Patient opinion of the doctor-patient relationship in a public hospital in Qatar

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ABSTRACT

الأهداف: تقييم مستوى رضا المرضى في العيادات الخارجية عن علاقتهم بأطبائهم في أكبر مستشفى حكومي في قطر.

الطريقة: أجريت هذه الدراسة الاستطلاعية في مستشفى حمد العام، الدوحة، قطر وذلك خلال الفترة من سبتمبر 2009م إلى يناير 2010م، حيث تم توزيع أوراق الاستبيان على 626 مريضاً. لقد قام هذا الاستبيان بتحديد مدى رضا المرضى عن مستوى التفاعل بين المريض والطبيب وذلك من خلال تقييم التالي: الوقت الذي استغرقه الطبيب مع المريض، اهتمام الطبيب بالحالة وأخذها بمحمل الجد، الإبقاء على سرية وخصوصية المريض، وتقييم الزيارة ومدى جودتها على وجه العموم.

النتائج: أشارت نتائج الدراسة إلى أن معدل الإجابات في مقياس ليكرت لتحديد اختلاف الآراء في الاستبيان (1 إلى 5) كان كالتالي: الوقت المُستغرق مع المريض= 4.39، والاهتمام بالحالة وأخذها بمحمل الجد= 4.57، والإبقاء على سرية وخصوصية المريض= 4.71، وتقييم الزيارة ومدى جودتها على وجه العموم= 4.46. لم تؤثر العوامل المتغيرة مثل: العمر، والجنس، والجنسية، ومستوى التعليم، وعدد الزيارات على مستوى رضا المرضى، كما أظهر 73.1% من المرضى اهتمامهم بكفاءة الطبيب واعتبروا ذلك من العوامل المهمة عند اختيار الطبيب، وكان 40.7% من الذكور، و28.1% من الإناث يفضلون اختيار الطبيب من نفس الجنس. لقد أسفرت نتائج الدراسة عن وجود علاقة طردية بين نجاح الطبيب في التواصل مع المريض من جهة ومدى رضا المريض عن هذه العلاقة من جهة أخرى.

خاتمة: أثبتت هذه الدراسة مدى رضا وقناعة مرضى العيادات الخارجية في مستشفى حمد العام عن علاقتهم بأطبائهم، كما وكانت مؤهلات الطبيب من أكثر العوامل التي تؤثر على اختيار المريض لطبيبه. ولقد فضلت نسبة عالية من المرضى الطبيب من نفس الجنس، كما وكان هناك علاقة واضحة بين سوء التواصل بين الطبيب والمريض وعدم رضا المرضى عن علاقتهم بأطبائهم.

Objectives: To analyze the factors associated with the level of satisfaction of outpatients in their relationship with their doctor at the largest public hospital in Qatar.

Methods: This study was a cross-sectional survey of attitudes. Researchers surveyed 626 outpatients at Hamad General Hospital in Doha, Qatar from September 2009 to January 2010 using a novel questionnaire assessing satisfaction with patients' interaction(s) with their doctor (spent time with patient, took case seriously, maintained confidentiality, and the overall quality of visit).

Results: Mean responses on 4 Likert scale items (one to 5) were as follows: "spent enough time with patient" = 4.39; "doctor took case seriously" = 4.57; "satisfaction with doctor-patient confidentiality" = 4.71; "overall quality of visit" = 4.46. Age, gender, citizenship, level of education, and number of visits did not significantly impact the level of satisfaction. For 73.1% of patients, the physician's qualification was the most important factor in choosing a doctor. Of those surveyed, 40.7% of men and 28.1% of women preferred to see a doctor of their own gender. A positive correlation between perceived communication and satisfaction with the doctor-patient encounter was established.

Conclusion: This study found that patients in the Out-Patient Department at Hamad Hospital were highly satisfied with their relationships with their doctors, and physician qualification was the most significant factor in choosing a doctor. A significant number of males and females preferred a physician of their own gender. Communication difficulty correlated with lower satisfaction.

