and they need to be at home in order to transport a woman in labour to the hospital. A woman generally tells her sister inlaw, husband or brother in law, and they locate a car owner as quickly as possible. This is easier to do in a planned settlement, where people live in neighbourhoods, but is more difficult in encampments or small unplanned subtribal clusters. For example E who lives in a small encampment, told her husband that she wanted to go to hospital to deliver. He walked 2 kilometres to the main road and
flagged down a Bedouin owned vehicle. By the time he returned two hours later, she had delivered their second child.

Although the quantitative data appears to explain the place of confinement by parity and access, the fieldwork suggests that the timing of arrival at the hospital has a few other dimensions. One has been mentioned already, and that is the feeling that the labour is not proceeding normally. Another aspect is that many women related that they wait at home until the labour is well advanced, before they make public the fact that they are in labour and need transport to the hospital. A false alarm would cause so much bother and expense and is shameful (ayb indnaaa). The decision to let labour be quite advanced before coming to the hospital is quite explicitly a strategy to avoid intervention with the birth. As N the mother of four, living in a planned settlement said:

"I wait at home and keep walking up and down and go to the hospital at the last minute. That way they can't do things to me." Another woman commented that "a few years ago you would have been sent home if it wasn't the time to give birth. Now you are put into that ward A2."

There is a widespread fear and dislike of Caesarians because they involve an operation and limit a woman's fertility. On a visit to a woman in her home after childbirth in which I took part, there were over twenty women present. Five of them had had one or two Caesarians including the mother of the new born. Two others when threatened with one during labour, refused to sign for one and both of
them had delivered normally. One young mother of three had a Caesarian with her first and third child, another had had a Caesarian with her first child and subsequently delivered vaginally. There was a general consensus that although Caesarians are sometimes necessary, they are to be avoided. Some women felt that it was preferable to lose the baby but retain one's unlimited fertility.

This is a view that the medical staff do not share or understand. They see a mother's refusal to be operated as irresponsible and damaging certainly to the infant and possibly to the mother. Several midwives and doctors stressed that although all women, both Jewish and Arab, fear Caesarian sections, it is only the Bedouin Arab women who refuse to have them even when it means losing the baby. This is where Bedouin Arab ethnicity and gender intermesh to present a viewpoint that does not put the baby first, when a Caesarean would mean putting a limit on the number of children they could have in the future.

The ability to bear children is supremely important for a Negev Bedouin Arab woman. It defines her status. She does not control her own fertility, for her children belong to her husband's family. If she cannot conceive, she may be divorced, and if she has too few children or insufficient sons this may encourage her husband to take a second wife. A Bedouin Arab woman needs therefore to protect her ability to reproduce, and a Caesarian threatens this, by putting a limit on the number of future births she can have.
Doctors and nurses frequently discuss Bedouin Arab women's fear of Caesarians, which they find difficult to deal with. They see the women as uncooperative and uninterested in the health of their babies when they refuse a Caesarian. A conversation in the staff room of the Delivery Ward took place during my fieldwork, on why Bedouin women fear operations so much. One midwife felt that the women were frightened of dying, another felt that they preferred to let the baby die in their womb for they knew that they could always have another one. An Arab resident said that he felt they knew that an operation would limit the number of births they could have in the future.

On one occasion a Bedouin woman was in labour with the baby in a transverse position. The staff were trying to persuade her to have a Caesarian and she was refusing to. The midwife and resident were fearful that both the mother and baby would die and were quite distressed and angry. They kept telling the mother in Arabic that both she and the baby would die if she didn't have the operation. The woman was naked and terrified. Once the staff had left the room, the woman explained quietly that she couldn't agree to such an operation without her husband's permission, and that he was at work on a Kibbutz thirty kilometres away. She agreed to the operation on the grounds that I would find her husband and explain that her life had been in danger.

There is no conflict of interest between Bedouin men, Bedouin women and medical staff on the common goal of delivering healthy babies. However the conflict arises when intervention involves limiting fertility, and when hospital childbirth means controlling and
managing labour. Negev Bedouin women attempt to retain control of their labour and their fertility by trying to arrive when labour is well advanced. Does this late arrival at the hospital result in less intervention and more spontaneous deliveries? The data on intervention in 1972-3 for Jewish and Bedouin births (Table 4.4) indicated that whereas only 87% of Jewish births were spontaneous, 93% of Bedouin births were. It is probable that this difference continues today but there is no data available about the rate of spontaneous delivery in Jewish births at Soroka during 1981-2 when this study took place.

I would hypothesise that Bedouin Arab women perceive the hospital as a place to give birth but that labour should take place at home. By arriving nearly fully dilated they avoid being monitored, and sometimes avoid the ritual shaving and enema. Midwives commented that Bedouin Arab women often arrive in the 2nd or 3rd stage of labour nearly fully dilated and that this was not common practice amongst Jewish women who arrive at the Delivery Room earlier on in their labour. Monitoring is routine for all births at Soroka, and yet, in this sample, only 45% of the women were monitored. They try to safeguard themselves against having a Caesarian which would limit their fertility. Being Arab women influences their approach to Caesarian Sections and intervention generally owing to the way in which fertility is controlled by their husband's families. Bedouin Arab women's views on the management of labour and childbirth therefore differ from those of the Obstetrics Department which has expanded in space, technology and staff to deal with the management of labour.
In the preceding chapter, it was established that childbirth and obstetric care is organised in the Soroka Medical Centre in Israel in a manner which is broadly similar to other Western medical settings. Childbirth takes place in hospital, midwives work under physicians, intervention is used increasingly, the importance of a healthy baby is paramount, and the needs of the mother are secondary. This is reflected in the type of treatment offered and in the amount and quality of space allocated to mothers and babies.

If one views the hospital setting as a microcosm of Israeli society, one would expect power to be distributed differentially according to ethnicity and gender and patterns of interaction, both verbal and spatial, to reflect divisions that exist in the wider society. Health care after all occurs in a social context. The patterns of interaction between health personnel and Bedouin Arab women patients reflect accordingly not only the gender but the ethnicity of those involved.

The midwives in the Delivery Ward and Obstetric Wards are all Jewish. Some of them are of Sephardi North African background and speak a North African dialect of Arabic, others are of Askenaazi background. Many have worked for a considerable number of years in the Delivery Ward - 7 of those working in 1984, were in post in 1977 when
I did some research in this setting. Only a few of the midwives speak Arabic well, and only a minority of the Bedouin Arab women speak Hebrew. 53% of the Bedouin Arab women interviewed in the hospital said that they understood the midwives and doctors, and a further 20% said they understood to a limited extent.

All of the midwives can speak key instructions in Arabic - Go and urinate! (imshee uboeli) or how many children do you have? - (kam awulad indki?) which they use for taking an obstetric history on admittance to the Delivery Ward, and for giving instructions. This use of key instructions in Arabic means that the imperative tense is used a lot, and that much of what is said sounds very peremptory and bossy. It sounds so in Hebrew also, but the tone is exacerbated in Arabic by the limited vocabulary.

The behaviour of the midwives varies according to their personality, the pressure of the shift and the way they interpret a woman's behaviour. Some have quite a lot of empathy with all women including Bedouin Arab women, whereas others are cool and directive with all. Some have political views which are to the right of the internal political spectrum, favouring a retention of the Occupied Territories and with little sympathy for Palestinians. Others have more centrist views. During my observation in the Delivery Ward, I saw 12 midwives working on the different shifts and talked subsequently to between 20 -30 women concerning their childbirth experience.
The communication between midwives and mothers is problematic, whether the mothers are Jews or Arab. This Delivery Ward handles 800 births a month, which averages out at 25 births every 24 hours, and there are only 4 midwives on duty at a time. Midwives therefore feel pressured by both the physicians they work with and the women patients, and frequently discuss how they are understaffed. A local pressure group for better conditions in the Delivery and Obstetric Wards was active in the late 70s and highlighted the need for more attention to the women's feelings by midwives, and for more staffing so that midwives could give more continuity of care. This group consisted of professional North American Jewish Israeli women.

There are particular patterns of interaction between Jewish midwives and Bedouin Arab women. The unsympathetic bossiness, and the reluctance to give information on decisions and procedures about care are features of care to all women patients both Jewish and Arab, but these are exacerbated when there is little common language and great social distance. The political situation impinges on the work situation, for both the Jewish midwives and the Bedouin Arab women are symbols to each other of the Jew and the Arab. Their contact in the Delivery Ward is the closest contact they have with each other, for they live in socially segregated worlds. The way in which both the midwives and the Bedouin Arab women used me as an intermediary highlighted the communication problems and social distance between them.

The midwives often expressed their irritation that the
Bedouin women would arrive so far advanced in labour, and that there was little to do except deliver them but the irritation would be accompanied by racist comment. As one said -

'Here we have a sophisticated medical department with all the latest equipment, like monitors and ultrasound, and there we have people who don't need us, for they can give birth without us at home. There is such a gap between the level of medicine and their level which is below zero' (hine marechet rifoum meturkemt im kol a tecnologim, ultrasound ve monitorim, ve yesh po anashim she hen be rama she hen lo zrichot otanu. Hi yehola laledet be bayt biladai. Hih lo zricha oti. ze par azoum baynha rama harifoum veah rama shelahem tat evesi.)

The following incident from my fieldnotes illustrates the complexities of the situation.

A IN THE DELIVERY WARD

'I first saw A in the afternoon when she was lying on a bed in the reception room being monitored. She was asking for something to drink. The midwife was curt with her and responded to her request with 'Stop talking about water. When you have finished being monitored you can have something to drink.' I gave her a drink. Later we talked. A was 7 months pregnant and had 6 boys and 1 girl at home. She was very beautiful and was a black Bedouin Arab of Sudanese slave origin. A said that she liked this particular midwife very much and remembered that she had delivered two of her previous children. "She wasn't nice to me just now but I know that she is really nice for she delivered two of my children." A little later while A was having an
ultrasound done by the resident, the midwife and I had a cup of tea together and she talked about working with Bedouin Arab women: "At work I serve them, since it is my duty, but outside work I do not like them" (bavodah ani mesharetet otan, ze hovatee, aval mihuz le avodah ani lo ohevet otan).

A was told, after her ultrasound, that she was going to have twins and both she and her husband, who was called in from outside, were quite pleased. She was sent to the A2 ward for women with high risk pregnancies or in the early stages of labour. She returned two hours later with a nurse accompanying her, and the midwife was told that she needed something in a drip to stop her premature contractions as she was only 7 months pregnant. Another midwife was on duty by then, for the evening shift. She spoke fluent Arabic and was warm and sympathetic in manner and asked A "You're a Bedouin aren't you?" A replied "No I'm from Gaza (meaning I am a Palestinian refugee from the Gaza strip whose family left the Negev in 1948). I married my cousin in the Negev." The midwife immediately took me aside and said: "Sometimes it is difficult to like them. Last night my husband's car was stoned while he was driving back from Jerusalem on the Hebron road on the West Bank. They hate us. For them, our presence is like a spreading cancer. What they want is Jerusalem, Jaffa and everything" (Lifamim ze cache lehov otam. Hem sonim otanu. Anachnu cmo sartan she olefet. Hem rotsim et akol - Yerushalyim v Jaffo). A got onto one of the beds in the Labour Room and asked me what was going to happen to her. I asked the midwife to explain and she said she would, but the went off to get the drip. She came back and fixed it up with no explanation. A then said "I'm frightened that I'm going to give
"I explained that she was on a drip in order to stop the contractions. Shortly afterwards she fell asleep.

The above snapshot has a number of dimensions. Both midwives expressed their difficulty in liking Bedouin Arab women because of the wider political reality. The curtness and the lack of information giving occurs with Jewish women too, and is raised in literature generally as a complaint of consumers (Macintyre 1977:479 ii &v), however it is exacerbated by the ethnic and political differences.

LACK OF INFORMATION TWO WAYS

There is little explanation given to Bedouin women concerning procedure or treatment decisions. The following two incidents are examples of the lack of information. A woman who I met after her delivery explained that she had come to the hospital because her waters had broken, and she had no pain. At the hospital they put in an infusion and then the machine made the pains come. Another woman who was in early labour with her first child was transferred to the high risk ward and this time I told her why when I saw no one was going to. Once in the ward, a nurse approached and told her to turn over and pull up her night dress, and then with no explanation gave her some Pethidine in a syringe. She asked me what it was when the nurse left her.

The midwives similarly felt that they didn't have
enough information from the Bedouin Arab women and even when they had, would make me double check it. One woman in early labour said that she had two children at home. The midwife said it looked more like a first labour could I double check this information. Another woman reported her weight at the beginning of her pregnancy as higher than her weight when five months pregnant. It was also written in her antenatal card. The midwife queried it through me and left the woman's weight at the beginning of pregnancy blank.

Bedouin Arab women rarely asked questions of staff, but maintained a passive mien - answering when spoken to. This is reminiscent of Ablon's description of stoical Samoan patients (Ablon 1973). She explained this quiet passive behaviour by their culture although she mentioned that their relatives were hospital cleaners and in other manual work. I would argue that the passivity is partly because they are used to having little autonomy, but also because they perceive that they are a minority, surrounded by Jewish staff in an environment which is not explained to them, and that the best way of coping is to be passive and obey. Another woman wouldn't give the ages of her children and the staff dismissed her as stupid. It later emerged that she was a second wife, and knew this was against Israeli civil law. She was determined to deliver a healthy baby giving as little information as possible away. She succeeded but the medical staff kept on making comments about her low IQ. In the Delivery Room she was sullen, silent and scared, and later in the Obstetric Ward she was open, chatty and relaxed.
The passivity, and lack of questioning that some Bedouin Arab women showed in the Delivery Ward was very similar to the public behaviour displayed to men with authority in the family. It is a coping mechanism, which is used by those who are relatively powerless. The mistake is to view the public passiveness as a negative attribute. It frequently is a superficial way of towing the line, and is backed up by assertive behaviour in private or by a long term strategy. It requires strength to exercise it and is part of a strategy which protects the autonomy of the women. Parmar (1982:250) gives a powerful critique of ethnicity studies which interpret Asian and migrant women as passive owing to cultural patterning without examining the articulation of gender, ethnicity and class. The following incident illustrates the way the woman involved was assertive in action whilst interacting minimally with staff.

M,' A PASSIVE NON COMPLIANT PATIENT '

M arrived at the Delivery Ward with a referral note from the Ante natal clinic, saying that her waters had probably broken. (I recognised her and she recognised me - her mother was the first woman of the tribe to have a baby in hospital in 1967.) She told me that she was eight and a half months pregnant, had had two previous Caesarians, that she was not going to have her baby that day, and that she didn't want another operation and was scared of having one. She had delayed coming to the hospital for two days. Her husband was waiting outside the Delivery Room with her two boys. She told me that she had been married for five years before she conceived. She was
examined by the midwife, put on a monitor and then subsequently examined by the doctor on duty. Whilst waiting for the doctor to come and examine her she went out of the Delivery Room to see her husband and children. The doctor examined her and told her that she must sleep in the hospital. When she asked why he replied in Hebrew 'For observation' (Hashgaa). She said she was going to see her husband and walked out of the Delivery room, took her children from her husband, told him she was going home, and would wait for him by the car. Her husband then came in to talk to the doctor, who explained that his wife needed to hospitalized for observation in Ward A2 because she must be operated on before she went into labour, as there was a risk that her womb would rupture. The husband explained that his wife did not want to be hospitalized and that he was willing to bring her to the hospital every day. The doctor repeated that there was a need for hospitalization, in order to avoid risk to the child and mother. The husband replied, that he was going to take her home and bring her when there were pains. The doctor made no attempt to talk to the woman through the husband. He also made no attempt to find out where they lived or in what conditions. (They lived 5 miles from the hospital with easy access (own vehicle, living in the middle of a planned settlement). He also seemed to think that the wife would do whatever her husband advised. The woman in fact went home against medical advice, and returned two days later at the onset of labour, to have a Casesarian section delivery.

In this case M had a firm idea of what she wanted to do, and she did it. The doctor did not negotiate with her, nor inform
himself about her access to the hospital. It is not clear if he would have advised hospitalization for a Jewish woman living in town and yet this woman's circumstances were not dissimilar. His advice was appropriate for a Bedouin Arab woman living in an isolated encampment, but possibly inappropriate in this case. By not communicating with her, she could be presented as passive and irresponsible.

VIEWS OF STAFF ACCORDING TO BEDOUIN ARAB WOMEN

The Bedouin Arab women talked about their experiences with the midwives but the way in which they did so varied according to the setting. Within the hospital setting, the women I spoke to were less critical of the personnel. I think that they did not know clearly whether I was one of the staff or not, for although I spoke Arabic and accompanied them, they only met me within the hospital setting where I had to wear a white coat and knew that I was Jewish. They made statements such as: 'There are nice midwives and not so nice ones'(fee quaeseen wa mush quaeseen). Throughout the fieldwork in the Delivery and Obstetric Wards, Bedouin Arab women were asking for information about procedures. Women asked me to ask for painkillers for them, and several told me not to leave them. Every one that I was with in the Delivery ward wanted to know how their baby was, and what was going to happen to them but didn't ask directly.

Amongst women in the two sub tribes where I had done previous fieldwork in the 70s, and who had known me for more than a decade, the views were more open. Some comments reflected the unwavering appreciation of the level of hospital care, along with a
feeling of dislike for certain procedures or ways of relating to Bedouin Arab patients. For example one mother who had had two births in the hospital and two at home said - "The hospital is all right and good for the baby but the doctors examine you too much and they are dirty (al mushtafaa quaes alashaan ababa laakin adocatara yafahasoo katheer wa hum waskheen)." One woman who grew up in a refugee camp in Gaza felt that care was given in a very similar way to Jews and Arabs. She said of her experiences in childbirth and with sick children - "There is little difference made between the Jews and the Arabs. If the Jews were in an Arab hospital it wouldn't be like that (Maa fee faida byn ayehud wa alarab. Itha ayehud kaan fil mushtafa alarab, maa beyaseer zayy kithee)." On the other hand, another woman who grew up in the Negev and is the mother of eight children felt that Bedouin Arab women were passive about the treatment they receive and said "Nurses are nice to the Jews because they are frightened of them. They make complaints and go to court and we don't."

The use of a perspective which looks at the way in which gender and ethnicity are articulated in the setting in relation to both providers and consumers reveals that there is a particular pattern of utilization amongst Bedouin Arab women. They use the hospital setting for childbirth and the home for the management of labour. It also reveals that the interaction between Bedouin patients and health personnel has social dimensions which are related to the ethnicity of those involved and to the structure of Israeli society.
INTERACTION IN THE OBSTETRIC WARD - THE INTERMESHING OF GENDER AND ETHNICITY

The Obstetric Wards are two wards which are linked by a corridor to each other and to the Delivery Room and the Infant Department. The Jewish and Arab mothers spend two nights and three days in one of these wards after delivery. The interaction between the nursing staff and the Bedouin Arab women in the Obstetric Ward has similar features to that outlined in the Delivery Room. It is curt, minimal and accompanied by racist comments made in Hebrew, which it is assumed are not understood. One morning a mother and her two daughters were sewing quilts at home and discussing the care in the Obstetric ward - I recorded the conversation as follows:

GENERATIONAL VIEWS OF OBSTETRIC CARE

'The mother M said that the hospital was good for the body but bad for the soul (quaes alashaan aljism laakin mush quaes alashaan alnafs). Although some of the nurses were nice, most of them weren't. The eldest daughter said that she felt that the nurses treated the Bedouin Arabs one way and the Jews another. The younger daughter said that she had slept very well and done everything she was told to do, so that no one would be angry with her. Her mother commented "You're still very young and it was your first baby." The mother M then continued with her views and experience. She felt that people thought that the Bedouin Arabs were dirty and yet she had seen Jewish women in the hospital who were much dirtier than some of the Bedouin. Once there had been a Jewish woman from Dimona in her room who had had lice crawling up her dressing gown.
She remembered that another time she had been on the way to the bathroom and a woman had walked past her. She didn't know if she was Jewish or Arab but the sanitary towel that she was wearing dropped on the floor. The woman had gone on walking. A nurse saw the sanitary towel and said to M "Pick it up and take it to bathroom." M replied "I didn't drop it." The nurse replied "Well it must have been one of you Bedouin - Pick it up." M refused to and continued on to the bathroom.

This conversation illustrates how the ability to answer back only develops with age and experience, and that the passivity of the younger women derives from low status and self preservation. This is similar to the pattern which women follow during their life cycle stages in their husband's family. As young daughters in law, they are passive, but as they gain in age and status they express their opinions more freely. These anecdotes illustrate how the Bedouin Arab women sense the hostility which the staff manifest. I witnessed the following scene between a nurse bringing in babies for nursing and one of the mothers I was observing.

'The nurse came in with the trolley of babies for the 5.30 afternoon feed, the first day after delivery. S was sleeping, after having taken an aspirin for the pains from her womb contracting. The nurse called out the mothers' names as she lifted each baby out, since she needed to know to whom to give each one of them. When S's name was called she didn't reply. The nurse then said "Why don't you answer? Why do you all hardly ever answer? Do you want your baby or not? (lama at lo ona? lama hen bederek !al becoshi onot? At rotsah ayeled
"S then said "Bring her here" (Jeebi) in Arabic. But the nurse replied "We don't do you favours you lazy thing. So you won't get your baby (lo osim tovet arzlanit - al tekabli a yeled)." She left the room leaving Sultana's baby in the trolley. I gave her the child."

It must be said however, that most women liked aspects of their stay in the Obstetric Wards. As one said:
"Its good in the hospital. They serve you, change your bed, and bring you food. That is better than what happens at home (hatha quaes fil mushtafaa. Kekhadamoonaan, betghayr al taht, bejeeboo akl wa hatha ahsan min al bayt)." Another mother of five who has no help at home expressed a similar sentiment:
"We can sleep, eat, wash and sleep again. Its a holiday" (nachna benaam, bemarra, benarasskel, benaam. Wa la hatha fursa)

The older women who had experienced home births, spoke of the pleasure in having easy access to running water. They said that somehow one seemed to bleed less in hospital, or the bleeding was more easily handled. In short, almost all felt that the hospital provides a woman with the best chance of a healthy baby, and a rest with some interesting company - the price is meeting and enduring some unpleasantness from staff. As M said so succintly:
"The hospital is good for the body but bad for the soul" (al mushtafaa quaes alashaan aljism, laakin mush quaes alashaan alnafs).
The use of space in the ward by the staff and the patients, reflects the social segregation between Jews and Arabs in Israeli society. One ward places the Jewish and Arab mothers in a random fashion in rooms together. Bed occupancy reflects when you delivered and if your delivery was normal or with complications. Women who have had C-sections tend to be placed opposite the nurses station for example. The other ward places all Bedouin Arab women together in the two rooms furthest from the nursing station. This is the ward where I spent three days shadowing three women through their hospitalization. The three women I was accompanying delivered on the same night and were placed in a room together. My fieldnotes of that first morning after delivery records the following incident.

'There were four Bedouin women and four Jewish women in the room. When the babies had finished their morning feed, a nurse came round calling out the names of the women who were going to be able to go home. In 'our' room three of the Jewish women and one of the Bedouin women were going home. This left three Bedouin women and one Jewish woman. A nurse came round stripping the beds of those going home, and making them up with fresh linen. Whilst she was changing the bed next to the Jewish woman she said to her quietly: "Come and move to another room so that you will have pleasant company (Tasusi le heder akhir she iela haveru naima)." This left our room with N, S, and S.- 3 Bedouin Arab women and 5 empty beds. These were later filled by four other Bedouin women and one young Falasha who could only speak
During the three days on the ward the three women that I was with talked to the one Jewish woman briefly in their room but they also talked with quite a number of other Bedouin women both those that were allocated the beds in the room and others in both the wards. This pattern is reflected in the quantitative data.

**TABLE 5.3 INTERACTION OF BEDOUIN ARAB WOMEN PATIENTS IN THE HOSPITAL WITH JEWISH WOMEN IN THE OBSTETRIC WARDS**

<table>
<thead>
<tr>
<th>INTERACTION</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>DID NOT TALK WITH THEM</td>
<td>315</td>
<td>76.4</td>
</tr>
<tr>
<td>TALKED IN ARABIC</td>
<td>44</td>
<td>10.7</td>
</tr>
<tr>
<td>TALKED IN HEBREW</td>
<td>27</td>
<td>6.6</td>
</tr>
<tr>
<td>TALKED IN BOTH LANGUAGES</td>
<td>16</td>
<td>3.9</td>
</tr>
<tr>
<td>NO RESPONSE</td>
<td>10</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>412</td>
<td>100</td>
</tr>
</tbody>
</table>

This shows that 76% of Bedouin Arab women in the Obstetric Wards, did not talk with any Jewish women. One of the indicators of the social and physical segregation between the Bedouin and Jewish women was the thinness of my data and fieldnotes on Jewish women in the Obstetric Ward. By accompanying the Bedouin Arab women, I deliberately restricted myself to their physical and social space, and noticed how few Jewish women the Bedouin Arab women spoke with. Two younger women in Tel Sheva, described to me how they enjoyed mingling with Jewish women and trying out their Hebrew, and that sometimes they
were mistaken for North African Jewish women. They however seem to be a small minority in their behaviour both from the quantitative data and the observational data.

In contrast Table 5.4 shows that only 15% of Bedouin Arab mothers did not talk with other Bedouin Arab women. Most Bedouin Arab women in the sample reported talking with 3-5 other women during their three days.

TABLE 5.4 INTERACTION OF BEDOUIN ARAB WOMEN PATIENTS WITH OTHER BEDOUIN ARAB WOMEN PATIENTS IN THE OBSTETRIC WARDS

<table>
<thead>
<tr>
<th>WOMEN</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>60</td>
<td>14.6</td>
</tr>
<tr>
<td>1-2</td>
<td>64</td>
<td>15.6</td>
</tr>
<tr>
<td>3-4</td>
<td>185</td>
<td>45.0</td>
</tr>
<tr>
<td>5-6</td>
<td>59</td>
<td>14.4</td>
</tr>
<tr>
<td>7+</td>
<td>24</td>
<td>5.8</td>
</tr>
<tr>
<td>NO RESPONSE</td>
<td>20</td>
<td>4.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>412</td>
<td>100</td>
</tr>
</tbody>
</table>

Most of the mothers were meeting the Bedouin women that they talked to for the first time in the hospital. 57% reported that they had met none of them before, and 24% reported that they knew some of them already. (2% said that they knew everyone that they talked to and 17% refused to give information.)

For example, one of the three women I was following
went to visit her husband's sister who had given birth to a boy and was in the other Obstetric Ward. Two young women from Tel Sheva related how they delivered at the same time and were in adjacent rooms. The 7 women in the room I observed in were all from different tribes and had never met each other before. They were very different not only in age and parity but also in educational and social background from different parts of the Negev. Two were co wives, two had married cousins and three had married into unrelated families. Two were tent dwelling, one lived in a house in Raahat, and four lived in huts in unplanned settlements.

The significance of meeting other Bedouin women whom they did not know before, can only be appreciated fully when one considers that these women spend all the rest of their time in a sub tribal setting, where they mix with their husband's or their own relatives. The opportunities to meet unrelated Bedouin women occur at the clinic, in the hospital and at the Post Office. In the Obstetric Ward, I heard a semi nomadic woman listen to a settled woman describing how her family's house building is progressing. A first wife complained about her husband's preference for a younger second wife without fearing that her complaints would get fed back within her social circle. My fieldnotes record that childbirth and the hospital care were discussed, but that more time was spent talking about their children, husbands, homes.

I would suggest that the contact with other Bedouin women is special to the setting. It's another aspect of the working of
gender and ethnicity within Bedouin society, that women have so little access to each other unless they are related. It is as significant as the lack of contact with the Jewish women.

There was also a lack of contact not only with Jewish women but also with the families of Jewish women. My fieldnotes record on several occasions, seeing husbands and family members visiting Jewish women in a room. The husbands chatted with each other but totally ignored the Bedouin Arab women lying in the other beds in the room. It was as if there was a mutual agreement to maintain a social distance which is mirrored at all levels of the society.

