Attitudes to and perceived use of health care services among Asian and non-Asian patients in Leicester

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SUMMARY. A random sample of 449 Asian patients and 447 non-Asian patients were interviewed at home in their preferred language using a personally administered questionnaire comparing attitudes to and perceived use of health care services in Leicester. The overall response rate was 89.6%. There were differences in the responses of the Asian and non-Asian populations. With respect to communication, language as a barrier appears to be a diminishing problem among Asian patients in Leicester. However, Asian patients reported finding it more difficult to gain access to their general practitioners than non-Asian patients. More Asian than non-Asian patients would have preferred direct access to consultants and most respondents from both populations felt they should be able to request a hospital opinion from their general practitioner. More Asian patients disliked management of illness by telephone than non-Asian patients, the latter feeling that telephone advice could save them a trip to the surgery, or their general practitioner a home visit. However, both groups regarded home visiting as essential. Asian patients disliked deputizing services more than non-Asian patients, and there was some support for 24 hour surgeries, particularly among the Asian population, with doctors working in shifts.

As Asian patients appear to differ from non-Asian patients with respect to attitudes and perceived need for health care services, this type of survey may form the basis for the more rational planning of health care delivery to ethnic minority patients in the future.

Keywords: access to GP; GP utilization; GP services; patient attitude; Asians.

Introduction

THERE has been a considerable amount of work published on different aspects of health care for Asian patients, much of it concentrated on specific and sometimes rare illness[1-3] and in the main it remains descriptive.[4-6] In these days of scarce resources within the National Health Service, there is a need for numerate data to allow the rational provision of health care services.

In the United Kingdom approximately 4% of the population consists of ethnic minority groups which are unequally distributed in geographical terms.[7-9] In Leicester, 22% of the population is of Asian origin[10] and with a birth rate higher than in the non-Asian population[11] the overall proportion of Asian people in Leicester is predicted to increase. It is important, therefore, that health care facilities are sensitive to this large sector of the population.[12,13] As Asian populations differ from non-Asian populations with respect to religion, language and culture, it is likely that attitudes to and expectations of health care services will also differ. The feeling that ethnic minority populations generate an increased workload for general practitioners has been documented[14-16] but only recently has evidence emerged to support this view.[17,18]

The aim of this study was to examine attitudes to and perceived use of primary health care services, including access to general practitioners and hospital services, telephone advice, home visiting, deputizing services and out of hours care, among age matched populations of Asian and non-Asian patients in Leicester. The results reported here represent part of a larger study.

The difficulties of obtaining accurate, representative samples of Asian populations for research purposes have been highlighted previously.[19-21] The term 'Asian' in this study refers to a person whose family originate from India, Pakistan or Bangladesh, or are of Indian or Pakistani descent from East Africa. Despite inaccuracies,[22] the family health services authority nominal index register (now computerized, but not identifying ethnicity), has been shown to be a useful sampling frame, particularly if Asian patients are identified by name,[20,21] a method which has been shown to be more accurate than place of birth.[23] In Leicester the age–sex distribution of the Asian and non-Asian population has been accurately defined.[10]

This study was approved by the local ethical committee and had the support of the Leicestershire family health services authority and the local medical committee.

Method

Within Leicester the Asian population is unequally distributed between 28 wards. Ninety five per cent or more of the Asian population live within 16 wards to the east and west of the city.[10] A one in four sample was drawn from the Leicestershire family health services authority nominal index register of patients registered with general practitioners with at least one surgery within these 16 ward areas. The sample was stratified by age grouping (16–24 years, 25–44 years, 45–59 years, 60–69 years and 70 years or more). Finally, the sample population was divided into Asian and non-Asian groups on the basis of name. While it is difficult to calculate the necessary sample size when exploring new knowledge, taking into consideration the number of questions asked on the questionnaire it was considered that 1000 people (500 Asian and 500 non-Asian people) would be a reasonable sample to allow clinically significant differences to be statistically significant. Knowing the target sample size and the age structure of the study sample which would be representative, it was possible to calculate target numbers of Asian and non-Asian patients within each age group. The final sample was obtained by random selection from the original one in four sample, without replacement, until target figures within each age group were achieved.

A questionnaire, comprising closed questions, was devised and validated in a pilot study for feasibility, acceptability and time taken for interview. The sample population were sent a letter explaining the purpose of the study and seeking their assistance

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Submitted: 25 July 1991; accepted: 6 November 1991.

by permitting an interview in their preferred language at their home within the next two weeks. Asian patients were sent a letter in English with a translation in Urdu, Gujarati, Punjabi and Hindi while non-Asian patients received a letter in English only. The interview schedule was administered by five interviewers (three Asian interviewers, fluent in all Asian languages and English and two non-Asian interviewers who spoke English only). Each interviewer was given detailed training in structured interviewing techniques which was reinforced repeatedly during the study to minimize observer bias. Inaccuracies in the addresses of the sample population, discovered if contact could not be made by the interviewer on the first occasion, were corrected by approaching the general practitioner with whom the patient was registered. Up to four visits and two telephone calls were made to try and establish contact. The interviews were carried out between March 1989 and March 1990. The age, educational attainment and social class distributions of sample populations are known to affect demand for medical care[24] and are therefore included in this study.

