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Patients' evaluations of family practice care and attributes of a good family physician

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ABSTRACT

Objective Patient evaluation of family practice care is the most direct assessment of quality of healthcare services provided. This study aimed to evaluate family practice care and to assess patient views on the attributes of a good family physician.

Methods A multicentre cross-sectional study was conducted at 18 family practice clinics of Aga Khan Hospital, Karachi, Pakistan. A total of 600 adult patients (aged over 18 years and visiting the clinic for more than a year) were approached consecutively to take part in this study. A pre-tested structured questionnaire including the EUROPEP was used by trained medical graduates to collect patient information. Data were analysed using SPSS v. 19; the internal consistency and reliability of the EUROPEP were tested. Means and proportions were reported for individual items of the questionnaire and a *P*-value of < 0.05 was considered statistically significant.

Results Of 600 patients, 502 (83.67%) agreed to participate and were interviewed. About one-third (72.3%) were females and 38% were within the age group 35–50 years. The overall mean scale score on EUROPEP was 82.8 (± 18.0), the score was higher for females at 83.7 (± 17.4) points. The three statements that were most highly rated for assessing family practice care were listening to the patient (mean = 4.54, SD = 0.92), thoroughness (mean score = 4.46, SD = 0.04) and proper physical examination (mean score = 4.44, SD = 1.07). The poorly rated statements were waiting time (excellent 9.8% vs poor 45.6%) and physician not accessible on telephone (36.5% excellent vs 35.5% poor).

Conclusion The results of this study identified some areas of improvement in family practice, such as accessibility of family practice on telephone and reduction in waiting times. Strategies should be devised regarding these issues at continuous medical education platform so that these attributes can be adapted to improve the overall quality of care.

Keywords: family physicians, family practice, Pakistan, patient satisfaction, quality of healthcare

Introduction

Patients are at the centre of the healthcare delivery model and their evaluations are therefore the most direct assessment of accessibility and quality of healthcare services provided.[1] Patient satisfaction is associated with continuity of care, better compliance and health outcomes.[1–3] Patient evaluations are ad-

vantageous in terms of cost and time; they are rapid and do not depend on medical records so the quality of the data is not compromised.[2] Patient evaluation is an important component of the evaluation of quality of care.[2]

This has led to the development of many questionnaires that differ in their presentation, content and the type of services targeted (outpatient services, private offices, visits to a general practitioner or specialist, etc.).[3] One such questionnaire is EUROPEP, developed in 1995 to 1998 as a standardised measure of patient evaluations of general practice care.[4] EUROPEP has been translated and validated in various languages including German, Dutch, French and Norwegian.[4–7]

Pakistan, like many other developing countries, has poor healthcare resources and indicators, with an alarming increase in the prevalence of chronic diseases, multiple comorbidities and a growing elderly population.[8] In this scenario, family physicians (FPs) are the most appropriate persons to provide comprehensive and cost-effective preventive, as well as curative care.[9]

Patient's perceptions and expectations of a 'good FP' can vary widely across cultures, because of differences in healthcare services in different countries. However, FPs everywhere are expected to be responsive to their patients' expectations and needs.[10] If patients' expectations are not met this may lead to dissatisfaction.[10] Studies have shown that mutual understanding between physician and patient is essential for good quality of care.[9,10] Therefore, exploration and understanding of patients' priorities are critical for optimum care and to identify areas for improvement. Insight into patients' views about good family practice care is limited in Pakistan.

This study aimed to evaluate the quality of family practice care, patient satisfaction and attributes of a good FP. We also assessed gender differences in patients' evaluation of family practice. This work will provide a baseline for interventions to improve the quality of care and patient satisfaction in Pakistan.

Methods

A multicentre cross-sectional study was carried out at 18 family practice clinics affiliated with Aga Khan University Hospital, Karachi, Pakistan (AKUH). AKUH is one of the major, not-for-profit, tertiary care teaching hospitals in Karachi. The hospital has a state-of-the-art primary care unit, which also offers off-site medical services at different locations in the city of Karachi. These primary clinics were chosen to obtain a diverse sample comprising different socioeconomic strata. A total of 600 adult patients (>18 years old and visiting the clinic for more than a year) were approached consecutively to take part in this study: 502 (83.67%) agreed to participate and were interviewed.