Bedouin Arab women utilise their own body space in a particular way which is consistent with norms of modesty in Arab society. They bring with them and wear elaborate capacious dressing gowns so that their bodies are totally covered. The hospital pyjamas and nightgowns are inadequate. The nightgowns worn in the delivery room tie at the back and gap from the waist so to cover one's rear view you have to hold it together. They also only cover you to your knees. The pyjamas are gappy on the top and delineate the legs too clearly. Dressing gowns cover one as well as a Bedouin dress (thaub). Most women also covered their heads either with a headscarf similar to that worn by religious Jewish women, or the standard white head covering (shasheeya) worn at home and brought to the hospital, or a towel. Bedouin Arab women have their heads covered both within and outside the home. It is considered immodest not to do so.
There are some Bedouin Arab women however who choose not to cover their heads during the stay in hospital. They are designated by the more conservative ones as 'having no shyness' (humma beyastahoo). They themselves explain their 'non conformist' behaviour in a variety of ways. N said that Bedouin Arab men only notice you if you wear something on your head and show that you are an Arab woman. You are more invisible, if you leave your head uncovered. S said that 'in the hospital you don't have to be modest in the way you do at home '. P and R both said that they liked being taken for Jewish women, and that their husbands didn't mind. It is clear to me that the women who spend the three days without covering their heads are younger, and have husbands who do not mind that they do so. There are a variety of options and strategies for the preservation of modesty and anonymity used by Bedouin Arab women in this setting.

On a general level, the hospital does give Bedouin Arab women some social freedom and anonymity. Honour only needs to be maintained rigourously within ones own social circle. They are surrounded by strangers. Jewish men are defined as neuter in gender since they are no sexual threat.

In addition to using body space in a particular way, Bedouin Arab women use the ward space too in a certain way. They may be in rooms with Jewish women or without them depending on policy. They tend to meet with other Bedouin Arab women and their families outside the ward, either in the corridor, or on the lawns surrounding the ward. At most times of the year apart from the cold months of
November December and January, they sit in groups on the lawn chatting. Only during the evening visiting do whole family groups come to the room. Otherwise husbands visit briefly, and then go and sit outside with their wives. This contrasts with the Jewish families use of space for they visit within the rooms. This is partly because Bedouin Arab families often come outside visiting hours and can't get past the 'gatekeepers' - (doorman and nurses). The fact that many Bedouin Arab men visit early in the morning on the way to their place of work reflects the type of jobs they do and the problems of access to the hospital when you live 20-30 kilometres out of town. It is also because the women seem to define the outside areas, both corridors, reception and the lawns as the places where you receive guests. Outside everyone can sit on the grass, and converse without any risk of being overheard or disturbed.

DISCUSSION AND CONCLUSIONS

A perspective which focuses on gender and the control of social reproduction highlights how obstetric care in the Delivery and Obstetric and Infant Wards is organised to promote the delivery of healthy babies. The care is baby oriented rather than mother oriented and is revealed as such by the use of space and the procedures that are carried out. All women patients receive maternity care within the parameters of this setting as outlined in Chapter Four. Reproduction is not only medically controlled but also is socially controlled both within Israeli society by the theocratic patriarchal state and the family ethos of the society, and also within Bedouin Arab society by its patrilineal structure and political need.
An articulated perspective, which focuses on the way that gender and ethnicity are interrelated, highlights how the ethnicity and gender of Negev Bedouin Arab women, both within Bedouin Arab society and as it is perceived by Jewish service providers, results in different patterns of utilization and service delivery and in different perceptions by Bedouin Arab consumers. This shows in the way that Bedouin Arab women tend to choose to arrive at the last stage of labour in the Delivery Room. This is a strategy to avoid medical intervention such as Caesarian sections, monitoring, shaving and enemas, and partly is a result of living between 5-30 kilometres from the hospital as a result of their way of life and the State settlement policy. The management of labour occurs primarily in the home, whereas childbirth and immediate post partum care occurs mainly in the hospital. By contrast Jewish women come to the Delivery Room earlier on in labour.

The transition from home confinements to hospital confinements has occurred mostly during the last twenty years, and there is a solid consensus on the part of both medical personnel and Bedouin Arab men and women that both mother and baby are safer in the hospital. There is an acceptance of medical protocol and procedure in order to make sure that the baby is safe. The only point at which Negev Bedouin women are critical of procedure, is when it threatens their future fertility. Both as women in Bedouin Arab society and Arab women patients in hospital, they ask few questions directly - both positions share a structural powerlessness.
Maternity care in the hospital is primarily delivered by midwives and nurses with physicians providing back up and authority. The nursing staff are underresourced and have a tendency to give little information, and be curt to all patients. However this tendency is exacerbated with Negev Bedouin Arab patients, owing to the social distance, the language difficulties and personal racism. There is no attempt to develop ethnic sensitive service delivery or consideration that particular groups may have different or special needs throughout the hospital. Therefore there is no choice in food, no interpreters, no gowns to take account of different norms of modesty, no different visiting hours to take account of the distances Bedouin Arab families have to cover or the occupations of the menfolk. The assumption is that patients will fit into a homogenous pattern of service delivery. This is an approach which can be designated as discriminatory and being institutionally racist.

Bedouin Arab women enjoy aspects of their three days in the Obstetric Ward - the social contact with other Bedouin women, the convenience of being physically looked after. They interact as little as possible with Jewish women patients and medical personnel and use the ward space and their bodies in a way consistent with their social mores and their position in Israeli society. The social divisions of gender and ethnicity in Israeli society are played out in microcosm in this setting.

The analysis in these chapters has highlighted that it is not only the gender and ethnicity of the patients that is of
relevance but also these same attributes of the service providers for health care is embedded in a social context. It has also highlighted that the literature in the sociology of reproduction has tended to focus on the two opposing paradigms of childbirth - the medical mechanical and the normal - with the physicians and the mothers as protagonists. The reality is more complex and in both Bedouin Arab society and in Israeli society both paradigms are simultaneously subscribed to, and consumers and providers are united on some issues although divided on others. An area of neglect also seems to be the relationships between mothers and midwives and nurses and between midwives and physicians.

Methodologically, the quantitative data gave information on the place of confinement, types of medical intervention and communication patterns in a broad sense. The qualitative data yielded information on the quality of interaction between actors, the division of labour between them and the use of physical and social space. The next section of the thesis will examine how gender, ethnicity and class are interrelated in post partum care in the home.
This thesis explores how gender, ethnicity and class relations intermesh at the macro and micro levels, to control women's reproduction and shape the social organisation of childbearing and post partum care. Part Three of the thesis deals with post partum care in the home setting. Chapter 6 focuses on the ways in which women work with each other, chapter 7 looks at the patterns of growth amongst their infants, and chapter 8 analyses the patterns of infant feeding. Throughout these chapters, it will be argued that an articulated perspective focusing on how the different gender, ethnicity and class orders intermesh, is of greater explanatory value for this data and in this setting, than an approach which focuses on one of these three alone. Chapter 6 looks primarily at the interrelationships of gender and ethnicity in relation to post partum health care in the home setting. Chapter 7 looks primarily at the interrelationships of ethnicity and class in relation to the growth of infants, and Chapter 8 looks at how gender, ethnicity and class interrelate in the social context of infant feeding.

The subject of this chapter is the post partum period of the first 40 days after childbirth. The perspective here is not one of descriptive ethnography concerning prescribed and proscribed behaviour, but is focusing on the nature of the social relations of reproduction, which shape the 40 day period (arbayeen
yaum). It explores the resources available to mothers during the 40 day period, examines the way in which the practice of seclusion, mutual help and visiting are related to both the control of reproduction and the mother's and infant's welfare. The activities of the 40 day period, will be analysed within the conceptual framework of the articulation of gender, ethnicity and class and within the debate on the domestic and public domains of social life much written about both in relation to segregated Middle Eastern and Mediterranean societies and within debates on the nature of the division of labour and women's work.

The particular context has been outlined in Chapter 2. Negev Bedouin Arab society is in the process of urban settlement, and is encapsulated physically and socio economically by Israeli society. It is a patriarchal patrilocal society, where property is handed down from father to son. Women are exchanged between families with little personal autonomy, for marriage is between families, and children belong to the husband's family. It is a segregated society, and this is expressed both spatially within and outside the home and in the way women cover their bodies. A family's honour is reflected in the way a woman behaves (Lewando Hundt 1978:189-90). Although the forty day post partum period deals with women in the home setting, its parameters are drawn by the social relations based on the gender order between men and women in Bedouin Arab society and the ways in which the gender, ethnicity and class relations between Jews and Arabs impinges on aspects of Bedouin Arab life. This analysis focuses on how gender, ethnicity and class intermesh at different levels during the forty day
post partum period by looking at the myth, reality and meaning of its different aspects namely the observance of seclusion, help with work and visiting work.

The data in this chapter, concerns women's unpaid domestic work during the 40 days post partum period. It will be presented according to the perspective sketched out by Papanek (1979) and termed 'family status production work'. She writes that:

'women as members of families and households, produce many goods and services that benefit other family members, whether their work is paid or unpaid.' (1979:776)

Family status production work has four distinctive modes. The first is support work for those doing income earning activities, the second is the work of caring for and training children, the third is the politics of status maintenance work involving visits, gifts and community activities which are linked to family status and the fourth is the close link between family status and a woman's appropriate behaviour. The three areas of work discussed here are aspects of family status production work. The observance of seclusion concerns appropriate behaviour, the help given with daily unpaid work is part of support and child work, and the visiting work for both the visited and the visitors, is part of family status production work and appropriate behaviour. These aspects of women's work are crucial for the maintenance of the family, both physically, socially and politically and are grounded in the social relations of reproduction, played out during the 40 days post partum period.
SECLUSION

The first 40 days after childbirth is a period in which particular rituals are observed in many societies. In China the mother is secluded, and has a variety of prescribed and proscribed foods (Pillsbury 1978). A seclusion of the mother and infant is also practised in many parts of India along with a suspension of normal work obligations (Jeffreys, Jeffreys & Lyon 1983). The 40 day period can be viewed as a rite de passage (Van Gennep 1909). It is a period of time during which the new born becomes established as a healthy infant and a social being, and the woman makes the transition from pregnancy to motherhood. Both the mother and baby are seen as vulnerable but also polluting, which as Douglas and Turner have pointed out reflects their marginality or liminality (Douglas 1966, Turner 1967). Both mother and infant are marginal, clinging to life, having been possibly close to death, neither of them belonging to either category until some time has passed. This is particularly true of societies with high infant and maternal morbidity and mortality. Ngubane (1977:86-90) argues that amongst the Zulu the overlap between the two worlds of life and death is perceived as dangerous and that the overlap is channelled through women as reproducers. She writes:

'A woman as a "mother of birth" (umdlezane) and a "mother of death" (umfelokazi) is not dangerous only because she is marginal. She is also dangerous because she is impure. Her impurity arises from the fact that she straddles this world and the section of the other world which is sacred but powerless'. (i.e. uncontrollable) (Ngubane 1977:88)
The seclusion of mothers and their infants for 40 days after birth has two universal themes - the vulnerability of mother and child, and the polluting qualities of bleeding during this time, which also is attached to menses generally in many societies. Elam (1967) in his book about the nomadic Himä cattle breeders, relates how milk from the cattle are the group's main source of food for 8 months of the year, and how women who are menstruating are forbidden to drink milk or milk the cows, from fear that the cows will become sterile. Both Elam (1967) and Turner (1967) suggest that menses symbolises death and decay and a rejection by the woman of her childbearing capacity.

The 40 day period for Negev Bedouin Arab women is indeed both a time of social marginality and pollution. The normative account always stresses that a woman is meant to stay at home for 40 days, not do any work outside or inside the home, and in particular is not to cook whilst she is bleeding. She is meant to eat well and rest. There is a belief which reinforces this seclusion. It is that contact with other women who are menstruating, may close the womb of the post partum mother and make it difficult to conceive again. This belief is called 'kabsa' and underlines both the opposition between fertility and infertility and the mother and child's perceived vulnerability during this period.

In practice, it is not clear to what extent Negev Bedouin Arab women believe in the ability of menstruating women to make a post partum woman infertile. In a number of conversations in different settings within the hospital and home, women expressed the
opinion that they did not think that menstrual blood can cause 'Kabsa', since when you are in hospital giving birth, you come into contact with many other women who are possibly menstruating, and yet most people conceive again quite easily. Despite this, most women did not visit a post partum mother at home during the first 40 days when they were menstruating.

It is clear that for the duration of the hospital stay after childbirth of 2 nights, the belief about the danger of getting 'kabsa' and the practice of seclusion are suspended. The days in hospital are counted as part of the 40 days, but the practice of seclusion within the home, and the danger of 'kabsa' only operates from the day of the mother's return home. This is usually on the third day after giving birth, but may be after a week or ten days in the case of a Caesarian birth.

There is great variation in the degree of seclusion that mothers of new borns observe, but also some uniformity in practice. Both Tables 6.1 and 6.2 show that although there is some variation in whether women visit beyond the home during the 40 day period, over 40% stay home throughout the whole period.
Seclusion observance does not appear to be related to the type of settlement that women live in. Table 6.1 shows that regardless of where women live, about 20% visit the doctor during the first 40 days after childbirth. It is only clear whether this is for themselves, the newborn, or their other children, when one looks at the observance of 40 days seclusion by parity in Table 6.2.

**TABLE 6.2**

BEDOUIN ARAB MOTHERS' SECLUSION OBSERVANCE DURING THE FIRST 40 DAYS POST PARTUM ACCORDING TO PARITY

<table>
<thead>
<tr>
<th>0-3 Children</th>
<th>4-6 children</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>GO NOWHERE</td>
<td>85</td>
<td>47.8</td>
</tr>
<tr>
<td>VISIT DOCTOR</td>
<td>26</td>
<td>14.6</td>
</tr>
<tr>
<td>GO VISITING</td>
<td>67</td>
<td>37.6</td>
</tr>
<tr>
<td>TOTALS</td>
<td>178</td>
<td>100</td>
</tr>
</tbody>
</table>

*N = 389 because 8 responses unknown*
This table shows that the number of children a woman has, and indirectly her age, affects the rate at which she visits the doctor. 26% of older women with more than four children, visit the doctor during the forty day period, whereas only 15% of those with less than four children visit the doctor during this period. It seems that the more children a woman has, the greater the chance that she will need to take one of them to the doctor during this period, and that it is a task that is not delegated to anyone else. Parity also influences whether women visit relatives living nearby during the 40 day period. More of the younger women with fewer than 4 children go visiting before the end of the 40 day period (38%) than the older women with more than four children (30%). This may mean that younger women are freer to do so or that younger women observe the ban on visiting others less strictly.

According to one ex lay midwife, the 40 day period of seclusion and rest post partum is a time for the mother to rest and be looked after, but she feels that many women do not remain at home for the full 40 days. Indeed, most women reported that they would go out to visit sometime after the first month. One mother said that she went to visit her mother 20 days after the birth of her first child. Another multipara said, 'that she visits the one sister in law she is on good terms with, and her own family who live some distance away, 30 -35 days after bearing a child. On the other hand two women who had experienced difficulty in conceiving, never visited before 40 days had past. I met one of them on the 41st day after childbirth, when she came to visit the woman who had cured her of 'kabsa'. Her first visit
outside the home after each childbirth was to this woman to whom she felt so indebted.

It is clear that when living as semi nomads in a small encampment relatives were not near neighbours. It was essential to be dispersed in order to have enough grazing and water. Settlement has resulted in families living amongst neighbours who are relatives. The proximity to affinal kin has perhaps modified the length of time during which seclusion is practised.

To summarise - mothers of new born babies once they have returned from hospital, tend to stay at home practising modified seclusion, for the first month to the first 40 days after childbirth. If they go out, it is to the doctor or to nearby neighbours or close relatives. The practice of seclusion and the ideas of pollution are present in many societies. The form they take here, is a consequence of the articulation of the particular gender and ethnicity orders of Negev Bedouin Arab society in Israel.

During the seclusion, Bedouin Arab women are not socially isolated, for there is intensive visiting of the mothers during this 40 day period. Neither does the observance of seclusion necessarily mean that they are resting, for the amount of rest is dependent on the amount of help they receive with their work.
The next two parts of this chapter will consider the social relations of reproduction by looking at women's unpaid health work and the division of labour in the home setting. This section will look at how mothers are helped with their domestic work by other women during the 40 days post partum period. The next section will look at the visiting work that occurs during this post partum period.

The argument of this section could be summarised as, settlement affects the nature of Bedouin Arab women's work, and Negev Bedouin Arab family structure and residence units. This influences both the type of work, and who is at hand to help with it. The practice of helping the mother of a newborn baby during the first 40 days, may at first glance appear to be related to the gender and ethnicity orders in Negev Bedouin Arab society but the way in which it occurs is shaped by the class order of the wider society - by the absence of menfolk during the day, the settled urban way of life within the sub tribal neighbourhood which has replaced the extended family encampment, and the housework. The help with work is seen as part of the unpaid health work of Negev Bedouin Arab women.

The normative account of help during the forty day post partum period stresses that women do no work during this time. They must rest and nurse their baby. The nature of women's work is determined by the economic basis of their families. Semi nomadic women
take part in the domestic mode of production for they are an important source of labour in caring for the flock. In contrast, settled women in families living from wage labour, have more work to do in the home for houses require more cleaning than tents. All Negev Bedouin Arab women have daily work to do involving cooking food, washing clothes, caring for children and domestic animals, and possibly fuel gathering. Some also have work to do with the maintenance of the flock in the form of herding and watering.

The women who help the mother of a newborn by taking on her work for some or all of the 40 day period are related to her affinally by marriage. Jeffreys, Jeffreys and Lyon in their work in India amongst Hindu and Muslim women point out that the post partum period is one of the few times that women are relieved from their duties (1983:3) and that it is affinal kin who help the mother of the newborn (1983:1). The actual amount of help given with work during the forty day period varies, according to the micro demography of their families, and the quality of their relationships with other women around them.

HELP WITH HERDING AND COLLECTING WATER FOR THE FAMILY

Amongst the women interviewed in their homes only 58 (14%) lived in families with a herd, and 195 (47%) lived in families where water was collected from an outlet daily. The following table shows the duration of help with herding and collecting water that these women received during the forty day period post partum.
TABLE 6.3
DURATION OF HELP WITH WATERING AND HERDING DURING FORTY DAYS

<table>
<thead>
<tr>
<th>DURATION</th>
<th>WATERING</th>
<th>HERDING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1-4 weeks</td>
<td>77</td>
<td>39.5</td>
</tr>
<tr>
<td>4-6 weeks</td>
<td>94</td>
<td>48.2</td>
</tr>
<tr>
<td>all the time</td>
<td>24</td>
<td>12.3</td>
</tr>
<tr>
<td>TOTALS</td>
<td>195</td>
<td>100</td>
</tr>
</tbody>
</table>

This table shows that some women have permanent help with herding (33%). This means that they have older children, or an unmarried sister in law, who herd on a regular basis. A substantial proportion of the mothers have help for some of the 40 days or the whole of it. The table shows that although only about 12% of women have permanent help with collecting water, during the 40 day period they all have some help with this. When a family is semi nomadic, the women often collect water for the household from the well, cistern or water pipe outlet daily, using a donkey to carry the jerry cans of water. They also may water the herd. They may herd the flock with their children, if they are not at school, or are not old enough to do so on their own. They may make cheese and yogurt in the spring from the sheep and goat milk, and spin and weave the wool to make strips for the winter tent or carpets. This pattern of work is less and less common, for so few Negev Bedouin Arabs still maintain a flock. It may safely be generalised that herding and collecting water is curtailed, or not undertaken, for part, or all, of the first forty days post partum.
The precise extent of the help varies according to who is available in the family. Help is generally given by a co wife, or sister in law - women who are linked together through marriage, through connection with a woman's husband. For example, two cowives in a semi nomadic family both had small children. The two eldest children of the first wife, herded and watered the flock with supervision. The wives would take it in turns on alternate days to accompany the children. Each time one of them had a baby, the other would take on the herding and watering for 40 days. This example illustrates a general principle which underpins all the help which women get during the forty day period. This is the principle of reciprocity.

HELP WITH DOMESTIC WORK

The expectation that mothers should rest during forty days stresses that they are meant to do less domestic work and that other women should do it for them. As with seclusion and non domestic work, there is tremendous variation in practice.

The amount of help given with domestic work during the forty day period is connected to the household composition and developmental cycle of the woman's family. Help is often given with routine domestic work such as cooking, washing clothes, and child care. The women who give this help, are usually mothers in law or sisters in law, or are neighbours who are related affinal kin.

Negev Bedouin Arab women live with their husband's
family after their marriages. In a semi nomadic encampment, each married son had his own tent pitched not far from his brothers and parents. In a polygamous family each wife has her own tent. The women who live near to each other are related through marriage. A wife lives nearby her mother in law, and her sisters in law. This has continued with settlement, for families live in subtribal neighbourhoods, and brothers homes are generally near each other. Settlement has two features which are of relevance here. One is that the number of women living nearby, who are related by marriage has increased, and the other is that there is a greater tendency for household work to be managed on a nuclear family basis, which also reflects the economic individuation which has occurred with wage labour. This process has also been described by Rosenfeld (1968) in his account of family structure, and the move from agriculture to wage labour in Arab villages in the Galilee. The statistical data presented here, highlights how the duration of help is connected to both the family developmental life cycle, and the family structure.

The data on household structure shows that there is not a statistically significant tendency for younger women with fewer children, who are at the beginning of their married life, to be living in a joint household with their husband's parents - 31% of mothers of 1-2 children live with their inlaws, whereas only 20% of mothers of 7+ children do so. It also shows that as women have more children and get older, their inlaws are more likely to have died - 10% are dead amongst mothers of 1-2 children whereas 27% are dead amongst mothers of 7+ children. It also confirms that few women live far away from
their in laws, for regardless of the number of children, a steady proportion live in a separate household in the same settlement or encampment - 55% of those with 1-2 children, 53% of those with 3-6 children, and 47% of those with 7 or more children. Only 4-7% live in a different settlement to their inlaws.

Help with the major areas of routine daily domestic work such as cooking, washing clothes and caring for other children is given to most mothers during the forty day period. The following table (6.4) shows that living in the same household as one's in laws means that a woman is more likely to receive help and the help that she gets is for a longer period of time.

TABLE 6.4
DURATION OF HELP WITH COOKING DURING THE 40 DAYS POST PARTUM AS RELATED TO WHETHER THE MOTHER EATS WITH HER IN LAWS DAILY

<table>
<thead>
<tr>
<th>EAT WITH IN LAWS</th>
<th>NOT EAT WITH IN LAWS</th>
<th>DEAD</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION OF HELP</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>1-4 weeks</td>
<td>49</td>
<td>39.5</td>
<td>95</td>
</tr>
<tr>
<td>4-6 weeks</td>
<td>56</td>
<td>45.2</td>
<td>54</td>
</tr>
<tr>
<td>no help</td>
<td>19</td>
<td>15.3</td>
<td>47</td>
</tr>
<tr>
<td>totals</td>
<td>124</td>
<td>100</td>
<td>196</td>
</tr>
</tbody>
</table>

10 cases unknown

Chi square=16.0, d.f.= 4, p<0.001

This table also shows that women whose in laws are dead are less likely to get help, but that there are other women besides mothers in law who help, for many of them get help during the
40 days even when their mother in law is dead. These 'other women' are generally sisters in law or related affines who are neighbours. Since a woman lives with her husband's family, she is unlikely to live close enough to her natal family for them to help her on a daily basis even if she has married a relative.

For example, one mother of six who lives in a house in a planned village, explained that she rests almost totally for two weeks after having a baby. During those first two weeks the only domestic work that she does is to wash the new born baby's clothes and to dress her older children in the morning. Her mother in law would make tea and coffee for herself and her husband, but was too busy with her own children to offer more help. Her own mother would visit as a guest. Her two neighbours used to do the cooking and wash the family's clothes during these two weeks. These women were married to cousins of her husband. Now that her husband's brothers are married, her sisters-in-law help her. Another woman whom I visited on the sixteenth day of her 40 day period, reported that her husband's brother's wife was helping her clean the house and doing the cooking. Six months previously their roles had been reversed. In addition, her young unmarried sister comes and collects the laundry daily, and returns it washed and dried the next day.

Table 6.5 shows the duration of help with child care. This can be related to the extended family structure for they show a similar pattern to that displayed in Table 6.4. Those women who are living with their husbands' parents receive help with domestic chores
over a longer period of time, for 44% get help with caring for their other children for 4-6 weeks. This help may be given by their mothers-in-law or by their unmarried sisters-in-law. Similarly as with the help with cooking, older women whose husbands' parents are dead, get a reasonable amount of help during the 40 day period from their sisters-in-law principally or other women who are related affinally. Both tables (6.4 & 6.5) suggest that sisters-in-law help for shorter periods than mothers-in-law.

**TABLE 6.5**

<table>
<thead>
<tr>
<th>HELP</th>
<th>IN SAME HOME</th>
<th>IN SETTLEMENT IN LAWS DEAD</th>
<th>OTHER</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1-2 WEEKS</td>
<td>31</td>
<td>35.2</td>
<td>85</td>
<td>44.7</td>
</tr>
<tr>
<td>4-6 WEEKS</td>
<td>39</td>
<td>44.3</td>
<td>50</td>
<td>26.3</td>
</tr>
<tr>
<td>NO HELP</td>
<td>18</td>
<td>20.5</td>
<td>55</td>
<td>29.0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>88</td>
<td>100</td>
<td>190</td>
<td>100</td>
</tr>
</tbody>
</table>

31 Cases are unknown

Chi square = 13.09, d.f. = 6, p<0.05

In each of these two tables concerning help with domestic work, there is a small proportion of women living with their in-laws who get no help with their work. Their mothers-in-law may be too frail, or have their own small children and so can only give limited help, or they may not be on good terms so that there is no reciprocal basis of mutual help.
The duration of help with domestic work also has health repercussions for the infant as it seems to have an impact on infant feeding. Of those mothers who have help with cooking for up to 40 days, 32% were exclusively breastfeeding when interviewed, whereas of those mothers who had help with cooking for only the first month, only 24% were exclusively breastfeeding at the time of the interview. (This will be elaborated in Chapter 8).

In general then, the women who give help to a mother of a new born baby are connected to her through her husband - they are affines. If she has married a cousin, they may also be kin, but the help is given because of the affinal connection. The baby is born into the husband's family and it is the women in that family group who care for the mother. So the system of personal reciprocal favours between women is underpinned by women who may offer help to each other, through virtue of being part of the husband's family or agnatic group, either through birth or marriage. Men are linked to each other by exchanging women, but women's relationships - whom they may help or visit - is controlled and shaped by their fathers, husbands and brothers. A woman who does not maintain harmonious relationships with her female affines is liable to be deprived of help during the forty day period - locked out of the system of reciprocal favours. Two sisters in law who lived next to each other but had quarrelled, stopped helping each other during the forty day period. Similarly a mother in law would not help her daughter-in-law when she was not on speaking terms with her.
Although the quantitative data highlights the pattern of help with routine work, it does not explore the work generated by the entertaining that has to be done of all the women who visit a mother during the 40 day period. This is a subject which was a central theme in discussions during fieldwork. It is an example of the way in which qualitative data can supplement the quantitative. Negev Bedouin Arab women when discussing the help they receive during the forty day period distinguish clearly between help given with the daily domestic routine, and help given with the added work that occurs during the forty day period through catering for visitors. The questionnaire did not differentiate between these two types of work, but women invariably did. Two sisters, who both live in nuclear family households, and whose mothers-in-laws were dead, explained that they did their own housework and cooking during their forty days, but other women prepared food for their visitors during this period. For one woman it was her sisters in law who cooked for her and for the other the women of the family in the neighbouring tent. They both helped the women who helped them subsequently whenever they had new babies.

The transition from semi-nomadism to wage labour has altered the class order of Bedouin Arab society. It also has altered family structure and women's work. Settlement in sub tribal neighbourhoods has lessened women's work with the flock, but created more domestic work during the forty day period, through the development of elaborate visiting patterns which take place during the forty day period. The paradox is that this time of seclusion is also a time of extreme sociability.
During the seclusion of the forty days post partum period, a mother of a new born is visited by her entire social network. The normative accounts of the forty day period always stress her need to stay at home and rest, but do not emphasise that during this period her home is more open to others than at any other time.

The process of settlement has altered the practice and meaning of the forty days visiting. Semi nomadic women who live in small encampments dispersed over the available grazing and water resources, were and are visited by fewer women after they have had babies. Their encampments are based on the extended family and perhaps a few relatives from their husband's sub tribe. For example, one mother of twins lives in an encampment of four tents - her own, her co wife's her mother in law's, and a cousin of her husband. During her 40 day period, she was visited by her sisters in law whose tents were pitched three kilometres away in an adjacent wadi, and her sisters whose tents were pitched about six kilometres away. The sisters came to her home by car. Their husbands both have Peugeot pick up trucks, which they hire out. The sisters in law walked over with their children.

Settled women live in sub tribal neighbourhoods, and this means that all the women of the sub tribe are close by. As a result, mothers of new borns are visited during the forty days by not only their closest affinal and natal kin, but also by the women
married to distant cousins of their husbands, or women related to them through their parents and brothers. The preferred pattern of marriage is between cousins, so that women often continue living within the sub tribal settlement that they grew up in. The intensity of the visiting during the forty day period reflects the increased density of settlement, but I would argue that it is not only related to physical factors of contiguous residence, but also to changes in the division of labour. Settled women also have little productive work to do - there are no flocks to maintain - so that once the home is tidied, and lunch prepared for the children when they return from school, the morning is free for visiting.