Statistics

The information from the questionnaires was coded and the results analysed using the *SAS* statistical package on the Leicester University Vax computer system. Initial comparisons between Asian and non-Asian patients used either the chi square test for nominal variables or the Mann-Whitney *U* test for ordered categorical variables. To investigate further any differences between Asian and non-Asian patients after adjusting for age, social class and educational attainment, logistic regression models were fitted to the data using the *GLIM* (generalized linear interactive modelling) statistical package. To ascertain differences between first and second generation Asian patients a variable was created with three levels: Asian patients educated in the UK, Asian patients educated in their country of origin and non-Asian patients (very few non-Asian patients were educated outside the UK). When this variable was entered into the model it allowed comparisons between the three categories after adjustment for age, educational attainment and social class.

Results

A total of 896 people were interviewed (449 Asian and 447 non-Asian patients); a response rate of 89.6%. The remainder of the sample had died, declined to be interviewed or could not be traced.

The age distribution of the two samples is shown in Table 1. It can be seen that these distributions are very similar to those predicted for Asian and non-Asian people aged 16 years and above in the city of Leicester as a whole.[10] The Asian population is younger than the non-Asian population. The social class distribution of the Asian and non-Asian patients were quite similar (Table 1). A higher percentage of Asian patients than non-Asian patients had received a university education (Table 1).

Of the 449 Asian patients interviewed 305 (67.9%) were first generation Asian patients, defined as those not educated in the UK. No significant differences were found in the responses of first and second generation Asian patients in any of the categories reported here.

Barriers to communication

Among the 449 Asian patients interviewed only 6.2% had difficulty in explaining symptoms in English (Table 2); this was, however, significantly higher than the percentage of non-Asian patients who had difficulty ($\chi^2=18$, 1 df, $P<0.001$). More non-Asian patients found it difficult to explain symptoms in medical terms than Asian patients ($\chi^2=9.1$, 1 df, $P<0.01$). More non-Asian patients also experienced anxiety at explaining symptoms than Asian patients ($\chi^2 = 28.5$, 1 df, $P<0.001$). Lack of access to a doctor of a particular sex was only considered to be a difficulty by 10.4% of Asian patients and 11.9% of non-Asian patients. Approximately a quarter of Asian respondents and a third of non-Asian respondents felt that the doctor only 'sometimes', as opposed to 'always' understood the descriptions of their symptoms (26.7% and 32.9%, respectively).

Table 1. Age distribution, social class distribution and distribution of the stage at which education was completed for the Asian and non-Asian patients. The age distribution predicted for the whole population aged 16 years and above of the City of Leicester is given in parentheses.[10]

	% of patients (city of Leicester)	
	Asian ($n=449$)	Non-Asian ($n=447$)
Age (years)		
16–24	27.8(28.4)	23.5(21.9)
25–44	47.2(47.0)	31.5(30.4)
45–59	16.5(16.4)	17.0(19.0)
60–69	5.6 (5.8)	15.0(14.4)
70+	2.9 (2.2)	13.0(14.4)
Social class[a]		
1	4.3	2.7
2	12.2	11.9
3 (non-manual)	22.4	19.9
3 (manual)	33.4	38.4
4	18.1	17.6
5	3.8	5.9
6	5.5	3.7
7[b]	0.2	0
Education completed:		
By age <16 years	39.9	51.0
By age 16–18 years	36.1	34.7
After university/polytechnic	13.5	4.9
After training for a trade/apprenticeship	0.5	4.0
After professional training	1.8	2.5
Still studying	5.2	2.9
Not known	2.9	0

n = total number of patients in group. [a]Registrar general's classification. [b]Student or in armed forces.

Table 2. Factors which made it difficult for patients to explain their symptoms to a doctor or nurse.

	% of patients	
	Asian ($n=449$)	Non-Asian ($n=447$)
Cannot explain in English	6.2	0.9
Cannot explain in medical terms	10.4	17.5
Doctor/nurse unapproachable	9.6	11.4
Anxiety at explaining symptoms	7.8	20.1
Not given enough time by doctor/nurse	13.3	14.3
Lack of access to a doctor of a particular sex	10.4	11.9
Other	10.0	8.1

n = total number of patients in group.