Questionnaire

Participants were interviewed using a pre-tested structured questionnaire comprising: (1) sociodemographic profile, (2) EUROPEP questionnaire and (3) characteristics of a good doctor.

EUROPEP is an internationally validated instrument developed by the EQUIP taskforce on patient evaluations of general practice care. This questionnaire covers specific aspects of FP practice including relationship and communication, medical care, information and support, continuity and cooperation, availability and accessibility of facilities. It measures experiences in the past 12 months graded on a five-point Likert scale from 1 = poor to 5 = excellent.

This questionnaire was used because it has been administered in other Asian populations, such as Turkey and the United Arab Emirates (UAE),[4–7] and was found to be efficient in assessing patient evaluations of general practice. In addition, the study hospital has state-of-the-art primary care clinics so the healthcare services being measured were close to that of the other developed countries where EUROPEP has been validated. Moreover, this questionnaire was close to achieve the objectives of the study.

The characteristics of a good FP were assessed by 13 attributes graded on a Likert scale from 1 = not/somewhat important to 3 = very/absolutely important. The list of attributes was compiled from an extensive Medline search and opinions generated through a consensus development technique by the investigators.

The English version of the questionnaire was translated into Urdu and backtranslated into English to check for consistency and to remove any discrepancies found. Pre-testing of the Urdu version was conducted on 5% (25) of the sample size. The final questionnaire was shared with experts in the field of family medicine to obtain their suggestions for improvement.

Data collection

Four medical graduates were hired and trained for data collection. They were especially taught to be neutral and not to share their personal feelings about the FPs' practice to patients. Data collection was carried out when patients left the consultation room (an exit interview) to avoid recall bias. Written informed consent was obtained from all participants after explaining the study protocol. The study was reviewed and approved by the family medicine research committee at AKUH.

Statistical analysis

This study did not have any a priori hypothesis so a power calculation was not performed. However, to estimate the sample size maximum variance was obtained at 50% with 95% confidence interval and bounded on an estimation error of 5%, resulting in 385 participants. The response rate of patients in such studies is around 70%, so the final sample was estimated at 500 participants.

Data were analysed using SPSS v. 17. Means and SD were calculated for all the variables of interest. By assuming equal intervals between scores on the Likert scale, an independent t-test was applied for the differences of means among male and female patients. Proportions were reported for all the items of EUROPEP and the FP attributes excluding 'not applicable/relevant' answers. Internal consistency was measured for EUROPEP to assess whether items adequately contributed to the scale construct using Cronbach's alpha and total item correlation. We defined an alpha of 0.70 as the lowest acceptable value for the scale to be considered reliable. Item-total correlation was also used to assess the overall correlation between items within a scale. A P-value of < 0.05 was considered statistically significant.

Results

In total, 502 patients were included in the final analysis and missing data were handled through mean imputation. Of the 502 participants over one-third (72.3%) were females and 38% were aged 35–50 years (Table 1). Approximately 38% of the participants had received higher university education, whereas 13% had no formal education. Almost half (49.4%) the participants were housewives; 15% were students or jobless. More than two-thirds of the participants had visited the doctor's practice fewer than five times during the previous 12 months, whereas 6.8% had visited more than 10 times.

Patient evaluations of family practice care on EUROPEP are given in Table 2. The mean scale score was 82.8 ($\pm$ 18.0) on a scale of 0–100, where 100 was the best possible score. Female patients reported

Table 1 Sociodemographic characteristics of patients ($n = 502$)

Characteristic	n	%
Age		
20–35 years	126	25.1
35–50 years	191	38.0
> 50 years	185	36.9
Gender		
Male	139	27.7
Female	363	72.3
Educational status		
No formal education	67	13.3
Primary	40	8.0
Secondary	119	23.7
High/sec	88	17.5
Graduate/postgraduate	188	37.5
Occupational status		
Jobless/retired/student	76	15.1
Working	178	35.5
Housewife	248	49.4
Number of visits in past 12 months		
< 5	383	76.3
5–10	85	16.9
> 10	34	6.8
Years since attending this doctor practice		
< 5	383	76.3
> 5	119	23.7

Table 2 Evaluation of family practice care by patients visiting family practice clinics in Karachi, Pakistan

