

Research paper

Exploring issues related to attitudes towards dental care among second-generation ethnic groups

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ABSTRACT

This paper presents an investigation of factors that influence going to the dentist among minority ethnic groups in Glasgow. A qualitative semi-structured research methodology was used. The sample covered the major ethnic groups living in Glasgow. One hundred respondents, both men and women, from Pakistani, Indian, Chinese and white ethnic backgrounds, aged 20–45 years were recruited through a sampling strategy that used the electoral roll, mail-shots and social networks, ensuring a socially and culturally diverse sample. Findings showed that participants viewed themselves as being more pro-active about seeing the dentist than their parents, and appreciated the importance of regular dental check-ups. However, the dentist was still seen by many as a problem solver rather than someone to visit for regular check-ups. Some Pakistani women preferred to see a female dentist,

but if they had to see a male dentist, they preferred an indigenous person. Chinese participants reported communication problems and a preference for dentists from the same ethnic background. Language was an issue for some Pakistani and Indian participants because they had to accompany their elders to the dentist in order to translate. The major barriers to regular dental check-ups are not associated with ethnicity *per se* but relate to cost, time and dental anxiety. These findings demonstrate that acculturation has occurred in relation to attitudes towards visiting the dentist, and that the perceptions found among diverse second-generation minority ethnic groups now fit with current general population trends.

Keywords: dental attendance, ethnicity, oral health, qualitative methods

Introduction

General dental practice has received little attention in the literature on diversity. The British Dental Association (BDA) is aware of this problem (BDA, 2002; Gill and Almond, 2004; Woodcock and Ellman, 2003) and now has its own equality and diversity committee whose most pertinent aims and objectives are (a) to

consider ways of tackling oral health inequalities and (b) to consider any issues pertinent to equality, culture and diversity. Dental services must therefore be relevant, responsive and sensitive to the diversity of the UK population.

Research linking ethnicity and oral health (Beal, 1990; Bedi and Uppal, 1995; Dhawan and Bedi, 2001; Gelbier and Taylor 1985; Kwan and Bedi, 2000;) has brought several issues to the fore, including differences in cultural oral health practices across ethnic groups, access and uptake of dental services, language and communication problems with dentists, the importance of deprivation and the effects of changing lifestyles on oral health. Newton *et al* (2001), in their study of minority ethnic groups in South East London, suggested that although distrust of the dentist was a common perception across all minority ethnic groups, barriers to the use of dental services varied from group to group; for example, only black Caribbean and Chinese/Vietnamese identified anxiety as a significant barrier. People also felt that unnecessary treatments were often performed which then resulted in an increase in costs. Other barriers such as anxiety, cost, language, cultural misunderstanding and concern about hygiene standards were also uncovered (Gibbons *et al*, 2000; Newton *et al*, 2001). Williams and Gelbier (1989) have suggested that reduced compliance could be a result of poor communication or a lack of understanding. This results in members of minority ethnic groups failing to understand or follow instructions and thus getting stereotyped as 'problem patients'.

Very few qualitative studies investigating ethnicity and oral health have been carried out in the UK (Croucher and Sohanpal, 2006; Gibbons *et al*, 2000; Newton *et al*, 2000). Those that have been undertaken have largely concentrated on children or older age groups. The qualitative component of these studies was limited and was restricted by the use of focus groups rather than in-depth interviewing. Croucher and Sohanpal's (2006) London study is of particular interest in that, although it identified cost and anxiety as the main factors inhibiting dental attendance, it contradicted the work of others in the field (Gibbons *et al*, 2000; Newton *et al*, 2000) by finding homogeneity in the opinions of members of diverse minority ethnic groups. Croucher and Sohanpal (2006) explained this by stating that the poor socio-economic circumstances of all the subjects in their study was the major common causal factor.

The study reported here focused on second and subsequent generations between the ages of 20 and 45 years, a group that has been largely neglected in previous research both of a qualitative and quantitative nature. This age group was chosen to discover whether respondents felt their beliefs and attitudes were any different from those of their elders because of their exposure to a different culture, and, if so, to understand the reasons for their perceived changes in their attitudes towards oral health. The aim was to explore two main areas: (1) the concepts that people from different minority ethnic groups have about the

salience and timing of dental care and (2) their perceived barriers to dental care. The University of Glasgow Ethics Committee for Non-clinical Research Involving Human Subjects issued a favourable opinion about the study.

