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Alternatives to the face-to-face consultation in general practice; focused ethnographic case study

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Abstract

Background

NHS policy encourages general practices to introduce alternatives to the face-to-face consultation, such as telephone, email, e-consultation systems or internet video. Most general practices have been slow to adopt these, citing concerns about workload. This project builds on previous research by focusing on the experiences of patients and practitioners who have used one or more of these alternatives to the face-to-face consultation.

Aim

To understand how, under what conditions, for which patients, and in what ways, alternatives to face-to-face consultations present benefits and challenges to patients and practitioners in general practice

Design and Setting

Focused ethnographic case studies in eight UK general practices.

Method

Non-participant observation, informal conversations with staff, semi-structured interviews with staff and patients. Practice documents and protocols were reviewed. Data were analysed through charting and the 'one sheet of paper’ mind-map method to identify the line of argument in each thematic report.

Results

Case study practices had different rationales for offering alternatives to the face-to-face consultation. Beliefs varied about which patients and health issues were suitable. Co-workers were often unaware of each other’s practice, for example practice policies for use of email with patients were not known about or followed. Patients reported benefits including convenience and access. Staff and some patients regarded the face-to-face consultation as the ideal.

Conclusion

Experience of implementing alternatives to the face-to-face consultation suggests that changes in patient access and staff workload may be both modest and gradual. Practices planning to implement them should consider carefully their reasons for doing so and involve the whole practice team.
Keywords
Remote consultation, Family Practice, general practice, electronic mail, telemedicine, focussed ethnography, qualitative research, workload, communication, telephone, internet

How this fits in

- What was previously known: enthusiasts have led the introduction of alternatives to the face-to-face consultation in general practice though uptake has been patchy and practices have concerns about being inundated by patients. Patients like them and find them convenient.

- What our research adds: by conducting observations as well as interviews with all staff groups and patients who have used an alternative to the face-to-face consultation we have obtained insights into the varied rationale for their introduction and expanded the evidence on how they work in practices with recent experience of trying to implement them.

- Relevance to clinicians: there is an expectation that practices will 'go digital' to help manage demand and we suggest that any decision should be a considered one, in particular thinking about the rationale for introduction, what the practice hopes to gain, and whether there is evidence that alternative consultation forms will achieve these aims.
Introduction

There is international interest in the potential role of different forms of communication technology to provide an alternative to the face-to-face consultation in healthcare, with several countries such as Denmark and the U.S routinely offering these in primary care settings.(1-3) In the United Kingdom (UK) policymakers have suggested that alternatives such as telephone, email or internet video used in the general practice setting could have a transformative impact; alleviating staff workload and improving patient access. (4, 5)

Despite the push to introduce alternatives to the face-to-face consultation, most general practices have been slow to adopt their use,(6) citing concerns about their potential impact, particularly on workload and the need to ensure patient safety.(7, 8) However some types of consultation are more embedded than others: telephone consultations have been used in general practice for some time, with more known about their use than for email or internet video.

Studies have attempted to assess the impact of alternatives to the face-to-face consultation on consultation numbers and patient satisfaction in primary care settings (9-12) but these studies are of limited number and in some cases are of low quality.(13) Studies about use of email consultation have assessed impact in the context of a patient portal that offers several functions e.g. appointment booking and access to medical records (14, 15) making it difficult to draw conclusions about the impact of the alternative to the face-to-face consultation alone. Recent years have seen a plethora of small and local pilot projects and commercial initiatives around specific systems (16, 17), which proliferate in an environment of patchy and inconclusive evidence.

Patients, practice staff and policymakers may have different aims in encouraging alternatives to face-to-face consultations. However, it is not always clear which hypotheses underpin the mechanisms through which alternative methods of consultation might lead to benefits.(8, 18-20) The ‘Alt-con’ project explores these issues and builds on previous research (7, 21, 22) by focusing on the experiences, rather than the hypothetical perspectives, of patients and practitioners who have used an alternative to the face-to-face consultation. Our aim was to understand how, under what conditions, for which patients, and in what ways, alternatives to face-to-face consultations present benefits and challenges to patients and practitioners in general practice. In particular, we aimed to explore the feasibility and impact of alternatives to face-to-face consultations, from the perspectives of both staff and patients.