Barriers to access to general practitioners

More Asian patients reported finding it difficult to gain access to their doctor than non-Asian patients (32.6% versus 19.9%; χ^2 = 18.8, 1 df, P<0.001). Of those experiencing difficulties the main perceived barriers were long waiting times in the surgery (72.7% of Asian patients, and 23.6% of non-Asian patients) and a long waiting time for appointments (5.8% of Asian patients and 34.8% of non-Asian patients). However, the general practitioners of only 27.1% of Asian respondents experiencing difficulties operated an appointment system, compared with 89.3% for non-Asian respondents. The attitude of the receptionist was responsible for creating a barrier according to 18.8% of Asian and 29.2% of non-Asian patients. The overall differences between responses from Asian and non-Asian patients concerning barriers to access to general practitioners were significant (χ^2 = 83.7, 4 df, P<0.001).

Access to hospital services

Fewer Asian patients than non-Asian patients wanted access to hospital consultants to continue to be through the general practitioner 'filter' system (56.2% versus 72.0%; χ^2 = 24.4, 1 df, P<0.001). Almost half of the Asian respondents would prefer to have direct access to hospital consultants compared with just over a quarter of non-Asian respondents (49.8% versus 28.2%; χ^2 = 43.9, 1 df, P<0.001). The 661 respondents from both groups not having difficulty in seeing their general practitioner were 2.5 times more likely to want access to remain through their general practitioner than the 235 respondents who did experience difficulty. The respondents having difficulty in seeing their general practitioner were 2.8 times more likely to want to see a hospital doctor without first seeing their general practitioner than those experiencing no difficulty. Among the Asian patients 93.1% felt that they should be able to request their general practitioner to refer them for a second opinion to a hospital specialist compared with 88.4% of non-Asian patients.

Telephone advice

Only 34.2% of the Asian respondents felt that telephone advice should be given by general practitioners compared with 62.3% of non-Asian patients. When asked if general practitioners should set time aside each day to give telephone advice, 25.2% of Asian patients agreed they should compared with 45.4% of non-Asian patients. Among the Asian patients 35.5% felt that telephone advice could save them a visit to the surgery compared with 67.8% of non-Asian patients. Finally, 32.9% of Asian patients compared with 62.0% of non-Asian patients felt that telephone advice could sometimes save a visit to their home by a general practitioner. All these results showed statistically significant differences between Asian and non-Asian patients at the P<0.001 level using the Mann-Whitney U test.

Home visits

Nearly all the Asian (98.9%) and non-Asian patients (97.5%) regarded home visits by general practitioners as essential, and almost a fifth of both sample populations had received a visit from their general practitioner within the previous three months (19.3% and 20.8%, respectively). Asian and non-Asian patients differed significantly in their response to the time of day they felt doctors should do home visits (χ^2 test, P<0.001). Among the Asian patients 85.3% felt general practitioners should make home visits between 09.00 and 12.00 hours. This percentage remained high throughout the afternoon and 83.6% felt that it was appropriate for a general practitioner to be making home visits between 18.00 and 19.00 hours. Among the non-Asian patients 73.4% felt general practitioners should carry out home visits between 09.00 and 12.00 hours and this figure fell progressively throughout the day to 40.3% between 18.00 and 19.00 hours. These differences still remained after adjusting for age, social class and educational attainment.

Deputizing services

During evening hours (19.00 to 23.00 hours), 22.7% of Asian and 9.8% of non-Asian patients objected to the idea of seeing a deputizing doctor. The same result was found for night visiting hours (old general practitioner contract: 23.00 to 07.00 hours; 22.7% versus 9.8%, respectively). More Asian than non-Asian patients preferred to see a doctor from their own practice during evening hours (76.0% versus 55.3%) and during the night (74.7% versus 55.3%). The differences between the two populations showed statistical significance at the P<0.001 level (χ^2 test) and remained significant after adjustment for age, social class and educational attainment. When asked about the cost to the state of calling a doctor out at night, 69.0% of Asian and 55.1% of non-Asian patients thought it cost £20 or less, the remainder of each group saying it cost more than £20. Whether or not patients had difficulty in seeing their general practitioner during the day was not associated with the responses to these questions.

Doctors' working hours

When respondents were asked if doctors surgeries should stay open 24 hours a day, 46.9% of Asian patients and 23.0% of non-Asian patients thought that this should be the case, with 56.5% of Asian and 35.9% of non-Asian patients wanting doctors to work in shifts over that 24 hour period. Among the Asian patients 51.2% felt that they would visit the general practitioner during 24 hour opening compared with 29.2% of non-Asian patients. The 661 patients who experienced difficulty in seeing their general practitioner were almost 1.5 times more likely to agree with the above statements, than the 235 patients experiencing no difficulty. All these results showed statistically significant differences at the P<0.001 level between Asian and non-Asian patients using the Mann-Whitney U test and differences remained significant after adjustment for other covariates.