Method

Study design

A phenomenological research methodology was adopted because the main focus of the study was on the meanings respondents gave to their activities. The aim of the analysis was to 'establish the cognitive universe or cosmology' (Silverman, 1985, p.173) in respondents' thoughts about diet and oral health. Qualitative semi-structured interviews (Strauss, 1987; Strauss and Corbin, 1998) were used with men and women from different ethnic groups, to build upon previous work on ethnicity, oral health and diet (Gibbons *et al*, 2000; Newton *et al*, 2001). One hundred respondents from Pakistani, Indian, Chinese and white backgrounds, aged 20–45 years, were interviewed. Seventy-five of the sample had been born in the UK, while the remaining 25 had lived in the UK for a minimum of 20 years. This ensured that respondents from the minority ethnic groups were primarily second generation, and those from the white indigenous sample could be used as a comparison group. Our terminology for *white* corresponds with that of Bhopal (2004); the term *majority population* is also used synonymously for white British.

Sample

A purposeful sampling strategy (Maxwell, 1996; Miles and Huberman, 1994; Patton 1990) was used to ensure that the main ethnic groups living in Glasgow were represented (Umeed, 2000). Electoral rolls of areas in the city where people from minority ethnic groups were concentrated, in conjunction with a name analysis system, formed the principal basis for developing the sample (Ecob and Williams, 1991). All potential respondents were initially sent letters outlining the purpose and scope of the study, including a short screening questionnaire covering basic demographic and household information enabling the selection of appropriate respondents to fit the sampling frame. Interviews were then arranged. The name analysis and use of screening questionnaires had already proved successful in Glasgow (Ecob and Williams, 1991; Mullen, 1993). Little difficulty was experienced with the use of the name analysis method, but there were a few problems with the accuracy of the electoral roll and in accessing respondents in multiple-occupancy

tenement property. Consequently, we also obtained supplementary lists of potential respondents by contacting community organisations utilised by minority ethnic groups (Miles and Huberman, 1994). On the day of the interview, respondents were given an information sheet which explained the scope and purpose of the study and asked if they were willing to sign a consent form. If they were in agreement the interview went ahead. Before the tape recorder was switched on a few demographic characteristics of respondents were collected. All written material for our study was in English.

A single dentist (RC), with considerable experience in multi-ethnic research, carried out the qualitative interviews. As the study concentrated on the second generation, translation skills were not required for 80 respondents, although three interviews were conducted by the interviewer in Punjabi and Urdu, and for 17 interviews within the Chinese community an interpreter was used. Although the interviewer (RC) had qualified as a dentist, this was not disclosed during the course of any interview, his role remaining strictly that of the research assistant.

The interviews

The overall aim was to discover the concepts that people from different minority ethnic groups have

Box 1 DepCat scores

There are seven deprivation scores (DepCat) with DepCat 1 being the most affluent and DepCat 7 being the most deprived. The scores are based on combining the proportion of households with male unemployment, lack of car ownership, overcrowded housing and the head of household being in social class IV or V in relation to each postcode in Scotland (Morris and Carstairs, 1991).

about oral health and how such views may affect their oral health practices. Our specific research questions were to investigate the reasons for ethnic differentials previously observed in oral health (Croucher and Sohanpal, 2006; Gibbons *et al*, 2000; Newton *et al*, 2001; Williams and Gelbier, 1989), identify those factors which inhibit consulting a dentist, and highlight the main areas where change could be implemented. In this article, we present an analysis of respondents' attitudes towards dental attendance and dentists.