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The doctor-patient relationship is a difficult concept to define due to the individual nature of the relationships that patients form with their doctors. The concept has been studied by a wide range of researchers including medical professionals, health care economists, social psychologists, medical sociologists, rhetoricians, and healthcare communication experts.[1] However, as Heritage and Maynard[2] point out in a 2006 review of sociological literature on the doctor-patient relationship, "there is no stable conceptual framework for the analysis of the doctor-patient relationship as realized in situ, and few historical benchmarks, against which to evaluate evolution and change".[2] In addition, the concept of patient satisfaction rests on 2 very subjective factors: patients' expectations regarding the care they will receive, and the perceived quality of the care they received.[3] However, the doctor-patient relationship has been established as an important factor in increasing patient regimen compliance and continuity of care that leads to better health outcomes: satisfied patients will follow medical instructions, return for follow-up care, provide more information during history taking, and maintain a longer-term professional relationship with their care giver.[4-6] Poor doctor-patient relationships may be equally unsatisfying to doctors. Al Sakkak et al[7] believe that patient satisfaction is now a key issue in the Arabian Gulf health systems, since increased personal income in the Gulf is driving higher patient expectations for higher quality care, including attention to the doctor-patient element in quality care. This study aimed to collect and analyze basic demographic information from outpatients, as well as their responses to a 5-point Likert scale, free response, and open-ended questions related to communication and patients' satisfaction in their encounter(s) with their doctors.

Methods. The ethical approval for this study was granted by the Institutional Review Board of Weill Cornell Medical College-Qatar (WCMC-Q) and Hamad Medical Corporation (HMC), which administers the Hamad General Hospital. Using a 36-question novel survey instrument, the researchers gathered a large convenience sample of 626 outpatients (95.4% response rate) in the Hamad General Hospital in Doha, Qatar between September 2009 and January 2010 during the outpatient waiting room hours of 8:00 AM-11:00 AM. Female investigators distributed the questionnaires in female-only waiting rooms, and males in male-only waiting rooms. Inclusion criteria were adult outpatients (>18 years) who consented to provide data. Outpatient clinics in Hamad General Hospital include 65 specialty clinics such as Diabetes, Nephrology, Orthopedics, and so forth. This instrument included 14 demographic questions, 7 5-point Likert scale items involving communication and satisfaction with the doctor-patient interaction, and 15 general and open-ended (free response) questions on the doctor/patient interaction. Variables listed in **Table 1** included gender, age, level of education, citizenship, doctor's gender, number of visits, doctor's estimated age, primary and secondary languages of patient, language of doctor, and language used in the encounter. An Arabic or English language questionnaire, and informed consent release form were self-administered, or translated to patients by the investigators into Urdu, Hindi, or Punjabi. Thus, the sample includes illiterate patients, although literacy level was not recorded. Thirty patients (primarily Nepali-only, or Tagalog-only speakers) refused to take the survey for language, or other undetermined reasons. The questionnaire was first developed in English, translated by the researchers into Arabic, then cross-checked by a professional Arabic translator at the Weill Cornell Medical College. The questionnaire was developed from models such as JE Ware's PSQ-III (Patient Satisfaction Questionnaire) available from Rand Corporation, Santa Monica, CA, USA modifying individual items from Ware's Global Likert Scales of Interpersonal Aspects, communication, and time spent with the doctor.[8-10] Patient satisfaction surveys specific to Qatar by McGivern in 1999[11] and Abdal Kareem,[12,13] which also drew on Ware's work were valuable in developing questions geared towards the population sample in Qatar.

Univariate (descriptive) statistical analysis and Pearson Chi-Square, Mann-Whitney, and Spearman's rho tests were performed using PASW Statistics version 18 (IBM SPSS Inc, Chicago, IL, USA)

Results. Demographic and communication data collected are summarized in **Table 1**. The socio-demographic statistics of the convenience sample closely matched the published gender and citizenship data for Qatar (2010 census: 75.9% males and 24.1% females/ total population [1,678,568]),[14] as well as the ethnic makeup of Qatar as reported in the Central Intelligence Agency Factbook.[15] Southeast Asian expatriate laborers were slightly under-represented as many are treated in onsite employer clinics. To measure the effect of perceived communication on satisfaction, a 2-item Likert

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Table 1 - Demographic and communication variables of sample (N=626).

