

## Patient Satisfaction And Experience Of Primary Care In Saudi Arabia: Article Review

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### Abstract:

*Purpose: This systematic review aims to explore patient satisfaction (PS) among patients who used Ministry of Health (MoH) primary care centres in Saudi Arabia, with a focus on their communication with physicians. Data sources: Medline, CINAHL, Embase, Global Health, the Saudi Medical Journal, Annals of Saudi Medicine, the Journal of Family and Community Medicine and Google Scholar. Study selection/Data extraction: The review focused on studies concerning PS in Saudi MoH primary care centres published between 2005 and 2020. Two independent reviewers confirmed that the included studies met the selection criteria, assessed the quality of the selected studies and extracted their significant characteristics. All of the articles were examined in terms of the five main domains that determine the patient–physician communication identified by Boquiren, Hack, Beaver et al. (What do measures of patient satisfaction with the doctor tell us? Patient Educ Couns 2015;98:1465–73). Results: The literature search retrieved a total of 846 studies. Only 10 studies met the selection criteria. All of the studies reported at least one domain of PS. There was a strong relationship between the level of education, income and satisfaction rate. Most of the studies reported PS in terms of the domains of availability and accessibility, and communication. Few of the studies covered the other domains, such as relational conduct, views on the physician’s technical skills/knowledge and the personal qualities of physicians. Conclusion: There was a contradiction between the patients’ responses to the surveys on the domains of PS and their actual experience. While the patients reported that they were satisfied with primary care centres, they frequently attended the emergency department directly. This indicated that they were unlikely to be fully satisfied with the primary healthcare centre.*

**Keywords:** patient satisfaction, patient experience, Saudi Arabia, primary care, communication, physicians, quality of care.

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## **Introduction:**

Patient satisfaction (PS) with the healthcare system has received substantial attention in the evaluation of modern healthcare. While PS measurements have been widely used to measure the quality of health-care, they remain proxy measures [1]. Communication between the physician and patient is a significant component of PS that can affect overall satisfaction [2, 3]. The Ministry of Health (MoH) healthcare system was established in 1926 and consists of three levels: primary, secondary and tertiary healthcare services available through the MoH network [4]. Primary healthcare (PHC) is provided through healthcare centres. PHC centres are the first place where patients encounter the health-care system [4].

Alyasin and Douglas [5] found that 65% of emergency visits to the hospital were for non-urgent cases. The main reasons for visits to the emergency department were lack of trust in PHC centres and the quality of care received in PHC centres not meeting expected standards. When patients were asked about their satisfaction with PHC centres, their satisfaction rate with the care provided by local PHCs was reported as mostly neutral or dissatisfied [5]. The critical issue in Saudi PHC is patient–physician communication, as most physicians in Saudi Arabia are from different backgrounds and speak different languages. According to Almutairi [6], cultural and language differences were two barriers to patient–physician communication. This could create the major barrier to patient trust in PHC, as the PS questionnaires revealed.

## **Aim of the study:**

To better understand this issue, this paper examined the main domains of PS that explain the patient–physician relationship. The domains were adapted from Boquiren and colleagues [1], who concluded that the measurement of PS is necessary to assess, plan, deliver and improve medical services. In their review, they also identified five domains to productively assess the efficacy, quality and feasibility of healthcare institutions. The first domain emphasizes the importance of good ‘communication’ between the patient and medical staff, highlighting the influence of the physician’s listening skills and comprehensibility. The second domain values ‘relational conduct’ via the interpersonal skills of the medical staff and how they address the patient with respect and courtesy. The third domain reflects the ‘technical skills’ of the clinic staff, and the available equipment in the healthcare institution. The professional level, knowledge and expertise of physicians play an important role in establishing patient trust and compliance with

treatment. The fourth domain considers the ‘personal qualities’ and human nature of the hospital staff, emphasising their compassion and caring towards the patient. Finally, the fifth domain underlines the ‘availability/accessibility’ attributes of healthcare institutions by analysing the ease of obtaining appointments, waiting times and the availability of preferred doctors for accommodating patient wishes [1].

## **Method**

This paper used the systematic review method. Two independent reviewers confirmed that the cross-sectional studies included in the review met the selection criteria. They also assessed the quality of the studies and extracted their significant characteristics. The selected studies were assessed based on the five main domains identified by Boquiren and colleagues (‘communication, relational conduct, technical skills, personal qualities and availability/accessibility’) that determine the patient–physician relationship [1].