Being aware of the different patterns between minority ethnic groups and the general population in relation to both socio-economic position and employment status (Modood and Berthoud, 1997; Williams *et al*, 1998), questions focused on a variety of social

Table 1 Gender by ethnicity

Gender	Ethnicity				Total
	Pakistani	Indian	Chinese	White	
Male	14	9	12	9	44
Female	15	14	16	11	56
Total	29	23	28	20	100

Table 2 DepCat score by ethnicity

DepCat score	Ethnicity				Total
	Pakistani	Indian	Chinese	White	
1–2 Affluent	3	13	3	4	23
3–4 Intermediate	3	3	5	4	15
5 Deprived	7	1	2	1	11
6–7 Very deprived	16	6	18	11	51
Total	29	23	28	20	100

Table 3 Gender by social class

	Non-manual	Manual	Unemployed	Total
Male	30	10	4	44
Female	32	5	19	56
Total	62	15	23	100

indicators: level of education, occupation, employment status, and Carstairs' Deprivation Category (DepCat) (Morris and Carstairs, 1991; see Box 1). The breakdown of the sample can be seen from Tables 1, 2 and 3. The numbers in Table 3 were derived from selected data about respondents occupational titles and job descriptions, and whether they were currently employed or unemployed.

These categories make the research comparable with previous studies of minority ethnic populations (Modood and Berthoud, 1997) and those carried out on the Scottish population (Central Research Unit, 2001). The respondents also accurately reflected the employment experience of minority ethnic groups. Previous writers have argued that social class measures are often deficient in relation to research on ethnic minorities (Smaje 1995; Williams *et al*, 1998). Researchers have also argued that local area deprivation measures are equally important (Chandola 2001; Nazroo 1997). In our study we have followed this lead, giving the deprivation index under each quotation and in Table 2.

Analysis

The two theoretical approaches that guided the analysis were grounded theory (Glaser, 1978; Glaser and Strauss, 1967; Strauss, 1987) and analytic induction (Cressy, 1973; Lindesmith, 1968; Znaniecki, 1934). Hammersley (1990, p.604) maintains that the two approaches are 'attempts to apply the hypothetical-deductive method to ethnography'. The final goal of both grounded theory and analytic induction is the same and this goal can be distinguished from research using statistical methods: 'The claim is not to representativeness but to faultless logic' (Silverman, 1985, p.14).

The semi-structured interviews (Strauss, 1987; Strauss and Corbin, 1998) lasted approximately one hour and were tape recorded. All interviews were transcribed by a secretary who was employed for that purpose, coded and indexed as soon as they were completed. This allowed for important emergent themes in the data to be followed up in the interviews of subsequent respondents (Mullen, 1993; Strauss,

1987). To ensure the validity and reliability of the initial coding frame, a selection of transcribed interviews was coded independently by one of the principal investigators (KM) and the research assistant (RC). High degrees of agreement were achieved. Data were initially analysed using QSR (Qualitative Solutions and Research) NVivo (QSR, 2002), and emergent themes were noted and included in the coding frame (see Dowell *et al*, 1995; Lindesmith, 1968).

Details of the technicalities of the process of transcription and computer coding can be found in Fielding and Lee (1991) and Pfaffenberger (1988). In practice, NVivo was extremely useful in the early stages of the analysis, which involved the production of descriptive material. However, the researchers felt it to be inflexible when they wished to progress from a purely descriptive presentation of the material to the development of an analytic focus. Initial descriptive coding, using NVivo, was carried out jointly by the research assistant (RC) and the principal investigator (KM) to ensure reliability. Subsequent analytic coding, axial and selective (Flick, 2006), was carried out by the principal investigator (KM) using paper transcripts generated by NVivo. In the results section that follows, the subthemes presented are those that emerged from the data and are the respondents' own categorisations.

Results

Importance and frequency of dental attendance

A perceived generational shift was seen to be an important influence on attitudes towards oral health. The older generation in the ethnic minority communities was considered to be less knowledgeable about oral health, as a 45-year-old Chinese respondent, housewife and mother of three children, stated:

R24: 'I think it is the generation, and the Chinese culture, they don't have much knowledge of oral health.'

Interviewer: 'And what do you think is the reason for that?'

R24: 'I feel they pay attention to other things but not oral health.'

Interviewer: 'And the reason behind that?'