Variables	n	(%)
Gender		
Male	483	(77.2)
Female	143	(22.8)
Mean age, years		41.8 ± 14.1
Level of education		
None	36	(5.8)
Primary school	68	(10.9)
High school	233	(37.2)
University	249	(39.7)
Post graduate	40	(6.4)
Citizenship		
Qatari	150	(24.0)
Non-Qatari	476	(76.0)
Country of origin		
Qatar	150	(24.0)
Egypt	101	(16.1)
India	46	(7.3)
Pakistan	38	(6.1)
Sudan	33	(5.3)
Palestine	32	(5.1)
Syria	22	(3.5)
Other	204	(32.5)
Doctor's gender		
Male	506	(80.8)
Female	100	(16.0)
No response	20	(3.2)
No. of visits to the doctor in the past year		
First	118	(18.8)
2-<5	253	(40.4)
5-10	99	(15.8)
>10	106	(16.9)
No response	50	(8.0)
Estimated doctor's age, years		44.9 ± 8.3
Primary languages		
Arabic	444	(70.9)
Tagalog	25	(4.0)
Urdu	23	(3.7)
Hindi	17	(2.7)
Malayalam	16	(2.6)
Nepali	13	(2.1)
Bengali	13	(2.1)
Other	63	(10.1)
No response	12	(1.9)
Main secondary language		
English	470	(75.1)
Arabic	87	(13.9)
French	40	(6.3)
Hindi	46	(7.3)
Urdu	32	(5.1)
Language used with doctor		
Arabic	446	(71.2)
English	101	(16.1)
Arabic and English	18	(2.9)

scale on "perceived communication" was constructed (Cronbach's alpha = 0.697), and compared with a 4-item Likert scale on "patient satisfaction" (Cronbach's alpha = 0.785) using Pearson product moment correlation. A moderately high positive Pearson product moment correlation of 0.493 (p<0.001) was calculated between the "perceived communication" Likert scale, and the "patient satisfaction" Likert scale. Means of individual 5-point Likert scale items are shown in **Table 2**. Approximately half of the respondents (49.8%) said that they would prefer to see a doctor from the same culture, while 13.9% said no, and 36.2% answered no preference. When asked, "what is most important to you in choosing a doctor?" (namely; age, gender, qualification, cultural background), 73.1% chose qualification, and 11.3% chose cultural background, 2.2% chose gender, and 0.9% chose age. The top 2 "other" free responses to this question were "experience" (51 respondents) and reputation (34 respondents), which also illustrates the importance of physician qualification to the sampled outpatients. Only 34 patients responded to the free response question "Did anything make you uncomfortable during your visit to the doctor?," and the primary comment was "long waiting" (12 respondents).

Differences in item scores between male and female subgroups, or between Qatari or non-Qatari citizens were investigated using the Mann-Whitney-Wilcoxon test for non-parametric comparisons. No significant differences were identified on any of the survey items related to satisfaction. The relationship between educational level and patient satisfaction was investigated using Spearman's rank correlation coefficient. No significant relationship was found between education level and any item related to patient satisfaction. Respondents were asked if they preferred a doctor of the same gender, a different gender, or if they had no preference. Most respondents (57.5% men and 62.2% women) stated that they had no preference in gender. However, 40.7% men preferred a male doctor, and 1.7% men preferred a female. Also 28.1% women preferred a woman doctor, and 9.6% preferred a male. This difference in distributions was highly significant (chi-square; 23.402, p<0.001).

Table 2 - Mean responses to individual 5-point Likert scale items (N=626).

"Perceived communication" scale (α=0.697)	**Mean**
Did you understand the instructions of the doctor?	4.57
Did the doctor use any signs, gestures or expressions that you could not understand?	4.49
"Patient satisfaction" scale (α=0.785)	
Do you think the doctor spent enough time with you?	4.39
Do you think the doctor took your case seriously?	4.57
How would you rate the quality of your visit to the doctor?	4.46
Are you satisfied with the degree of doctor-patient confidentiality with your doctor?	4.71

Discussion. The HMC, established by an Emiri decree in 1979, oversees 4 specialty hospitals in Qatar, including the largest public facility Hamad General Hospital, where this study was carried out, as well as 22 primary health care centers (PHCCs). The Hamad General Hospital outpatient department where the data was collected had 435,249 visits in 2008.[16] Both Qatari citizens and individuals holding Qatar residence permits may also receive free, or heavily subsidized care in the regional PHCCs, military, and police hospitals (for armed forces personnel and families only), or employer-sponsored health clinics. Other care options include private fee-for-service hospitals, such as Al-Ahli Hospital, or medical care abroad, subsidized by the government for Qatari citizens. The high means on the 4 satisfaction questions (4.39-4.71) indicate that in general, outpatients appear to be highly satisfied with their interactions with their doctors. Other factors, which may have indirectly influenced patients' attitude towards their doctors, and consequently responses at the time of the survey, include level of distress, type of complaint, hospital setting, previous bad experiences, availability of parking, support staff friendliness, and waiting time. These factors were not measured in this study. The study means were higher than those found in Abdal Kareem et al's[12,13] study of 444 patients in the same hospital and Khalifa Town Health Center using almost identical scale items ("humaneness of doctors," "quality of care"). Abdal Kareem et al's[12,13] results ranged from 2.70-3.59. This increase in patient satisfaction with physician interactions provides support to the idea that the quality of doctors and/or general medical services has improved in Qatar since 1991. In 2007, for example, the Joint Commission International (JCI) accredited the HMC hospitals, which received the highest ranking of Category 1. To assist in the JCI audit, Bener and Mazroei[17] looked at several common international health services indicators (that is, physician/1000 population), and concluded that the health care in Qatar had significantly improved across the board from 1999-2009.