Methods
The Alt-con project included an initial scoping survey of general practices(6) and a conceptual review (23) to inform a mixed methods evaluation using a case study design and combining quantitative and qualitative methods. We report here the qualitative element of the study; focused ethnographic case studies conducted in eight general practices in the UK between June 2015 and March 2016. In a team-based focused ethnography, rather than embedding a researcher in a social setting for a lengthy period, more targeted data collection is used to explore the study topics.(24) Our rationale for using this approach is described in detail elsewhere.(25) The case studies were focused on use of alternatives to face-to-face consultations in each practice, which included telephone consultations, email, ‘e-consults’(26, 27) and internet video (e.g. Skype™). We excluded telephone consultations used specifically for triage as a parallel study explores this model of care.(28) The final report for the funder on the wider study will be published in 2018.(29) In this paper we report the findings from the ethnography, in line with standards for reporting qualitative research. (30)

Theoretical approach

We used Weiss ‘theory based evaluation approach.’(31) Weiss distinguishes between ‘program theory’ which specifies the mechanism of change and ‘implementation theory’, which describes how the intervention is carried out. To develop the ‘program theory’ we used a realist approach(32) to understand provision of alternatives to face-to-face consultations in terms of context, how and why alternatives to the face-to-face consultation might lead to benefits and challenges (mechanism) and what matters to patients and practitioners (outcomes). To contribute to an ‘implementation theory’ we explored why the case study practices had decided to offer alternatives to face-to-face consultations to different groups of patients and the experiences of practice staff and the organisation.

Recruitment

We conducted a scoping survey(6) to identify general practices that were currently providing alternatives to face-to-face consultations in the four areas where we sought to recruit practices; Bristol, Oxfordshire, Lothian and Highlands & Islands. We then approached practices identified as having experience of implementing one or more form of alternatives to face-to-face consultations and invited them to participate. We recruited two practices in Scotland and six in England.

Data collection

The fieldwork team consisted of five researchers; a day-to-day lead (HA), a senior lead (SZ) and three ethnographers (HB, AB, TP) working in the field. Each of the field ethnographers was allocated two or three practices and collected data in each practice for up to 8 weeks.
Data were gathered through non-participant observation across the practice in reception areas, communal staff areas and in consultation rooms, through informal conversations and semi-structured interviews with administration staff and general practitioners (GPs) and interviews with patients. Practice documents and protocols on alternatives to the face-to-face consultations were reviewed. Staff participants for interviews were selected by the ethnographers in the field. Staff assisted in identifying patients to invite to be interviewed. We selected patients using purposive sampling, ensuring that patients had different characteristics in relation to age, sex, ethnicity, disability, frequency of attendance and whether or not they had long term health conditions. We specifically included people who were in ‘hard to reach’ groups with regard to accessing general practice e.g. young men, the vulnerably housed and minority ethnic groups. All patients invited to participate in interviews had experience of using an alternative to the face-to-face consultation within the practice.

In preparation for the ethnography, we conducted a conceptual review(23) to identify areas of focus for enquiry. These included the staff members they should consider observing (e.g. focusing on reception staff as well as clinical staff), things they might want to look out for (e.g. dynamics within the clinic between staff members) and where they might look (e.g. areas where team members interact beyond the consultation areas).

The findings were used to devise a case study guide to help ensure consistency of approach between the three field-workers, who held regular phone conferences and meetings throughout the study. Data were collected using anonymised field notes, which were then transferred into a ‘practice summary’ template to facilitate comparisons between the practices.

Interviews were digitally recorded, using an encrypted recorder. The files were transcribed verbatim by a professional transcription service.

**Ethical approval and consent**

Ethical approval was obtained from the NHS Research and Ethics Committee Yorkshire and the Humber-South Yorkshire (15/YH/0135). Consent for participation in semi-structured interviews and the observation of consultations was obtained from primary care staff and participating patients.