R24: 'I think they do not have much education on the subject or knowledge, they don't know that they have to look after their health, or oral health, but now in this generation they know more about oral health.' (DepCat 7)

A 28-year-old male, part-time marketing lecturer, from an Indian background echoed this view:

R1: 'Absolutely, yeah, as an Indian, I think y'know my parents' attitude towards oral health has been pretty relaxed, they weren't as proactive as I am in relation to oral health.' (DepCat 6)

The issues of aesthetics and the importance of good oral health were considered to be more pronounced among this younger generation, compared with their elders, as a 30-year-old female Chinese health development officer stated:

R22: 'Confidence-wise, I know when I had a gap in my tooth I was very conscious of it and I didn't want to smile and things like that. Just the whole appearance ... if you don't have good oral hygiene you would have bad breath and things like that.' (DepCat 6)

Respondents viewed themselves as having a greater awareness of oral health than their parents, and did try to make an effort to visit the dentist. However, even though they were aware of the recommendation that the dentist should be visited every six months, there were many instances of people only going to the dentist when something was wrong. Thus, the dentist was seen more as a problem solver rather than someone to be seen on a regular basis, as reported by a 33-year-old Pakistani male pharmacist:

R3: 'I think a person should visit a dentist maybe at least three times a year, just for a general check-up. And obviously if they are in any kind of pain they should go and see a dentist immediately. But I don't practise it. I should go, but a reason being is the time trying to go with a busy life, so I end up postponing. The only time I go is if I am having problems with my teeth or gums.' (DepCat 6)

Although this was a common tendency across all groups, the white group reported they went more regularly for six-month check-ups, and women tended to make more regular visits to the dentist than men. However, there was also a feeling among some that six-monthly visits were too regular.

Barriers to dental care

Barriers experienced by first-generation members of ethnic minorities when visiting the dentist include those such as language, communication, and cultural awareness, but these did not directly affect most

respondents in our sample. However, other barriers to attending such as expense, time, lifestyle factors and anxiety were of concern. There were difficulties associated with arranging a suitable time in the day when they could get an appointment. As one 32-year-old Chinese male general practitioner (GP) stated:

R89: 'The time, yeah, because you have to make an appointment to see a dentist and not many dental practices are open at the weekend. Week days are impossible for me to go.' (DepCat 2)

The tension between the dentists' and patients' timetables can also be seen in this quotation from another, this time 29-year-old, Chinese male day care officer:

R12: 'Sometimes the dentist that I attend is a very busy dentist and if I want to make an appointment after 5 or 6, sometimes I need to wait a while, but sometimes when I have finished work, I am feeling tired and I don't really want to go anywhere, I just want to get straight home.' (DepCat 2)

Expense was a particular concern, and some respondents preferred to use the community or hospital services, where no fee was charged, even though this took up more of their time. Financial issues were also salient in their discussion of NHS versus private dentistry. There was a general perception that private dentists were more competent, although whether this was based on experience or anecdote was difficult to fully ascertain. Respondents often wished they could have a private dentist but because of cost considerations had to remain with an NHS dentist. As a 41-year-old Pakistani self-employed male with three children said:

R64: 'I have come across a number of dentists that I have visited. They were not as capable as those dentists that only took private patients – they have been double capable than those who are operating on the national health service ... But unfortunately with the state of my teeth it would cost me a fortune to get my teeth fixed.' (DepCat 5)

Cost issues and access were also exacerbated by the perception that there were fewer NHS dentists available. As a 33-year-old Indian female educational project officer with one child stated:

R57: 'Often you find it is a problem with the private and the NHS ... an excellent dentist was recommended to me, but when I went to make an appointment, I was told he is not taking any more patients. So that was a bit of an issue. And then others, unfortunately, that are very good tend to go into private practice. I can't afford to go into private you know.' (DepCat 2)

Additionally, a 35-year-old white male unmarried journalist stated:

R92: 'That is quite a foggy area ... I am aware that there are not many NHS dentists left any more. As soon as they open up you are continually watching news stories about a

thousand people queuing up outside, so I think it is confusing.' (DepCat 6)

Fear of the dentist, dental anxiety and a feeling of 'a lack of control' emerged as an important issue. This stemmed either from the effects of a general fear of pain, or was linked to specific clinical instances described by our respondents. The following was expressed by a 31-year-old single Pakistani male:

R87: 'Number one, I am scared of drills number two, scared of the syringes and number three, scared of having my teeth pulled. These are the only reasons. It just totally freaks me out just seeing the needle. That is why I don't like going because any time that you are getting any tooth work done you have got to get injections so therefore I try to avoid it as much as possible.' (DepCat 6)

Some respondents also mentioned early childhood experiences which had heightened their anxiety about dental treatment. Other respondents were anxious about appropriate sterilisation of equipment.

