


Health-Care Reform in Saudi Arabia: Patient Experience at Primary Health-Care Centers

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Mohammed Senitan^{1,2}  and James Gillespie¹

Abstract

The aim of this study was to assess the relationship between patients' demographics, the quality of physician–patient communication, care coordination, and the overall satisfaction rating in primary health-care centers (PHCs). A cross-sectional study was conducted using a patient experience tool. A convenience sample of 157 patients visiting PHCs were retrieved from 10 out of the 13 Saudi regions. A total of 81% of the overall ratings could be attributed to the predictors included in the model. The highest predictor of the overall rating in this model was physicians answering of patient questions, followed by time spent with the physician, type of PHC, and the abilities of the physician to listen carefully, explain things clearly, and show respect. The weakest predictors were follow-up by the health-care provider and physician's knowledge of the patient's medical history. Our findings suggest that to improve the overall patient experience and the quality of care at PHCs requires extra attention to physician–patient communication. To improve quality, safety, and efficiency, the Ministry of Health should ensure interpretation service for patients at PHCs either public or private. The Saudi Central Board for Accreditation of Healthcare Institutions should enhance the physician–patient communication as part of their standards for accrediting PHCs.

Keywords

PHC, physician–patient communication, patient experience, Saudi Arabia, quality, efficiency

Introduction

Health-care providers, patients, and policy makers are increasingly recognizing the importance of quality in health care. However, these groups use different measures to evaluate the quality of care. Patient experience is a measurement concept introduced for the evaluation of patient-centered care, which itself is defined as “a respectful of and response to individual patient preferences, needs, and values, and ensures that patient values guide all clinical decisions” (p.2187) (1).

Physicians are the first point of contact for patients at primary health-care centers (PHCs). In Saudi Arabia, health services can be accessed through 2 routes. Patients can first use the health services provided by PHCs and subsequently be referred to secondary care. Alternatively, patients can bypass the PHCs to receive care at the emergency department (ED), followed by visits to outpatient clinics for further secondary care (2). A study by Alyasin and Douglas (3) found that in Saudi Arabia, 65% of patients' visits to the ED were for nonurgent cases. Patients were asked if they have regular PHCs, 63% of these patients indicated that they did not have a regular PHC and 44% reported that the ED

provided better care than other health services. Therefore, this study raised questions about the effectiveness of PHCs in Saudi Arabia.

Although previous studies of patients attending PHCs reported high satisfaction rates, they implemented satisfaction measurements (4). However, studies of PHC quality from the patient perspective should consider the potential differences between “patient satisfaction” and “patient experience.” Specifically, patient satisfaction surveys are used to evaluate the patient's satisfaction with care, whereas patient experience surveys aim to determine what the patient

¹ Menzies Centre for Health Policy, Sydney School of Public Health, University of Sydney, Sydney, New South Wales, Australia

² Department of Public Health, Faculty of Health Sciences, Saudi Electronic University, Riyadh, Saudi Arabia

Corresponding Author:

Mohammed Senitan, Menzies Centre for Health Policy, Sydney School of Public Health, No. 2W19/Level 2, Charles Perkins Centre D17, University of Sydney, New South Wales 2006, Australia.
Emails: malharbi@seu.edu.sa; malh8372@uni.sydney.edu.au



did or did not experience during their interactions with providers and the health-care system (1).

Furthermore, previous studies have suggested that trust and communication contribute to a patient's decision to use secondary care instead of a PHC (5). Specifically, a patient's trust in a PHC is strongly associated with effective and clear communication between a patient and physician (5).

Physician-patient communication, a core measure of patient-centered care, is strongly associated with better clinical health outcomes. This factor can be measured in different ways, and some aspects contribute to a better patient experience. For example, a physician's ability to listen and explain diagnoses and treatment options is an important indicator of the quality of physician-patient communication (6,7). Furthermore, listening skills, respect for the patient, and time spent with the patient also reflect the quality of communication between physicians and patients. Notably, this communication can also predict the overall ratings of physicians at PHCs or of specialists at hospitals (8,9). In a PHC, the physicians directly affect the quality of the delivered care. Patients who have positive experiences with PHC are also more likely to indicate that a good quality of care has been provided. Kumah identified a strong correlation between physician-patient communication and overall patient satisfaction (10).

Care coordination is another important component of the patient experience. Different studies have reported that improvements in care coordination lead to reductions in unnecessary and repetitive testing, ED visits, and hospital admissions (11). These factors improve the quality of care and outcomes while reducing costs. Therefore, we studied several issues, including physician-patient communication and care coordination in the PHC, with the aim of assessing the quality of PHCs in the context of overall patient experience ratings.