Patients' opinion	Mean (SD)	Male mean (SD)	Female mean (SD)	P	Total item correlation
Total Scale Score†	82.89 (17.98)	80.99 (19.11)	83.72 (17.41)	0.03*	
Making you feel you had time during consultation?	4.41 (1.03)	4.32 (1.13)	4.45 (0.98)	0.24	0.69
Interest in your personal situation?	3.79 (1.48)	3.57 (1.51)	3.88 (1.47)	0.04*	0.47
Making it easy to tell about his/her problem?	4.39 (1.05)	4.20 (1.20)	4.47 (0.97)	<0.01*	0.70
Involving you in decisions about your medical care?	3.82 (1.42)	3.68 (1.48)	3.88 (1.40)	0.17	0.56
Listening to you?	4.54 (0.92)	4.41 (1.06)	4.61 (0.85)	0.02*	0.75
Keeping your records and data confidential?	3.97 (1.33)	3.92 (1.42)	4.00 (1.30)	0.57	0.64
Quick relief of your symptoms?	3.69 (1.39)	3.50 (1.42)	3.77 (1.37)	0.06*	0.61
Helping you to feel well so that you can perform your normal daily activities?	3.85 (1.40)	3.69 (1.45)	3.92 (1.37)	0.09*	0.62
Thoroughness?	4.46 (1.03)	4.30 (1.20)	4.53 (0.94)	0.02*	0.74
Physical examination of you?	4.44 (1.07)	4.27 (1.27)	4.52 (0.96)	0.02*	0.74
Offering you services for prevention?	4.12 (1.39)	4.20 (1.33)	4.10 (1.42)	0.43	0.68
Explain the purpose of tests/treatment?	4.17 (1.38)	4.09 (1.37)	4.22 (1.38)	0.31	0.70
Telling you what you want to know about your symptoms and illness?	4.31 (1.14)	4.20 (1.25)	4.36 (1.09)	0.15	0.73
Helping you deal with emotional problems related to health status?	3.64 (1.54)	3.60 (1.54)	3.67 (1.54)	0.69	0.63
Knowing what she/he had done or told you during contacts?	3.42 (1.55)	3.34 (1.50)	3.46 (1.57)	0.48	0.60
Preparing you for what to expect from specialist or hospital care?	2.88 (1.74)	2.85 (1.73)	2.90 (1.75)	0.80	0.50
The hopefulness of the staff (other than the doctors)?	4.12 (1.20)	4.04 (1.25)	4.15 (1.18)	0.34	0.54
Getting an appointment to suit you?	3.74 (1.41)	3.61 (1.46)	3.79 (1.39)	0.21	0.53
Getting through to the practice on telephone?	3.07 (1.71)	3.10 (1.75)	3.07 (1.69)	0.88	0.60
Being able to speak to the family practitioner on the telephone?	2.83 (1.75)	2.99 (1.75)	2.77 (1.75)	0.27	0.61
Waiting time in the waiting room?	2.09 (1.27)	2.09 (1.31)	2.09 (1.25)	0.95	0.20
Providing quick service for urgent health problems?	3.14 (1.58)	3.12 (1.62)	3.15 (1.57)	0.85	0.48

* Significant differences ($P < 0.05$) using t-test for two independent samples. Cronbach's alpha = 0.75. § Mean scales are scored 0–100 where 100 is the maximum answer.

higher levels of satisfaction 83.7 (± 17.4) than male patients. Significant differences were observed between male and female evaluations of doctors' practice for most items related to communication and medical care. Nevertheless, there were no significant differences in items of other sections. Cronbach's alpha value for the scale was 0.75. Total item correlations were acceptable ranging from 0.47 to 0.75, where the lowest was observed in the item 'waiting time' and the highest in 'listening'.

Table 3 shows the proportions of patients' responses for individual EUROPEP items. The most favourable response was for the item 'listening to you' (75.5% excellent vs 1.2% poor), whereas 'waiting time' was rated poorest (excellent 9.8% vs poor 45.6%). Patients felt less satisfied with a FP not accessible by phone (36.5% excellent vs 35.5% poor), getting through to the practice by telephone (29.9% excellent vs 38.8% poor) and what to expect from hospital and specialist care (32.3% excellent vs 38.8% poor). Patients appreciated many aspects of family doctors' practice such as making the patient feel important (71.1% excellent vs 2.2% poor), making the patient comfortable (69.3% excellent vs 2.0 % poor) and thoroughness (72.1% excellent vs 2.6% poor).