Communication and the explanation of procedures was an issue for some individuals, particularly regarding the use of dental jargon. Some respondents wished to see more communication between the dentist and patient. This was particularly important as some respondents saw a close link between good communication and lowered anxiety in the dental surgery. However, most respondents felt that their dentist communicated with them satisfactorily and explained treatment to them before carrying out any procedures. As a 37-year-old white single male working part-time said:

R41: 'Yeah, yeah he is very good he is always talking away and explaining what he is doing.' (DepCat 6)

Language problems relating to visits to the dentist were still a problem for the Chinese community. As reported by a Chinese female, married housewife with three children, aged 45 years:

R24: 'It is really only the language barrier as you don't know how to explain to the dentist what the problem is.' (DepCat 7)

For other non-white groups, language was believed by respondents to have been more of an issue for the previous generation, although the current generation occasionally helped in an advocacy role in the dental surgery. A 37-year-old Pakistani male, married GP, stated:

R77: 'I don't think so for myself no, for my mother yes, for her to explain, or if I am not available or my father is not available she is not comfortable with the person that she is seeing and speaking to and he has to try his best to communicate with her ... He has to understand the ethnic diversity and her health beliefs and customs and various other things before she would feel comfortable.' (DepCat 2)

The ethnicity of the dentist was not an issue, except in the case of some minority ethnic women, who preferred to see a female dentist. Interestingly, if they were to see a male dentist, they preferred an indigenous person rather than someone from their own community. One 24-year-old single female Pakistani development worker said:

R36: 'Gender, no, I know it is very stupid, but I would not mind a white male dentist, but I would mind an Asian male dentist, I don't know what the reason is.'

Interviewer: 'There must be a reason behind it.'

R36: 'I don't feel comfortable with Asian guys as there is the cultural factor going on there and you just don't feel comfortable.'

Interviewer: 'Do you think it becomes much more personal if you go to an Asian dentist rather than a white dentist?'

R36: 'Yes, I would say so.' (DepCat 5)

As a 33-year-old Indian woman, married administrator with two children, said:

R72: 'If it was an Asian male I would probably feel a bit uncomfortable, I don't know why. If there was an option you know, otherwise it makes no difference to me, I would go to an Asian male doctor, so this is just a dentist, but if there was a choice then I would pick the white male.'

Interviewer: 'Why would you do that?'

R72: 'Probably just because of my upbringing you know, that I don't know, it must have something to do with the way that I was brought up, like, culturally.' (DepCat 2)

And a quotation from another Pakistani unemployed female aged 34 years:

R74: 'Before I used to go to the dental hospital, there was Asian dentists there. I used to feel a bit awkward, as I am Asian and I don't like anyone Asian looking into my mouth. I think it is me just being stupid.' (DepCat 4)

Issues of professionalism were important to many respondents. A 34-year-old white female, single and self-employed, stated:

R91: 'His attitude was really annoying ... it was an awful experience and he was shaving away parts of my teeth in order to make the one that he done fit. I asked to see a mirror to see what he was doing and he just went ballistic, and I think "you are so old school. If you believe in your work you will let me watch you shave a bit of my good teeth". He was absolutely really quite cheeky and I thought what a wholly unpleasant experience. I just think he hadn't been used to people answering him back.' (DepCat 6)

By contrast, a 30-year-old Indian male accountant assistant, married with two children, said:

R83: 'Very professional. They know what they are doing. They actually play music. They have the radio on as well.'