**Case study sample**

The eight participating practices had a range of list sizes, from 1,938 to 18,353. One was in a rural area, two in semi-rural areas and five in the inner-city. Practices included some from the most and least deprived areas in terms of deprivation deciles. The participating practices used a varied range of alternatives to the face-to-face consultation (Table 1).
We interviewed 45 staff members. Staff participants included 19 GPs, ten practice managers/deputies, one practice co-ordinator, five practice nurses, one rural health worker, five receptionists, one patient service manager, one practice administrator and an IT manager. We recruited 39 patient and carer participants. See box 1 for participant characteristics.

**Data analysis**

The coding frame was devised by the focused ethnographic team at a face-to-face meeting early in the data collection period. The three ethnographers read and coded interview transcripts and field-notes, condensing the field notes into a summary profile. HA read every transcript and summary profile, checking the coding to ensure reliability and comparability. The transcripts and summary profiles were then entered into NVivo software and a series of NVivo reports were generated, with data from the staff and patient interviews and the field notes integrated. Three team members (HA, SZ and HB) read all of the reports, applying the ‘one-sheet-of-paper’ mind mapping method (33) to identify the line of argument in each thematic report and between the three researchers a condensed summary (‘one sheet of paper’) was produced for each thematic code. We ensured that outliers and negative cases were included in these reports. At this point, the wider study team (including three experienced GPs) were paired with members of the ethnographic team to discuss interpretation of the data (HA&BM, HB&CS, SZ&JC). The core messages were presented at a wider team meeting and the analysis refined through discussion amongst all the team members.

**Results**

We discuss the different rationales practices described for introducing the alternative to the face-to-face consultation, the consequences for the organisation and ways of working, staff and patient experiences, ideas about for whom different types of alternatives to the face-to-face consultation are suitable, the barriers and facilitators to implementation and the outcomes that mattered to the participants.

**Rationale**

Rationale given for introducing an alternative to the face-to-face consultation included:

- The desire to be a modern practice and respond to the expectations of busy, time-poor patients.
- The only way of providing healthcare for patients in remote locations, or with other barriers to attending the practice.
- The acknowledgement that the previous system was broken and unethical in providing a first come, first served system that left patients without appointments that they needed.
- The recognition that reception staff and phone lines were overwhelmed.
- To manage demand and improve efficiency.

Rationales differed between practices, but also within practices; different team members had different perceptions and understandings about the rationale for introducing an alternative to the face-to-face consultation and thus the potential benefit it could bring. In many practices the decision to implement alternative forms of consultation was in the context of a perception of increasing demand and external encouragement from policy to introduce these alternatives. In some practices the decision to implement was triggered by the offer of financial support from the GP Access fund\(^\text{34}\) for specific project support and free pilots: “Our pilot of [e-consultation system] is about to come to an end. We were given this on free trial basis to see what we, and our patients would make of it...” (GP1 – Practice E).

**Practice organisation**

In practices without a formal e-consult system, members of the practice team did not always know whether other staff were, for example, in e-mail contact with their patients. One GP, during an interview, said, “I do the same as ever-y-one else in the practice” (GP1 – Practice C), but accounts from other staff members, and observations by the ethnographer, suggested otherwise. In the case study practices policies about emailing patients were either not in place, not known about or not followed. Contradictions were evident: for example one GP explained that his practice was trying to discourage patients from engaging in two-way email communication with the practice yet he used email with ‘selected’ (trusted) patients, “What we’re envisaging is ... saying, ‘No reply @ X Medical Practice,’ to make it a bit more obvious that you’re not meant to reply” (GP3- Practice F).

Informal discussions and interviews with staff and patients identified different views about the boundaries of a consultation. Patients described using telephone and email for background information, a perspective which was reinforced if the patient was then asked to attend a face-to-face consultation. Staff were inconsistent in recording consultations in the medical record, for example, we observed that not all email consultations were necessarily included in the medical record.

**Staff and patient experiences**
Patients could only express a preference for an alternative to a face-to-face consultation if they were aware that the practice offered it, and this was not always the case. Telephone consultations were well-integrated within the practices we studied but our ethnographic observations suggested that patients rarely asked for a non-face-to-face consultation and receptionists only offered them as a last resort when all appointments were taken. This was consistent with the staff belief ‘that patients prefer to see the doctor’ or, as one of the patients put it, a phone consultation was “better than nothing, but not 100 per cent,” (50 year old female patient – Practice D). Other interviews suggested that, depending on the health issues, some patients preferred to avoid coming to the practice.