Methods

Ethical Approval

This study received ethical approval from the ethics committee of King Fahad Medical City, the Ministry of Health (MOH), Saudi Arabia (H-01-R-012) and OHRP/NIH, United States (IRB00010471).

Study Setting and Sampling Procedures

A convenience sample of 157 patients was collected from May to September 2017 through the SHARIK Initiative (<https://sharikhealth.com/>). To measure patients' experiences with PHCs, the Clinician and Group Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS) survey was translated into Arabic and validated in accordance with the World Health Organization guidelines for the translation and adaptation of instruments (12).

A cross-sectional study of a representative random sample of patients attending random PHCs in Saudi Arabia was

conducted. The assessment tool used for data collection comprised 2 sections. The first section solicited general information about the participants, including sociodemographic data such as sex, age, income, marital status, education level, health status, and type of PHC. The second section comprised an Arabic translation of the modified patient experience questionnaire from the CG-CAHPS and also solicited the name and type of the PHC center and the home region of the participant.

The study sample included patients aged ≥ 18 years who spoke Arabic and attended PHCs in Saudi Arabia. Participation in this study was voluntary and did not include any financial incentives. Participants were recruited through the SHARIK Initiative (<https://sharikhealth.com/>), which links people interested in research with a researcher. This data management platform intended to generate data through communications with people interested in research participation is an initiative of the Saudi Food and Drug Authority Research Centre and Studies.

Measures

Demographics. The literature suggests a potential relationship between demographics and overall satisfaction. In a recent review, Senitan et al reported that an older age, lower income, and lower level of education were strongly associated with higher patient satisfaction (4). However, most studies included in that review based their outcomes on satisfaction tools. By contrast, this study used a patient experience tool to test the relationships of these variables with overall ratings.

In our sample, subjects were stratified into age groups of 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and ≥ 65 years. Subjects were further stratified by income into groups of <5000, 5000 to 15 000, 16 000 to 30 000 SAR, and >30 000 Saudi Riyal (3.75 SAR = US\$1) per month. Finally, subjects were stratified by education levels into the following groups: primary school, secondary school, high school, diploma (or equivalent), bachelor and master, or PhD (or equivalent). The type of PHCs was tested with overall satisfaction ratings.

Physician-patient communication. The communication domain of the CG-CAHPS patient experience survey, version 2 comprised 6 items (13). In version 3, however, 1 item was transferred to the care coordination domain (13). Therefore, this study used only 5 items from the communication domain of version 2 to determine how often the patients felt that their physicians explained things clearly, listened carefully, showed respect, provided easy-to-understand instructions, and spent enough time with the patient. The Saudi patients used a 3-point Likert scale (yes definitely, yes somewhat, and no) to answer the CG-CAHPS questions (12).

Care coordination. This study also applied 2 items transferred to the care coordination domain of the

CG-CAHPS, version 3 (13). The first item asked whether the provider seemed to know important information about the patient's medical history and was measured on a 3-point Likert scale (yes definitely, yes somewhat, and no). This measure was selected to address previous findings, suggesting that many referrals from PHCs lack important medical information (14). The second item asked whether the health-care provider's office follow up with the patient to deliver results (yes or no).

Overall ratings (satisfaction) of PHCs. Finally, the overall ratings of the physician or provider were measured as the main outcome of this study (13). The questionnaire asked patients to rate their physicians on a scale of 0 to 10, with 0 and 10 indicating the worst and best, respectively. The overall ratings were then categorized to indicate low (0-6), medium (7-8), and high (9-10) satisfaction.

Validity and Reliability

The CG-CAHPS was translated by a native Arabic-speaking professional translator. Three experts, including the study investigator, an expert on psychometric papers, and the manager of a PHC, reviewed the questionnaire in which disagreements on 2 questions (8 and 20) led to modifications. Using Cronbach alpha, a subsequent testing of the CG-CAHPS communication subscale yielded an internal consistency of 0.90.

Analysis Data Set

All data were analyzed using SPSS, version 24. The associations of all demographic variables with the overall ratings was tested using correlations. The χ^2 test was used to determine the significance of the relationships of physician-patient communication aspects and care coordination domain items with the physicians' overall ratings. All significant variables in these analyses were entered into a multiple linear regression model. The subsequent analysis was conducted to determine the strengths of the potential associations of demographic factors, aspects of physician-patient communication, and the care coordination domain items with the overall ratings of PHCs. A P value $<.005$ was used to indicate significance.

Results

Characteristics of the Participants

The study sample had a male predominance, and most participants were in the age groups of 25 to 34 years and 35 to 44 years. Majority of the participants had a monthly income of 6000 to 15 000 SAR, were married, hold a bachelor's degree, and rated their health excellent (Table 1).