That is something that they did not do about 20 years ago. It is a slightly more friendly atmosphere, you go in and you have flower plant pots and it is a nice airier room. They have all the new technical stuff and all the high-tech chairs and instruments, they are all friendly. They have their masks on for health and safety as well; that is good to see just like visiting a hospital sort of thing.' (DepCat 2)

In this respondent's mind, along with standard professional issues relating to good health and safety standards and practices, situational elements were also viewed as an important part of a professional approach.

Discussion

Early studies on ethnicity and oral health found a lack of awareness of standard oral health messages (Bedi and Uppal, 1995; Prendergast *et al*, 1997; Williams and Fairpo, 1988), although more recent research is tending to show a greater understanding (Gibbons *et al*, 2000; Newton *et al*, 2000, 2001). In general we discovered that respondents' awareness of the standard dental health message with regard to dental attendance was high. The problem, which is clearly stated in most health belief models, is how to help people follow this through and overcome barriers to dental care. Respondents viewed themselves as being more pro-active in attending the dentist than members of first-generation ethnic minorities, but many still only visited the dentist when symptoms arose.

It is now the case that many of the issues surrounding accessing oral health care among different ethnic groups are general oral health-related issues: such as dental anxiety (Stewart *et al*, 1994; Wardle, 1982), and the personality of the dentist (Bernstein *et al*, 1979). The major barriers to regular dental attendance were not specifically associated with ethnicity but were related to cost (Finch, 1988), time and dental anxiety, as well as a dentist's competence, skill, cleanliness and ability to communicate. Two additional barriers highlighted by Newton *et al* (2001), of distrust of the dentist and fear of unnecessary treatments, did not come through in our study.

Similarities found between ethnic groups highlight the fact that the context of work and family puts a time structure on people's everyday lives, and this explains why oral health behaviours such as regular dental attendance may drop down the list of an individual's priorities. Flexibility in the timing of dental appointments is an important issue.

The results also highlight general problems associated with cost and accessing NHS dentistry. Private dentistry was also perceived as having the edge over NHS treatment. However, care needs to be taken when

drawing conclusions, as this view was often based on anecdotal rather than experiential evidence.

Previous investigations have shown that language can constitute a major barrier to the receipt of dental care (Bedi and Uppal, 1995; Williams and Gelbier, 1989). A study conducted in London among older ethnic groups found language was a particular concern with the Indian, Pakistani, Bangladeshi and Chinese participants (Newton *et al*, 2001). Our study, conducted among second-generation ethnic groups, found that, with the exception of the Chinese community, language was not a direct problem, although some respondents reported having an advocacy/interpreter role in relation to accompanying older relatives to dental surgeries.

Research in dentistry on gender issues of the dentist/patient relationship has been sadly neglected (Humphris and Ling, 2000; Kent and Croucher, 1998). One area of our findings where we did discover differences relating to culture was in some Pakistani women's negative attitudes towards treatment by male dentists from their own community. This was not purely a gender issue but related to cultural factors. Similar findings have been indicated in relation to attitudes towards general medical practitioners (Ahmad *et al*, 1991) but ours is the first study to focus on dentist/patient interaction.

Our study demonstrates the advantages of using the qualitative interview method to understand the complexity of people's reasoning when they come to the decision to consult a dentist. An example is the pressures of work and family cross-cutting minority ethnic affiliation – such a dynamic inter-relationship would not have been uncovered by quantitative research.

The age group, from 20 to 45 years, and the additional entry criterion of having to have lived in the UK for at least 20 years were chosen as there was interest in discovering the beliefs of second-generation migrants, people for whom there may be a tension between the beliefs and attitudes of their elders and those of current social norms.

The care in the selection of our respondents means our findings are generalisable to the other major studies carried out on these, the main minority ethnic groups in the UK (Modood and Berthoud, 1997). They do not, however, directly relate to those parts of dental studies where other minority ethnic groups have been considered, in particular the Caribbean, Bangladeshi, or Vietnamese populations (Bedi and Uppal, 1995; Gibbons *et al*, 2000; Laher, 1990; Prendergast *et al*, 1997; Williams and Fairpo, 1988).