Mothers can expect to be visited by their sisters in law and their sisters during the forty day period. Their sisters visit slightly less, and are seen daily less often than sisters in law, owing to the practice of women living with their husband's family and sub tribe. If however they marry cousins within their sub tribe, who are closely related to each other, they will not be too distant from each other.

The statistical data on visiting patterns reflect the residential contiguity of sisters in law for between 72-78% of all sisters in law were seen daily by the mothers in the sample during the 40 day period and between 90-94% visited during this period. In contrast only 39-50% of sisters were seen daily during the 40 day period but 85-88% of sisters visited during this time. (Since some women have several sisters and sisters in law it is difficult to
present this information with frequencies and percentages in tabular form).

Since there is no casual visiting in Bedouin society, visiting occurs around life events and one of the most frequent is childbirth. In Tel Sheva between 8-9am, you can see women leaving their homes and walking swathed in their black cloaks (abbayehs) to the homes of whoever they are going to visit amongst their affines or kin. They spend the rest of the morning, drinking tea and coffee and eating lunch and returning home between 12 and 1pm. They meet other women there, give the mother of the new born a gift of money, which they tuck into the new born's swaddling and spend the morning hours sitting together discussing a wide range of topics from current events, to child rearing and village life.

The approach that I am going to take is that visiting and being visited is 'work'. It has become in particular women's work in the context of the urban settlement of Negev Bedouin and is part of both women's unpaid health work (Stacey 1984) and their family status production work (Papanek 1979). It is socially supportive and contributes to a woman's status, but also is part of family politics, and is linked to the way in which Bedouin Arab men's involvement in wage labour has altered women's work.

This approach differs from much of the anthropological literature on women's visiting patterns in segregated societies. This literature tends to view women's visiting as a domestic activity, belonging to the private domain which is of importance only to women.
For example Rosenfeld (1974) in an article on the visiting patterns of Palestinian Arab village women writes that their visiting patterns are reciprocal and non hierarchical. Dobkin (1976) in her work on Muslim Turkish village women argues that age and relative standing within the lineage is relevant to a woman's social status, and that the hierarchy of status is played out through reciprocal visiting patterns. Sharma (1978), writing about women in rural India, describes how younger women have shifting alliances which offer each other moral support for they have little power and that within the extended family 'the internal politics of the household constitute a zero sum game so far as the older woman's loss is the younger woman's gain' (1978:277).

There is no question that women's visiting is organized on a principle of reciprocity and that there are status differences, but they may not only be based on lineage standing and age. I have argued in an earlier piece of research that:

'Settled Negev Bedouin women's visiting patterns are reciprocal but there are social differences. These are based not only on age and relative standing within their husband's lineage and their own, but also on behaviour, personality, their husband's political interests and their own,' (1978:254)

For example, a woman's social reputation may be quite different from that of her husband. As one informant said of another -'S is a good woman but she is unfortunate. Her husband has little understanding, is mean and always in trouble. (S hurmah quaesa, laakin
maskina. Juzhaa may byafham, daiman indhu mushaakil awhu behayl). A woman can become religiously observant, praying five times a day and going on the pilgrimage to Mecca, or she may be particularly scrupulous about carrying out her social obligations and so acquire a high social standing amongst the community which relates to her, and secondarily reflects on her family.

The visiting that occurs during the 40 days post partum is extremely supportive for the mother. It underlines how having children is socially valued, both within the family and the society. The rest, help and the visits emphasise this. It is a time of attention, sociability and gift giving. Stern and Kruckman (1981) undertook a literature review of the incidence of post partum depression in different societies and concluded that it is a culture bound syndrome caused by lack of social support post partum and that it is not found in societies with seclusion, assistance and social recognition of a mother's new status through visiting and gifts. For Negev Bedouin Arab mothers, despite the variation in seclusion and help with work, the visits that occur daily during this period provide interest and social support.

The forty day visiting is strictly reciprocal. You visit someone who visited you. If you visit someone who didn't visit you, you know that she will in the future. Your social obligations and status are thus intimately linked to your own, and others, reproduction. The exceptions to this binding reciprocity are barren women who do not visit extensively and women past menopause who may
choose whom they visit. The mother of a new born has to remember who
came, and this is quite complicated as it is a question of not only
remembering who came during the forty days period but also what money
did they gave you.

According to older women, during the 1950s and early
60s, women would bring food to the mother of a newborn. One great
grandmother related that she would take the mother of a new born
infant eggs, or a chicken, rice, or honey. This was a time of
shortages, and it was considered important that the mother should be
eating adequately to ensure that her breastfeeding was established and
maintained. Today food is relatively plentiful, owing to wage labour
and state subsidies on dairy products and bread. Women give each
other gifts of money which they tuck into the swaddling clothes of the
new born. These are called 'nugot' and are for the personal use of the
mother. They are given to her on the later occasion of her sons
circumcision and her son's marriage and whenever she gives birth to a
son or a daughter.

Thus a loan system operates between women. A mother of
a new born receives capital which she can spend as she chooses - on
clothes for the children, on purchasing a goat or cow, or chickens,
on food if her husband is not a reliable provider, or is unemployed.
She returns the loan when the giver has her next child. The amount of
money returned is adjusted to take account of the inflation rate which
has been very high in Israel in the last few years. At the time of
fieldwork it was 600% per annum. This is sometimes dealt with by
exchanging Israeli shekels for U.S. dollars or Jordanian dinars. It involves memorising a very complicated bookkeeping operation - rather similar to remembering who sent you Xmas cards or wedding gifts in Western society, so that you can reciprocate. The amount of money that you give is a combination of your resources, what you have been given, your personal relationship to the woman and your husband's family relationship to her husband's family.

Jakubowska (1985:229-231), in her analysis of Negev Bedouin Arab women's networks in the urban settlement of Rahat, estimated that in 1982 women received on average 12,300 Israeli shekels (377 1976 U.S. $) in gifts (nugot) after childbirth. During the eighteen months of her fieldwork she calculated that the average expenditure on money for gifts of this kind for women in the sub tribal neighbourhood of her study was 6,000 Israeli shekels (184 1976 U.S.$). She also comments that there is an equality in the amount of money that is given which is strictly enforced although close family give more. This indicates how the gift giving is both an economic loan and a symbolic gift.

Where does this money come from? Women have access to money through the State Benefits that they are entitled to as reproducers, for it is not only Bedouin society that values children and their role as reproducers but also the Israeli state. All women who are Israeli citizens, whether Jewish or Arab receive certain benefits - a maternity benefit on leaving hospital after having the baby, and a Children's Allowance. The amount of money paid to Arab
women for having children is less than the amount paid to Jewish mothers of Jewish children. These are paid to the women personally in their name and are collected from the post office in town or paid automatically into a bank account, if they have one. A few women have their allowances paid into their husbands' bank accounts but most collect their own money. The State Benefits thus give them some economic autonomy, and enables a loan system to operate. In addition women sometimes ask their husbands for money for this purpose which illustrates that the visits are part of family status production work.

Besides carrying out social and economic obligations, the 40 day visits are enjoyable and provide an opportunity for the mother to receive attention, and her home to become the setting for a rich social life. Much of the visits are spent discussing the mother's experience of childbirth with everyone sharing their own experiences. It is clear that the 40 days visiting provides a mother with social support and attention which generate more status for her within her household and the wider family. Providing she has help with the catering for the visitors it is not seen as a difficult period, but one to be enjoyed and savoured.

During these visits, little attention is paid to the baby apart from money being tucked into its swaddling. It is left to sleep and glanced at cursorily. This is felt to be necessary in order to protect the infant from envy, jealousy and the evil eye. To this end the baby also usually has blue beads and amulets sewn onto its
bonnet. The visiting work is part of the unpaid health work that women do for one another, which is based on a concern for the physical, social and mental well being of the mother. This emphasis on the mother's well being is in marked contrast to the hospital approach to post partum health care.

The loan system which operates through gift giving during the 40 days period highlights how an approach to women's visiting which views it as a purely social domestic activity is limited. The loan system is based partly on benefits which are related to the gender order of Israeli society and partly on husband's earnings.

I would argue that there are other aspects to women's visiting work which is family status production work. Owing to the transition from semi nomadism to settlement and wage labour, Negev Bedouin Arab women have taken on much of the politics of status maintenance work, which their menfolk used to do.

When living as semi nomads, the women were involved in the daily maintenance of the herds and the encampment, as has been discussed earlier in this chapter. The men worked at maintaining links with other families. They would visit guest tents in different encampments, gathering information on water levels and grazing, go to market to meet others from different tribes, sell their own livestock and provision the family. The men did much of the family status production work which entailed visiting and travelling beyond the domestic domain.
I would argue that with the move to settlement and a livelihood based on wage labour, the men have had to relinquish much of their work in the 'politics of status maintenance' in their sub tribe, owing to their absence from home. Many are absent for days and nights at a stretch, when they work as night watchman or long distance truck drivers or as agricultural labourers further north. They are dealing with their work situation in the Israeli labour market which is based on a different gender and class order. As a consequence, women have taken on more of the work of family status production, through using visiting as work and one of the main occasions for visiting is during the first forty days after a child is born.

Negev Bedouin Arab women do not select who to visit according to personal preference. A mother is visited by all the women who are connected to her - but they are defined as connected to her through men - brothers, father, husband, husbands brothers. Women trace out a choreography of the connections between families through their visiting patterns. They are only able to take part in the visiting through being married to men and having children.

When a woman marries she starts developing some status within her husband's family. This increases as the years pass and as she has more children. She starts visiting women during their forty day periods, and they visit her and she gradually develops an intricate network of reciprocal social obligations, which are related to both herself as an individual and her husband's family. The network is developed through childbirth so its link with reproduction and
success in reproduction is important. One wife who had not conceived during the eight years of her marriage was totally excluded from the forty day visiting. She would only visit her sisters in law. Thus women's visiting is family status production work - the links in the visiting are men and the reason producing children for the mens' families.

Some examples from the fieldwork may clarify how forty day visiting involves status maintenance at a family level. A certain woman had a third child by Caesarian whilst I was in the field. She had married out of the subtribe into a family of another tribe who lived in the adjoining neighbourhood. I went to visit her on the day that many of the women from her sub tribe were going to visit her. There were 15 women altogether. Since she lived amongst this other tribe, it was only possible for the women from her sub tribe to visit in a large group since this is not an area where it is acceptable to walk or visit. The women present were of her mother's generation and her own, and there were four groups of mothers and daughters. Her mother was there with her sister - they are married to brothers. Her grandfather's wife was there with her three married daughters as was her father's brother's wife and her married daughter and her great uncle's wife and her two married daughters. All the daughters present had married cousins within the sub tribe. There were four other younger women who were married to cousins of her father and brother and herself. Her husband had been forewarned that the women from her sub tribe were coming. He had stayed home and insisted on slaughtering a goat for lunch despite the protestations of the older
women in the party. The significance of this is that goats and sheep are generally slaughtered when men come as guests not women. Only men can slaughter animals. This symbolised that they were outsiders visiting on behalf of their sub tribe and the men in their families.

Not all visits are as formal or in such big groups. For example I accompanied a woman on a forty day visit which she undertook to a mother of a baby of 35 days. The fact that the baby was nearly forty days old at the time of the visit indicates some social distance from the family. According to the visiting woman, we were going to see this mother for a number of reasons. She was the daughter of a man whose tent was pitched next to her hut for many years, until she and her husband moved into a house in the village. One of his co wives is the daughter of her father's cousin. This mother of the newborn was the younger daughter in law and had had her second baby. She had visited the woman I was visiting with when she had her last child last year. The first reason is one of being neighbours, the second is a kinship link, the third is a reciprocal social obligation.

The topics of conversation during these visits cover a wide range of personal and family interests. In addition to experiences of childbirth and advice on infant feeding or weaning, much is discussed which is later passed on to husbands on their return from work. Examples of topics discussed are a man's new job, the date of when someone's husband is going to be released on parole, news of a newly arranged marriage, an account of a dispute within the village,
and information on who is planning to go on the pilgrimage to Mecca. Visiting during the 40 days post partum period in settlements has expanded in terms of both the number of visitors a mother will receive, in the quantity of money exchanged, and in the range of information traded.

So how do the myths, realities and meanings of the forty day period relate to the control of reproduction in Negev Bedouin society? It is clear that the importance of the woman's childbearing function is underlined by the myths, rituals and practices of the forty day period. It is clear that although the myth emphasises the seclusion of the mother, the reality emphasises the highly social nature of this period both in help and visiting. Bedouin men control the parameters of whom may be visited and the Israeli state and women's husbands provide the money for the loan system that develops. What at one level seems a period which is part of the women's domestic private world, actually is part of the politics of status maintenance of not only women but families. This leads me to question the public/private debate and how it has been applied to women's lives in highly segregated societies.

WOMENS UNPAID HEALTH WORK IN THE DOMESTIC DOMAIN AND INTERMEDIATE ZONE

All anthropologists who have studied nomadic societies have emphasised that there are two worlds - the public one of men and the private one of women (Cunnison 1966, Asad 1970, Barth 1961, Marx 1967). The emphasis on the dichotomy between the worlds of the tent
and the camp and marketplace, was perhaps a reflection of their lack of access as men to the world of the tent and a subsequent misleading exaggeration of the private nature of the domestic sphere. It was often referred to as the women's world rather than the domestic sphere of family life. Women who have studied nomadic societies or segregated societies have been more preoccupied with how power and influence is exercised within the domestic sphere amongst related women and men (Sharma 1978, Jeffery 1979, Lewando-Hundt 1978, 1983, Nelson 1974). There has been too little emphasis on how the domestic and non domestic articulate with each other, and how this differs with contrasting modes of production. As Bujra writes (1978:21-22):

'to have any explanatory value what must be investigated is the relationship, the character of articulation, between domestic and non domestic spheres of action. Domestic labour in some form or other is universal, but it takes on differing significance in contrasting modes of production.'

In the setting of Negev Bedouin Arab society the transition from a domestic mode of production, semi nomadism, to urban settlement based on wage labour has meant that men's non domestic sphere, (their public sphere) has become the Israeli labour market, the mosque and the guest tent in their subtribal neighbourhood. Women's domestic sphere has widened from the tent in an encampment to a house in a subtribal neighbourhood and they have taken on much of the family status production work which, when semi-nomadic, their men undertook. This is carried out through the medium of formal reciprocal
visiting around reproduction. A biological event is elaborated not only to serve women's interests, but also family's interests.

This leads us to consider if the division of the private and the public is meaningful at all in this setting or cross culturally. In highly segregated societies, individuals are not individuated to a great degree from their families. Arab women are not referred to by their personal first names outside their households but as mother of.....or wife of...... It is considered shameful to use their first names. Similarly their conduct reflects their families honour, both that of their agnates and affines (Papanek 1979). The notion of the private is closely associated with the importance of the individual as opposed to the importance of the group. In Negev Bedouin society, private conversations are rare and guarded against. Visitors are noticed and immediately joined by others. Children are asked what is being discussed. One can request a private conversation (mukhlaweeyaa) and then have it some distance from everyone else but in full view. Sciama points out (1981:110):

'while "private"and "public" remain important sociological key terms, the relative and culture bound nature of their contents make it imperative that differences and ambiguities be taken account of'

In this setting there is a domestic, sphere of the home and an intermediate zone of the sub tribal neighbourhood. The unpaid health work of helping a mother of a new born occurs in the domestic sphere, but the visiting work seems to be located in an intermediate
zone for it involves many women with differing complex connections and involves their husbands and families indirectly.

It is clear on reviewing this chapter that the social relations of reproduction which occur during the 40 days post partum period are based on three types of activities - seclusion, help with work, and visiting - which all are shaped by the articulation of gender, ethnicity and class. Seclusion is practised in many societies and is part of the Negev Bedouin Arab tradition of appropriate female behaviour post partum. Its form and variation is influenced by hospital childbirth and settlement residence patterns. Similarly, help with women's work is part of Negev Bedouin Arab post partum tradition. The helpers are affinal female kin as in many societies but the range of helpers, the type of work, and the timespan during which help is given is related to settlement and wage labour. The visiting work is part of the politics of status maintenance by women for themselves and their husbands. It is both reciprocal, economically and socially supportive and of political importance. Its range and intensity is affected by settlement work and residence patterns.

Both the help with work and the visiting work can be viewed as part of women's unpaid health work for they are enabling mothers to rest and giving them social support. It reveals that Negev Bedouin Arab society's views of health deal with the mental, physical and social wellbeing of women post partum. This is in marked contrast to the hospital biomedical approach which emphasises the physical well being of the infant and mother and barely considers their mental
and social well being.

Thus the forty day post partum period underlines the importance of reproduction in Negev Bedouin Arab society. In the context of urban settlement, family and personal interests are developed during the forty day period visiting. The way in which seclusion, help and visiting are practiced makes visible the social relations of reproduction and the family status production work which women are both controlled by and influence for their menfolk and families. It is not only the interrelationships of gender and ethnicity which shape the form and meaning of these forty day post partum practices of help and visiting work but also class. The type of domestic work and who is available to do it has been affected by wage labour and settlement, as has the range and meaning of visiting work. The forty day post partum period of each mother every time is like a ballet, the choreography of which changes slightly at each performance, as do the performers.
PART THREE

CHAPTER 7

THE GROWTH AND INFANT FEEDING PATTERNS OF NEGEV BEDOUIN ARAB INFANTS AND THEIR RELATION TO LIVING CONDITIONS

The previous data Chapters 4 & 5 in Part Two have dealt with hospital delivery and post partum care and Part Three Chapter 6 deals with post partum care in the home during the first 40 days. I have argued in these chapters that a gender perspective alone cannot explain the social relations of reproduction or events that occur in post partum care in this setting for they are shaped by an intermeshing of the gender, ethnicity and class orders. The next two data chapters shift to consider the growth of the infants in the sample and how this is related to the gender, ethnicity and class orders. This seventh chapter will look at the epidemiological data on the patterns of growth and development of the Negev Bedouin infants in this sample and the way infant feeding patterns and living conditions are related to it. This chapter focuses on the way in which ethnicity and class are interrelated. Chapter 8 will analyse the social context of infant feeding and look at how gender, ethnicity and class are interrelated.

GROWTH PATTERNS

The growth and development patterns of this sample and those in previous studies of this population will be outlined. The way in which different patterns of infant feeding are correlated with the patterns of growth will be reviewed. The health measurements that will be used are birthweight, the standard deviation
ratio of height for age, and the ratio of weight for height. Although this thesis is concerned with the post partum period during the first two months after childbirth, data in this chapter will include growth and infant feeding information collected from this same sample of mothers and infants, when the babies were nine months old. This does not alter the main focus of the research as being within the two month period, but gives an indication of whether trends seen at two months continue during the following seven months. The babies were weighed and measured in hospital just after birth and weighed and measured at home at the age of two months and nine months by trained interviewers (Chapter 3 & Appendix 1).

The reference standards for comparing weights and lengths were those of normalized National Centre for Health Statistics (NCHC) derived from an American population. This is the only large data set on nutritional status. The mean is at a point which is not that of Bedouin Arab children's growth. This means that societies that are less affluent or societies that have different body shapes and bone structures have a large proportion of children below the American mean. It could be viewed as a way of pathologising the Third World and poverty and setting up affluence as the norm. Alternatively to develop percentiles based on a Third World population could be seen as normalising social deprivation. Cross cultural comparisons of populations using the American percentiles is therefore problematic and needs to be viewed and used with caution.

The standard definitions developed by the Pediatric
Nutrition Surveillance System established by CDC in 1974 for defining growth will be used. This programme (PNSS) monitored the growth of children born to high risk low income families enrolled in public health programmes to improve the health of their young children. The families were of different ethnic groups - white and black Americans, Hispanic, American Indian, Alaskan Eskimo, and Asian Pacific Islanders. The programme defined underweight children as the % of children who are lower than the fifth percentile. Overweight was defined as those infants who were weight for height above the 95th percentile.

The standard deviation of weight for height of the children in the sample at two months and nine months is set out below.

<table>
<thead>
<tr>
<th></th>
<th>2 MONTHS</th>
<th>9 MONTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2 OR LESS</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>-1.99 - -1.00</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td>-0.99 - -.01</td>
<td>122</td>
<td>104</td>
</tr>
<tr>
<td>0 - 0.99</td>
<td>154</td>
<td>138</td>
</tr>
<tr>
<td>1.00 - 1.99</td>
<td>51</td>
<td>57</td>
</tr>
<tr>
<td>2.00 OR MORE</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>TOTALS</td>
<td>394*</td>
<td>384**</td>
</tr>
</tbody>
</table>

MISSING *3 **13

Chi square (Goodness of Fit) Statistic = 9.43, d.f. = 5, p<0.001

Chi square (Goodness of Fit) Statistic = 46.31, d.f. = 5, p<0.001
Figure 7.1
This table and the accompanying graph (Fig 7.1) shows that the prevalence of children over two standard deviations below the mean in the sample is a little over 3% at both two and nine months. The prevalence of overweight increases between two and nine months from 3% to 7%. The data shows that as the children get older they get further away from the American pattern of growth. In particular there is an increase of the proportion of infants in the sample, who are above two standard deviations from the American mean. Table 7.1 indicates that 57.8% of the infants in the sample are on or are above the American mean at nine months. This indicates that more than half of the Bedouin Arab infants are heavier for their height than American infants.

Table 7.1 and Figure 7.1 also show that there is wide differentiation in patterns of growth within Bedouin Arab society for 42.2% of the sample are below the American mean at nine months and 3% are below two standard deviations at two and nine months. This table shows that there is a stability in the trends of growth between two and nine months. It also underlines the point that the majority of Bedouin Arab children are not undernourished as compared to American children.

The focus of the epidemiological study was not to compare Bedouin Arab infants' patterns of growth with American infants. Its focus was to distinguish differential patterns of growth amongst Bedouin Arab infants and to establish whether these were correlated to infant feeding patterns, morbidity and living
conditions. The measure of Height for Age is more sensitive than Weight for Age in delineating differential patterns of growth within a population such as this, which is not suffering from malnutrition. Therefore this is the measure used more extensively in the following analysis. When data on height for age is examined in Table 7.2 and Figure 7.2, it is clear that there is variation in patterns of growth within the sample.

**TABLE 7.2 STANDARD DEVIATION OF HEIGHT FOR AGE AT 2 MONTHS AND 9 MONTHS OF INFANTS IN THE SAMPLE**

<table>
<thead>
<tr>
<th></th>
<th>2 months</th>
<th></th>
<th>9 months</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nos</td>
<td>%</td>
<td>Nos</td>
<td>%</td>
</tr>
<tr>
<td>-2.00 OR LESS</td>
<td>35</td>
<td>8.8</td>
<td>72</td>
<td>18.7</td>
</tr>
<tr>
<td>-1.99 - -1.00</td>
<td>82</td>
<td>20.7</td>
<td>130</td>
<td>33.8</td>
</tr>
<tr>
<td>-0.99 - -.01</td>
<td>159</td>
<td>40.0</td>
<td>119</td>
<td>30.9</td>
</tr>
<tr>
<td>0 - 0.99</td>
<td>89</td>
<td>22.4</td>
<td>51</td>
<td>13.2</td>
</tr>
<tr>
<td>1.00 - 1.99</td>
<td>21</td>
<td>5.3</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>2.00 OR MORE</td>
<td>11</td>
<td>2.8</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>TOTALS</td>
<td>397</td>
<td>100</td>
<td>385*</td>
<td>100</td>
</tr>
</tbody>
</table>

MISSING *12

Chi square Goodness of Fit
Statistic = 129.57, d.f.= 5
p<0.001

Chi square Goodness of Fit
Statistic = 659.37, d.f.= 5
p<0.001

This table shows that at two months 9% were more than minus two standard deviations from the mean and that by nine months 19% were. The proportion of infants below minus one standard deviation from the mean is 30% at two months and is 55% at nine months. The Chi
Figure 7.2
square statistic for the Goodness of Fit test is clearly significant and particularly so at nine months. This shows how different the Bedouin Arab children's pattern of growth is from the American pattern for it is 129.57 at two months and 659.37 at nine months.

Data from the PNSS programme shows that of the different ethnic groups studied, there was a prevalence of stunting at different periods. For example the black American infants had the lowest prevalence of stunting over 60 months except for during infancy when they had the highest. The stunting exhibited in these early months did not continue beyond the first year of life. The histogram of height for age during 0-11 months from this study is shown below.

Source: Pediatric Nutrition Surveillance System CDC

Fig.7.3 Prevalence of short stature, by age and ethnic group - Pediatric Nutrition Surveillance System, 1986

Source MMWR, Vol 36 No23 p 367
It would be possible to find out whether the Bedouin Arabs infants continue to grow more slowly than American children during childhood if a follow up study of this sample would be undertaken. From this data it can only be said that Negev Bedouin Arab infants have different patterns of growth in the first few months of life. There is some data available on differential patterns of growth of Jewish and Bedouin Arab infants from a small study which took place in 1981 (Dagan, Sofer, Klish, Hundt, Saltz & Moses 1983).

This study looked at the growth patterns and infant feeding practices of a sample of Bedouin infants (353) and a sample of Jewish infants (302). The study was based on a single examination of these infants at various ages during their first year of life. The interview and physical examination was undertaken by two paediatricians. I was an advisor on study design and interview technique and analysis. The findings from this study are similar to those shown in Table 7.2, in that the authors found that there was a slower pattern of growth in the presence of only mild malnutrition amongst some of the Bedouin Arab infants. This was not present amongst the Jewish infants. The weight to length ratio showed that 88% of Bedouin Arab infants and 96% of Jewish infants were above the 10th percentile. Tricep skinfold measurements showed that 96% of the Bedouin Arab infants and 99% of the Jewish infants were above the 5th percentile. However the midarm to head circumference ratio of Bedouin Arab infants was in the range between 0.280 - 0.310 (the mild malnutrition range) whilst the Jewish infants range of this ratio was 0.310 and above (the well nourished range).
Appendix 3 contains the figures from the article of Dagan et al (1983). Figures 4-9 show the difference in growth between Bedouin Arab and Jewish infants during the first year of life in relation to weight for age, height for age, head circumference, weight for length, midarm and triceps skinfold thickness. They all show that the difference between the two groups increases from 5 months onwards and is possibly-associated with the use of milk powder in bottles and the pace at which solids are introduced. The authors of the article argue that the difference in growth shown between the two samples may be partly due to a different infant feeding pattern but also that 'factors other than a deprivation of calories, might play a role in the marked stunting observed among the Bedouins'(1983:755).

It is generally considered that the infant feeding pattern during the first year of life is the main influence on an infant's growth and development. It is therefore appropriate to review the infant feeding pattern during the first two months of life of the infants in this sample, in order to look at how the infant feeding choices of mothers affects their infant's growth patterns. The second section of this chapter will do this.
INFANT FEEDING PATTERNS AND THEIR RELATION TO GROWTH

The data presented in the first part of this chapter shows that some Negev Bedouin Arab infants have grown less well than others during the first year of life. This trend is apparent at two months and is more widespread at nine months. A previous study (Dagan et al 1983) indicates that 5 months is the age at which the slowing down in growth occurs. This pattern of growth poses questions as to why it is occurring. Is it associated with the particular infant feeding patterns practised by Negev Bedouin Arab mothers? If so how do these patterns get adopted? Are other factors involved and if they are, how are they linked to the articulation of gender, class and ethnicity in Negev Bedouin Arab Israeli society?

A mother's choice of infant feeding influences her infant's growth and development, but it would be simplistic and out of line with the general perspective of this thesis to view infant feeding patterns as a result of women's autonomous choices. The decision of how long to breastfeed, and if when and how to use a bottle of milk, occurs in the micro setting of the family, but is also influenced by the way infant feeding is organised in the hospital, in the well baby clinics and in the homes of the families living close by. Infant feeding is crucial to infant health and growth, but its consequences are influenced by living conditions and economic resources.

This section of the chapter sets out the infant
feeding patterns of the Negev Bedouin Arab mothers and infants in this sample and reviews how they are correlated to growth. In the following chapter the analysis of infant feeding amongst Negev Bedouin Arabs looks at the interface between the macro and the micro, the formal and the informal health care systems, and the impact of the different home environments. It reviews how the constraints and consequences of infant feeding reflect the way in which ethnicity, class and gender intermesh in this setting and can only be understood through an articulated perspective.