Table 1. Characteristics of the Participants.

Characteristics	(n) %	N = 157
Sex		
Male	(117)	74.1
Female	(40)	25.3
Total		99.4
Age group		
18-24 years	(11)	7.0
25-34 years	(52)	32.9
35-44 years	(77)	48.7
≥ 45 years	(17)	10.7
Total		99.4
Income		
<5000	(20)	12.7
6000-15 000	(115)	72.8
16 000-30 000	(21)	13.3
>30 000	(1)	0.6
Total		99.4
Marital status		
Married	(114)	72.2
Single	(43)	27.2
Total		99.4
Education		
Secondary school	(2)	1.3
High school or equivalent	(14)	8.9
Diploma or equivalent	(26)	16.5
Bachelor	(97)	61.4
Master, PhD, or equivalent	(18)	11.4
Total		99.4
Health status		
Excellent	(100)	63.3
Very good	(42)	26.6
Good or fair	(15)	9.5
Total	(157)	99.4
Type of PHCs		
Public	(91)	58.2
Private	(66)	41.8

Abbreviation: PHC, primary health-care center.

Associations of Demographics and Overall Satisfaction Ratings

It appears that there were no significant associations between sex, age, income, marital status, education level, or health status with the overall satisfaction ratings. However, the association of overall satisfaction ratings by the type of PHC was significant ($P < .05$).

Associations of Physician-Patient Communication and Overall Satisfaction Ratings

Table 2 shows the relationship between 5 communication items with the overall satisfaction ratings. Notably, it appears that all communication domain items (physicians explained things clearly, listened carefully, provided easy-to-understand instructions, showed respect, and spent enough time with the patient) were significantly associated with the overall satisfaction ratings.

Table 2. Associations of Physician–Patient Communication and Overall Satisfaction Ratings.

	Overall Satisfaction Ratings			P Value
	Low Satisfaction	Medium Satisfaction	High Satisfaction	
Communication	n (%)	n (%)	n (%)	
Explains concepts in an easy-to-understand manner				.001
Yes, definitely	34 (21.5)	52 (32.9)	17 (10.8)	
Yes, somewhat	10 (6.3)	6 (3.8)	0 (0)	
No	30 (19)	9 (5.7)	0 (0)	
Listens carefully				.002
Yes, definitely	36 (22.8)	44 (27.8)	17 (10.8)	
Yes, somewhat	19 (12)	14 (8.9)	0 (0)	
No	19 (12)	9 (5.7)	0 (0)	
Gave easily answer understood instructions				.001
Yes, definitely	0 (0)	44 (67.7)	10 (15.4)	
Yes, somewhat	1 (1.5)	0 (0)	0 (0)	
No	10 (15.4)	0 (0)	0 (0)	
Respect				.001
Yes, definitely	38 (24.1)	52 (32.9)	17 (10.8)	
Yes, somewhat	26 (16.5)	6 (3.8)	0 (0)	
No	10 (6.3)	9 (5.7)	0 (0)	
Spent enough time with the patient				.001
Yes, definitely	27 (17.1)	51 (32.3)	17 (10.8)	
Yes, somewhat	26 (16.5)	16 (10.1)	0 (0)	
No	21 (13.3)	0 (0)	0 (0)	

Table 3. Associations of Care Coordination and Overall Satisfaction Ratings.^a

	Overall Satisfaction Ratings			P Value
	Low Satisfaction	Medium Satisfaction	High Satisfaction	
Care Coordination	n (%)	n (%)	n (%)	
Medical history				.001
Yes, definitely	28 (17.8)	36 (22.9)	7 (4.5)	
Yes, somewhat	17 (10.8)	8 (5.1)	10 (6.4)	
No	28 (17.8)	23 (14.6)	0 (0)	
Follow-up				.047
Yes	9 (15.8)	26 (45.6)	0 (0)	
No	12 (17.5)	10 (17.5)	0 (0)	

^an = 157.

Associations of Care Coordination and Overall Satisfaction Ratings

Table 3 shows the relationship between the care coordination items medical history and follow-up with overall satisfaction ratings. It appears that medical history and follow-up

Table 4. Multiple Linear Regression for Overall Satisfaction Ratings.

Predictors	Standardized Coefficient (β)	95%	P Value
		Confidence Interval (CI)	
Demographics			
Type of PHC	1.22	4.102 to 5.377	.001
Communication			
Explains concepts in an easy-to-understand manner	0.47	0.444 to 3.334	.001
Listens carefully	0.816	2.306 to 5.888	.001
Gave easily answer understood instructions	−1.52	−13.710 to 10.307	.001
Respect	0.24	−0.518 to 3.442	.147
Spent enough time with the patient	1.27	5.383 to 8.973	.001
Care coordination			
Medical history	0.09	−1.355 to 0.613	.457
Follow-up	0.066	−0.240 to 1.102	.206

Abbreviations: CI, confidence interval; PHC, primary health-care center.

correlated significantly with the overall satisfaction ratings of PHC.