To conclude, our findings demonstrate that acculturation has occurred to a large extent in relation to attitudes towards visiting the dentist, and that the perceptions found among the different second-generation minority ethnic groups now fit with current general-population trends. This is an advance on the recent

work in the east end of London by Croucher and Sohanpal (2006), who although finding homogeneity in views across minority ethnic groups put this down to similar levels of elevated social disadvantage. Our more diverse sample of respondents from another area of the UK indicates that convergence of views may be a more general phenomenon.

Some issues still remain, however, and it is therefore important that we continue to be sensitive to the heterogeneity within ethnic groups. Finally, while we acknowledge that our results are not generalisable to other minority ethnic groups, we propose that the future use of such qualitative methods in this research field will greatly enhance our understanding of how patients view access issues, and enable us to tailor our oral health interventions.

Our central aim should always be to ensure that culturally competent practice in the delivery of dental services is achieved. Health services, including dental services, have to relate to the needs of all sections of the community. The priority is to meet varied individual needs and expectations. This is irrespective of a person's race, heritage, sex, religious or non-religious belief, nationality, family background, age, disability or sexuality.

ACKNOWLEDGEMENTS

This research was funded by the Scottish Executive Health Department Chief Scientist Office, grant number CZH/4/53. We also acknowledge the helpful comments of David Conway on an earlier draft of this article.

REFERENCES

- Ahmad WIU, Kernohan EEM, and Baker MR (1991) Patients' choice of general practitioner: importance of patients' and doctors' sex and ethnicity. *British Journal of General Practice* 41:330–1.
- Beal J (1990) The dental health of black and ethnic minority communities. *Community Dental Health* 7:122.
- Bedi R and Uppal RDK (1995) The oral health of minority ethnic communities in the United Kingdom. *British Dental Journal* 179:421–5.
- Bernstein D, Kleinknecht R and Alexander L (1979) Antecedents of dental fear. *Public Health Dentistry* 39: 113–24.
- Bhopal R (2004) Glossary of terms relating to ethnicity and race: for reflection and debate. *Journal of Epidemiology and Community Health*. 58:441–5.
- British Dental Association (BDA) (2002) *Religious and Cultural Diversity*. www.bda.org/advice/docs/E9.pdf (accessed 29 March 2007).
- Central Research Unit (2001) *Scoping Study for a National Study of Scotland's Minority Ethnic Populations*. Edinburgh: Scottish Executive.
- Chandola T (2001) Ethnic and class differences in health in relation to British South Asians: using the new National Statistics Socio-Economic Classification. *Social Science and Medicine* 52:1285–96.
- Cressey D (1973) *Other People's Money*. New Jersey: Patterson Smith.
- Croucher R and Sohanpal R (2006) Improving access to dental care in East London's ethnic minority groups: community based, qualitative study. *Community Dental Health* 23:95–100.
- Dhawan N and Bedi R (2001) Transcultural oral health care: 6. The oral health of minority ethnic groups in the United Kingdom – a review. *Dental Update*. 28:30–4.
- Dowell J, Huby G and Smith C (1995) *Scottish Consensus Statement on Qualitative Research in Primary Health Care*. Dundee: Tayside Centre for General Practice.
- Ecob R and Williams R (1991) Sampling Asian minorities to assess health and welfare. *Journal of Epidemiology and Community Health* 45:93–101.
- Fielding NG and Lee RM (1991) *Using Computers in Qualitative Research*. London: Sage.
- Finch E (1988) *Barriers to the Receipt of Dental Care*. London: Social and Community Planning.
- Flick U (2006) *Introduction to Qualitative Research*. London: Sage.
- Gelbier S and Taylor WS (1985) Some Asian communities in the UK and their culture. *British Dental Journal* 8:416–18.
- Gibbons DE, Gelbier S and Newton T (2000) *The Oral Health of Minority Groups in Contemporary Britain: a case study in the South Thames Region*. London: GKT Dental Institute, Kings College.
- Gill A and Almond J (2004) Developing diversity. *BDA News* 17:3–12.
- Glaser B (1978) *Theoretical Sensitivity*. Mill Valley: The Sociological Press.
- Glaser B and Strauss AL (1967) *The Discovery of Grounded Theory*. Chicago: Aldine.
- Hammersley M (1990) What's wrong with ethnography? *Sociology* 24:597–615.
- Humphris G and Ling MS (2000) *Behavioural Sciences for Dentistry*. London: Churchill Livingstone.
- Kent G and Croucher R (1998) *Achieving Oral Health: the social context of dental care*. Oxford: Wright.
- Kwan SYL and Bedi R (2000) Transcultural oral health care and the Chinese – an invisible community. *Dental Update* 27:296–9.
- Laher MHE (1990) A comparison between dental caries, gingival health and dental service usage in Bangladeshi and white Caucasian children aged 7, 9, 11, 13 and 15 years residing in an inner city area of London, UK. *Community Dental Health* 7:157–63.
- Lindesmith AR (1968) *Addiction and Opiates*. Chicago: Aldine.
- Maxwell JA (1996) *Qualitative Research Design: an interactive approach*. London: Sage.
- Miles MB and Huberman AM (1994) *Qualitative Data Analysis*. London: Sage.
- Modood MB and Berthoud R (1997) *Ethnic Minorities in Britain*. London: Policy Studies Institute.
- Morris R and Carstairs V (1991) Which deprivation? A comparison of selected deprivation indexes. *Journal of Public Health Medicine* 13:318–26.