Table 4 represents the percentage of 13 attributes of a good family physician. Most patients (96%) felt that it was important that doctors should be knowledgeable about medical matters. More surprisingly, 9.8% felt that respecting patient confidentiality was not important.

Discussion

The results of this study highlight that most patients were very satisfied with their FPs' practice. The mean patient satisfaction score found in this study was 82.8 points which is comparable with studies conducted internationally. A study conducted in Slovenia with 2482 patients found a patient satisfaction score 86.2 points on EUROPEP.[11] Another study from UK revealed that 82% of the patients were satisfied with their FPs' practice.[12] A similar study in the UAE also reported high satisfaction levels with family practice.[13]

To the best of authors' knowledge this is the first study from Pakistan which have used the EUROPEP questionnaire. Therefore, it was difficult to compare the results with those from previous cross-sectional studies conducted in Pakistan. However, previous studies have generated similar findings that patients are usually satisfied with their FPs care.[14,15]

Patient satisfaction is a complex construct as it not only depends on the characteristics of patients and doctors, but is also affected by patient expectations.[16]

This study gives a valuable insight into patient expectations about family practice care. In the study, the highest ranked statements were listening, thoroughness and proper physical examination. These results are congruent with findings from an Estonian study.[17] Another study also found that attentive listening and understanding patients' problems were important for the patient–doctor relationship.[18] Vedsted et al. reported confidentiality and listening as the two most highly rated items.[6] Listening has been highly rated in many studies, probably because it plays an essential role in the satisfaction process.[6,7,9] Patients expect that their problems should be listened to with patience and that they should be examined thoroughly; by doing so, the physician will gain the trust of the patient.

Patients felt less satisfied with long waiting times and FPs not being accessible by telephone. The availability of doctors by telephone has been rated as poor in many previous studies including from Denmark, Gaza and Solvenia.[6,19,20] Physicians should try to be accessible to discuss minor issues by telephone, for example, the side effects of medications or dose adjustments, especially for patients with chronic illness or those who need care on a regular basis. This would save FPs consultation time but would also be beneficial for patients in terms of cost (consultation and transport fees) and time (waiting time) and can help FPs to build good rapport with the patient.

Waiting time has long been discussed as an important influence on patient's satisfaction level[21] and many studies have reported long waiting times to be the cause of considerable dissatisfaction.[21–23]

Communication and interpersonal skills play a vital role in understanding patients' problems and making it easier for them to express their feelings. In an Australian study, an FP's ability to communicate well was considered extremely important,[24] which is consistent with the study results. In recent years, primary care has moved from a physician care model to a patient-centred care model.[25] In the current study, 11.9% of the patients rated their physicians as poor in involving the patient in their care.

Proper explanation about the disease process, treatment prescribed and the need for investigations makes it easier for patients to follow doctors' instructions. According to a systematic review on the attributes of a good FP, the most highly rated attribute was providing culturally sensitive care followed by competence/accuracy, patients' involvement in decisions and time spent with the patient.[12] Similar results have been reported by another study.[26]

According to the National Health Survey of Pakistan, women visit doctors more frequently than men in Pakistan.[27] This may be due to women having higher rates of morbidity and poorer self-perceived health status.[28] Moreover, males are usually the bread winners in this part of the world and therefore, cannot manage

Table 3 Percentages of responses on items of the EUROPEP Questionnaire

Statements	Poor (%)	Fair (%)	Good (%)	Very Good (%)	Excellent (%)
Making you feel you had time during consultation?	2.2	4.2	15.5	7.0	71.1
Interest in your personal situation?	14.3	7.4	16.7	11.0	50.6
Making it easy to tell about his/her problem?	2.0	5.4	15.5	7.8	69.3
Involving you in decisions about your medical care?	11.9	8.4	18.1	12.4	49.4
Listening to you?	1.2	3.4	12.9	7.0	75.5
Keeping your records and data confidential?	8.6	7.2	18.1	11.2	55.0
Quick relief of your symptoms?	10.6	11.8	19.1	16.5	42.0
Helping you to feel well so that you can perform your normal daily activities?	10.6	9.1	17.5	13.3	49.4
Thoroughness?	2.6	4.0	13.5	7.8	72.1
Physical examination of you?	2.8	5.4	12.2	7.2	72.5
Offering you services for prevention?	9.6	8.6	10.6	7.6	63.7
Explain the purpose of tests/ treatment?	9.8	7.6	10.4	9.2	63.1
Telling you what you want to know about your symptoms and illness?	3.6	6.2	14.9	9.4	65.9
Helping you deal with emotional problems related to health status?	16.1	9.8	12.9	10.6	50.6
Knowing what she/ he had done or told you during contacts?	17.7	14.3	15.1	12.0	40.8
Preparing you for what to expect from specialist or hospital care?	32.3	11.4	9.4	8.2	38.8
The hopefulness of the staff (other than the doctors)?	3.6	9.4	19.3	11.8	56.0
Getting an appointment to suit you?	10.2	12.5	20.5	10.6	46.2
Getting through to the practice on telephone?	29.9	12.2	11.2	8.0	38.8
Being able to speak to the general practitioner on the telephone?	36.5	12.5	9.0	6.6	35.5
Waiting time in the waiting room?	45.6	23.7	18.3	2.6	9.8
Providing quick service for urgent health problems?	23.1	15.1	16.3	11.6	33.9