Depending on how practices organised the working day, alternatives could offer flexibility to both staff and patients. GPs and nurses were able to choose when and in what order to reply to messages or make phone calls, “I’m able to manage my time a bit better” (GP 2 – Practice H). However, the benefit of flexibility was contrasted with the potential for ‘hidden work’ that stretched the working day. One of the practices had examined whether telephone consultations were briefer and had been surprised to find that this was not the case, “But we’d thought that we might be able to do two things, two, do two telephone consultations in the time it took to do a face-to-face…And that hasn’t proved to be the case” (Practice manager – Practice F). It was observed that on some occasions a decision was made to convert to a face-to-face consultation following use of an alternative such as a telephone consultation and this increased the overall number of consultations with that patient.

For which patients and problems?

In interviews staff and patients concurred that alternatives to face-to-face consultation might be unsuitable if a new health problem was being presented, if the patient was elderly or confused or if the patients was using a complex array of medicines. Clinicians varied in their views about which patients were most likely to be suitable for an alternative consultation, in some cases these decisions were based on age, socio-economic status or ethnic group. One GP commented that telephone consultations were best used with patients who had been born in the UK, “I do notice that generally the patients that are born and raised in the UK, you can process their problems quicker, (GP1 – Practice B). Clinicians felt more confident to gather information via telephone or email if the patient was known to be ‘sensible.’ Continuity mattered to patients too: for certain health problems, it might be important to know the clinician who would be consulted remotely.

Implementation
We observed several barriers and facilitators to implementation. Barriers included difficulties in making patients aware of the option to use an alternative to the face-to-face consultation and subsequently getting them to engage with these alternatives when the face-to-face consultation was still seen as the ‘gold standard’. The lack of understanding within practices about the role of alternatives to the face-to-face consultation and how they might impact on the practice and the staff were barriers to implementation, with unintended consequences such as an increased workload via conversions to the face-to-face consultation, and potential inequitable delivery of care where clinicians were choosing which patients they would consult with this way.

Receptionists and administrators had a key role in ensuring that new consultation methods were taken up by and delivered to patients, but this was not always acknowledged or considered by other members of the practice. Receptionists were not offered training, and practices were reluctant to invest financially in training for any staff members, sometimes delivering ad-hoc or in-house training, or in the case of e-consults training only the GPs. Training was ‘the poor partner, the poor relation’ (staff member, Practice F).

Sometimes factors relating to implementation were addressed up front, for example the use of ‘out of office’ messages to avoid patients having a long wait for a reply to an email. However others were not adequately considered beforehand. In one site where video consultation was used there was a lack of facilities, slow computers and insufficient bandwidth. Video consultations were time consuming to set up and the images were poor. Consequently consultations defaulted to the telephone. Other structural factors such as not having enough telephone lines, or difficulty in recording via the appropriate systems when a consultation occurred, were also barriers to use. More subtle factors included the impact on professional identity, with the core tenet of general practice being the doctor-patient relationship as conducted in the face-to-face consultation; Medicine’s about relationships really and getting to know your patient as a person’ (GP3, Practice C).

The GP access fund(34) was an important facilitator to implementation, since it provided a rationale, financial support and training. In several practices the introduction was driven by one or two ‘innovators’ who got alternatives to the face-to-face consultation off the ground. Other facilitators included the identification of a clear role for alternatives to the face-to-face consultation in some conditions and for certain patients. Patients were positive about the use of alternatives to the face-to-face consultation, and both staff and patients shared an understanding about the limitations of these mediums which made implementation smoother. The flexibility of alternatives to the face-to-face consultation made them easier to ‘slot’ into day-to-day practice. A willingness to adapt their use
once introduced was a key facilitator “We created more telephone slots because there was a demand for it” (Practice Administrator – Practice D).