When asked how many hours it was safe for doctors to work each day without affecting their judgement approximately 95% of both groups felt that it was between six and 12 hours — six to eight hours, Asian patients 23.8%, non-Asian patients 44.8%; eight to 12 hours, Asian patients 71.0%, non-Asian patients 50.9%. Only 5.2% of Asian patients and 4.3% of non-Asian patients expected doctors to work more than 12 hours each day.

Discussion

In recent years there has been an increasing trend towards the use of link workers and interpreters to facilitate communication between doctors and their patients,[25-27] but the difficulties of having a third person in a consultation have been acknowledged.[28] While in 1983, 27% of Asians could speak little or no English in Leicester,[10] this study conducted almost a decade later suggests that language as a barrier to communication is a diminishing problem with only 6% of Asian patients expressing difficulty in explaining their symptoms in English. This is to be expected as an increasing percentage of the Asian population is composed of second generation Asians, born or educated in the UK. Less clear is the influence of culture which may promote differential utilization of NHS resources as previously noted among ethnic minorities.[29]

The sex of a doctor has previously been reported as important to patients consulting in general practice, with women patients preferring to see a woman doctor for gynaecological and sex related problems.[21,30] Other evidence suggests that women's

preference for women doctors may extend beyond sexual problems, family planning clinics and well women clinics.[31] In this study there was no significant difference between Asian and non-Asian patients in preferring access to a doctor of a particular sex. However, no questions relating specifically to gynaecological ill health were asked.

The understanding of patient complaints is central to any consultation.[32] So it was disappointing that about a quarter of Asian respondents and a third of non-Asian respondents felt that doctors only 'sometimes' as opposed to 'always' understood their descriptions of their symptoms, despite there being little evidence of a language barrier.

Asian respondents found it more difficult to gain access to their general practitioner than non-Asian patients, the main barriers to access being long waiting times in the surgery for Asian patients and a long waiting time for appointments for non-Asian patients. Contrary to popular beliefs[33] the attitudes of the receptionist played a minor role in preventing access in both populations. It has been demonstrated that patients' perception of delay is greater in those practices operating open access as opposed to appointment systems; appointment systems are normally more common than open access systems.[34,35] However this does not appear to be true for the Asian population in this study, and this may accentuate the overall level of dissatisfaction Asian respondents experience in attempting to gain access to their general practitioner. There is some evidence to support the use of flexible mixed systems, which may help to overcome some of these negative feelings.[36,37] This study reveals that many Asian patients would prefer to bypass the general practitioner filter system for referral to a consultant by having direct access. This trend was not so marked among non-Asian patients. This difference may reflect the Asian population's experience of the health care system in their country of origin where direct consultant access is the norm.

Asian patients were far less enthusiastic about telephone advice than non-Asian patients in this survey. It could be that Asian patients feel culturally disadvantaged in expressing symptoms without the help of body language. At a time when evidence of increased workload for general practitioners working among ethnic minorities especially in deprived areas is accumulating[17,18,38] there is a need to educate Asian patients regarding the acceptability of telephone advice for diagnostic and illness management purposes.

Home visiting is a contentious part of a general practitioner's workload. This study found that both Asian and non-Asian patients considered home visiting as essential. Most Asian respondents considered that home visits should be made throughout the day while non-Asian respondents were less likely to consider that home visits should be made in the late afternoon and early evening. Late evening surgeries may reduce the perceived need for home visits among the Asian population in Leicester, a method already successfully used in one Leicester practice among a primarily non-Asian population where demand for home visiting was high (Hastings A, personnel communication).

There was a dislike of deputizing services among the Asian respondents, despite the fact that many deputizing services, including the one based in Leicester, are staffed mainly by doctors of Asian origin.[39] Previous research into patient satisfaction associated with use of deputizing services has not considered ethnic minority views,[40] and this type of discrepancy underlines the need to identify ethnic minority perceptions in the use of health care services.[41] That more than two thirds of Asian respondents and just over half of non-Asian respondents believed that calling a doctor out at night cost £20 or less may be partly responsible for the increasing demand for out of hours care observed in cities.[42]

The results of this survey support the concept of 24 hour surgeries manned by doctors working in shifts. There is evidence that Asian patients in particular would use this kind of service together with many non-Asian patients. This type of practice may mitigate against fatigue among general practitioners[43-45] but has implications for continuity of care.[46]

The responses of Asian patients in this survey suggest that these patients used a different approach to health care delivery from the non-Asian population in Leicester. While Asian patients appear able to use current services, their demand is for more personal care, with greater emphasis on continuity and improved access. In British cities with large Asian populations, this type of study can assist in providing a more rational basis for resource allocation, thereby opening pathways for Asian patients seeking medical help.

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Acknowledgements

We thank Professor Robin Fraser for his support and guidance and Mrs Madu Morjaria for her work as research assistant. A R was supported by a generous grant from Leicestershire Health Authority.

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