Multiple Linear Regression Model

From the previous step, a multiple linear regression analysis was conducted to predict the overall ratings of physicians according to patient demographics and the CG-CAHPS domains of communication and care coordination. In the proposed model (Table 4), demographic variables, except the type of PHC, were excluded because their association with overall satisfaction ratings was not significant. Notably, 81% of the overall ratings could be attributed to the predictors included in the model. The highest predictor of the overall rating in this model was the answering of patient questions, followed by time spent with the physician, type of PHC, and the abilities of the physician to listen carefully, explain things clearly, and show respect for the patient. The weakest predictors were follow-up by the health-care provider and physician's knowledge of the patient's medical history.

Discussion and Conclusion

Discussion

The results of this study revealed that the overall patient satisfaction determined using the patient experience tool has a strong association which can be predicted by physician's communication skills and the type of PHC visited. These findings were consistent with those of previous studies, which found that 3 communication skills were strongly associated with overall ratings, namely, the physician's abilities

to listening carefully, show respect, and answer patient's questions (10).

Currently, the main challenge faced by the Saudi health-care system is the underutilization of PHCs, which is attributed to the high number of international physicians. The new 2030 vision of the Saudi Arabian government has led to an ongoing reform of the national health-care system. This reform aims to improve the integration and continuity of health-care services provided by developing PHCs (15). Following this reform, the MOH will no longer be the main provider of health care to Saudi citizens but will rather supervise and regulate the health-care system to improve efficiency, safety, and quality (15).

In our study, the coordination of care was not the predictor of the overall health-care ratings. Under the current system, it is not surprising that patients would have lower expectations regarding care coordination. However, future studies could investigate the effects of the proposed changes to the Saudi health-care system on the relationship between overall patient satisfaction and care coordination.

We further note that the Saudi MOH previously reported overall patient satisfaction rates with selected PHCs of 71.2% to 72.4%, which were much higher than the rate (15%) observed in our study (16). However, these MOH rates were lower than the overall satisfaction rate reported by a study based on patient satisfaction tools (4). The studies on patient experience conducted by Saudi MOH used similar study parameters as our study. Future studies should address these limitations.

About 72% of physicians in Saudi Arabia are from overseas, and most do not speak Arabic (17). The review by Almutairi found language barriers or difficulties in communication between patients and providers and identified only one study that showed good communication (18). Another issue affecting the quality of patient-physician communication in Saudi Arabia is that doctors from other Arabic countries can have issues related to language clarity. Such issues include the clarity of the language used by health-care providers when giving information and providing an adequate explanation about their activities (18). Providing language interpretation services at this stage could improve the communication between physicians and patients, which in turn will likely improve the quality of care and patient outcomes. There is evidence suggesting that the use of professional interpreters in health-care systems can decrease the utilization of ED services, referral rates, and hospital admissions from the ED (19).

Conclusion

This study revealed significant relationships of various CG-CAHPS items related to physician-patient communication, as well as the type of PHC, and the overall ratings given to physicians in Saudi Arabia. Our findings suggest that to improve the overall patient experience and the quality of

care provided at PHCs required extra attention to physician-patient communication.

Practice Implications

Due to the number of overseas physician, the MOH as part of the reform to improve quality, safety, and efficiency should ensure interpretation service for patients at PHCs either public or private. The Saudi Central Board for Accreditation of Healthcare Institutions should enhance the physician-patient communication as part of their standards for accrediting PHCs.

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Declaration of Conflicting Interests

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ORCID iD

Mohammed Senitan  <https://orcid.org/0000-0002-1588-7615>

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Author Biographies

Mohammed Senitan is a PhD candidate at the Menzies Centre of Health Policy, School of Public Health, at The University of Sydney. Mohammed is also a Health Management lecturer in the Department of Public Health at the Faculty of Health Sciences, Saudi Electronic University. He holds a bachelor degree in Health Sciences and Hearing and Speech from The University of Sydney and a master degree of Health Management with Distinction from the Queensland University of Technology. His current research interest focus on integrated care for chronic NCD and primary care, patient satisfaction and experience.

James Gillespie is the deputy director, Menzies Centre for Health Policy and associate professor in Health Policy and Sub Dean for Higher Degree Research in the School of Public Health, University of Sydney, Australia. His research interests focus on the policy implications of the growing burden of chronic illness.