Outcomes that matter to participants

Some clinicians said that they used email to share and gather information when co-ordinating complex healthcare packages. Nurses explained that they used telephone and email consultations for management of diabetes, for example for discharge checks and medication reviews. For GPs, the main motivation for introducing alternatives was to help them manage their workload. Patients said that they liked the efficiency and convenience offered by alternatives to the face-to-face consultation. Some thought that an email that went directly to the GP avoided involving the receptionist in the decision about whether the patient needed to be seen: “Then the decision whether I need to be seen is his [the GP’s]...if you phoned the receptionist you haven’t got a hope in hell.” (76 year old male patient with comorbidities – Practice F). Beyond these factors, the benefits for patients of alternatives to the face-to-face consultation related to certain elements of the medium, for example email and e-consults offered an asynchronous and text based approach, which was recognised as useful for people who were very anxious, or found face-to-face contact difficult, who had hearing or communication difficulties, and those who ‘struggled to express themselves.’

Discussion

Summary

Practices introduced alternatives to face-to-face consultation for different reasons and often without a clear rationale for how different forms of consultation might help. Implementation was often not well ‘thought through’ in relation to personnel, training or logistical factors and which patients were the intended beneficiaries. The intended outcomes were varied, but practice staff emphasised managing patient access while patients emphasised improved convenience and efficiency. There were clear barriers to the implementation of alternatives including structural factors like insufficient phone lines and poor internet connectivity, and more subtle concerns like impact on the doctor-patient relationship. Overall uptake of alternatives other than telephone consultations was very low, which may have related to the lack of clear rationale or benefit, inconsistent policies in practices and structural barriers to use.

Strengths and limitations
We included a range of urban and rural practices, covering a broad geographical area, and having a wide range of deprivation scores. Each practice used a different combination of alternatives to the face-to-face consultation. We interviewed patients from a wide range of ages, health conditions and socio-economic groups. One weakness is that just one of our case study practices served a community with a high proportion of patients from ethnic minority backgrounds. We did not include practices using ‘doctor first’ telephone triage systems(26, 27, 35) and it is possible that this might have provided more context for how telephone consultation was used.

Using focused ethnography allowed us to see what people do as well as what they say they do. Team based focused ethnography is relatively quick (compared with conventional ethnography) and data can be collected at different sites concurrently. This speed is advantageous in research areas where the policy context is constantly changing. However it does not provide the same depth of exploration as a conventional ethnographic study.

Comparison with existing literature

Policy documents and reports outline a rationale for the introduction of alternatives to the face-to-face consultation, (5, 36, 37) but the aims of improving patient access while also controlling practice workload may be in tension. We have demonstrated that reasons for introduction in practice are varied and sometimes opportunistic rather than carefully considered. Concerns about whether improving access through use of alternatives to the face-to-face consultation will increase rather than decrease workload pressure is evident in much previous research on the use of alternatives such as telephone(38) or email consultations.(7) Our findings suggest that the impact on patterns and volume of workload is complex and reductions in workload cannot be assumed.

As in our study, earlier studies have described GPs selectively choosing which patients to engage with in email consultations.(7) The suitability of email for straightforward and uncomplicated questions or conditions was reported in a Danish study.(21) A conversation analysis of telephone consultation found that patients were less likely to raise additional problems with the GP during a telephone consultation compared to a face-to-face consultation.(39) This fitted with our finding that patients and doctors were in accord that the telephone was good for ‘basic’ problems or follow up, but that a face-to-face consultation was needed for more complex problems.

Implications for research and practice

Technology always has consequences for professional relationships, expectations and patterns of work. Intervention studies should focus on how these aspects of the service are designed. The
feasibility of examining these factors depends on the level of development and current implementation of the technology under investigation.

The low rates of usage of alternative forms of consultation, other than telephone, needs further investigation to understand to what extent this relates to a lack of patient awareness or demand, problems of implementation, or simply slow adaptation leading to increased uptake in time.

In order to evaluate alternatives to face-to-face consultations it is necessary to be clearer about the aims and intended outcomes of the initiative. We have applied our findings reported here and from the wider study(29) in two ways. First we have developed guidance and a website resource for general practices considering the introduction of an alternative to the face-to-face consultation (http://www.bristol.ac.uk/primaryhealthcare/researchthemes/alt-con/resources/).(40) Based on our research it outlines five key areas to consider: why do you want to do this, which type of alternative are you interested in, who is it for and why, how do we get it right, and how will we know if it has worked?