The mothers in this sample were interviewed in the hospital after childbirth, and then subsequently at home two months and nine months after giving birth and so there is data available on the infant feeding pattern at those points in the infant's development. Table 7.3 shows that although 84% of the mothers were breastfeeding their infants exclusively when they left the hospital, only 24% were doing so at two months. The incidence of breastfeeding with supplementary milk in a bottle rose from 7% in the hospital to 52% Very few had stopped breastfeeding at two months (9%). This means that Negev Bedouin women are using supplementary milk in addition to breastfeeding rather than instead of it. The maintenance of breastfeeding continues past two months, for at nine months 65% are still breastfeeding.
TABLE 7.3 INFANT FEEDING PATTERNS AT BIRTH, TWO AND NINE MONTHS

<table>
<thead>
<tr>
<th>INFANT FEEDING</th>
<th>AT BIRTH</th>
<th>2 MNTHS</th>
<th>9 MNTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>22</td>
<td>5.5</td>
<td>-</td>
</tr>
<tr>
<td>ONLY BREAST</td>
<td>338</td>
<td>83.9</td>
<td>95</td>
</tr>
<tr>
<td>BREAST+SOLIDS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BREAST+BOTTLE</td>
<td>30</td>
<td>7.4</td>
<td>208</td>
</tr>
<tr>
<td>BREAST+BOT+SOL</td>
<td>-</td>
<td>-</td>
<td>58</td>
</tr>
<tr>
<td>ONLY BOTTLE</td>
<td>13</td>
<td>3.2</td>
<td>36</td>
</tr>
<tr>
<td>BOTTLE +SOLIDS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTALS</td>
<td>403*</td>
<td>100</td>
<td>397</td>
</tr>
</tbody>
</table>

MISSING *9 **29

NOTE: -- LESS THAN 1% OR NO FREQUENCIES

The pattern of infant feeding outlined above is that of the year 1982. It is difficult to ascertain how long infant feeding in Negev Bedouin society has been based on breast and bottle together. In talking with older women – mothers and grandmothers – there is a strong consensus that breast milk is best and several women on separate occasions quoted a motto which said that a child who is not given its mother's milk will have anger in its heart all its life against its mother. The ideal infant feeding pattern of the past is held to be two years of breast feeding for a boy, and a year and a half for a girl. Weaning should be in the spring months of February and March when the sheep and goats have lambed and have milk. When nursing my own children, I was frequently told to wean them in the spring, although they were born at different times of the year and my advisers knew that both my home and the neighbouring shops stocked...
Prior to the availability of milk powder, supplements were always goat, sheep or cows milk, and babies were also occasionally wet nursed. In the family where I lived for much of my early fieldwork, the mother and her eldest daughter gave birth at the same time. It was the mother's last child and her daughter's first. They would nurse each other's babies whenever one of them had work to do which meant being separated from the baby. Another saying was that unrelated babies who had nursed from the same woman's breast could not marry in later life.

Milk powder has been available in shops since the late 1950s. There are various brands, all imported. The only brand with instructions in Arabic is Nestles Nido. Milk powder is the form of supplement that has been widely used amongst the Bedouin Arabs because fresh milk was not easily available or storable whilst living in encampments without electricity for fridges and without easy daily access to a supplier. Today Bedouin women living in planned settlements with electricity and fridges may use fresh cows milk - the others use powdered milk or goat and sheep milk. Israeli Jewish women have a different pattern of infant feeding. Dagan et al (1984) found that both groups of Bedouin Arab and Jewish mothers initially breastfed their babies (Bedouin Arab 99% Jewish 79%). By the end of the first year, none of the Jewish mothers were breastfeeding their babies whereas 63% of the Bedouin Arab mothers were. Jewish women feed their infants with formula or use fresh cows milk in bottles, for they
live near shops and have fridges.

There has been considerable literature on the deleterious effects to health of powdered milk given in bottles to babies in the Third World (Bader 1976, Wade 1974). The babies most at risk from gastroenteritis from unsterilised bottles or malnutrition from over diluted milk powder are those living with families who have no running water, and who are socially disadvantaged. In this sample of Negev Bedouin Arab infants, the use of supplementary bottles in infant feeding at an early age appears to be associated with a slower growth pattern amongst Negev Bedouin Arab babies than for those who are solely breastfed up to two months. This association is not necessarily causal for many other factors influence growth and infant feeding such as living conditions, and morbidity. These other factors and how they relate to growth will be discussed later in this chapter.

TABLE 7.4  INFANT FEEDING PATTERNS BY STANDARD DEVIATION HEIGHT/AGE AT TWO MONTHS

<table>
<thead>
<tr>
<th>INFANT FEEDING</th>
<th>UNDER -1.00</th>
<th>-0.99-+0.99</th>
<th>1.00&amp;MORE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONLY BREAST</td>
<td>23 24.2</td>
<td>69 72.6</td>
<td>3 3.2</td>
<td>95 23.9</td>
</tr>
<tr>
<td>BREAST+BOT</td>
<td>57 27.4</td>
<td>127 61.1</td>
<td>24 11.5</td>
<td>208 52.4</td>
</tr>
<tr>
<td>BREAST+BOT+SOL</td>
<td>18 31.0</td>
<td>35 60.4</td>
<td>5 8.6</td>
<td>58 14.6</td>
</tr>
<tr>
<td>ONLY BOTTLE</td>
<td>19 52.6</td>
<td>17 47.2</td>
<td></td>
<td>36 9.1</td>
</tr>
<tr>
<td>TOTALS</td>
<td>117 29.5</td>
<td>248 62.5</td>
<td>32 8.1</td>
<td>397 100</td>
</tr>
</tbody>
</table>

Chi square = 19.81, d.f.= 6, p<0.01
The table shows that the children who are being fed by bottle only are growing least well. Of the babies being breastfed the ones who are being exclusively breastfed are the least represented amongst those who are growing more slowly. Fewer of the children who are exclusively breastfed are below one standard deviation and they are the group of whom the most are clustered around the mean. However children who are given a supplement are bigger although these are few in number. If one looks at the same growth measurement at nine months by the infant feeding pattern of two months one finds that the children who were being exclusively breastfed at two months are growing better than the others at nine months.

TABLE 7.5 INFANT FEEDING AT TWO MONTHS BY STANDARD DEVIATION

<table>
<thead>
<tr>
<th>INFANT</th>
<th>STANDARD DEVIATION</th>
<th>HEIGHT FOR AGE AT NINE MONTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNDER -1.00</td>
<td>-0.99--+0.99</td>
</tr>
<tr>
<td>BRAST ONLY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>37</td>
<td>40.7</td>
<td>49</td>
</tr>
<tr>
<td>BRAST+BOT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>52.1</td>
<td>85</td>
</tr>
<tr>
<td>BRAST+BOT+SOL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>65.5</td>
<td>18</td>
</tr>
<tr>
<td>ONLY BOTTLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>68.8</td>
<td>10</td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>195</td>
<td>52.7</td>
<td>162</td>
</tr>
<tr>
<td>MISSING*27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi square = 12.23, d.f. = 6, p ≈ 0.05

There appears to be a difference in growth between babies who are breastfed and then weaned onto solid foods with
continued breastfeeding and those who are exclusively bottlefed with solids. The babies who are breastfed and then weaned onto bottles and solids with continued breastfeeding are somewhere in between the other two patterns.

At two months 29.5% of all the infants in the sample are below -1 standard deviation whereas at nine months 52.7% are below -1.00. The shift downwards is to the same extent regardless of infant feeding pattern. This suggests that there may be other factors influencing growth such as living conditions or genetic patterns within the population. These will be explored in later sections of this chapter.

INFANT FEEDING AND MORBIDITY

The minor morbidity data for this sample also show that bottle feeding is associated with increased morbidity. There were no hospitalization episodes during the first two months of life for this sample of babies. The illness episodes at home show that bottlefed babies had more illness, although one must qualify the data by saying that only 328 mothers out of 397 answered the question and of these 226 infants had no illness in the first two months of life. The rate of illness had a steady gradient with least illness amongst the breastfed and most amongst the exclusively bottlefed. Of the breastfed 26% had an illness episode, of the breast and bottlefed 29% and of the bottlefed or breast bottle and solids 43% were ill during those first few months. There was a difference in the incidence of
gastroenteritis, with 22% of breastfed babies getting it, and 39% of those being given bottles getting it.

The data on infant feeding patterns of the babies in the sample shows that although 65% of Negev Bedouin Arab mothers continue to breastfeed during their infants' first nine months of life, the majority also use a bottle of powdered or fresh milk as a supplement along with solids (35%), or breastfeed with the addition of solids (27%) by nine months. The data presented by Dagan et al (1983, 1984) suggests that the late introduction of solids and of different solids may contribute to the slower growth amongst some Negev Bedouin infants. This occurs between 5-12 months and is not strictly the province of the data in this thesis, which since it is focusing on the first two months post partum, is primarily concerned with the shift from breastfeeding to breast and bottle feeding in this time period and its effect on growth.

Babies are fed in the hospital and in their homes by their mothers. Their growth is a result of a complex of interwoven factors. The pattern of feeding is closely related to growth but so are other variables which are related to the intermeshing of the ethnicity and class orders in Negev Bedouin Arab Israeli society. The following sections of this chapter will look at these other factors which provide the context for the infant feeding and growth patterns presented here.
INFANT FEEDING AND SETTLEMENT

There appears to be little association between settlement and infant feeding patterns as Table 7.6 shows. This is contrary to the initial hypothesis of the study which was that 'westernization' would result in the decline of breastfeeding.

TABLE 7.6 INFANT FEEDING PATTERNS AT TWO MONTHS BY TYPE OF SETTLEMENT

<table>
<thead>
<tr>
<th>TYPE OF SETTLEMENT</th>
<th>INFANT FEEDING</th>
<th>PLANNED</th>
<th>UNPLANNED</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>BREST ONLY</td>
<td>42</td>
<td>25.3</td>
<td>52</td>
<td>22.7</td>
</tr>
<tr>
<td>BREAST+BOT</td>
<td>84</td>
<td>50.6</td>
<td>124</td>
<td>54.2</td>
</tr>
<tr>
<td>BREAST+BOT+SOL</td>
<td>26</td>
<td>15.7</td>
<td>31</td>
<td>13.5</td>
</tr>
<tr>
<td>BOTTLE ONLY</td>
<td>14</td>
<td>8.4</td>
<td>22</td>
<td>9.6</td>
</tr>
<tr>
<td>TOTALS</td>
<td>166</td>
<td>100</td>
<td>229</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi square = .95, d.f. = 3, Not statistically significant

The fact that infant feeding patterns are not associated with settlement type and yet are associated with growth may at first lead one to think that the choice of infant feeding made by the mother is the crucial determinant of her child's health. This would be overlooking the social and physical environment of health work in both the formal and informal health care system. It will be argued that the choice of infant feeding is influenced by the social environment in the hospital, home and clinics but that the consequences of the infant feeding pattern are influenced by the
particular physical home environment.

It is clear from the data presented in the preceding sections of this chapter that infant feeding patterns are related to the growth of infants but the relationship cannot be inferred to be causal. The pattern of infant feeding may be linked to occupational category or living conditions. Infant feeding patterns may be an intervening variable which only in conjunction with certain other conditions may lead to differential growth and later differential morbidity patterns.

OCCUPATIONAL CATEGORY AND GROWTH PATTERNS OF NEGEV BEDOUIN ARAB INFANTS

In the literature on health inequalities such as the Black Report (Townsend and Davidson 1982) one of the most frequent ways of showing inequalities is to compare differences in health based on the Registrars General's definition of occupational category. This in Britain has revealed clear differences in infant and adult mortality and morbidity. As Townsend and Davidson relate:

'At birth and during the first month of life the risk of death in families of unskilled workers is double that of professional families. Children of skilled manual fathers (occupational class IIIM) run a 1.5 times greater risk.'

(51-52:1982)

The utility of 'occupational category' as a
measurement is questionable. The main limitation is that it is based on men's current occupations. This means that the unemployed are difficult to classify, and wealth in pensions or inherited wealth is not included. Women are 'invisible' in the sense that they are customarily classified according to their husbands' occupation or their fathers' if they are unmarried. Their work is therefore de-emphasised and the difference it makes to family and household living standards is not assessed. Lifestyle too is not always so directly linked to occupation. Nevertheless despite these limitations as a measurement, it reveals clear differences in health status in the population of the United Kingdom. In the setting of the Negev one finds that the use of father's occupation or his schooling is weakly related to the health of his children. Owing to the intermeshing of ethnicity and occupational category, the latter alone is not a good indicator. The following table provides no real evidence to support the contention that growth is correlated with father's occupations. This is partly due to the lack of variation in occupation amongst this group, partly due to the extended household structure and partly due to occupational category being a poor indicator of economic resources and lifestyle.
TABLE 7.7 FATHERS' OCCUPATION BY THE STANDARD DEVIATION OF THEIR INFANTS' HEIGHT/AGE AT TWO MONTHS

<table>
<thead>
<tr>
<th>OCCUPATIONAL CATEGORY</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NON MAN</td>
<td>5</td>
<td>19.3</td>
<td>18</td>
<td>69.2</td>
<td>3</td>
<td>11.5</td>
<td>26</td>
<td>6.63</td>
</tr>
<tr>
<td>SKILLED MAN</td>
<td>46</td>
<td>33.3</td>
<td>79</td>
<td>57.3</td>
<td>13</td>
<td>9.4</td>
<td>138</td>
<td>35.20</td>
</tr>
<tr>
<td>UNSKILLED MAN</td>
<td>39</td>
<td>29.0</td>
<td>87</td>
<td>65.0</td>
<td>8</td>
<td>6.0</td>
<td>134</td>
<td>34.18</td>
</tr>
<tr>
<td>UNEMPLOYED</td>
<td>20</td>
<td>30.3</td>
<td>41</td>
<td>62.1</td>
<td>5</td>
<td>7.6</td>
<td>66</td>
<td>16.84</td>
</tr>
<tr>
<td>SEMI NOMADS</td>
<td>6</td>
<td>28.6</td>
<td>14</td>
<td>66.6</td>
<td>1</td>
<td>4.8</td>
<td>21</td>
<td>5.40</td>
</tr>
<tr>
<td>TOTALS</td>
<td>116</td>
<td>30.1</td>
<td>239</td>
<td>62.1</td>
<td>30</td>
<td>7.8</td>
<td>385</td>
<td>100</td>
</tr>
</tbody>
</table>

MISSING *12

Chi Square = 5.12, d.f. = 8, Not statistically significant.

Firstly Bedouin households are not for the most part based on nuclear families. Many families live in extended family households and those who live in nuclear families often share their economic resources extensively. For example one household in an unplanned settlement consists of a widow and her married and unmarried sons. Three of the married sons, one of the unmarried sons and one grandson are working. Each married couple has their own quarters but the economic resources of the household are pooled to a large extent. The sons work in a variety of occupations - one is self employed as a long distance lorry driver, another is a teacher, the other a community worker, the grandson a waiter. It is difficult to categorise this household according to the occupation of just one of these men. This was one of the limitations of the questionnaire in
that it attempted to do so.

There is also little variety in occupational category amongst Negev Bedouin Arabs. They are mostly employed in manual labour - the equivalent to Class IV and V and IIIM. Only 7% work in non manual occupations. They are a racialized fraction of the occupational category of manual labourers as discussed in Chapter 2. Similarly there is little variety in educational background for only 15% of Bedouin Arab men have more than eight years of education. When looking at the level of father's education and growth one finds that those children with fathers who have more than 8 years education (14.7%) tend to be bigger. There is a marked gradient at the extremes of the standard deviation but not in the middle.

<table>
<thead>
<tr>
<th>FATHER'S EDUCATION</th>
<th>BELOW -1.00</th>
<th>-.99</th>
<th>+.99</th>
<th>ABOVE + 1.00</th>
<th>TOTALS=100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATION</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>0-4</td>
<td>65</td>
<td>29.9</td>
<td>171</td>
<td>78.4</td>
<td>11</td>
</tr>
<tr>
<td>5-8</td>
<td>30</td>
<td>26.5</td>
<td>77</td>
<td>67.3</td>
<td>7</td>
</tr>
<tr>
<td>9+</td>
<td>16</td>
<td>28.1</td>
<td>34</td>
<td>59.6</td>
<td>7</td>
</tr>
<tr>
<td>TOTALS</td>
<td>111</td>
<td>28.6</td>
<td>282</td>
<td>72.7</td>
<td>25</td>
</tr>
<tr>
<td>MISSING</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi square = 6.51, d.f. = 4, Not statistically significant.

The reason that occupational category and education
Figure 7.4
are poor indicators in this Negev setting is that there is little connection between occupation, education and family living conditions. Occupational category or education are not an indirect measure of standard of living in Negev Bedouin society.

THE LINK BETWEEN LIVING CONDITIONS, EDUCATION AND OCCUPATIONAL CATEGORY

There is no clear link between level of education or occupational category and living conditions. The decision to live in a house in a planned settlement with running water is based on sub tribal land history and sub tribal politics. It is not a decision of an individual family. This is shown very clearly on examination of the location of families according to father's occupational category and education.

TABLE 7.9 FATHERS' EDUCATION AND PLACE OF RESIDENCE

<table>
<thead>
<tr>
<th>FATHER'S EDUCATION</th>
<th>PLANNED SETTLEMENT</th>
<th>UNPLANNED</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>0-4</td>
<td>107</td>
<td>62.6</td>
<td>117</td>
</tr>
<tr>
<td>5-8</td>
<td>42</td>
<td>24.5</td>
<td>77</td>
</tr>
<tr>
<td>9+</td>
<td>22</td>
<td>12.9</td>
<td>37</td>
</tr>
<tr>
<td>TOTALS</td>
<td>171</td>
<td>100</td>
<td>231</td>
</tr>
</tbody>
</table>

10* MISSING

Chi square = 5.99, d.f. = 2, p = .05.
Table 7.9 shows that the unplanned settlements of huts and tents have more educated men living in them. 16% of the men in unplanned settlements have secondary or tertiary education whereas only 13% of men in planned settlements do. The difference is greater if we look at the proportion who stayed at school between the ages of eleven and fourteen. In unplanned settlements 65% of the men did so, whereas in the planned settlements the corresponding figure is only 25%.

The reason for this difference in education between the men living in planned settlements and the men living in unplanned settlements relates to the social stratification of Negev Bedouin Arab society. As was explained in Chapter 2, the groups who moved to live in planned settlements were 'fellaheen', those groups of peasant origin from Egypt who left their villages in order to avoid conscription into the Turkish army, famine or feuds. They came to the Negev and attached themselves in small groups to the established landed Bedouin Arab tribes and worked as sharecroppers. This gave them protection and a means of livelihood. These groups had no land to lose in 1948, and saw the chance to buy building plots in planned settlements in the 1970s as a social and economic opportunity. For example, the Abu Taha and Abu Rostam groups who have been living in Tel Sheva planned settlement for fifteen years were attached to the Azazmeh tribe. They ran a mill and some shops in addition to sharecropping. This tribe has remained the most nomadic and these two groups of peasant origin (fellaheen) are the only groups from this tribe to move in the 1960s and 70s to a planned settlement. The Abu
Taha family runs a number of shops in Tel Sheva and a community taxi service between the settlement and the city of Beersheva. Therefore those families of peasant origin are economically more prosperous, whereas the Bedouin Arab elitist subtribes are more educated but living in unplanned settlements, owing to their reluctance to relinquish their rights to compensation for land they were displaced from.

These tables show the way in which occupational category and education are limited as indirect indicators of lifestyle owing to the particular way in which ethnicity and class intermesh both within Negev Bedouin Arab society and within the wider Israeli society. The limited usefulness of occupational category and education as indicators of lifestyle and living conditions is not unique to the Negev although the degree of discrepancy in this setting seems particularly great.

Recent work in the 'social patterning of health' (Macintyre:86) has been moving away from focusing on social class and health inequalities to reviewing the patterns of regional differences through a number of small area analyses. Whitehead (87:27-29,80-83) has reviewed the different studies and the indices used in them. One example of such as an analysis is the study on the Inequalities of Health in Bristol by Townsend, Simpson and Tibbs (1984). They avoided occupational category and education as indicators and looked at the association of health outcomes such as standardised adult mortality rate, birthweight, and stillbirth and infant mortality rates with
measures of living standards such as the number persons per room in a household, car ownership, free school meals, unemployment of head of household, and the cutting off of electricity resulting from unpaid bills. Their findings presented a clear correlation between the two sets of measurements, which highlighted the diversity of health and deprivation within different wards of the City of Bristol.

A similar approach will be taken here with this data from the Negev. Living conditions such as dwelling, settlement, and water source will be cross tabulated with health outcomes such as birthweight, height for age and morbidity in order to see if infants health is more closely correlated with living conditions than either occupational category education of fathers in households.

LIVING CONDITIONS AND THEIR IMPACT ON GROWTH

When considering the living conditions of Negev Bedouin Arabs, it is simplistic to perceive that all those who live in planned settlements live in houses with running water and all those who live in unplanned settlements live in huts or tents without running water. There is a combination of all three types of dwelling in each type of settlement although in different proportions.
Table 7.10 shows that in planned settlements 60% of the dwellings are houses, 32% huts and 9% tents. By contrast in unplanned settlements only 11% of the dwellings are houses, 71% are huts and 18% are tents. There is a marked preponderance of houses in planned settlements and huts in unplanned settlements but all three types of dwellings are present everywhere. There is also a great variety of water sources in the settlements as Table 7.11 shows.

Table 7.11 shows that within planned settlements 77% of
the inhabitants have running water whereas in unplanned settlements only 21% do. How does this relate to the health of children? The data indicate that there is a strong association between living conditions and their growth and development.

GROWTH AND ENVIRONMENT

Both the dwelling type and the availability of water seems to be associated with the growth of Negev Bedouin Arab children at two months of age.

TABLE 7.12 STANDARD DEVIATION OF HEIGHT FOR AGE AT TWO MONTHS BY TYPE OF DWELLING

<table>
<thead>
<tr>
<th>DWELLING</th>
<th>BELOW -1</th>
<th>-0.99 - +0.99</th>
<th>ABOVE +1.00</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>TENT</td>
<td>25</td>
<td>46.3</td>
<td>29</td>
<td>53.7</td>
</tr>
<tr>
<td>HUT</td>
<td>66</td>
<td>29.9</td>
<td>140</td>
<td>63.3</td>
</tr>
<tr>
<td>HOUSE</td>
<td>25</td>
<td>20.7</td>
<td>79</td>
<td>65.3</td>
</tr>
<tr>
<td>TOTALS</td>
<td>116</td>
<td>29.2</td>
<td>247</td>
<td>62.2</td>
</tr>
</tbody>
</table>

Chi square = 19.44, d.f. = 4, p < 0.001

Table 7.12 shows that there is evidence of an association between growth and dwelling type. Infants living in tents are more likely to be shorter than those living in huts and houses, and those living in houses are especially likely to be larger. The availability of water is also strongly associated with patterns of
growth for these infants at the age of two months as the following table 7.13 shows.

TABLE 7.13 STANDARD DEVIATION OF INFANTS HEIGHT FOR AGE AT TWO MONTHS BY WATER AVAILABILITY

<table>
<thead>
<tr>
<th>WATER SOURCE</th>
<th>BELOW -1</th>
<th>-0.99 - +.99</th>
<th>+1 OR ABOVE</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NON TAP</td>
<td>80</td>
<td>35.9</td>
<td>139 62.3</td>
<td>4 2.0</td>
</tr>
<tr>
<td>TAP</td>
<td>18</td>
<td>10.3</td>
<td>109 62.6</td>
<td>28 16.1</td>
</tr>
<tr>
<td>TOTALS</td>
<td>98</td>
<td>24.6</td>
<td>248 62.4</td>
<td>32 8.0</td>
</tr>
</tbody>
</table>

Chi Square = 33.74, d.f. = 2  p < 0.001

These data suggest that both dwelling type and the availability of running water are associated with the growth and development of Negev Bedouin Arab infants. The availability of water and the type of dwelling is not related to occupational category or education.

BIRTHWEIGHT, ENVIRONMENT AND DESCENT

The incidence of low birthweight is also possibly related to living conditions. Hut dwellers have more low birthweight babies. 6.% of babies born in huts are under 2.500 gms whereas the rate is 4% in tents and 2% in houses. There are more low birthweight babies in unplanned settlements (6%) than in planned settlements (4%). There is a difference in birthweight between those without running water (6% below 2,500 gms.) and those with running water (3% below
Figure 7.5
2,500 gms.). This would seem to imply that if a family live in a planned settlement with running water, their babies are more likely to be over 2,500 gms. It would be simplistic however to overlook the way in which internal social stratification of Negev Bedouin Arab society and patterns of preferred endogamy may be interrelated with settlement and birthweight.

The decision to live in a house with running water in a planned settlement is related to subtribal affiliation and to whether the family is of 'Bedouin' or 'peasant' (fellaheen) origin. As mentioned in Chapter 2 the majority of the sub tribal groups living in planned settlements are of peasant origin such as the Abu Jaffer in Rahat. 'Bedouin' women do not marry into 'peasant' families although 'peasant' women may marry 'Bedouin' men. An alternative hypothesis to the argument presented here, that variation in growth is linked to living conditions, would be that variation in growth is linked to genetic variation and lack of intermarriage within Bedouin Arab society. This hypothesis is difficult to check out owing to lack of data, and also although probably an influence, the pattern of settlement is complicated by large 'Bedouin' subtribes also living in settlements such as the al Huzail or the Al Affinish. It must be noted however that genetic variation which is backed up by endogamy and is linked to differential strategies of settlement must have an influence on the variation in growth of infants.

The data presented in this chapter shows that there is variation in the growth of the Bedouin Arab infants in this study
In their first few months of life. This becomes more marked during the second part of the first year. This growth pattern is associated with the type of infant feeding and weaning, but is also associated with the living conditions of Negev Bedouin Arab families. It is not linked particularly to the occupation or level of education of the infants' fathers but may be linked to genetic variation and endogamy within Bedouin Arab society. The living conditions of Negev Bedouin Arab families are controlled by the intermeshing of ethnicity and class both within Negev Bedouin Arab society and within the wider Israeli society.

In relation to the health status of Bedouin Arab infants, there is a fundamental way in which the gender order intermeshes with both the living conditions prescribed by the interrelationship between ethnicity, class and the health outcomes of infants. This is in the way Bedouin Arab mothers feed their infants. I would argue that the choice of infant feeding may have different consequences, depending on the living conditions of the family. The same strategy may have different results according to the setting. The decision of how to feed a baby may appear initially to be one of those decisions which occur in the domestic sphere, and over which women have total control but is in reality a complex multifaceted matter. The choices and their differential effect on the health outcomes of infants will be explored in the following chapter. Indeed, an analysis of infant feeding behaviour shows clearly how gender, ethnicity and class intermesh at both a macro and micro level.
CHAPTER 8 MOTHER'S INFANT FEEDING PATTERNS AND THE CONSTRAINTS OF GENDER, ETHNICITY AND CLASS IN THE FORMAL AND INFORMAL HEALTH CARE SETTINGS

The data presented in Chapter 7 show that there is some variation in growth amongst Negev Bedouin Arab infants during the first year of life. This trend is apparent at two months and is more widespread at nine months. This pattern of growth poses questions as to why it is occurring. There is some indication through a previous study (Dagan et al 1984) that it may be related to the pattern of weaning onto solid foods, as well as the pattern of milk feeding. This chapter will only deal with the infant feeding patterns relating to breast and bottle feeding of milk up to the age of two months. The data set out in later sections of the previous chapter indicate that, in addition to infant feeding being related to growth, there is a strong correlation between the living conditions present in the physical environment and the growth and health of the infants in the sample. It will be argued here that the pattern of growth is influenced by not only the physical context of mothers and children but also their social context.

A mother's choice of infant feeding influences her infant's growth and development, but it would be simplistic and out of line with the general perspective of this thesis to view infant feeding patterns as a result of women's autonomous choices. The decision of how long to breastfeed, and if, when, and how to use a bottle of milk, occurs in the micro setting of the family, but is also
influenced by the way infant feeding is organised in the hospital, in the well baby clinics and in the homes of the families living close by. The factors influencing infant feeding in the formal health care settings of the hospital and clinics will be discussed and then subsequently, the beliefs and practices operating in the informal health care setting of the home will be reviewed.

This analysis of infant feeding amongst Negev Bedouin Arabs looks at the interface between the macro and the micro, the formal and the informal health care systems, and the impact of the different home environments. It argues that mothers do not have total control over their infant feeding options and therefore that a 'victim blaming' approach urging mothers to stop using bottles is ill conceived and misguided. It reviews how the exogenous and endogenous constraints and consequences of infant feeding reflect the way in which ethnicity class and gender intermesh in this setting and can best be understood through an articulated perspective.