The population of Qatar has quadrupled since 1991 (mostly due to the influx of expatriate workers), and per capita gross domestic product (GDP) is now ranked among the highest in the world. Substantial amounts of hydrocarbon revenues have been specifically earmarked for improvements in education and healthcare in the last 10 years by Emir Hamad bin Khalifa Al-Thani, reaching 4.327 billion Qatari Riyals national expenditure for healthcare in 2007-2008.[17] Nationally, medical staff has increased by 153.9% from 2001-2008.[17] The HMC has actively sought partnerships with internationally recognized medical centers, such as the University of Pittsburgh Medical Center Emergency Services, Heidelberg University Hospital, and Sick Children's Hospital of Toronto, Canada. In this coming 2012, the all-electronic and permanently endowed Sidra Hospital in Doha, Qatar will be a state of the art teaching hospital in the Gulf. The WCMC-Q in Doha was established in 2001, and since 2008, 49 medical doctors have graduated. The WCMC-Q is also developing in partnership with HMC, and the newly established Qatar Science and Technology Park (QSTP) programs in stem cell and biotechnology research. All of these developments, which include the hiring of top expatriate Arab and Western medical personnel, greater exposure of existing Hamad Hospital doctors to internationally renowned medical services partners, and the introduction of web-based Continuing Medical Education through HMC and WCMC-Q programs, have positively impacted the training and professionalism of doctors in Qatar. The recent increased attention to physicians' professionalism would logically result in higher patient satisfaction rates with all aspects of their medical encounters.

Another plausible explanation for the higher satisfaction means than in Abdal Kareem et al's[12,13] study, is that there are now more public and private options for patient care in Qatar. In 1991, most patients would have been treated at Hamad General Hospital, or a similar HMC specialty hospital, whereas today they have a greater variety of private and public options. Thus, the patient population surveyed in this study, provided with this new variety of health care options, had specifically chosen Hamad General Hospital due to the reputation of the hospital, or due to their satisfaction with previous care received there. In addition, the patients' actual experience of care may have closely matched their expectations, resulting in high satisfaction. The lowest patient satisfaction mean reported in this study (4.39) was for the question "Do you think the doctor spent enough time with you?" This finding corroborates Bener et al's 2007 study that a primary care physician in Qatar spends an average of only 6.6 minutes per consultation per patient compared with 9.4 minutes in the UK, and 13 minutes in the United States.[17,18] In addition, Mohammed et al[19] surveyed 80 patients in 2004 in the Diabetic Clinics in Doha's PHCCs, and discovered that while most were satisfied with the services, a significant number expressed concern that more time should be spent with the patient. Thus, despite the high satisfaction rates reported in this study, areas of improvement in physician clinical and interpersonal skills training in Qatar still exist.

The difference between male and female preference of physician gender is significant. In Qatar in 2008, there were 854 women doctors and 1414 male doctors

employed, but these numbers were not distributed equally across specialties, for example, 73.6% of female physicians are listed as General Practitioners or Family Medicine physicians, while the Orthopedics Department and Urology have no female doctors. Thus, choosing the gender of one's physician will not always be an option in Hamad General Hospital.[16]

Patient satisfaction, including factors that directly impact the doctor-patient relationship such as friendliness, taking cases seriously, humaneness, and compassion towards patients has been studied in Saudi Arabia, Oman, United Arab Emirates, Kuwait, and Qatar. The results, as well as study design have been varied. As Al Sakkak et al[7] points out, "previous studies have shown no consistent picture of the effect of socio-demographic data on satisfaction level, and that satisfaction level is usually multi-factorial". A similar study to the current research was carried out in Qatar in 1993 by Abdal Kareem,[12,13] which measured patient satisfaction with outpatient services in Hamad General Hospital and Khalifa Town Health Center, and one dimension studied was "humaneness of doctors," a Likert scale composed of questions similar to the present study. Questions included "do doctors treat patients with respect, keep patients from worrying, and explain the patient's medical problem". The primary findings were that non-citizens, and respondents with lower incomes and lower levels of education were more satisfied with the quality of care than higher income, more highly educated, and local citizen subgroups. The authors attributed these differences to the free health care access for the large Asian expatriate (non-citizen) workers coming from countries with much lower standards of care. In another related study in 1999, McGivern[11] surveyed 612 patients regarding patient satisfaction in the acute care complex in Doha, Qatar. Respondents slightly favored technical expertise over interpersonal care, and 84% rated the overall quality of care to be excellent to very good (similar to Abdal Kareem's[12] overall satisfaction rate of 81%), suggesting that the doctor-patient relationship was not of primary importance to them, but rather the technical competence of the doctor. University-educated patients were more satisfied than high school-educated ones in McGivern's study.[11]