Secondly we have used the findings to develop a framework and recommendations for future evaluation. Treating provision of alternatives to face-to-face consultations as an intervention, we have made recommendations about the target population, appropriate outcome measures, and best methodological approach for evaluation. This framework will be reported elsewhere.(29)

**Conclusion**

Our findings show that there is a lack of clarity about the match between the different rationales for introducing alternatives to the face-to-face consultation and the intended benefits. Clinicians had varying views on what conditions were suitable for this type of consultation, though agreed that they were not suitable for new or complex conditions. Implementation brings considerable challenges, including the potential for changes in the volume and pattern of workload, implications for the roles of practice staff, and for the equitable delivery of care. When introducing an alternative to the face-to-face consultation the potential for unintended consequences should be considered as these may have a bearing on the potential success of these forms of consultation. However, patients and staff could see potential for benefit from use of a range of types of consultation if these difficulties could be overcome.
Funding: This project was funded by the National Institute for Health Research [HS&DR programme] (project number 13/59/08) and hosted by Bristol NHS Clinical Commissioning Group. The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the HS&DR Programme, NIHR, NHS, the Department of Health or Bristol NHS Clinical Commissioning Group.

Ethical approval: Ethical approval was obtained from the NHS Research and Ethics Committee Yorkshire and the Humber-South Yorkshire (15/YH/0135).

Competing interests: The authors declare that they have no competing interests

Acknowledgements: We thank the participating practices and all participants, our PPI contributors and members of the steering group. We thank Keira Pratt-Boyden and Thuy Phan for their research assistance. We thank Dr Angela Martin and Dr Lucy McCloughlan for project support.

References

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Table 1. Description of case study sites
<table>
<thead>
<tr>
<th>Practice reference</th>
<th>Size of Practice</th>
<th>Location of practice</th>
<th>Deprivation categorisation and decile</th>
<th>Alternative to the face-to-face consultation used</th>
<th>No of days spent in observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>18353 registered patients</td>
<td>Inner city</td>
<td>Deprived 3</td>
<td>Telephone consultations, e-consultations,* isolated use of email</td>
<td>25</td>
</tr>
<tr>
<td>B</td>
<td>8954 registered patients</td>
<td>Inner city</td>
<td>Deprived 3</td>
<td>Telephone consultations, isolated use of email</td>
<td>19</td>
</tr>
<tr>
<td>C</td>
<td>15000 registered patients</td>
<td>Inner city</td>
<td>Mixed 4</td>
<td>Telephone consultations, e-consultations,* isolated use of email</td>
<td>18</td>
</tr>
<tr>
<td>D</td>
<td>1938 registered patients</td>
<td>Rural</td>
<td>Mixed 5</td>
<td>Telephone, video</td>
<td>8</td>
</tr>
<tr>
<td>E</td>
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<td>Inner city</td>
<td>Deprived 1</td>
<td>Telephone, e-consultations* isolated use of email</td>
<td>17</td>
</tr>
<tr>
<td>F</td>
<td>13778 registered patients</td>
<td>Semi-rural</td>
<td>Affluent 10</td>
<td>Telephone, email</td>
<td>25</td>
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<tr>
<td>G</td>
<td>13511 registered patients</td>
<td>Semi-rural</td>
<td>Mixed 6</td>
<td>Telephone, email</td>
<td>16</td>
</tr>
<tr>
<td>H</td>
<td>6597 registered patients</td>
<td>Inner city</td>
<td>Affluent 10</td>
<td>Telephone, email</td>
<td>11</td>
</tr>
</tbody>
</table>

* All those using e-consults in our study were piloting the use of the software for free.

a. Practices A-C and F-H based on the Index of Multiple Deprivation rank
b. Practices E and F Measured by Percentage of practice patients living in data zones defined as the 15% most deprived in Scotland (population weighted)
### Staff participants

33 female, 12 male.
Age range 31 to 68.
Time in current role 10 months to 31 years.
Length of time since qualifying 7-40 years.
16 GP partners, 6 salaried GPs.

### Patient participants

13 male, 25 female, 1 transgender.
10 identified as carers.
7 had restricted mobility
30 had a long term condition
6 had a mental health condition (where condition was disclosed)*
15 had multimorbidity (where conditions were disclosed)*
16 were educated to degree level or above.

*it was not compulsory to disclose any long term condition or disability