MOTHER'S INFANT FEEDING PATTERNS AT BIRTH

Mothers' infant feeding options and choices in the hospital after a hospital birth are influenced by the hospital schedule, the type of delivery and the birthweight of the infant. For the women interviewed after giving birth in 1982, the routine was that mothers would be given time to rest after giving birth, and that the first feed would be the one closest to 12 hours after the birth. Consequently 39% of the sample first nursed their babies 8-12 hours
after the birth and for 43% more than 12 hours had elapsed (12% couldn't remember). By the time of the fieldwork in 1984, this practice had changed and babies were brought for feeding at the first feeding time after the birth.

The feeding times were spaced at four hour intervals - 5.30 am, 9.30 am, 1.30 pm, 5.30 pm and 9.30 pm. The way in which babies were cared for and handed out for feeding has been discussed in Chapter 5. The subject of concern here is the infant feeding patterns within the hospital. The spacing of infant feeding schedules in a hospital can influence both the infant's weight loss and gain after birth. Salber (1956) in her study of feeding schedules in a hospital on the weights of Bantu babies in South Africa found that babies that were fed on demand both lost and gained more weight during the first week of life than those on a three hour or four hour schedule. The babies on a four hour schedule gained the least in weight. In the Soroka Medical Centre, most of the infants are fed on a four hour schedule and most of the mothers and babies stay for less than a week. They return home on the third day after childbirth unless there are medical complications.

During their three day stay in the Obstetric Ward, the majority of mothers breastfed their babies exclusively (84%). A few use a supplementary bottle of milk (7%) and a few have babies who are fed intravenously (6%) or by bottle only (3%). The type of infant feeding used is influenced by the birthweight of the infants and the hospital protocol. The following table illustrates how low
birthweight babies are less likely to be breastfed exclusively.

### TABLE 8.1  MOTHER'S INFANT FEEDING BY BIRTHWEIGHT IN HOSPITAL

<table>
<thead>
<tr>
<th>TYPE OF INFANT FEEDING</th>
<th>IV ONLY</th>
<th>BREAST+ ONLY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BREAST</td>
<td>BOTTLE</td>
<td></td>
</tr>
<tr>
<td>BIRTHWEIGHT</td>
<td>N  %</td>
<td>N  %</td>
<td>N  %</td>
</tr>
<tr>
<td>BELOW OR=2500</td>
<td>2 11.8</td>
<td>7 41.2</td>
<td>4 23.5</td>
</tr>
<tr>
<td>ABOVE 2500GM</td>
<td>20 5.2</td>
<td>331 85.8</td>
<td>26 6.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22 5.5</td>
<td>338 83.9</td>
<td>30 7.4</td>
</tr>
</tbody>
</table>

*MISSING 6 home births and 3 hospital births

Note: Chi Square for this table is not used owing to the small number of infants in the sample below or equalling 2500 GM.

Of the babies below 2500 gm only 41% were breastfed exclusively, compared with 86% of those above 2500 gms. According to one of the nurses in the Infant ward, there are protocols for small babies and large babies. She explained that babies below 2500 gms are nursed every three and a half hours by their mothers in the infant ward. After the feed they are weighed to see that they are gaining enough, and if they are not, they are given extra milk in a bottle. Babies which are extra large (over 4.00 kilos) are also given extra milk because they need the extra blood sugar. Thus the birthweight determines the type of infant feeding, and it is a decision taken by the staff not by the mother.

The proportion of low birthweight babies in this sample was 4.2%. This is a smaller percentage of low birthweight
babies than was found in the whole of the 1982 study cohort - 9.7%. The general proportion of low birthweight Bedouin babies is higher than the proportion of Jewish low birthweight babies. This is partly due to the younger age of Bedouin mothers for 5% in the sample have their babies before they are 20 (Table 3.12 Chapter 3). This is a reflection of the gender order of Bedouin society which encourages early marriage and large families and perhaps also of genetic factors.

The low birthweight is also affected by the nutritional status of Bedouin mothers. Although obesity is increasing amongst some settled women, there are many who are not well nourished, or are suffering from maternal depletion from having consecutive births with small birth intervals. The study collected no data on maternal health status, so that these statements are based on observation. This reflects the way in which bio medicine is oriented to perceiving mothers and children as separate entities primarily and so an infant feeding study was designed with health outcomes which only related to children. Another reflection of the conceptual focus on the children and mothers as separate entities is the language used when writing about 'infant feeding patterns'. It is possible to describe and analyse 'infant feeding patterns' without referring to mothers at all.

Another factor influencing infant feeding in the hospital setting is the type of delivery. The data from the sample shows that women who deliver vaginally were more likely to breastfeed exclusively than those who have C sections. The difference in infant
feeding between normal and breech vaginal deliveries was slight but women who had Caesarian sections were quite unlikely to breastfeed (32%).

There is little discussion by staff with mothers about infant feeding. 93% of the Bedouin women said they had received no advice about infant feeding although 50% reported discussing breastfeeding with other Bedouin women on the ward. There is only one nurse in the Infant department who speaks Bedouin Arabic and who seeks out mothers who have problems with their babies. The emphasis of the nursing in the infant department is to ensure that the babies are physically fit. Communication with mothers whether Jewish or Arab is of low priority.

It is clear that both Bedouin and Jewish women breastfeed exclusively during their stay in the hospital unless their babies are particularly small or large, or their delivery was complicated. This pattern is largely established by the hospital setting. Subsequent to their discharge from hospital the two groups of women have different patterns and variations within those patterns. Jewish women tend to stop breastfeeding by three months and use bottles with fresh milk (Bloch 1977, Thaustein et al 1960, Dagan et al 1983). Bedouin Arab women tend to continue breastfeeding but many also use a supplement of milk powder in a bottle. These choices are affected by values, family structure, working and living conditions and possibly by the advice given at the well baby clinics which the mothers attend post natally.
The system of primary health care in Israel is organised as two services - the preventative Well Baby clinics and the Sick Fund curative care clinics. There are both types of clinics in the Negev serving Bedouin Arab families, but the way they are planned and the way care is delivered, reflects the gender and ethnicity of the predominantly Jewish staff and administrators who run them. The way they are utilized reflects the gender and ethnicity of the Bedouin Arab patients who use them.

The Ministry of Health organises Well Baby clinics in every settlement, and in neighbourhoods of towns. These give antenatal care to women and immunizations to babies and young children. The nurses running them also give nutritional advice to mothers and some contraceptive services.

The Negev Bedouin Arabs are served by these clinics, but their distribution is uneven, and the resources allocated both in terms of clinic buildings and staff are fewer than those given per capita to Jewish towns and neighbourhoods. The Negev Bedouin Arab birth rate is 55/1000 and 53% of the population of 58,000 is below the age of thirteen and yet there are 5 clinics and one Mobile Unit with a total staffing of 13 nurses. There is one nurse for all the school age children.

The explanation given for this meagre allocation of
resources by the Head of the Ministry of Health in the Negev in 1982 was that it is difficult to serve a population that is so dispersed and, as they come to live in planned settlements, they will be better provided with clinics. The staff themselves do not expect women to attend ante natal care if they live more than 5 kilometres away from the clinic. They have had a low ante natal attendance for many years and a low coverage of immunizations. Both these have increased recently, owing to the opening of a large clinic near the market in Beersheva, which is accessible to all Bedouin women.

The nurses in these clinics all speak Arabic. Three of them are Bedouin themselves and the others are Jews of North African origin, who speak fluent Arabic. They are conscientious and caring, despite being chronically underresourced. It would seem both from the statistical data and from observation in these clinics, that care is given by the staff in the same way as it is in the clinics in Jewish neighbourhoods. The approach in terms of structure of service delivery, and protocols of care is identical but the patterns of utilization by Negev Bedouin mothers and their needs are different. The ethnic sensitivity of the service is limited and reflects an insitutional racism in the way resources are planned and delivered without reference to special needs.

During the first two months of life many Bedouin mothers do not attend the Well Baby clinics. The first immunization shots for diptheria, whooping cough and smallpox are only given after two months. Most Bedouin mothers perceive these clinics as a place for
immunizations rather than for nutritional advice or ante natal care. One mother in Tel Sheva explained that she had been to the clinic during the first 40 days but had done so only to make an appointment for immunization at two months. The nurses at two clinics where I was observing, commented that it was very rare to have mothers come to the clinic during the first 40 days. The clinic staff perceive that their role is to immunize babies and also to give nutritional advice. Thaustein et al (1960) in an article describing infant feeding patterns in Israel and the system of preventive health care emphasized that, in addition to doing immunization, the clinics are meant to give nutritional advice. They write:

"One of the important tasks of the infant welfare stations is to supervise infant feeding and to educate the mothers in the method of maintaining breastfeeding and later adding complementary foods and weaning the infant at appropriate ages." (1960:321)

Table 8.2 shows that mothers living in planned settlements of Tel Sheva and Raahat are hardly more likely to attend the clinics during the first six weeks of their infants' life. The data is not statistically significant and is consistent with the data in Chapter 6 in Table 6.1 which found that the observance of the forty days seclusion was not related to living in a planned or unplanned settlement.
TABLE 8.2 MOTHER'S ATTENDANCE WITH THE INFANT AT WELL BABY CLINICS
BY SETTLEMENT TYPE DURING THE FIRST 40 DAYS

<table>
<thead>
<tr>
<th>ATTENDANCE</th>
<th>PLANNED</th>
<th>UNPLANNED</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>DID GO</td>
<td>88</td>
<td>51.8</td>
<td>104</td>
</tr>
<tr>
<td>DID NOT GO</td>
<td>82</td>
<td>48.2</td>
<td>135</td>
</tr>
<tr>
<td>TOTALS</td>
<td>170</td>
<td>41.6</td>
<td>239</td>
</tr>
</tbody>
</table>

*The total includes home births. 3 unknown

Chi square = 2.72  Not statistically significant

Visits that occur during the first two months are visits for weighing and confirmation that the baby is all right. The nurses on these visits sometimes give nutritional advice. The data shows that of those who attended the clinics during the first forty days, 48% were given nutritional advice (88 were given advice, 107 were not, 212 didn't go, 5 didn't answer). When questioned further, two women couldn't remember what advice they were given but the others could and gave the following information. 38 mothers were encouraged to continue breastfeeding, 39 mothers were encouraged to give a supplementary bottle and/or some solids, 9 mothers were encouraged to give the baby water in a bottle. There is not a statistically significant association between the exclusive use of a bottle and the use of a bottle with solids and breastfeeding and attendance at the Well Baby clinic. The following Table 8.3 shows this.
One is faced here with the perennial chicken and egg problem. Do the mothers go to the clinic because their babies are frail and they are worried and then get advised to supplement bottles or solids? Or do they go after already embarking on this pattern of feeding? It is possible that mothers of low birthweight babies who were fed intravenously, or with a supplement in hospital, may be more represented in the group that attend the clinics for advice during the first 40 days.

Observation carried out in two clinics may elucidate the types of advice that nurses give mothers when they visit the clinics. I spent some time at the clinic in the marketplace in Beersheva and also at the clinic in Raahat. It is of course difficult to assess general patterns of service delivery on the basis of two days observation, however, certain patterns were
The work of the nurses of Well Baby clinics is that it is clinic based and child oriented. They do not make home visits to Bedouin Arab mothers. They are therefore unaware of their living conditions and in the course of the two days observation, none of the nurses I was with, asked a woman if she had running water or lived in a tent, hut or house. The care is very child oriented. The baby is weighed and examined and the mother asked how she is feeding the child. The mother is not asked how she is, or how her other children are. This is common to much medical practice in developmental paediatrics. Despite the rhetoric of child development taking place in the family and the community, health staff whether they be in the hospital or in the clinic often focus on children's needs in a decontextualized way.

In terms of advice, one nurse kept telling all the mothers who came in with their babies regardless of their age to cut their nails regularly and wash their hands in order to prevent diarrhoea. Another nurse was telling most mothers to give cereal as a way of increasing the babies' weight. This would involve mothers who had no sheep or goats or source of refrigerated milk in using milk powder. Many mothers were told to give their babies a drink of water since this observation took place in the summer. This was not prefaced by an enquiry of whether there was running water or of the need to boil water. Giving water to small babies means using a bottle so that it introduces the problem of keeping bottles clean even without using
milk powder. It was striking how decontextualized the care was. Not only were mothers not asked about their homes or children but their babies' recent health prior to the clinic visit was not asked about. The following example from my fieldnotes illustrates this.

'H came in. I recognised her as a woman living in a tent near Yatir (unplanned sub tribal cluster 3 kilometres from the road) whom I had visited a year ago just after this baby was born. She has 6 previous children. The baby is now one year and two months. H did not recognise me. The nurse weighed the baby and told H that the weight is dropping and is not good. The nurse did not ask if the baby had been ill. She asked how the baby was being fed and H said defensively that he was eating everything and being breastfed. The nurse replied that the breast is not enough. He can nurse but give him a few cups of milk in addition to food. (Ha deed mush be kafi. Khalleuuh yurthur, turtee kubaiyatayn haleeb ma alakl) She then gave the baby a measles injection which is what H had come for and told her to expect the baby to have a fever in five days time and to have some Acamol ready.'

This mother came for an injection and was told that she needed to give her baby additional milk. She lived in a tent and had clearly breastfed the baby and then weaned the baby onto solids. Unless there were goats or sheep available with milk, this mother would have to use milk powder to comply with the advice. I doubt whether she took any notice. It is clear that the nurses give the same nutritional advice that is given to Jewish mothers in town. It is appropriate to tell a mother using formula to give a baby water to drink in the summer and if the mother has running water in her home is
probably not going to affect the child's health negatively. However when a mother is breastfeeding, she does not need to give a baby additional liquid and to tell her to do so is to involve her in the preparation of bottles in possibly difficult conditions. Similarly the preparation of cereal can involve bottles and milk powder. Thus one has a picture of the nurses in the Well Baby clinic encouraging supplementary feeding and the use of milk powder, cereal and water in bottles in order to encourage weight gain.

The way in which the Well Baby clinics for Bedouin Arab Israeli mothers and children are planned and staffed is influenced by ethnicity. There are fewer of them per capita than there are for Jewish Israelis. The care is given on the same model that it is given to Jewish Israelis and does not take into consideration the living conditions or needs of the population it is serving. The care is decontextualised, child oriented and clinic based in both settings. Bedouin Arab mothers utilise the clinics primarily for immunization, and only half of them attend them for nutritional advice. The choice of infant feeding appears to be influenced by the birthweight of the baby, the hospital pattern of infant feeding, perhaps by attendance at a Well Baby clinic. In addition the choice of infant feeding is also influenced by the social norms and preferences within the mother's social and physical environment - the informal health care setting of the home. This will be explored in the following section of this chapter.
In Negev Bedouin Arab society there is an appreciation and commitment to breastfeeding (alruthur) which is widespread and steady and is not shared by the wider Israeli society. The formal health care system has a rhetoric in the hospital and clinic settings which supports breastfeeding, but a practice that hampers it. The majority of Jewish Israeli women stop breastfeeding within the first three months of their babies' lives (Bloch 1977). Most Bedouin Arab women continue breastfeeding for more than nine months and use bottles to a limited extent as supplementary food whilst believing that 'breast is best'. This difference between the Jews and Arabs in preferred infant feeding patterns is not new for Thaustein et al (1960) recorded the infant feeding patterns of all infants brought to Well Baby clinics during two weeks in August 1956 and found that at eleven months 82% of Arab mothers were partially breastfeeding their babies whereas between 7% - 44% of Jews of different ethnic origins were doing so (1960:326).

There is very little discussion of breast feeding other than to say that it is best for the infant's health. There is a wide consensus on this. Breast feeding on demand is practised in such a way that it is an integral part of women's unpaid health work. It is considered very important to prevent a baby from crying. Whenever a baby cries, it is picked up and comforted by suckling for a few seconds or minutes. This means that the baby is always close to the
mother whatever she is doing. She may be sitting with visitors, cooking, walking or sleeping - the baby will be on her lap or swaddled lying beside her, or on her back, or in her arms. There is little physical separation between mother and baby and the nursing barely interrupts whatever activity is in hand.

The Bedouin Arab style of nursing on demand is different to the rhetoric and practise of Western nursing on demand, not just in the proximity of the baby but also in the conceptual view of feeding. The Western view of nursing is based on the concept of 'feeds'. Even when the baby is being fed on demand, when it nurses it is meant to do so for eight minutes each side. Feeding time involves interruption of all other activity. The hospital feeding times reflect this, for the nurses chide the mothers who are playing with their babies rather than feeding them. In the room that I was observing in, one experienced mother said to a first time mother who was playing with her baby - 'if you don't feed her, they will tell you off! (itha anti maa beturthur, hum beyekawano)'.

The Bedouin Arab view of nursing is that the baby will know how much it needs and can take it in short or long periods of suckling. Nursing is for food and comfort and that the giving of these is integrated into daily work activity. It does not govern the rhythm of the day - lets cook or clean between feeds - it happens during these activities. The lack of physical separation between the mother and infant and the primacy of the infant's needs is recognised and supported by all. On one occasion a husband had brought home four
guests unexpectedly for an evening meal and the baby began to cry whilst the mother was struggling with making bread and cooking lentil soup. The husband called from the guest section of the tent to his wife telling her to nurse the baby rather than cook, and his guests then added their encouragement.

In order for this system of nursing to function it has to be underpinned by a view of the breast as a piece of nutritional equipment and not an object of men's sexual desire. In this way nursing can occur anywhere - whilst gathering wood, in the marketplace, herding, whilst entertaining visitors. Bedouin women must cover their legs and their arms for these are provocative, but breasts are not. This does not mean that they are uncovered for when nursing one can use one's veil, but it doesn't matter if they are.

This again is in marked contrast to hospital feeding times when no one is allowed in the ward. It is also in marked contrast to the mother sitting in a quiet room alone relaxed in order for her 'let down reflex' to work, and maintaining her modesty by absenting herself from company. Many Jewish Israeli women do not nurse in public places or in mixed company. On one occasion when my first born was a few weeks old, I was visited by one of the sons of the family I lived with during my intensive fieldwork of the early seventies. When I picked him up to nurse, M left the room and I asked him where he was going. He replied 'I'm not sure if you are like the Jewish women who are embarrassed when they nurse or if you are like a Bedouin woman' (Ana maa bearif ithat anti zayy alyehudiyyat illee
Nursing on demand at night is a simple matter when sleeping arrangements are that the baby is next to the mother on the mattresses arranged on the floor for all the children and parents. Suckling can occur almost without the mother moving. It is part of the closeness which enables breastfeeding to be integrated into the pattern of daily living. This then is the social context within which most Bedouin women continue nursing their babies during the first year of life, for 65% were still breastfeeding when their babies were nine months old. Why however do so many of the mothers use a supplement of milk powder in a bottle particularly when it does not necessarily benefit their babies growth?

O Gara and Kendall (1985) in their paper on options for infant feeding based on work in the Honduras look at the milk options that mothers have. They take the view that only when the beliefs associated with different types of milk are explored, do the options chosen make sense. They argue that mothers in the 'barrios' of Tegucigalpa, the capital of Honduras, perceive milk as being of two main types - the wet and the dry or fluids and powders. Human and cows milk is wet and milk powder and corn starch powder are the dry. The views and prescriptions on the use of breastmilk is clear. But the views and prescriptions concerning the use of pasteurized cows milk, and powdered formulas are unclear owing to their relative newness. The following discussion will look at the beliefs and options chosen by Negev Bedouin Arab mothers.
Older women constantly bemoan the fact that younger women are using milk powder in bottles. They frequently reiterate that tinned milk powder given in bottles bring illness (hum ayanneen min al Haleeb min al elab fil gniat). Conversations about how they fed their own children reveals that many of them nursed their children for between a year to two years and often throughout their next pregnancy. They weaned them from the breast onto goat's or sheep's milk mixed in with tea in a glass. The following excerpt from fieldnotes illustrates this. It is an account of a conversation with two grandmothers at a 40 days visit to one of their daughters in law.

'The mother in law explained that she had had four children - two boys and two girls. She nursed them all for a year and a half. Then she would boil sheeps milk and add it to their tea. She taught her son's wife to do the same. She said that neither any of her children or her sons'children had ever been in hospital. M (the other widow present) said that she too used goats milk to feed her daughter. She used to nurse her children until the end of the next pregnancy. Today women stop when they are about five months pregnant. She can remember her husband bring home a tin of milk from the doctor and showing her how to make it when she was heavily pregnant with her last child (30 years old now).'</n
Breastmilk would be substituted by goat or sheep's milk if it was available. The present pattern is different. Firstly fewer families herd or keep goats and sheep or cows. Those that do, give the milk to their children. But what has happened is that milk is
given as a supplement in addition to breastmilk - not instead of. It is given in a powdered reconstituted form in a bottle not a glass.

Another fundamental difference is that Bedouin Arab mothers no longer nurse a baby when they are more than four months pregnant. When a woman feels the foetus move, she weans her child. Some women told me that their breastmilk when pregnant is no longer good for the baby. This is a change in practice and belief which has happened during the last thirty years according to the grandmothers that I spoke with. However the belief that breastfeeding on demand will prevent pregnancy is widespread and some women related that they specifically continued breastfeeding in order to prevent menstruation, whilst others specifically weaned their babies early in order to get pregnant again quickly. Breastfeeding and fertility are seen as being closely linked and breastfeeding is one of the main ways that women can influence their fertility which on the whole is controlled for them by their husbands. The use of contraception is often not allowed by husbands who want more children or are religiously observant. Young women are generally keen to have more children fairly quickly and older women between 30-40 are more interested in spacing their births.

The following table (8.4) shows that a mother's infant feeding pattern at two months does not mirror her sisters in laws' preferences. The two are not associated in a statistically significant way. Bryant (1982) in her study of the importance of networks of female kin, friends and neighbours in influencing infant feeding
options, found that the proximity of other women was an important factor. Sisters in law generally live close together, but then so do many other related women. To focus on sisters in laws as the only significant other women, is a distortion of the complex social networks and relationships that Negev Bedouin Arab women have with other women.

Table 8.4 Mothers Infant Feeding Practices and Those of Sisters in Law Who Have Infants Under One Year

<table>
<thead>
<tr>
<th>SISTER IN LAW</th>
<th>BREAST ONLY</th>
<th>BREAST+BOT</th>
<th>BREAST/BOT/SOL</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>BREAST ONLY</td>
<td>20</td>
<td>48.8</td>
<td>30</td>
<td>32.2</td>
</tr>
<tr>
<td>BREAST+BOT</td>
<td>18</td>
<td>43.9</td>
<td>57</td>
<td>61.3</td>
</tr>
<tr>
<td>BREAST/BOT/SOL</td>
<td>3</td>
<td>7.3</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>TOTALS</td>
<td>41</td>
<td>24.3</td>
<td>93</td>
<td>55.0</td>
</tr>
</tbody>
</table>

TOTAL = 169 - this excludes respondents who had no sisters in laws with babies under one year.

Chi square = 7.76, d.f. = 4 Not statistically significant

Field observation also highlights that there are group preferences about the brand of milk powder so that in one sub tribal encampment all the mothers who use milk powder are using Nido and in another they are using Nursia. It is impossible to know if this preference is from the constraints of what is available in the local shop, or if the women ask the men to buy this brand or how this pattern becomes established. It does however mean that knowledge in
preparation can then be shared.

There are indications that use of a supplementary bottle early on is related to the workload of the mother. This was mentioned in Chapter 6, where during the forty days period it was found that women who had help with cooking throughout the 40 days exclusively breastfed more, and that mothers with help for a shorter duration used a supplementary bottle more. 32% of mothers with help for 40 days breastfed exclusively and only 23% of mothers with help for a shorter period did so.

During the last twenty years Bedouin Arab women's work has altered as a result of settlement and also as a result of the drop in infant mortality which has resulted in an increased family size with shortened birth intervals between children. Hospital childbirth, better nutrition and easier access to the hospital for Pediatric Care means that infant deaths are rare not commonplace. Better nutrition means that prolonged breastfeeding is not always successful as a means of repressing ovulation. Supplementary feeding using bottles further undermines breastfeeding as a form of birth control for its effectiveness is connected to frequent feeds 24 hours a day.

Larger families with shortened birth intervals and no contraception mean that mothers often have several pre school children at home and several at school. This means that the care of the other small children competes with the new born and may influence
the decision to use a supplementary bottle so that others can give the feed. This excerpt from my fieldnotes shows how a mother committed to breastfeeding, explained her use of a supplementary bottle and also how she perceives breastfeeding as being connected with controlling her fertility.

'S has six children under 10 years of age. She thinks she might be pregnant for although she had a period last month, this month it didn't come. Speaking of contraception she said "I want it. I am sick of having children but I am afraid it will make me sick" (widee, ana zehigana min alawulad lakkin ana khaifa innu ana akoon ayana)". She nurses her children for about a year so that she won't become pregnant. However the baby girl before this last one (15 months old) had a bottle when she was 20 days old as "musaada" (help).

Her reasons were complex. First of all everyone said "it was better". Secondly one of her older children has convulsions when he gets a fever and is hospitalized for short periods. When her 3rd to last baby was three months old and being breastfed exclusively, this older son was hospitalized. She can remember that she would leave the baby with her sister in law who would give the baby tea from a cup if it cried while she rushed to the hospital and back. So she felt that if she got the new baby (2nd to last) used to a bottle, she would have more freedom and less worry the next time this son was hospitalized. The baby liked the bottle and at two months refused to nurse. She gave it Simmilac and the baby got diarrhea and became sickly. They tried a lot of different milk powders and it cost a lot of money and she felt that she would never again use milk powder.'
This account shows that breastfeeding is associated by $ with a spacing of pregnancies and healthy babies but that it restrict one's freedom when you need to be away from the baby when another child is ill. Bottle feeding is associated with freedom and the social pressure of it being good, but she felt that in health terms it had bad consequences and was expensive.

There is a widespread concern that children and adults should be 'well and healthy'. This is reflected in the word 'nase' which means well and plump. This is at present a general value within Bedouin society. When semi nomadic, most people had a 'lean and hungry look' and during the 1950's and early sixties there was little food and little prosperity. The full employment of the late sixties and seventies, and the decrease in herding, meant that women have a more sedentary existence with little exercise apart from housework. It is socially unacceptable to walk about or run or swim. Women are getting obese and men too and there is a rise in the rate of heart disease (Blondheim et al 1982). These values which are to do with changes in life style and class are reflected in a desire for plump children and supplementary bottles are seen to promote this. One senior cowife explained the general view and how she accommodates it as follows:

"I nurse all my children for a year and a half which is how I have kept my births down. The last three children have also been given a bottle at night time just before they go to sleep. Everyone says that this is better and that they grow better with it. I do what they say. (Kull anaas beqooloo innu haatha ahsan wa beyekuberoo ahsan .Ana besawee zayyanaas beqooloo)"
She has a younger cowife who lives on the ground floor of the house and is more favoured by her husband. She has had six children - 4 girls and 2 boys in nine years. She bottlefeeds soon after birth in order to get pregnant more quickly. Her children according to T are always in hospital from the time they start having bottles."

How to feed ones baby appears at first to be a decision which is solely the mother's and relates to her well being and her infants. The pressures to use milk powder are partly within her social environment and are derived from the day to day patterns of women's work that have accompanied settlement - plump children, rooms with furniture and modern gadgetry and sometimes a desire for more children. In addition however the use of milk powder as a supplement has financial implications.

The use of milk powder costs money and therefore involves the family's economic resources which are controlled by husbands apart from the money of Childrens Benefit. Milk powder is very expensive since it is imported and subject to 100% purchase tax. If it is used as a supplementary food the expense is limited. It is a major expense when it is a total form of nourishment as it becomes for babies who have been hospitalized for dehydration from diarrhoea. Data from the 1981 cohort of this study reveals that hospitalization of a baby results in a cessation of breastfeeding. This information was obtained at a home interview with the mothers when the infants were 6 months old.
TABLE 8.5 INFANT FEEDING PRACTICES OF BEDOUIN ARAB INFANTS BEFORE AND AFTER HOSPITAL ADMISSION (0-6 MONTHS) FROM THE 1981 COHORT OBTAINED AT A HOME INTERVIEW WHEN THE INFANTS WERE 6 MONTHS OLD

<table>
<thead>
<tr>
<th>FEEDING PRACTICE</th>
<th>BEFORE ADMISSION</th>
<th>AFTER ADMISSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>BREASTFED</td>
<td>45</td>
<td>36.0</td>
</tr>
<tr>
<td>BREAST/BOTTLE</td>
<td>41</td>
<td>32.8</td>
</tr>
<tr>
<td>WEANED</td>
<td>39</td>
<td>31.2</td>
</tr>
<tr>
<td>TOTALS</td>
<td>125</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 8.5 shows how hospitalization in the Pediatric Ward results in the cessation of breastfeeding. The process whereby this occurs is unclear and will remain so until further qualitative research is undertaken.