- Mullen K (1993) *A Healthy Balance: Glaswegian men talking about health, tobacco and alcohol*. London: Avebury.
- Nazroo J (1997) *The Health of Britain's Ethnic Minorities*. London: Policy Studies Institute.
- Newton JT, Khan FA, Bhavnani V, Gelbier S and Gibbons DE (2000) Self-assessed oral health status of ethnic minority residents of South London. *Community Dental Oral Epidemiology* 28:424–34.
- Newton JT, Thorogood N, Bhavnani V, Gibbons DE and Gelbier S (2001) Barriers to the use of dental services by individuals from minority ethnic communities living in the United Kingdom: findings from focus groups. *Primary Dental Care* 8:154–61.
- Patton MQ (1990) *Qualitative Evaluation and Research Methods*. Newbury Park: Sage.
- Pfaffenberger B (1988) *Microcomputer-application in Qualitative Research*. London: Sage.
- Prendergast MJ, Beal JF and Williams SA (1997) The relationship between deprivation, ethnicity and dental health in 5-year old children in Leeds, UK. *Community Dental Health* 14:18–21.
- Qualitative Solutions and Research (QSR) (2002) *QSR NVivo User Guide*. Victoria: Qualitative Solutions and Research.
- Silverman D (1985) *Qualitative Methodology and Sociology*. Aldershot: Gower.
- Smaje C (1995) *Health Race and Ethnicity*. London: King's Fund Institute.
- Stewart J, Marcus M, Christenson P and Lin W (1994) Comprehensive treatment among dental school patients with high and low dental anxiety. *Journal of Dental Education* 58:697–700.
- Strauss A (1987) *Qualitative Analysis for Social Scientists*. Cambridge: Cambridge University Press.
- Strauss A and Corbin J (1998) *Basics of Qualitative Research: techniques and procedures for developing grounded theory*. London: Sage.
- Umeed I (2000) *Health Needs and Knowledge: self-reported health status of South Asian men in Glasgow*. Glasgow: Greater Glasgow Health Board.
- Wardle J (1982) Fear of dentistry. *British Journal of Medical Psychology* 55:119–26.
- Williams R, Wright W and Hunt K (1998) Social class and health: the puzzling counter-example of British South Asians. *Social Science and Medicine* 47:1277–88.
- Williams SA and Fairpo CG (1988) Cultural variations in oral hygiene practices among infants in an inner city. *Community Dental Health* 5:265–71.
- Williams SA and Gelbier S (1989) Dentists and ethnic minority communities. *British Dental Journal* 166:194–5.
- Woodcock J and Ellman L (2003) Open wide (BDA's equality and diversity committee), Bill watching. *BDA News* 16:30–6.
- Znaniecki F (1934) *The Method of Sociology*. New York: Rinehart.

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Received 15 September 2006

Accepted 20 March 2007