Al Emadi et al[20] measured patient satisfaction in 21 PHCCs in Qatar in 2008. The overall satisfaction was reported as relatively low (75.2%). Accessibility to health services scored 98%, and comprehensiveness of care was 92.6%. There was a significant difference in satisfaction between Qatari and non-Qatari patients. Non-Qataris were more satisfied with accessibility to services, continuity of care, and comprehensiveness of care. The score for the category "humaneness of staff" was 97.5%, a figure similar to the current study's finding, indicating that factors other than physician professional behaviors (such as parking, scheduling, waiting times, and so forth) are contributing to lower general satisfaction rates with health care in Qatar.[20] Regionally, patient satisfaction rates for both overall satisfaction and doctor-patient relation concerns have varied considerably. In the 2003 Margolis et al's[21] study in the Emirates, the category humaneness[14,11] scored the highest among in-patient satisfaction categories. In Abdalla et al's[22] 2005 study of consumer satisfaction with PHCC services in Hail City, Saudi Arabia, significant factors which improved satisfaction were proximity to the center, family medical file at the center, low income, and occupation as laborer. Al-Eisa et al's[23] 2005 study of PHCC services at the capital health region in Kuwait reported a mean score of overall satisfaction of 4.59 out of 5 points with more males than females satisfied with services. Al-Mandhari et al[24] established that patients' perceived health status affects their satisfaction with quality of care in Oman.

Communication issues. This study established a positive correlation between the perceived quality of doctor-patient communication and patient satisfaction. The work of Clever et al in 2008,[25] Jackson et al in 2001,[26] and meta-analysis by Beck in 2002[27] provides firm evidence that patient dissatisfaction and non-compliance are clearly related, as is poor communication and patient dissatisfaction. Approximately 10.1% of patients in the study indicated that they needed a translator during their encounter, and expatriate nurses and support staff primarily from Asia and Southeast Asia frequently act as translators for non-Arabic and non-English speakers. In addition, in 2006, WCMC-Q in partnership with HMC initiated the Medical Interpretation Program in Hamad Hospital to provide trained translators in such languages as Arabic, Hindi, and Tamil to patients, practitioners, and medical students on clerkship.

The Likert summated scales could be refined further and validated with higher Cronbach's alpha inter-correlation of individual scale items. Reading the questionnaire to illiterates, or translating it out loud by data collectors may have introduced social desirability bias, that is, cultural reluctance to express negative opinions in public, a concern that was raised in a satisfaction study in Kuwait.[28] More rigorous randomization of the outpatient sample would have resulted in more generalizable results.

Doctor-patient communication has become an area of increasing interest in the Arabian Gulf. For example, medical liability involving complaints against doctors arising from poor doctor-patient communication has risen in such countries as Saudi Arabia.[29] Abdulhadi et al's[30] 2007 study of the patient-provider interaction in

diabetes patients in Oman identified "patient-provider communication manner" as an important factor among 6 key themes in focus groups, and concluded that good communication skills are necessary for physicians to properly manage long term diabetic care. Subjects rated physicians' communication skills higher than professional skills in Saeed et al's[31] patient satisfaction study of PHCC patients in Riyadh in 2001. Patients at the Obstetric and Gynecology Unit at King Khalid University Hospital, Riyadh, Saudi Arabia expressed low satisfaction with general communication, and complained of inadequate information from providers regarding post-partum self care, infant care, and breast feeding.[32] The overall implications of this study are that although the sampled outpatients expressed high satisfaction in their relationship with their physicians in Hamad General Hospital, short consultation times and choice of gender of physician are areas of concern, as well as instances of poor communication. The researchers recommend that physician gender distribution in outpatient clinics, as well as potential language and communication difficulties between physicians and patients should be studied in more detail.

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