Bedouin Arab women are united in their agreement that breastfeeding is the best form of infant feeding, and that milk powder given in bottles causes diarrohea. They perceive the danger as being in the method of preparation. Neither Bedouin Arab mothers or health staff in clinics seem to recognise that the situation and context of health behaviour is either important or relevant. The hospital staff have made a video to encourage breastfeeding, which has no mention of the influence of living conditions on health, the clinic staff do not ask mothers how they live, and the mothers themselves only mention that it is difficult to keep bottles clean. They see the blame if any
as being related to themselves, the dirt and the flies (alwaskh wa aldhubaan).

Negev Bedouin Arab mothers have a number of options concerning their pattern of milk feeding. Some of the factors influencing their choices are endogenous within Bedouin Arab society, and some are exogenous, reflecting aspects of the wider society and the formal system of health care. The endogenous factors within the informal health care system reflect the way that gender and ethnicity articulate within Negev Bedouin Arab society. These are the beliefs that breastfeeding is part of women's health work and that breasts are not sexual objects. The value of breastfeeding in relation to fertility and childbearing is underlined by the patterns of support which develop during the 40 days after childbirth and also the way in which women's work is organised around infant feeding.

The way in which gender, ethnicity and class intermesh is clearly seen when reviewing how the formal health care system influences women's infant feeding options. The percentage of low birthweight babies is higher amongst the Bedouin Arabs than the Jews. Small babies are more likely to receive a bottle of milk supplement in the hospital. Subsequently the risk of major and minor morbidity and poor growth is higher for those infants who are given a supplement of milk in a bottle during the first two months of life and hospitalization, if it happens, can lead to total weaning. This results in a small number of babies being caught in a cycle of infection. The intermeshing of gender, ethnicity and class also
illuminates the connection between living conditions and the consequences of infant feeding choices.

A perspective which focuses either on gender and ethnicity - beliefs and practices relating to infant feeding in Negev Bedouin Arab society - or on ethnicity and class - the inadequate access to Well Baby clinics, the type of service delivery and the living conditions of Negev Bedouin Arabs - will miss the way in which the these three social orders are prismlike in their effect on Negev Bedouin Arab infants' health and life.
CHAPTER 9

CONCLUSIONS

This chapter will discuss the main findings of this piece of research and will relate them to ongoing debates in the field of medical sociology. The chapter is organised into four sections - methodological conclusions, theoretical conclusions, policy implications, and suggestions for further work.

METHODOLOGICAL CONCLUSIONS

This piece of research used quantitative data gathered by interviews using questionnaires and by secondary analysis of medical records, and qualitative data gathered by observation, unstructured interviewing, and some life history reminiscences. There is a commitment throughout this thesis to using both types of data and to exploring how they are complementary to each other. It is clear that the quantitative data was essential in order to establish the health outcomes of the infants in the study, - weights at various ages, height, morbidity, and the mother's infant feeding patterns in the hospital and at home during the first two months. The questionnaire data also yielded information on patterns of social interaction within the hospital between staff and Bedouin Arab mothers, and between women at home. This information however was complemented by the qualitative material.

In the hospital setting, which was analysed in Chapters 4 & 5, the quantitative data established that only 21% of
Bedouin Arab mothers talked with Jewish mothers and that 81% spoke with other Bedouin Arab women. The observational data clarified the nature of the social interaction both between women patients and between health personnel and Bedouin Arab women. It also gave a spatial dimension to the analysis. It was argued that the allocation of space, both in metres and level of comfort, reflected the biomedical emphasis on the health of the babies as more of a priority than the mothers and that the two are separate entities. The way in which space was used by staff and patients within the Obstetric Ward reflected ethnic differences in Israeli society and the way in which Bedouin Arab women covered their bodies and used their rooms, wards and the outside reception area, reflected their beliefs and practices concerning appropriate modest behaviour. The quantitative data established that a certain proportion of mothers gave birth to infants on the way to hospital and that this was linked to being a multipara. The qualitative data illuminated that many Bedouin Arab mothers viewed the hospital as a setting for childbirth, not labour, and that a late arrival would preempt surgical medical intervention.

Similarly this complementarity operated in the analysis of the informal health care setting of the home during the first 40 days in Chapter 6. The questionnaire data delineated the proportion of women who were being helped with their daily work. The qualitative data added dimensions to this information by highlighting that there are different types of help – there is help with women's daily work, and help with visitors. It clarified that help may be related to the quality of personal relations, and that the visiting
work has altered in its intensity and meaning, owing to the economic and residential changes that have taken place in Negev Bedouin Arab society with the advent of settlement and waged work for men. The life history data was particularly useful in highlighting changes that had taken place over time.

In chapters 7 & 8 both quantitative and qualitative data was essential in the analysis and discussion of infant growth and development and indicating the extent to which the pattern of growth is influenced by social factors such as living conditions, or occupation, or by social behavioural and attitudinal factors relating to infant feeding behaviour. Each type of data on its own would have been incomplete raising questions without answers, whereas together, the beginning of some answers were delineated.

The questionnaire data outlined clearly the patterns of infant feeding being practised by Bedouin Arab mothers and the patterns of growth of their infants. The data established that growth was not related to father's occupations but more strongly to living conditions. The data also clarified that mother's infant feeding practices seemed to favour prolonged breastfeeding and the limited use of bottle feeding and seemed to suggest that the consequences of using a bottle of milk powder varied according to the living conditions of the family. The qualitative data clarified how mother's infant feeding options are influenced by the hospital protocols on feeding and birthweight, how clinic advice is decontextualised without reference to the home environment, and how breast and bottle feeding
of milk, in various forms, are accompanied by strong views on both their protective and negative properties.

Macintyre (1986) has suggested that when analysing the factors such as gender, ethnicity, class, and living conditions, underpinning the social patterning of health, there is a need 'to unpack' categories such as class gender etc, and to explore the everyday lives of those categorised along these dimensions' (1986:411). It is suggested here that a methodological approach which combines quantitative and qualitative material may prove helpful in achieving this. It also may be useful to practise 'triangulation' by collecting the quantitative data as a first step and subsequently collecting the qualitative data, or vice versa, (Stone & Hundt 1987) depending on the particular nature of the research. It is suggested that in a cross cultural setting, the use of questionnaires administered on a one to one basis is useful for collecting some types of information but is of limited usefulness in settings where most interviews are family discussions. There is no doubt that although both types of data are of interest on their own, when they are used together, the analysis is more rounded.
THEORETICAL CONCLUSIONS

This thesis has looked at how the intermeshing of gender, ethnicity and class relations affects the life circumstances, beliefs, attitudes and behaviours of Negev Bedouin Arab mothers and their infants during the first two months post partum. It is assumed that health is patterned by social position in this piece of work. It is argued throughout that a perspective which looks exclusively at gender, ethnicity or class relations in relation to health, cannot elucidate adequately the complex of factors which impinge on the health of Negev Bedouin Arab women and children, or by implication, on the health of an ethnic minority in any society. In some parts of the analysis the interrelationship between gender and ethnicity were primary (Chapters 4 & 5) or between ethnicity and class (Chapter 7), and in other parts of the analysis the interrelationship of all three - gender, ethnicity and class- were focused on (Chapters 6 & 8).

In Chapters 4 & 5 it was argued that Negev Bedouin Arab women have their babies and rest in the Obstetric Ward in the same way as Jewish women - both biologically and in the sense of sharing the same hospital setting and system of childbirth. However, their utilization of the Labour Ward, the pattern of interaction between them and the medical staff, and their pattern of interaction within the Delivery Ward, are shaped not only by their biological femaleness and gender, but also by the way in which these intermesh with ethnicity and class as Arab women in Israel to influence both the way they behave to others, and the way others behave to them.
In Chapter 6 it is argued, in the analysis of the post partum 40 days period, that the interrelationship of gender and ethnicity is particularly important. This period is a time of seclusion in the home when the mother receives help with domestic work and is visited and supported by many kinswomen. It is argued however that the importance of the visiting work which kinswomen undertake is shaped by the class relations both within Bedouin Arab society and within Israeli society. The Bedouin Arab men are absent working in wage labour and the women are living in sub tribal neighbourhoods and are maintaining ties between families which, prior to the wage labour economy, the men used to maintain. In addition, the loan system which the women operate around childbirth is a reflection not only of the importance of fertility in Bedouin Arab Palestinian society and culture, but also a reflection of the way in which the gender order in Israeli society makes money available to childbearing women.

In Chapter 7 & 8, it is argued that there is some variation in the growth patterns of Negev Bedouin Arab infants during the first few months of life and these appear to be related to both mothers' infant feeding patterns and their living conditions. It appears that mothers' infant feeding options are influenced by their babies' birthweight, which affects the pattern of infant feeding instituted in the hospital, and subsequently perhaps by both clinic advice and the social norms, beliefs and behaviours of kinswomen. The effect of using a supplement of milk in a bottle seems to be differentially related to the living conditions of the mother and her infant, although this is not perceived as such by either the health
personnel nor the mothers themselves. The bottles with milk powder are seen as sources of potential ill health, so that mothers only use them in a limited fashion and 65% continue breastfeeding for the first nine months. This undoubtedly protects their infants' health.

The living conditions of Negev Bedouin Arabs are a consequence of the intermeshing of ethnicity and class for they form a racialized occupational category since so few of them work in non manual occupations. The mothers' choice of infant feeding options and their impact on their infants' life chances can only be viewed clearly by disentangling the intermeshing of gender, ethnicity and class relations in their influence on life circumstances, beliefs and behaviour.

The particular setting for this research was Negev Bedouin Arab society in Israel, it does however raise issues which are pertinent to theoretical debates which are ongoing in relation, not only to health inequalities, but also the division of labour in health care and health care delivery to women and children who are an ethnic minority within their society. These more general issues will now be discussed.

THE DOMESTIC, PUBLIC AND INTERMEDIATE SPHERES

Much of the literature on women's work in both segregated and non segregated societies has focused on women's exclusion from the public domain. This thesis has avoided the use of
the term 'private' sphere, owing to its ethnocentrism in this particular non Western setting, and used the term domestic sphere. Previous studies of Middle Eastern women who do no paid work have located women as being active and influential in the domestic sphere, but as having almost no role in the public sphere unless they are widowed, past menopause, or are healers (Aswad 1967).

Woman's work in Negev Bedouin Arab society is to service the family, to have, and care for children, and maintain links with other families related to her husband's and her own subtribe. Their reproductive health work occurs within the framework of the social relations of reproduction, but much of it is located outside the domestic domain, or alternatively, occurs within the domestic domain but is non domestic in content. It therefore seems appropriate to consider that childbirth and childcare in the formal health care setting of the hospital and clinics and visiting work during 40 days post partum occurs in what Stacey has termed, the ambiguous intermediate zone (1984:11b). She argues that this zone has developed during the late 20th century and that it comprises education, health and healing, and all service industries. Women are active in this zone but men are often in control of the resources and hierarchy. This piece of research has extended the idea of an intermediate zone to the 'family status production work' and health work that Bedouin Arab women do.

Bedouin Arab women continue as yet to have no role in the public domain but their health work takes them into this
intermediate zone. They go to the hospital to give birth to their children and visit others having children there. They hospitalize them when they are sick and often spend the days and nights there next to their beds. They go to the clinics to have their children weighed and immunized and treated when sick. Both the clinic and hospital setting are the only settings where Negev Bedouin Arab women can meet with unrelated women from different subtribes and neighbourhoods. The formal health care settings of the hospital and clinics are not in the public domain for consumers, for access is limited to patients or their relatives and there is a commitment to health which overrides to a certain extent, ethnic, gender and class taboos, even whilst in interaction they are evident. Family status production work in the form of visiting work may also be regarded as occurring in an intermediate zone. It occurs in the home of the mother of a new born infant, but the women who are visiting may come from quite a geographical and social distance. It is a social setting which is only open to those linked together by marriage to a certain subtribe, or by kin relations, but the effect of endogamy, settlement and waged labour for men, means that it is not work that is purely domestic in either content or sphere.

This means that women's health care and health work occurs both in the domestic domain and the intermediate zone. It may be useful to separate the physical location from the type of interaction or activity and to differentiate whether women are doing paid or unpaid work in these different settings. For example childbirth in hospital is a domestic activity occurring in an
intermediate zone where the Bedouin Arab women are patients and not paid health workers. It is clear that the use of the dichotomies of a domestic and public domain or the private and public spheres is of limited usefulness for social reality is more complex than dichotomies allow for. The delineation of an intermediate zone provides a framework for analysis of some of the areas of social life which do not fit within the dichotomies of domestic and public domains.

THE ARTICULATED PERSPECTIVE

Bedouin Arab women have a number of strategies for protecting their own and their children's health which seem 'deviant' from a medical practitioner's viewpoint, but which are sensible coping mechanisms within their social and physical circumstances when analysed within an articulated perspective of gender, ethnic and class relations. They tend not to use the hospital facilities for the duration of labour but use it for delivery. This prevents, they feel, unnecessary intervention but ensures the delivery of a healthy baby. It is also an outcome of the distance they live from the hospital, it is seen by midwives and gynaecologists as irresponsible. They use the Well Baby clinics mostly for immunization and less for nutritional advice. Indeed their preferred pattern of infant feeding of prolonged breastfeeding with a limited use of a supplement of milk powder, or breastfeeding and solids, is a way of minimising the effect of their living conditions on their children's health. If they pursued the early termination of breastfeeding, with the use of bottles of milk and
early solids as Jewish women do, the incidence of major and minor morbidity would be higher owing to their living conditions and economic situation. It is only possible to understand the logic of Bedouin Arab women's healthwork decisions by using an articulated perspective to analyse their life circumstances, attitudes and behaviour. This articulated perspective avoids the tendency to locate the blame for illness, either totally on the social conditions or on the individuals. It focuses rather on the interface of the macro and micro social spheres.

On a methodological level, there has been some progress toward an articulated perspective, for recent developments in the area of health inequalities have led to the development of small area health studies, which use several indicators of social and material deprivation in a composite deprivation index. Although this is a positive development, one of the problems of the Jarman Underprivileged Area Score (1983) which is commonly used, is that the percentage of ethnic minorities and single parent families are two indicators on the Score. Thunhurst (1985) has pointed out that this skews the findings to locating most underprivileged areas in London where there are large numbers of ethnic minorities. Townsend et al (1984) in their study of Bristol use an index which is composed only of indicators of material deprivation and does not include social class or ethnic origin or family structure. They look at the link between life circumstances and health without using these indicators. It seems that the use of a composite deprivation index is useful and could be developed in Israel in order to compare the health and life
circumstances of different ethnic groups in the society. It could be used within different groups of Bedouin Arabs or to compare Ashkenazi Jews, Sephardi Jews, and Arabs.

An articulated perspective which looks at how gender, ethnic and class relations intermesh can be of use in many settings. In the area of health care, it can elucidate patterns of utilization and service delivery. It enables the analysis to move away from a unidimensional explanation to a perspective which looks at the articulation of all three aspects of the social order.

POLICY IMPLICATIONS

This piece of research has a number of policy implications within it. These relate primarily to the formal health care setting of hospital and the clinics. It is clear that in both settings, care is given in the same way to all mothers and infants regardless of their ethnic origin. This lack of ethnic sensitivity can be viewed as a form of institutional racism, for there is little special provision for a large ethnic minority who have a different language and different health needs.

In terms of language provision, most midwives speak a limited amount of Arabic, and the nurses in the Well Baby clinic speak fluent Arabic. Communication would be facilitated in the Labour Delivery and Obstetric Wards if there were interpreter/health advocates available. Language however is only part of the problem for
there are patterns of personal racism and ignorance over the social and cultural background of Bedouin Arabs. There is a need for ongoing in service training which involves home visits, reading and discussion of professional practice issues.

Since hospitalization of children results in the cessation of breastfeeding, a small step towards facilitating its continuation would be to provide mattresses/easy chairs and food for mothers of infants who are hospitalized.

Since 53% of the Bedouin Arab population are under 13 years of age there is a need to increase the number of school nurses from the present level of one. This would mean that adequate screening could be developed and enable schools possibly to begin to do some community health projects. There is a need for expenditure by the Ministry of Health on the provision of sewage and rubbish disposal and information on how to build water closets to all those families living without running water.

The infant feeding study has generated a lot of information concerning the growth and development of Negev Bedouin infants and health service provision. This needs to be disseminated amongst the Negev Bedouin Arabs through the preparation of a booklet in Arabic and through various forums of community consultation with teachers, parents, tribal leaders, and mothers. Community health initiatives and evaluation of intervention could be developed as a result of the community consultation. In addition there is a need to
ensure that some coordinated planning of health care provision is undertaken using data from this study. In the researcher's view, there is little ethical or financial justification for a large study of this nature unless the data gathered is used for the future planning of health care and service provision and training and for empowering, through dissemination of information with consultation both health personnel and Bedouin Arab parents. This process of dissemination and consultation will be pursued by the researcher in 1988-90 in association with various agencies in the Negev.

FUTURE WORK

There are a number of possibilities for future research deriving from this study, both in the specific setting and on the more general theoretical level. In terms of the specific setting, it would be of interest to follow up the children in this sample who are now 5 years old to establish their present growth and health status and their families living conditions. This would establish if the variations in rates of growth evident in the early months are a temporary phenomenon related to living conditions and infant feeding and weaning patterns or if they continue throughout childhood. It would also be a means of monitoring the process of settlement. It also would be illuminating to supplement the quantitative morbidity data with qualitative observation in the Pediatric Wards and Sick Fund clinics.

On a general level, it would be interesting to explore
the division of labour between doctors and midwives in different hospital settings in order to clarify how gender and ethnicity intermesh in their work. The articulated perspective would also be a useful means of looking at the link between life circumstances, attitudes and behaviours in health care of ethnic minorities in different settings such as Asian mothers and infants in Britain, or Black American and Hispanic mothers and infants in the United States. Their situation may be similar in many dimensions to that of Negev Bedouin Arab mothers in Israel.

This thesis has looked at the social causation of health inequalities from an articulated perspective based on the intermeshing of gender, ethnic and class relations. It is hoped that it has gone some way towards illuminating the processes and factors involved in the post partum health care of Negev Bedouin Arab mothers and children in Israel, and of an ethnic minority in any society. It is hoped that by looking at the social causation of health inequalities from an articulated perspective, a better understanding of the processes and factors involved in the post partum health care of Negev Bedouin Arab mothers and children has been achieved. It is hoped that as a consequence more suitable health care policies and provision may be implemented.

Amiram, Ben David, & Shinar, (1976), 'The Process of Sedentarization and Settlement', Ford Foundation research report, limited publication


Antonovsky, A. (1972), 'A Model to Explain Visits to the Doctor: With Specific Reference to the Case of Israel', Journal of Health & Social Behaviour, 13, pp446-454.


Carby, H.V. (1982), 'White woman listen! Black feminism and the boundaries of sisterhood' The Empire Strikes Back Race & Racism in 70's Britain, pp212-223, Centre for Contemporary Cultural Studies Hutchinson

Cohen, A. (1965), Arab Border Villages in Israel, Manchester University Press.


Currer, C. (1983), The Mental Health of Pathan Women in Bradford Unpublished draft report, Sociology Department, University of Warwick


Donovan, J. (1984), 'Ethnicity and Health: A research review', Social Science & Medicine, 19 (7), pp663-70.

Donovan, J. (1986), We Don't Buy Sickness, It Just Comes, Gower.


Doyal, L. (1980), Migrant Workers in the National Health Service Preliminary Report North Thames Polytechnic, Sociology Dept.


Finch, J. (1984), 'It's great to have someone to talk to. The ethics and politics of interviewing women', Social Researching, Politics, Problems and Practice, eds. C. Bell & H. Roberts pp. 70-87, Routledge, Kegan & Paul.


Gennep, Van A. (1909), Les Rites de Passage, Paris Emile Noury.


Kuhn, A. & Wolpe, A. M. (1978), Feminism and Materialism, Routledge Kegan & Paul

Kuper, L. (1975), Race, Class and Power, Duckworth and Co.
La Fontaine, J. (1978), 'The power of rights', Man (N. S.) 12, pp 421-437


McKinlay, J. B. (1972), 'The sick role - illness and pregnancy.' Social Science & Medicine, vol 6, pp561-


Marx, E. (1967), The Bedouin of the Negev, Manchester University Press.


Nathanson, C. (1977), Sex, Illness and Medical Care, Social Science and Medicine, 11.1.


Open University, (1985), *The Health of Nations, U205, Book 111, Health and Disease*


Oz, A. (1985), In the Land of Israel, Fontana.


Parmar, P. (1982), 'Gender, race and class - Asian women in resistance' The Empire Strikes Back, Race and Racism in 70s Britain, Centre for Contemporary Cultural Studies, pp236-273, Hutchinson.

Pearson, M. (1983), 'The politics of ethnic minority health studies', Radical Community Medicine, Winter, pp34-44.


Pillsbury, B. L. K. (1978), "Doing the Month" confinement and convalescence of Chinese women after childbirth. 'Social Science & Medicine, 12, pp 11-22.


Randolph, R. (1965), 'Elements in the social structure of the Qedirat Bedouin', Houston unpublished D. Phil.


Shimon, Y. (1947), The Arabs of the Land of Israel (Arivei Erets Israel) Tel Aviv.


Smith, D. (1980), Overseas Doctors in the National Health Service


Stacey, M. (1976), 'Concepts of health and illness: a working paper on the concepts and their relevance for a research paper for the health and health policy panel of the SSRC.' University of Warwick.

Stacey, M. & Davies, C. (1983), 'Division of labour in child health care: final report to the SSRC 1983 grant no. RB/19/14/3


Townsend, P. & Simpson, D. & Tibbs, N. (1984), 'Inequalities of health in the city of Bristol, a preliminary review of statistical evidence', Department of Social Administration, University of Bristol.


Zohar, A. (1980), Proposal of the Ben Mair team to evacuate and settle the Bedouin from the Nevatim airport, Tel Aviv Engineers Counsellors Ltd.
APPENDIX 1

REPORT ON THE TRAINING OF INTERVIEWERS IN THE BEDOUIN ARAB INFANT FEEDING STUDY NOI-HD-O-2859

The data collection for this study has involved the hiring and training of a large number of interviewers and of two drivers (one full time, one part time). There are between two to four interviewers in the field seven days a week, interviewing Bedouin Arab mothers in their homes. In addition there are two interviewers in the hospital pediatric wards with the mothers of hospitalized children.

The interviewers are all female Arab Israeli students who are studying for their first or second degrees at Ben Gurion University of the Negev. They all work part time, whenever their study schedules permit them to. Thus, in order to maintain a steady rate of interviewing, it has been necessary to train a large number of interviewers. It would have been possible to hire fewer interviewers, if we had hired full time Bedouin Arab girls who had completed their high school education. This, however, proved impossible owing to the complexity of the questionnaires and the social inacceptability of travelling amongst all the tribes in the area, accompanied only by an unrelated male Bedouin Arab driver. The university students are all from villages in the North of Israel and are living in student dormitories far from their families. They are older, more educated and more independent than the Bedouin Arab high school graduates. The other possibility was to hire Jewish female interviewers who spoke fluent Arabic. This was tried out in the pilot study but it was found
to be unsatisfactory, owing to the increasing political polarisation which makes Arab interviewers more acceptable to Bedouin Arab women.

The training of the interviewers has three stages: the first is the technical and theoretical background to the questionnaire, and the training in anthropometrics. The second stage is the training period in the field, and the third is the independent interviewing in the field with periodic supervision. These stages will be described in detail.

1. THE TECHNICAL AND THEORETICAL BACKGROUND TO THE QUESTIONNAIRES AND THE TRAINING IN ANTHROPOMETRICS

The interviewers have all had no previous experience in using a questionnaire or of working in a research study. They also have no first hand knowledge or understanding of Bedouin Arab culture since they come from towns and villages. Prior to going out in the field, they have two long introductory orientation sessions with the Project Co-ordinator responsible for interviewer training - Gillian Hundt. The basic objectives of the study are explained together with a summary of present day knowledge about Bedouin Arab infant feeding, child development, processes of social change and in particular of settlement. The importance of collecting adequate baseline data on Bedouin Arab mother and infant health in order to provide adequate health services in the future is explained.

Since there is a turnover of interviewers, the
orientation sessions usually involve three to four interviewers at a time. Prior to looking at the questionnaire, each interviewer talks about her previous experience and knowledge of Bedouin Arab life, and subsequently there is a role playing session on how to present oneself and the study to the respondent on arriving at her home.

The questionnaire is then examined in detail - technically, linguistically and culturally. After explaining how to mark in the answers, the principle of coding is discussed. The rationale for each question is explained, the appropriate Bedouin Arabic dialect words explained and any relevant background information. For example the question "Do you live in the same household as your in laws?" involves an explanation of how one of the indicators of the process of settlement is the fragmentation into different households of the extended family. The residential pattern of traditional semi nomadic and settled Bedouin Arabs is explained and discussed. Subsequently the words for mother-in-law and father-in-law are discussed since there is a difference between Palestinian village and Bedouin dialects in wording. The definition of a household is discussed and then the possible responses are dealt with through role playing. The two orientation sessions are each of three hours duration.

The interviewers are trained in anthropometrics by a physician with research experience. They learn how to use a scale, to measure and how to use calipers and take head circumferences by practising on children in the Paediatric Wards under supervision.
Subsequently they practise every month when all the interviewers cross check for validity in the Paediatric Wards by several of them taking measurements from the same child with the same and different equipment.

2. THE TRAINING PERIOD IN THE FIELD

A new interviewer goes out to the field several times with an experienced interviewer and observes her technique. She then interviews under the tutelage of the experienced interviewer and takes measurements. After she has interviewed about five mothers, she is supervised in the field by Gillian Hundt and then if she is considered satisfactory, she is allowed to interview independently with her questionnaires being double checked each day. She receives supervision once a week for the first few weeks.

3. INDEPENDENT INTERVIEWING IN THE FIELD WITH PERIODIC SUPERVISION

All interviewers have to attend a weekly meeting when the work schedule is set up and common problems are discussed. For example - what to do on arriving a mother's home and finding that her child has died. In these meetings the Infant Feeding section of the questionnaire is repeatedly gone over since it is complex and vitally important. All interviewers are supervised once every two months in the field and as previously mentioned, the anthropometric measurements are checked monthly. The equipment is checked weekly. There is a turnover of interviewers but it is not extremely high. There are at
present 11 interviewers working. Four have left in the last year and four have been training in the last year. Seven of those working have been working for more than 18 months on this study.

Gillian Hundt

March 1982
BREASTFEEDING SURVEY

No. of cohort

Survey No.

FIRST INTERVIEW — HOSPITAL DELIVERY

No. of record

Name of Mother:

First Name  Mother’s Father’s Name  Family Name

Name of the region: __________________ according to the settlement appendix

Sex of child: 1. Male  2. Female

Date of birth: __/__/____

Day  Mos  Yr

(These details are to be copied from the delivery log book)

(The interviewer presents herself and the objectives of the interview as follows:

After the appropriate greetings:

I am from the hospital in Beer-Sheva, My name is: __________

I am visiting mothers who gave birth in the hospital or at home, in order to understand more about the health of the mother and child.

I am doing this in order to better help sick children.

Now I would like to ask you a few questions concerning the birth and health of this child.

How did you feel when you were pregnant with this child?