Based on answers to categories 1–5, where 1 = poor, 5 = excellent and excluding 'Not applicable/not relevant'.

Table 4 Attributes of a good family practitioner rated by patients visiting family practice clinics in Karachi, Pakistan

Attribute	Not important	Very important	Absolutely important
Knowledgeable about medical matters	0.6	3.0	96.4
Up to date with medical advances	0.8	5.8	93.4
Can be trusted	1.2	6.4	92.4
Respect Confidentiality of patient	9.2	12.5	78.3
Emotionally stable	2.4	10.2	87.3
Able to explain things carefully	1.0	5.4	93.6
Listens the problem sympathetically	1.4	8.0	90.6
Communicate in patient's language	4.2	10.4	85.5
Considerate about others feelings	2.4	11.2	86.5
Have a good out look	4.0	14.7	81.3
Realistic	4.0	14.7	81.3
Trustworthy	1.6	6.4	92.0
Enthusiastic	8.0	15.5	76.5
Friendly	1.2	12.0	86.9
Cautious	1.8	9.4	88.8

Percentage of responses on categories 1–3, where 1 = not important and 3 = absolutely important.

time to visit the clinics. Differences were observed in this study between male and female evaluation of family practice care with women having higher rates of satisfaction. However, studies conducted in the West show contrasting results with gender not being associated with ratings of FP care.[21,22] In Pakistan, females prefer to consult female physicians and this may increase satisfaction levels.

In this study, EUROPEP was found to be effective in patient evaluation of FP practice. The internal validity of the scale was satisfactory but further validation studies of the Urdu version of EUROPEP are warranted because although EUROPEP is intended to be a self-administered questionnaire, in our study it was administered by the data collectors. This was because of the low literacy rate in Pakistan: 21% of patients did not have any formal education or were educated to primary level. Thus, in countries like Pakistan self-administered questionnaires are not useful. Nonetheless, in order to avoid interviewer bias the data collectors were trained to be neutral and not to share any of their personal feelings about the FP practice with patients. A study conducted in UAE reported that patients were comfortable with the use of an interpreter, who used common language.[13]

Some of the strengths of this study are the use of an internationally validated instrument with adequate sample size and technique. As opposed to some studies in which respondents are sent questionnaires through the mail, resulting in low response rates, our questionnaires were completed through interviews. Another fact to note is that in this study the interviews were carried out immediately after the consultation, reducing the possibility of recall bias.

The study had several limitations. First, it was conducted in urban areas of Pakistan so we cannot comment about FP practice in rural areas. Second, this was conducted in primary care clinics of a private hospital in Karachi so cannot be extrapolated to public sector hospitals. Third, in this study, we did not collect information on physician characteristics, such as age, gender or years of experience, which might be correlated with patient satisfaction. Fourth, we did not assess associations of patient sociodemographic and health characteristics (age, gender, number of times visiting the doctors practice, presence of chronic diseases) with their level of satisfaction.

Conclusion

The study results indicate that patient satisfaction with FPs practice in Pakistan is high and similar to developed countries. Nevertheless, the results of this study will help identify areas of improvement such as the accessibility of the FP on telephone and improved waiting times. These issues should be discussed and strategies should be devised during continuous medical education to improve the overall quality of care. Further studies needs to be conducted on a larger scale representing both public and private sector FPs practice in Pakistan.

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