Try to remember if during this pregnancy you suffered from any of the following

<table>
<thead>
<tr>
<th>Health Problems</th>
<th>Yes</th>
<th>No</th>
<th>Does not know/remember</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiredness</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Swollen legs</td>
<td></td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Back ache</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>
**Health Problems**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Does not know/remember</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Bleeding, pain or cramps during the pregnancy</td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>16</td>
<td>Breast problems - swelling, nipple discomfort</td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>17</td>
<td>Blood pressure</td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>18</td>
<td>Anemia</td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>19</td>
<td>Were you depressed or sad during the pregnancy</td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>20</td>
<td>Were there serious family problems during the pregnancy</td>
<td>1.</td>
<td>2.</td>
</tr>
</tbody>
</table>

**SMOKING**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>21</td>
<td>Do you usually smoke?</td>
<td>1. yes</td>
<td>2. No</td>
</tr>
<tr>
<td>22</td>
<td>Did you smoke during your last pregnancy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If yes, did you smoke home grown tobacco or cigarettes?</td>
<td>8. No, (if answered: skip to quest 23.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Yes, homegrown</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Yes, cigarettes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Doesn't know/remember</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0. Didn't smoke during pregnancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>If yes, about how many cigarettes per day?</td>
<td>1. 1-5</td>
<td>2. 6-10</td>
</tr>
<tr>
<td></td>
<td>If yes, doesn't smoke 9. Doesn't know/remember 0. Didn't smoke during pregnancy.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**USE OF HEALTH SERVICES DURING THE PREGNANCY**

Did you visit any of the following services during this pregnancy? Who took you and how many times did you visit them during this pregnancy?
### THE BIRTH

#### Where did you have this baby?
1. At home
2. In the hospital
3. On the way to the hospital
   
   *(if you answered 2 or 3, skip to column 40)*

#### How many months were you pregnant?
1. 7
2. 8
3. 9
4. 10
5. 10+)
6. Not relevant
7. Doesn't know/remember

#### Who was with you during labour?
1. her mother-in-law
2. her sister-in-law
3. husband's second wife
4. her daughter
5. no one
6. more than one relative was present
7. not relevant
8. Doesn't know/remember
9. neighbor

#### How did they help you during the birth?
1. delivered the baby/ cut the umbilical cord
2. supported me/ gave me something to drink
3. bathed/ took care of the infant
4. someone was present, but did not help
5. Doesn't know/remember
6. Not relevant (hospital birth or was alone during birth, code 7 question 36)
Did you intend having the baby at home?
1. Yes 2. No 3. hadn't made up her mind 8. not relevant
9. doesn't know/remember

Why didn't you go to the hospital? (Interviewer circle each answer the mother gives list the first answer that the mother gives with a Roman Numeral I and so forth according to each subsequent answer). (Coder: Code the answers by order of response column 39: 1st answer and so forth).
1. prefers to give birth at home
2. did not have the means of transportation
3. there was no man in the house
4. the birth progressed easily and quickly
5. I am scared of hospitals
6. the hospital is far away
7. other, specify __________________________
8. not relevant
9. does not know/remember

How long after the birth did you nurse the baby for the first time?
1. immediately after the delivery (in the first 10 minutes after delivery)
2. within 1 hour after delivery (from the first 10 minutes until 1 hour after the delivery)
3. 1-2 hours later
4. 2-4 hours later
5. 4-8 hours later
6. 8-12 hours later
7. more than 12 hours later
8. not relevant
9. does not know/remember
Did you give your child anything in addition to breastmilk during the first 3 days of his life?
0. no 4. yes, semana
1. yes, goat's milk 8. not relevant
2. yes, water and sugar or honey 9. does not know/remember
(If she gave birth in the hospital or on the way to the hospital ask the following questions and continue until the end of the section)
(If she gave birth at home stop here and continue questioning with question 53)

HOSPITAL BIRTH

During labour and delivery did you understand what the midwives and doctors said to you?
1. Yes 2. partly 3. No 8. not relevant

During your stay in the hospital, did you talk to any Jewish women in your room or ward?
If yes, in what language did you speak to them?
(Emphasize that the meaning is with other mothers or their relatives and not with the medical team)
1. Yes, in Arabic
2. Yes, in Hebrew
3. Yes, in both languages
4. I did not speak with any Jewish women
8. Not relevant
You spoke with Bedouin women in your room or ward after you gave birth, about your birth and theirs, and also about other children in your family at home. If yes, how many have you spoken with up until now? (If she didn't speak with Bedouin women, skip to question 51)
0. I did not speak
I spoke with ___ (list the number)
1-6. The number of women she spoke with
7. I spoke with 7 or more women
8. not relevant/home birth
9. does not know/remember

Did you know them before the hospitalization?
1. yes, all of them
2. Yes, part of them
3. I met them here for the first time
8. Not relevant/home birth/didn't speak with Bedouin women
9. Does not know/remember
I would like to know if during your discussion you spoke on the following subject

Did you speak with Bedouin women about breastfeeding?
If yes, specify the subject of the discussion
1. It is good for the child's health
2. stopping breastfeeding
4. pain or problems/lack of milk
8. not relevant (Didn't speak with Bedouin women/home birth)
9. does not know/remember
0. didn't speak on this subject

Did you speak with Bedouin women about bottle feeding?
If yes, specify the subject of the discussion
1. Bottle preparation method
2. Type of bottle
4. Type of milk supplement
8. Not relevant (Didn't speak with Bedouin women/home births)
9. I do not remember the content of the discussion
0. Didn't speak on this subject
Did you speak with Bedouin women about family planning?

If yes, specify the subject of the discussion
1. Birth control
2. clinic/ a doctor for advice
4. the husband's or family's views on the subject
8. not relevant (Didn't speak with Bedouin/home birth)
9. does not remember the content of the discussion
0. didn't speak on this subject

How long after the baby was born did you nurse it for the first time?
1. Immediately (up to 10 minutes after delivery)
2. within 1 hour (from 10 minutes until the first hour after delivery)
3. 1-2 hours later
4. 2-4 hours later
5. 4-8 hours later
6. 8-12 hours later
7. more than 12 hours later
8. not relevant
9. does not know/ remember

How was the baby fed while in the hospital?
0. Intravenous feeding
1. Breast feeding only
2. Breast feeding with supplement of water and sugar
3. Breast feeding with supplement of milk
4. Breast feeding with supplement of milk and sweet water
5. Bottle feeding only
6. Bottle feeding with milk and supplement of sweet water
7. Breast feeding, and she does not know if they gave the child a supplement of any kind
8. not relevant
9. does not know/ remember
Did you go to the infant feeding department to feed the baby?

Did the nurse or doctor in the hospital give you advice about breast feeding or bottle feeding the baby during your stay in the hospital?
If yes, what did they say?
1. Try to breastfeed  2. Give a milk supplement  0. Did not receive advice  3. Give a milk supplement  4. Refer problems to Tipat Halav  9. Does not remember the content of the discussion

Did you participate in a meeting with Badra, the woman who shows slides about breastfeeding and feeding your child?

Until what age do you want to breastfeed your infant? _____ in months,
(If she is unable to provide a specific age, circle one of the following possibilities).
40. day  90. Until the next delivery  66. As long as the infant wants it  88. Not relevant  67. Until the next pregnancy  99. Doesn't know  80. I haven't decided yet

Have you already decided what to give your infant as a food supplement?
1. Yes  2. No  9. Doesn't know/hasn't decided yet
(If she hasn't decided yet specify for her the following categories)

If yes, what food will you give him first?
1. milk from a bottle  8. not relevant  2. milk from a cup  9. Doesn't know/hasn't decided yet  3. Solid food

If yes, at what age will you give him a milk supplement? _____ in months
00. I won't give milk  88. Not relevant  55. When the infant wants it  99. Doesn't know/hasn't yet decided  66. in a little while

If yes, at what age will you give him solids? _____ in months.
55. When the infant wants it  66. in a little while  99. Doesn't know/hasn't yet decided

If yes, at what age will you give him tea, juice, water or other drink? _____ in months.
How do you intend to wean your infant?

1. Suddenly (in one day or with a bitter ointment or pepper on the nipples or a sudden stop in breastfeeding)
2. Gradually with a bottle or other utensil
4. To make him stay with a relative
9. Doesn't know/ hasn't decided yet.

PREVIOUS PREGNANCIES AND KNOWLEDGE ABOUT FAMILY PLANNING

(All Mothers)

How many times were you pregnant before the last infant? __________

Did you ever miscarry?

1. Yes 2. No (if no, skip to number 76)

A. If yes, try to remember how many times and in what month of pregnancy it happened (record total number of miscarriages).

(The interviewers should use the notebook of Tipat Halav if the mother went there)

<table>
<thead>
<tr>
<th>Number of Miscarriages</th>
<th>Month of Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

(Code 0: if there weren't miscarriages in columns 71-75)

(Interviewer: do not include stillborns here, one must list in section 17)

Did you use contraceptives in the past?

1. No

If yes, what type

2. Yes, I do not want to specify 6. Coitus interruptus

3. I U D 7. Condom
Did you want to use contraceptives in the past and did not do so?
1. No, I didn't want to use them
   If yes, why didn't you?
2. My husband did not permit me to
3. Did not know where to go
4. I became pregnant before I could do anything
5. Other, specify: ____________________
6. More than one reason
7. Does not know/remember
8. Not relevant, I used them in the past
9. Does not know/remember

Do you think you can get pregnant when you are breastfeeding and not having a period?
1. Yes
2. No
3. Sometimes yes, sometimes no
4. I do not know

We are interested in visiting you and your baby when he will be 6 months old, in order to see how he is doing. We therefore would like to know where you live or intend to live in another 6 months.

Please specify the exact address and how to get there:

Address: __________________________________________

Region code: ______________________________

(Copy these details on the follow-up card)

In what type of dwelling do you live?
1. tent
2. hut
3. tent and hut
4. house
5. house and tent
6. house and hut
8. I am intending to change dwellings
9. doesn't know/remember

Will someone help you with cooking and doing laundry when you return home immediately after the birth?
1. Yes
2. No
3. Maybe
9. Doesn't know

If yes, for how long? (Interviewer list the number of days of expected help according to the mother). ________________________________

88. Not relevant
99. Doesn't know

Date of Interview
<table>
<thead>
<tr>
<th>Day</th>
<th>No.</th>
<th>Mo.</th>
<th>Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

**Support and Help for the Mother After Delivery**

Date of Interview / / 

Name of Mother: __________________________ Mother’s Father __________________ Tribe __________________

Region: __________________ According to the appendix of regions

Sex of infant: 1. Male 2. Female

Date of Birth: / / 

Name of hospital interviewer: __________________________

(These details should be copied from the follow-up card)

(Interview: introduce yourself and the objectives of the interview as follows):

I am sent by the hospital in Beer Sheva, My name is: __________________

I came to see how you and your infant are doing.

You probably remember that I (or give the name of the previous interviewer) mentioned in the hospital that we would come and visit you at home. Do you mind if we ask you some questions? We are visiting mothers of children up to one and a half years old, in order to improve our understanding of mother and child health. We are doing this, so that in the future we can be of more help to sick children.

How do you feel since you left the hospital?

(Regarding home birth ask: How do you feel since the delivery?)

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were there unusual problems after the birth until now?</td>
<td>(Circle the appropriate category)</td>
</tr>
<tr>
<td>Heavy or continuous bleeding</td>
<td>1. Yes 2. A little 3. No 9. Doesn't know</td>
</tr>
<tr>
<td>Serious family problems</td>
<td>1. Yes 2. Problem, but not serious 3. No 9. Doesn't know</td>
</tr>
<tr>
<td>Specify:</td>
<td></td>
</tr>
<tr>
<td>Does someone usually help you with your housework?</td>
<td>1. Yes 2. No 9. Doesn't know</td>
</tr>
<tr>
<td>Did you have special help in the 40 days after delivery?</td>
<td>Yes No Doesn't know</td>
</tr>
<tr>
<td>If yes, who helped you in the 40 days after delivery?</td>
<td>1. Son 4. My husband 9. Doesn't know</td>
</tr>
<tr>
<td>2. Daughter 8. No one</td>
<td></td>
</tr>
<tr>
<td>1. Mother 8. Mother didn't help 9. Doesn't know/remember</td>
<td></td>
</tr>
<tr>
<td>1. Sister 8. None of the above</td>
<td></td>
</tr>
<tr>
<td>2. Sister-in-law 9. Doesn't know</td>
<td></td>
</tr>
<tr>
<td>4. Mother-in-law</td>
<td></td>
</tr>
<tr>
<td>1. Second wife 8. None of the above</td>
<td></td>
</tr>
<tr>
<td>2. Neighbor 9. Doesn't know</td>
<td></td>
</tr>
<tr>
<td>4. Other relative</td>
<td></td>
</tr>
</tbody>
</table>
How did they help you? How long did they help after the delivery?

(Interviewer: list the number of days that the woman mentions)

Cooking ___ days after delivery 88. Not relevant/Didn’t get help
97. Still receiving help since delivery
98. Doesn’t remember how many days
99. Doesn’t know/remember if she received help

Laundry ___ days after delivery 88. 98. 99.

Bathing the infant ___ days after delivery 88. 98. 99.

Cared for other children ___ days after delivery 88. 98. 99.

Carrying water ___ days after delivery 88. 98. 99.
00. No need to bring water

Care for the flock ___ days after delivery 88. 98. 99.
00. There is no flock

Other help, specify ________ 88. 98. 99.

Did you receive the same help after the birth of your previous child?

01. Didn’t receive help
02. Received same type of help
03. Received more help
04. Received less help
05. Doesn’t have an older child
09. Doesn’t know/remember
<table>
<thead>
<tr>
<th></th>
<th>Did you go out of the house to visit people during the first 40 days after the delivery?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yes, I went everywhere</td>
</tr>
<tr>
<td>2.</td>
<td>Yes, I went to visit neighbors/relatives</td>
</tr>
<tr>
<td>4.</td>
<td>Yes, I went to the doctor/clinic or hospital</td>
</tr>
<tr>
<td>8.</td>
<td>No, I didn't go out during this entire period</td>
</tr>
<tr>
<td>9.</td>
<td>Doesn't know/remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Did you go out of the house during the first 40 days after the birth of your previous child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yes, I went everywhere</td>
</tr>
<tr>
<td>2.</td>
<td>Yes, I went to visit neighbors/relatives</td>
</tr>
<tr>
<td>4.</td>
<td>Yes, I went to the doctor/clinic or hospital</td>
</tr>
<tr>
<td>8.</td>
<td>No, I didn't go out during this entire period</td>
</tr>
<tr>
<td>9.</td>
<td>Doesn't know/remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Have you cut your child's hair after the first 40 days following his/her birth?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yes</td>
</tr>
<tr>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>8.</td>
<td>Didn't have hair (Doesn't have hair yet)</td>
</tr>
<tr>
<td>9.</td>
<td>Doesn't know/remember</td>
</tr>
</tbody>
</table>
Many women have probably visited you after this birth.

We are interested in the manner of feeding of Bedouin infants. It is difficult for us to visit each mother. We are therefore interested in the practices of your relatives, family and neighbors.

And now, please tell me about the women you see every day and if each of them breastfeeds her youngest child, if s/he is one year old or younger.

(Coder: Code in columns A', B' and C': 8. Doesn't have such a relative 9. Doesn't know
Code in column C': 0. Didn't come to visit/doesn't daily.

<table>
<thead>
<tr>
<th>Relationship</th>
<th>A' Visited during the 40 days</th>
<th>B' Sees daily</th>
<th>C' Feeding the very youngest child</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.Yes 2.No</td>
<td>1.Yes 2.No</td>
<td>Breast feeding only</td>
</tr>
<tr>
<td>Sister I</td>
<td>50</td>
<td>51</td>
<td>52</td>
</tr>
<tr>
<td>Sister II</td>
<td>53</td>
<td>54</td>
<td>55</td>
</tr>
<tr>
<td>Sister III</td>
<td>56</td>
<td>57</td>
<td>58</td>
</tr>
<tr>
<td>Sister IV</td>
<td>59</td>
<td>60</td>
<td>61</td>
</tr>
<tr>
<td>Sister-in-law I</td>
<td>62</td>
<td>63</td>
<td>64</td>
</tr>
<tr>
<td>Sister-in-law III</td>
<td>68</td>
<td>69</td>
<td>70</td>
</tr>
<tr>
<td>Sister-in-law IV</td>
<td>71</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>Mother</td>
<td>74</td>
<td>75</td>
<td>76</td>
</tr>
<tr>
<td>Mother-in-law</td>
<td>77</td>
<td>78</td>
<td>79</td>
</tr>
<tr>
<td>Relationship</td>
<td>Visited during the 40 days</td>
<td>Sees daily</td>
<td>Feeding the very youngest child</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
<td>-----------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Married Daughter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Wife</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daughter-in-law I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daughter-in-law II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daughter-in-law III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Woman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Woman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Woman</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. She has more than 4 sisters with children that come to visit (list No.): 44. She has no: 45. 4 sisters-in-law: 46. 3 relatives: 47. 3 neighbors: 48. 3 married daughters.
BEDOUIN BREASTFEEDING SURVEY

Cohort No. 1
Survey No. 2 - 5

INFANT FEEDING

Record No. 0 - 67
8 - 9 10

Date of interview Day Month Year

How did you intend to feed your infant? (Until the present age)
1. Breastfed only
2. Breastfeeding and solid supplement
3. Breastfed and milk in a bottle or cup
4. Didn’t breastfeed and fed the infant with a bottle/cup/solids
5. Breastfeeds and receives liquids in a cup or bottle
6. Breastfeeds with milk & solid supplement
7. Doesn’t know/remember

How old is the infant today (in months) __________

How are you feeding your baby now?

Breastfeeding only: 1. and doesn’t receive any liquids 8. Doesn’t belong to this category
2. and receives liquids (any type) in a bottle 4. and receives liquids (any type) in a cup

Breastfeeding and receive supplement:
1. Yes, milk from a bottle
2. Yes, milk from a glass
3. Yes, solids
8. Doesn’t belong to this category
9. Unknown

 Doesn’t breastfeed and is nourished by:
1. Milk from a bottle
2. Milk from a glass
4. Solids
8. Doesn’t belong to this category
9. Unknown

(If belongs to category 19, continue to interview through number 44)
(If belongs to category 20 and answered 1,2, continue to interview through number 27 and from number 45 in the second section until the end)
(If she belongs to category 20 and answered 4, continue until 44, and from number 45 in the second section until the end)
(If belongs to category 21, skip the following questions until number 44 and from there continue until the end)
Babies who are breastfed only or breastfed and also receive a supplement

Try to remember yesterday how many times you nursed your baby from dawn until you put him to sleep at night. (Circle the correct answer)

<table>
<thead>
<tr>
<th>Number of times</th>
<th>Median (For coding only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 6</td>
<td>11</td>
</tr>
<tr>
<td>2 7</td>
<td>12</td>
</tr>
<tr>
<td>3 8</td>
<td>13</td>
</tr>
<tr>
<td>4 9</td>
<td>14</td>
</tr>
<tr>
<td>5 10</td>
<td>15</td>
</tr>
</tbody>
</table>

If the interview was lengthy: Has weaned at the time of the interview 80

Didn't remember 99

Didn't breastfeed during the day 00

(If it is difficult for the mother to state the number of times, ask:)

Do you breastfeed sometimes? (2 5)

Do you breastfeed often? (4 5)

And at night: Did you nurse your baby last night? If so, how many times? (Circle correct answer)

<table>
<thead>
<tr>
<th>Number of times</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 6</td>
<td>11</td>
</tr>
<tr>
<td>2 7</td>
<td>12</td>
</tr>
<tr>
<td>3 8</td>
<td>13</td>
</tr>
<tr>
<td>4 9</td>
<td>14</td>
</tr>
<tr>
<td>5 10</td>
<td>15</td>
</tr>
</tbody>
</table>

I never breastfed 88

Didn't remember 99

Has weaned at the time of the interview 80

Didn't breastfeed last night 00

(If it is difficult for the mother to state the number of times, ask:)

Do you breastfeed sometimes? (2 5)

Do you breastfeed often? (4 5)

Why do you breastfeed? (List the first answer that the mother mentions with a Roman Number I, the second II and third III) (Coder: code according to order)

1. It is good for the health of the baby 2. It's comfortable, easy of response 3. I breastfed my previous children 4. In my family we breastfeed 5. Everyone does 6. In order to prevent another pregnancy 7. Medical staff recommended it [Clinic, hospital, Tipat Chalav]

8. Not relevant 9. Doesn't know 0. Other: specify ________

(in column 26 there are no other responses)
<table>
<thead>
<tr>
<th>How do you know that the infant wants to feed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cries  2. Searches for my breasts  3. Cries and throws the pacifier</td>
</tr>
<tr>
<td>4. Cries and searches  5. The mother knows  6. The time has come</td>
</tr>
<tr>
<td>8. Not relevant  9. Doesn't know/remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you nurse each time the baby cries?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes</td>
</tr>
<tr>
<td>If no, what does it depend on?</td>
</tr>
<tr>
<td>2. if you have time?  3. According to the type of cry?</td>
</tr>
<tr>
<td>4. The amount of time since the last feeding  5. Other</td>
</tr>
<tr>
<td>8. Not relevant  9. Doesn't know/remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did you have any problems with nursing, such as:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No (If she answered negatively, skip the next questions until question 32)</td>
</tr>
<tr>
<td>Yes, there were</td>
</tr>
<tr>
<td>0. Congestion  2. Lumps  3. Abscesses  4. Cracked nipples</td>
</tr>
<tr>
<td>8. Not relevant  9. Doesn't know/remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What did you do about this problem? (Record the first response of the mother)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Nothing  1. She went to a doctor/nurse  2. She ate/drank more</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How did you care for the baby?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gave him milk supplement  2. Gave him something to drink only</td>
</tr>
<tr>
<td>3. I continued to breastfeed in spite of the problem  8. Not relevant  9. Doesn't remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who gave you advice in solving this problem? (Who did she turn to first?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Doesn't know  *(If she answered 1, 2, 3, 4 ask the following question - column 35)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Did the woman you discussed this with:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Breastfeed only  4. None of the above</td>
</tr>
<tr>
<td>2. Breastfeed and also gave a bottle  5. Doesn't know how she fed</td>
</tr>
<tr>
<td>3. Fed with a bottle only  8. Not relevant</td>
</tr>
</tbody>
</table>
Until what age do you want to nurse this baby? ______ (months)

66. As long as the child wants 77. Until she becomes pregnant again
80. As yet undecided 88. Not relevant 90. Until the next birth
99. Doesn't know

Do you give your baby tea, juice, water or another type of drink?


Do you use a pacifier?

1. Yes 2. No 3. Did you use it in the past when the baby was younger
4. 1+3 5. 3+2 8. Not relevant 9. Doesn't know

Did you already decide to give the infant additional food?


If yes, what did you give him first?

1. milk in a bottle 8. not relevant
2. milk in a cup 9. doesn't know/ hasn't decided yet
4. solid food

If yes, when will you give him a milk supplement? ______ months

00. will not give milk 88. not relevant
55. when the infant wants it 99. doesn't know/ hasn't decided yet
66. in a little while 77. When I will stop breastfeeding

How do you plan to wean the baby?

1. Suddenly suddenly stop breastfeeding
2. Gradually with a bottle or other utensil Q. Other: specify
4. Leave him with relatives
8. Not relevant 9. Doesn't know/ hasn't decided yet

(Skip the rest of the questions in this section if the mother breastfeeds only)
INFANTS RECEIVING SUPPLEMENTS (with or without breastfeeding)

1. With what utensil do you feed your infant?
   1. bottle  2. cup/bowl/plate  4. with fingers (solids)
   8. not relevant  9. doesn't know

48. When did you decide to give your infant milk from a bottle?
   1. I didn't intend to give him a bottle or other utensil
   2. Before this pregnancy  3. During this pregnancy

49. When did you decide to give your infant milk in a cup or other utensil?
   1. I didn't intend to give him a cup  4. After the birth
   2. Before this pregnancy  8. Not relevant
   3. During this pregnancy  9. Doesn't know/remember

50-51. When did you start to give the baby milk from a bottle?
   (Until 2 months old, specify the week; from 2 months old and over, specify month)
   50. First week  51. Second week  52. Third week  53. Fourth week
   54. Fifth week  55. Sixth week (40 days)  56. Seventh week
   57. Eight week  02-12 List age in months __________
   88. Didn't receive milk/not relevant  90. She doesn't know/remember
   99. Unknown

52-53. When did you begin to give your infant milk in a cup? (Until 2 months old, specify the week; from 2 months old and over specify month)
   50. First week  51. Second week  52. Third week  53. Fourth week
   54. Fifth week  55. Sixth week (40 days)  56. Seventh week
   57. Eight week  02-12 List age in months __________
   88. Didn't receive milk in a cup/not relevant  90. She doesn't know/remember
   99. Unknown

54-55. What was the reason for giving your baby milk from a bottle (or other utensil)
   01. Mother's milk insufficient/ the baby cries
   02. The mother became pregnant
   03. Other women also feed (or other environmental problem)
   04. The child needs milk supplement/
   05. The mother became ill (including breast problems)
   06. The child became ill  07. The child cries
   09. Unknown/doesn't remember
   10. The mother wanted to become pregnant
   11. Other, specify ______________________
   12. The infant refuses to breastfeed
   88. Doesn't receive milk
   89. Unknown/doesn't remember
Now let me mention some other possible reasons and tell me if any are correct:


What kind of milk do you feed the baby from a bottle (or other utensil)?

(If she uses milk, list the type according to the following list:)
1. Tnuva milk (cow's milk) 2. Fresh cow's milk
3. Fresh milk from a sheep or goat 4. Tnuva milk + fresh cow's milk
5. Tnuva milk + fresh milk from a sheep or goat or camel
6. Tnuva milk + fresh cow/sheep/goat/camel 7. She doesn't use fresh milk
8. Not relevant 9. Doesn't know/remember

(If she uses powdered milk mention the type according to the following list:)
6. She doesn't use milk powder 7. Not relevant 8. Doesn't know/remember

(If she uses different types, record the principle mix of the mother)
1. I sometimes use more than one type of milk powder at one meal
2. I change milk powder from time to time
3. I usually mix milk powder with Tnuva milk or fresh milk
4. I don't do 1, 2 or 4 8. Not relevant 9. Doesn't know/remember
Why do you use this type of milk?

(Ask the most used type, record the mother's first answer)

1. It's good for the baby's health
2. Medical staff recommended it (Tipat Chalav, Hospital or private doctor)
3. The brand is sold in the store or pharmacy
4. I have domestic animals that give milk
5. Past experience
6. Recommended by relatives or friends
7. Environmental influence
8. She doesn't use milk
9. Doesn't know

(Present these reasons to the mother and record):

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
<th>She doesn't use milk</th>
<th>Doesn't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>My husband bought it</td>
<td>1.</td>
<td>2.</td>
<td>No</td>
<td>8.</td>
</tr>
<tr>
<td>My child bought it</td>
<td>1.</td>
<td>2.</td>
<td>No</td>
<td>8.</td>
</tr>
<tr>
<td>I received it from my family or neighbor</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>It was given to me as a present</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>Other women use it</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>It is the best for my infant's health</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>The brand is the cheapest</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>I used it previously</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>I saw it on a T.V. advertisement</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>Medical staff recommended it</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
<tr>
<td>Store owner/pharmacist recommended it</td>
<td>1.</td>
<td>Yes</td>
<td>2.</td>
<td>No</td>
</tr>
</tbody>
</table>

Now, please show me the bottle or utensil that you usually use to prepare the baby's meal. The last time, how much fresh milk do you usually add?

(Interviewer: estimate the average amount of milk that the mother uses)

<table>
<thead>
<tr>
<th>Amount</th>
<th>Yes</th>
<th>No</th>
<th>She doesn't use milk</th>
<th>Doesn't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>How many times do you give the baby milk during the night? (Including milk given with cereal)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20-21</td>
<td>Number of standard tablespoons</td>
<td>77. She doesn't know/remember</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-21</td>
<td>Number of standard teaspoons</td>
<td>88. She doesn't use milk powder/not relevant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>(Interviewer: record the amount in tablespoons or teaspoons. Don't use both possibilities. Coder: code the amount in teaspoons)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>22</th>
<th>Do you give the baby cereal? If yes, does he always receive the same type or does she give him more than one type?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Doesn't receive cereal</td>
</tr>
<tr>
<td>2</td>
<td>Yes, receives one type</td>
</tr>
<tr>
<td>3</td>
<td>Yes, receives more than one type</td>
</tr>
<tr>
<td>(Interviewer: check if the cereal is mixed with milk or not. If it is mixed with milk, add the amount to the amount of milk from a bottle or glass.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>23</th>
<th>Did you or do you receive advice concerning the preparation of the bottle?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Doesn't receive</td>
</tr>
<tr>
<td>1</td>
<td>Doesn't need advice, she has previous experience.</td>
</tr>
<tr>
<td>2</td>
<td>Received advice from Tipat Chalav people in the area</td>
</tr>
<tr>
<td>3</td>
<td>Received advice from a private doctor</td>
</tr>
<tr>
<td>4</td>
<td>Received advice from the hospital</td>
</tr>
<tr>
<td>(Interviewer, record the first response that the mother gives with a Roman Numeral I, second II, Coder: code the first response in column 23, second in column 24).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25</th>
<th>Does the child drink milk prepared more than two hours earlier that has been out of the refrigerator?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Not relevant</td>
</tr>
<tr>
<td>9</td>
<td>Doesn't know/remember</td>
</tr>
</tbody>
</table>
How do you prepare the bottle before use? (Any bottle, for milk or another drink)
(Code the highest category; for example, boiling and washing = 1)
1. Boils
2. Washes with soap and water
3. Washes with water only (with or without a brush)
4. Doesn’t wash
8. Not relevant
9. Doesn’t know/remember

How do you prepare the nipple of the bottle?
1. Boils always
2. Washes with soap and water
3. Washes with water only (with or without a brush)
4. Doesn’t wash
5. Boils sometimes
8. Not relevant
9. Doesn’t know/remember

Do you boil the water to prepare the milk (from powder)?
1. Yes
2. No
8. Not relevant
9. Doesn’t know/remember

MOTHERS WHO DO NOT BREASTFEED

How old was the infant when you stopped breastfeeding?
__________ in weeks (50-53)
__________ in months (01-12)
88. Still breastfeeds
99. Does not remember/doesn’t know or never nursed this infant,
or never breastfed
00. Has never breastfed
(Record the two first reasons concerning the mother
if the mother gives only one response code 0 in column 34)
1. The mother got sick
2. Breast problems
3. I didn’t have sufficient milk
4. I became pregnant
5. Medical advice
6. Other: specify:
7. There weren’t any problems with the mother
8. She continues to breastfeed
9. She doesn’t know/remember

Mention problems with the infant:
(Record the two first reasons concerning the infant)
(if the mother gives only one response code 0 in column 34)
1. The infant didn’t want to breastfeed
2. The infant was hospitalized
3. The infant got sick
4. Medical advice
5. It was time the infant grew
6. Other, specify:
7. There weren’t any problems with the infant
8. Still breastfeed
9. Doesn’t know/remember
Here are some other possible reasons why you stopped nursing. Tell me if these reasons also entered your decision.

<table>
<thead>
<tr>
<th>35-36</th>
<th>37-38</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Insufficient milk</td>
</tr>
<tr>
<td>03</td>
<td>It was time to wean the baby</td>
</tr>
<tr>
<td>04</td>
<td>I was told by the hospital staff to stop</td>
</tr>
<tr>
<td>05</td>
<td>The doctor told me to stop</td>
</tr>
<tr>
<td>06</td>
<td>The nurse at Tipat Chalav Clinic told me to stop</td>
</tr>
<tr>
<td>07</td>
<td>Breast and nipple damage</td>
</tr>
<tr>
<td>08</td>
<td>I became sick</td>
</tr>
<tr>
<td>09</td>
<td>The infant became sick</td>
</tr>
<tr>
<td>10</td>
<td>I was hospitalized</td>
</tr>
<tr>
<td>11</td>
<td>The infant was hospitalized</td>
</tr>
<tr>
<td>12</td>
<td>I wanted to become pregnant</td>
</tr>
<tr>
<td>13</td>
<td>Other, specify:</td>
</tr>
<tr>
<td>88</td>
<td>Not relevant</td>
</tr>
<tr>
<td>99</td>
<td>Doesn't remember</td>
</tr>
</tbody>
</table>

(circle the correct reason re: mother)
(If not relevant code 88 in each column)(If she gave less than 4 answers code 00 in the blank column)

Record the number of answers over four in the previous question
0. No other answers 8. Not relevant 9. Doesn't know/remember

<table>
<thead>
<tr>
<th>43</th>
</tr>
</thead>
<tbody>
<tr>
<td>How did you wean the baby off the breast</td>
</tr>
<tr>
<td>1. Suddenly</td>
</tr>
<tr>
<td>2. Gradually with a bottle or other utensil</td>
</tr>
<tr>
<td>3. Sent the infant to stay with relatives</td>
</tr>
<tr>
<td>4. Weaned due to hospitalization</td>
</tr>
<tr>
<td>5. Have not yet weaned</td>
</tr>
<tr>
<td>6. Doesn't know/remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you use pacifier?</td>
</tr>
<tr>
<td>1. yes</td>
</tr>
<tr>
<td>2. no</td>
</tr>
<tr>
<td>3. I used it in the past when the baby was younger</td>
</tr>
<tr>
<td>4. 3+1</td>
</tr>
<tr>
<td>5. 3+2</td>
</tr>
<tr>
<td>6. not relevant</td>
</tr>
<tr>
<td>7. doesn't know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you give the baby tea/juice/water or anything else to drink?</td>
</tr>
<tr>
<td>1. Yes, in a bottle</td>
</tr>
<tr>
<td>2. Yes, in a glass</td>
</tr>
<tr>
<td>3. No</td>
</tr>
<tr>
<td>8. Not relevant</td>
</tr>
</tbody>
</table>
TEMPORARY BREAK IN BREASTFEEDING PRACTICES

BREASTFEEDING AND NON BREASTFEEDING MOTHERS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>If yes, did you try to return to breastfeeding after the break in breastfeeding?</td>
</tr>
<tr>
<td></td>
<td>1. No, I didn't try to return to breastfeeding after a break</td>
</tr>
<tr>
<td></td>
<td>2. Yes, I tried for sometime and stopped (I didn't succeed)</td>
</tr>
<tr>
<td></td>
<td>3. Yes, I tried and succeeded</td>
</tr>
<tr>
<td></td>
<td>9. Doesn't know/remember</td>
</tr>
</tbody>
</table>

If yes ask:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>Why did you try to return to breastfeeding? (Record the first answer that she mentions)</td>
</tr>
<tr>
<td></td>
<td>1. It's good for the baby's health</td>
</tr>
<tr>
<td></td>
<td>2. It's comfortable, easy</td>
</tr>
<tr>
<td></td>
<td>3. I breastfeed with previous children</td>
</tr>
<tr>
<td></td>
<td>4. In my family, we breastfeed</td>
</tr>
<tr>
<td></td>
<td>5. Everyone does it</td>
</tr>
<tr>
<td></td>
<td>6. In order to prevent another pregnancy</td>
</tr>
<tr>
<td></td>
<td>7. Other, specify:</td>
</tr>
<tr>
<td></td>
<td>8. Not relevant</td>
</tr>
<tr>
<td></td>
<td>9. I don't know/remember</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>49-50</td>
<td>How long did you stop breastfeeding? list in days</td>
</tr>
<tr>
<td></td>
<td>88. Didn't stop</td>
</tr>
<tr>
<td>99. Doesn't remember</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>How did you keep the milk flowing?</td>
</tr>
<tr>
<td></td>
<td>1. I extracted the milk myself</td>
</tr>
<tr>
<td></td>
<td>2. I didn't do anything</td>
</tr>
<tr>
<td></td>
<td>3. I nursed another baby</td>
</tr>
<tr>
<td></td>
<td>4. Other, specify:</td>
</tr>
<tr>
<td></td>
<td>8. Not relevant</td>
</tr>
<tr>
<td></td>
<td>9. Doesn't know/remember</td>
</tr>
</tbody>
</table>
If she stopped and didn't succeed a second time ask:

What was the principal reason for the decision? (List the reasons the woman gives in order I, II, III ...)

1. The infant didn't want to be nursed
2. The infant was hospitalized
3. The infant was sick
4. Medical recommendation
5. It is time/the baby grew
8. Not relevant
9. Doesn't know/doesn't remember

\textbf{WEANING FROM THE BOTTLE}

At what age do you plan to stop feeding him from a bottle? in months

55. When the child wants
77. Hasn't yet decided
66. In a little while
88. Not relevant
99. Doesn't remember

\textbf{SUPPLEMENT WITH SOLID FOODS}

Does the infant eat something in addition milk?

1. Yes
2. No
8. Not relevant
9. Doesn't know/remember
66. In a little while  80. Already gave a supplement
77. I haven't yet decided  88. Not relevant
55. When he can eat by himself  99. Doesn't know

If yes, specify:
Which solid food does the child receive, at what age did you first give them to him, and whether he ate the foods yesterday.

(Read the mother the list of foods and state age in months)

<table>
<thead>
<tr>
<th>Type of food</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age when first given (months)</td>
<td>Did he eat the food in the last 24 hours</td>
</tr>
<tr>
<td>Bread, rice; noodles, biscuits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable, vegetable soup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(cooked or fresh)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legumes (lentils, beans chick peas, peas, beans)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Afik&quot;, leben, other milk products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meat (beef, goat, sheep, turkey, chicken fish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fruit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cereal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A' - Record 0 if he doesn't receive this type of food
1-8 the age of the infant in months
9 Doesn't know/remember

B' - Record 8 Not relevant
Was the infant sick in the last 24 hours?
Rodouin Breastfeeding Survey

<table>
<thead>
<tr>
<th>2</th>
<th>Cohort number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>Survey no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 5</td>
<td></td>
</tr>
</tbody>
</table>

Pediatric Morbidity
(Excepting Hospitalization)

<table>
<thead>
<tr>
<th>6</th>
<th>Record No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Has your child been very sick?
1. yes 2. no. 3. yes, was hospitalized (refer to Section 1)
If answer is no, pass on to next section (Anthropometric Measurements).
If answer is yes ask the mother to state illness one by one while write details of illnesses at home on this form and hospitalization on the special form with the aid of the list of illnesses on the following page.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>13-14</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>17-18</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>21-22</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>25-26</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>29-30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>33-34</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Was the infant sick during the last week?

A
What illness did the infant have?

B
Whom did you turn to?

(A) Refer to the list of illnesses on attached page,

(B) Record age in months

In the event that the child was ill during the first month, code according to weeks: 50. one week old 51. 2 weeks old, etc.

(C) 1. Clinic 2. Private doctor 3. Clinic and doctor 4. Hospital, but not hospitalized (e.g. emergency room)

8. Leave blank if the infant was not sick

9. None of the above.
Anthropometric Measurements of Infant

(The measurements may be taken at any time during the interview considered suitable by the interviewer)

<table>
<thead>
<tr>
<th>Weight of infant</th>
<th>grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of infant</td>
<td>cm</td>
</tr>
<tr>
<td>Head circumference</td>
<td>cm</td>
</tr>
<tr>
<td>Skin fold (arm)</td>
<td>mm</td>
</tr>
<tr>
<td>Skin fold back</td>
<td>mm</td>
</tr>
</tbody>
</table>

Name of person taking measurements

(Code: Please compute and code average of the two measurements of each variable. Round the average down to 49/100, and round up if ≥ 50/100).

Interviewer: Please record what the infant was wearing during the weighing by circling the following possibilities. If the clothing is not listed, specify the clothing:

Coder: Deduct the weight of clothing from the weight of the infant as follows:

1. long pants 60 grams
2. shirt 45 grams
3. long overalls 110 grams
4. undershirt
5. underpants
Cohort No. 1
Survey No. 2-5
Record No. 6-7

SOCIAL ENVIRONMENT

Does your infant wear diapers or panties?
1. diapers
2. pants
3. both
4. cottons
5. nothing

(ask about the infant born before the last one and remember his name from the last section):

How old is he? ______ months ______ years.
Circle: 01-60 Age in months (until 5 years old)
61 Older than 5 years
88 She has no other children, this is the first
99 She doesn't know/doesn't remember
**USE OF TIPAT CHALAV AND IMMUNIZATION**

Do you take your children to Tipat Chalav for immunization?

1. yes  2. no  8. this is her first child  9. doesn't know/remember

Have you taken your youngest child to Tipat Chalav?

1. yes  2. no  3. not yet  9. doesn't know/remember

(If yes, ask the responder to show you her card from Tipat Chalav, and mark down the following details.)

<table>
<thead>
<tr>
<th>No. visit</th>
<th>Date of visit</th>
<th>Reason for visit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Immunization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polio</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DTP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Follow up</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other: specify</td>
</tr>
</tbody>
</table>

- Polio: Yes No
- DTP: Yes No
- Follow up: Yes No
- Other: specify

"TIPAT CHALAV" = Mother & Baby Well Clinics.
if yes, what did she say?
0. Addition of drink only
1. Encouraged breastfeeding
2. Use of milk powder/other milk
3. 1 + 2
4. Addition of solid food
5. 1 + 4
6. 2 + 4
8. She doesn't visit Tipat Chalav/didn't receive advise
9. She doesn't know/remember

Does the immunization mobile unit visit you?
B. Doesn't come to visit
1. Yes, came to see older children
   If yes, did they see this baby
2. Yes, came to see this baby
3. Yes, came to see this baby and other children
4. He hasn't come to visit this child
9. Doesn't know/doesn't remember
   (if yes, ask the responder to show you the immunization and record the details).

<table>
<thead>
<tr>
<th>Visit No.</th>
<th>date of visit</th>
<th>reason for visit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>immunization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>polio</td>
</tr>
<tr>
<td></td>
<td></td>
<td>yes  no</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DTP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>yes  no</td>
</tr>
<tr>
<td></td>
<td></td>
<td>follow up visit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Total number of visits by immunization mobile unit (of this baby)

8. The mobile unit didn't visit this baby
9. Couldn't find the card.

Total number of immunizations against polio

8. Didn't receive this type of immunization
9. The mobile unit didn't visit this baby
9. Couldn't find the cards.

Total number of immunizations against D.T.P.
8. Didn't receive this type of immunization
8. The mobile unit didn't visit this baby
8. Couldn't find the cards.

TIES WITH THE HUSBAND'S FAMILY

Are your husband's parents alive?
1. yes, his father
2. yes, his mother
3. yes, both of them
4. neither of them are alive

(if the answer is yes to any of the above possibilities continue on the next question. If the answer is no, 4, skip to column 29).

Do your husband's parents or one of them live with you in the same settlement?
1. yes, in the same living quarters in the same settlement
2. yes, in separate living quarters in the same settlement
3. yes, in the same settlement with one of the brothers/relatives
4. no, in another settlement, alone
5. no, in another settlement with one of the brothers/relatives
6. not relevant, neither of them are living

Does either or both your husband's parents eat with you everyday?
1. yes
2. no
6. they live with another brother
7. they live in another region
8. Neither of them are alive
9. Doesn't know/remember

Do you live with the subtribe of your husband?
1. yes
2. no
9. doesn't know/remember

Does your husband have any married brothers?

Do they live in your neighborhood?
1. yes, they live in the neighborhood
2. yes, they live far away
3. yes, some in the neighborhood, some far away
5. He doesn't have any married brothers

Do you have sisters-in-law? Do you see them everyday?
1. yes, she sees them everyday
2. yes, she sees them sometimes or infrequently
3. yes, some yes and some no
8. She doesn't have any sisters-in-law
HUSBAND'S WORK

Does your husband work for wages?
1. Yes
2. No, he works in agriculture or tends his flock
3. No, he doesn't work
8. She doesn't have a husband
9. She doesn't know
If answered 2 or 3 ask:

If no, how long ago did he work for wages?
____________________ months ago list: 01-12 by months
20. More than a year ago
30. More than several years ago
70. Doesn't have a husband
88. Works outside for wages
90. Doesn't know/remember

Did he work for wages everyday of the month except sabbath and holidays?
1. Yes
2. No
8. He doesn't work for wages
9. Doesn't know/remember

What work does he do? (wage work)
1. in town
2. in a factory
3. for a company
4. independent
5. for a public institution
6. daily wages
7. agricultural worker
8. he doesn't work for wages
Blank - Doesn't have a husband
9. doesn't know/remember
0. doesn't work at all

What does he do at his work? (any work, for wages or not for wages)
(Try diplomatically to find out from the interviewee details about the husband's work)
____________________ See coding instructions in Appendix
"List of Occupations"

How long has he worked at his present place of employment? (wage work)
1. less than 6 months
2. 6-12 months
3. 1-12 years
6. more than 5 years
8. doesn't work for wages
9. doesn't know
<table>
<thead>
<tr>
<th></th>
<th>What does your father-in-law do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>1. works in his field or pasture</td>
</tr>
<tr>
<td></td>
<td>2. works for wages</td>
</tr>
<tr>
<td></td>
<td>4. independent</td>
</tr>
<tr>
<td></td>
<td>8. doesn't work at all</td>
</tr>
<tr>
<td></td>
<td>9. doesn't know/remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Did your husband study in school?</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>1. no (if answer is no, skip to column 72)</td>
</tr>
<tr>
<td></td>
<td>if yes, how many years did he study?</td>
</tr>
<tr>
<td></td>
<td>2. 1-4</td>
</tr>
<tr>
<td></td>
<td>3. 5-8</td>
</tr>
<tr>
<td></td>
<td>4. 9-12</td>
</tr>
<tr>
<td></td>
<td>5. 13</td>
</tr>
<tr>
<td></td>
<td>6. 14</td>
</tr>
<tr>
<td></td>
<td>7. 15</td>
</tr>
<tr>
<td></td>
<td>8. 16+</td>
</tr>
<tr>
<td></td>
<td>9. Doesn't know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Did you study at school?</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>1. no</td>
</tr>
<tr>
<td></td>
<td>if yes, how many years did you study?</td>
</tr>
<tr>
<td></td>
<td>2. 1-4</td>
</tr>
<tr>
<td></td>
<td>3. 5-8</td>
</tr>
<tr>
<td></td>
<td>4. 9-12</td>
</tr>
<tr>
<td></td>
<td>5. 13</td>
</tr>
<tr>
<td></td>
<td>6. 14</td>
</tr>
<tr>
<td></td>
<td>7. 15</td>
</tr>
<tr>
<td></td>
<td>8. 16+</td>
</tr>
<tr>
<td></td>
<td>9. Doesn't know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Are you insured by Kupat Holin?</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>1. yes</td>
</tr>
<tr>
<td></td>
<td>2. no</td>
</tr>
<tr>
<td></td>
<td>9. doesn't know</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>51</td>
</tr>
</tbody>
</table>
**BEDOUIN BREASTFEEDING SURVEY**

<table>
<thead>
<tr>
<th>1</th>
<th>Cohort No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Survey No</td>
</tr>
<tr>
<td>3</td>
<td>PHYSICAL ENVIRONMENT</td>
</tr>
<tr>
<td>4</td>
<td>LIVING ENVIRONMENT</td>
</tr>
<tr>
<td>5</td>
<td>Record No.</td>
</tr>
<tr>
<td>7</td>
<td>The interviewer should examine the floor and say from what it is made: 1. floor tiles 2. cement 3. earth</td>
</tr>
<tr>
<td>8</td>
<td>When did your husband's family move to live in this place? 1. Less than one year ago 2. Less than 1-3 years ago 3. Less than 4-6 years ago 4. Less than 7-9 years ago 5. 1-20 years ago 6. More than 20 years ago 7. He always lives in this place 8. Does not know/remember</td>
</tr>
<tr>
<td>9</td>
<td>How often does your husband's family move his tent from place to place? 1. We don't move the tent at all 2. Every 6 months 3. Each year 4. Every few years 5. Doesn't know/remember 6. Depends on the husband's place of work 7. Other</td>
</tr>
</tbody>
</table>

(The interviewer should examine the floor and say from what it is made.)
Have you moved to another place since the infant's birth?
1. The family moved to another region once
2. The family moved to another region more than once
8. We stayed in the same place
9. Does not know

WATER SOURCE AND STORAGE

From where do you get your water for use for home consumption during the year?

<table>
<thead>
<tr>
<th>Water Source</th>
<th>Use of source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Yes</td>
</tr>
<tr>
<td>Well</td>
<td></td>
</tr>
<tr>
<td>Cistern filled with rain water</td>
<td></td>
</tr>
<tr>
<td>Cistern filled with water from central water pipe by tank (Outside for water pipe general use)</td>
<td></td>
</tr>
<tr>
<td>Water tap (Running water in the yard)</td>
<td></td>
</tr>
<tr>
<td>Tap (Running water)</td>
<td></td>
</tr>
</tbody>
</table>

How often do you bring water to your family?
1. every day
2. once every 2-3 days
3. once every 4-6 days
4. once a week
5. once every 2 weeks
6. once a month
8. tap with running water in the house
9. doesn't know/remember
How do you store your water?
1. Small gerry cans
2. Metal or plastic barrels
3. Large water tanks
8. Tap (running water) in the house
9. Doesn’t know/remember.

Is your house connected to electricity?
1. No
2. Yes to generator
3. To an electric cable

What do you cook on?
1. On an open fire
2. On a primus stove/primus and open fire
3. On an electric or gas oven/oven and primus/oven and open fire/oven and primus and open fire
9. Doesn’t know/remember
Now I am going to read through a list of possible furniture and I would like you to tell me if you have these items in your home.

(Interviewer, try to obtain this information from observing the furniture during the interview)

<table>
<thead>
<tr>
<th>Name of article</th>
<th>Found in home</th>
<th>9* Doesn't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double bed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child's bed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cradle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cupboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall pictures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mattresses, carpets, pillows</td>
<td>Yes No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of article</th>
<th>Found in home</th>
<th>9* Doesn't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Have you ever seen on the television or heard on the radio, an advertisement on the use of milk powder?

1. yes 2. no 8. doesn't have a T.V. or radio 9. doesn't know/remember
MEANS OF TRANSPORTATION

Does your husband have any means of transportation?
1. No  2. Yes, he owns the car himself
3. Yes, with one or more partners
4. Yes, owns more than one vehicle
5. Yes, owns more than one vehicle with partners

THE YARD

(Try to initiate a discussion of the different roles of the mother in the house and surroundings. Explain that you are interested in the mother’s burden in addition to the care of the baby. Ask:

Is it hard to care for the baby? Yes  No  She doesn’t know.

Do they expect you to do many extra jobs in the house or surroundings? Yes  No  She doesn’t know

Do you care for the animals in the yard? Yes  No, she doesn’t have animals

Record the animals present in the yard. (If you cannot see the yard and the woman is not cooperative – record 9)

Chickens/ turkeys/ ducks/ geese/ rabbits (eggs and meat)

8. Not present
   1. Yes, they are present and roam freely
   2. Yes, they are present and are caged
   9. Unknown
8. Not present
1. Yes, they are present and roam freely
2. Yes, they are present and are caged
* 9. Unknown

Cat/dog
8. Not present
1. Yes, they are present and roam freely
2. Yes, they are present and are caged
* 9. Unknown

Do you also take care of the flock? If not, who does? (Specify)
1. There is a flock
2. There is no flock
9. Unknown/ there is no reaction

Who usually cares for the flock?
1. The interviewee
2. The children
3. The mother and children
4. The husband
5. The husband and children
6. A hired shepherd
7. A relative
8. There is no flock
9. Unknown/ there is no reaction

How large is the flock? (Try to obtain this information cautiously)
For instance: Is it hard work to care for the flock?
Do you take the flock out to pasture daily?
1. less than 50 head
2. more than 50 head
8. there is no flock
9. unknown/ no reaction
Did you sow wheat or barley this year? (If yes, was it a good harvest and enough for all your needs)

0. They did not sow this year 4. For sale
1. For the needs of the house, for baking 5. They do not work fields
2. For the animals, for pasture, for storage 6. Doesn't know/remember

SOURCE OF SUPPLIES

Who does the shopping in the market?

1. the husband 3. 1 + 2
2. the interviewee 5. 1 + 4
4. relative or neighbor 6. 2 + 4
8. they don't buy in the market 7. 3 + 4
9. doesn't know/remember

How often do you shop in the market?

1. two or more times a week 5. as needed/when there is transportation
2. once a week 8. doesn't shop in the market
3. once every two weeks 9. doesn't know/remember
4. once a month
Do you do your shopping in a local store? If yes, who usually does the shopping?

1. the husband 3. 1 + 2
2. the interviewee 5. 1 + 4
4. the interviewee with the help of the children 6. 2 + 4
8. They don't buy in a local store 7. 3 + 4
9. doesn't know/remember 0. There is no local store

What do you buy from the local store?

1. milk, milk powder 3. 1 + 2
2. fruits and vegetables 5. 1 + 4
4. sugar, flour, biscuits, etc. 6. 2 + 4
8. They don't buy in a local store 7. 3 + 4
9. doesn't know/remember 0. There is no local store

Do you buy from vendors?

1. yes 2. vendors don't come here 8. doesn't buy from vendors
9. doesn't know/remember

Do you buy from any other place?

1. yes, in the area in which they live 3. 1 + 2
2. Yes, outside of the region they live in, in Jewish settlements 5. 1 + 4
4. Yes, from Gaza or the West Bank 6. 2 + 4
8. They don't buy from another area 7. 3 + 4
9. Doesn't know/remember

COMMON FOODS OF THE FAMILY

How often do you eat meat?

1. less than once a week 4. infrequently, holidays or celebrations
2. once a week 5. 1 + 4
3. more than once a week 1. doesn't know/remember

What type of meat do you eat?

1. sheep or goat 3. 1 + 2
2. poultry, turkey, fish 5. 1 + 4
4. fresh or frozen meat 6. 2 + 4
8. doesn't eat meat 7. 3 + 4
9. doesn't know/remember
Do you cook and eat meat that was bought in a shop? (Which you did not
slaughter)
1. yes 3. No 5. doesn't eat meat 9. doesn't know/remember
2. sometimes

What type of bread do you eat?
1. bread baked or "saaj" 3. 1 + 2
2. pitta baked in an oven
with yeast 5. 1 + 4
4. bread bought in a shop. 7. 3 + 4
8. doesn't eat bread
9. doesn't know/remember

Do you cook carrots in your vegetable soup?
1. Yes 3. No 8. Doesn't prepare vegetable soup
2. Yes, sometimes 9. Doesn't know/remember

Do you prepare "afig" in the spring?
1. Yes 2. No
If no, do you prepare them at any other time? 3. Yes, sometimes
8. Not at all 9. Doesn't know/remember

Do you buy oranges during the winter?

Do you eat in your house one of the following foods?
Sour cream, eshel (similar to yogurt), soft white cheese.

APPEARANCE OF THE INTERVIEWEE

Do you wear a traditional "chuzam" belt? 1. yes 2. no
8. she doesn't have that type
9. doesn't know/remember

When you are in the house, do you sometimes wear a dress
without a "tobe"? (Bedouin dress)
1. yes 2. no 8. she doesn't have a western-
9. doesn't know/remember

Do you wear an "abia" or "gina" when you go out to visit? (headcovering)
1. yes 2. no 8. she doesn't have the head covering
9. she doesn't know/remember

Do you have a handbag? (gashdan)
1. yes 2. no 9. doesn't know/remember

When does your husband wear a kaffia? (Arab headress)
1. all the time 8. never
2. at home 9. doesn't know/remember
3. on holidays
4. only in the winter when it is cold

Do you sleep next to your baby? On the mattress?
1. yes 2. no 8. Sleeps in a bed/ not relevant
If no, specify where your infant sleeps
3. in a cradle
4. in a child's bed
9. doesn't know/remember
### MEASURE OF INTERVIEWEE'S INDEPENDENCE

<table>
<thead>
<tr>
<th>61</th>
<th>When did you last go to Beer Sheva?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>this week</td>
</tr>
<tr>
<td>2.</td>
<td>last week</td>
</tr>
<tr>
<td>3.</td>
<td>last month</td>
</tr>
<tr>
<td>4.</td>
<td>two months ago</td>
</tr>
<tr>
<td>5.</td>
<td>3 months ago</td>
</tr>
<tr>
<td>6.</td>
<td>4 months ago</td>
</tr>
<tr>
<td>7.</td>
<td>I have not been there since the child was born</td>
</tr>
<tr>
<td>8.</td>
<td>she never goes there</td>
</tr>
<tr>
<td>9.</td>
<td>doesn't know/ remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>62</th>
<th>Do you go to the market?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>no</td>
</tr>
<tr>
<td>2.</td>
<td>this week</td>
</tr>
<tr>
<td>3.</td>
<td>last week</td>
</tr>
<tr>
<td>4.</td>
<td>during last month</td>
</tr>
<tr>
<td>5.</td>
<td>two months ago</td>
</tr>
<tr>
<td>6.</td>
<td>three months ago</td>
</tr>
<tr>
<td>7.</td>
<td>four or more months ago</td>
</tr>
<tr>
<td>8.</td>
<td>have not been there since my child was born</td>
</tr>
<tr>
<td>9.</td>
<td>doesn't know/ remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>63</th>
<th>Do you collect the national insurance for your children?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>yes I do</td>
</tr>
<tr>
<td>2.</td>
<td>yes, with other women</td>
</tr>
<tr>
<td>4.</td>
<td>no, my husband collects the money/ the money goes to the bank</td>
</tr>
<tr>
<td>8.</td>
<td>they don't collect insurance money/ didn't receive lately</td>
</tr>
<tr>
<td>9.</td>
<td>doesn't know/ remember</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>64</th>
<th>Do you visit the doctor or the hospital alone or with somebody else?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>alone</td>
</tr>
<tr>
<td>2.</td>
<td>with other women</td>
</tr>
<tr>
<td>4.</td>
<td>with my husband</td>
</tr>
<tr>
<td>8.</td>
<td>doesn't visit a doctor</td>
</tr>
<tr>
<td>9.</td>
<td>doesn't know/ remember</td>
</tr>
</tbody>
</table>
APPENDIX 3 FIGURES FROM ARTICLE BY DAGAN, SOFER, KLISH, HUNDT, SALTZ, & MOSES

GROWTH AND NUTRITIONAL STATUS OF BEDOUIN INFANTS IN THE NEGEV DESERT ISRAEL: EVIDENCE FOR MARKED STUNTING IN THE PRESENCE OF ONLY MILD MALNUTRITION

AMERICAN JOURNAL OF CLINICAL NUTRITION 38. NOVEMBER 1983 PP747-756