## **Data sources and search strategy**

This review searched four major databases: Medline, CINAHL, Embase and Global Health. A manual search for articles on research into PS in Saudi Arabia was also conducted to retrieve articles that were not shown in the database searches. Three journals were also identified based on their relevance to the topic. All searches were performed in English. We also used Google Scholar to search for any relevant articles using similar terms. Based on the most relevant articles identified, we performed a forward citation search to identify further studies to be included in this review. We decided to use search terms that were relevant to the four main concepts (PS, PHC centre, MoH and Saudi Arabia). For example, the term ‘General Practice’ or ‘Medical Centre’ under the PHC centre concept identified a wide range of articles in the literature. We also used the term trees of different databases, such as MeSH for Medline. When collecting studies from the manual searches of journals and Google Scholar, we recognized that using a greater number of terms complicated the search and produced vague results and thus, for these searches, we used the concept terms.

### **Quality appraisal**

Quality appraisal is a critical step in systematic reviews. It aims to assess the quality of the methodology used in a study and determine the extent to which a study has addressed the possibility of bias in its design, conduct and analysis. The Joanna Briggs Institute (JBI) critical appraisal tools have been developed by the JBI and collaborators, and approved by the JBI Scientific Committee following extensive peer review [8].

### **Results**

#### **The systematic search**

The database search retrieved 846 articles from Medline, CINAHL, Embase and Global Health. After removing duplicates, 723 articles remained. Of these, a further 167 were removed as they were out of the specified date range. The titles of the remaining 567 articles were screened. A further 544 articles were excluded after screening the titles. Twelve articles were fully screened, of which six were included in the analysis. Another four articles were added from Google Scholar and forward citation searches. This gave a final count of 10 articles to be included in this review.

#### **Characteristics of the included papers**

The included papers were quantitative cross-sectional studies. The papers in this review covered most of the regions in Saudi Arabia, including Riyadh province [9], Dammam [10], Majmaah [11], Abha [12, 13], Hail [14, 18], Jubail [15], Al-Laith [16] and Jeddah [17]. These studies provided a range of comparisons in terms of their survey approaches and their direct or indirect application of the five PS domains. Some of these studies mentioned the validity and reliability of PS questionnaires tools [9–14, 16].

#### **Overall satisfaction**

Overall satisfaction refers to the question at the end of the PS questionnaire asking about the participants’ general or overall satisfaction. Overall satisfaction was reported in almost all studies. The overall satisfaction reported in the included studies ranged from 50% to over 90% [9, 11, 12, 14–18]. In eight studies, the overall satisfaction was over 75%, which aligns with the previous review by Al-Ahmadi and Roland (2005) [7] (Table 3).

#### **The five domains of patient–physician communication Communication attributes**

Six studies reported the communication domain [9, 10, 12, 14–15]. However, while some studies clearly reported the communication sub-domains between physicians and patients,

some did not. Overall, the PS scores on the communication domain ranged from 50% to 89.5%. Table 4 shows the included studies report of the five domains..

In Al-Ali and Elzubair's study [10], 49% of patients were not satisfied with physician communication. The mean satisfaction score of rapport among the participants in this study was 77% [10]. The highest communication satisfaction score came from elderly patients with a low level of education, suffering from chronic conditions and with fixed appointments with a physician.

Alfaqeeh et al. [9] concluded that the patients and physicians had good communication. Almoajel, Fetohi and Alshamrani [15] reported that 70% of patients were satisfied with their doctors' listening skills. Additionally, 60% of patients reported that their physicians treated them nicely, while 14% disagreed with this statement [15]. Furthermore, 21% of patients reported that the time spent with their physicians was not enough. Thus, this domain had substantial differences in PS.

Alshammari [14] reported that the communication domain received the third highest score ( $M = 3.64$ ) of PS. In Ghazwani and Al Jaber's study [12], 86% of patients were moderately to highly satisfied with the communication they had with their physicians and only 13% were not satisfied. Abdalla et al. [18] reported that the satisfaction rate for physicians was the highest; however, listening to patients' complaints scored the lowest satisfaction scores.

### **Relational conduct**

Only three studies reported the relational conduct domain [9, 14, 15]. The subdomains overlapped with the subdomains of personal qualities. For instance, Alshammari [14] reported that the interpersonal dimension, which has six subdomains, with four domains (personal interest, reassurance, respect, and support and time offered to their patients) under relational conduct and two domains (friendliness, courtesy) under personal qualities.

Almoajel, Fetohi and Alshamrani [15] found that 82% of patients reported that the reception staff treated them well, 84% of patients agreed that their physicians treated them with respect, while 62% of patients agreed that their physicians did not listen to their complaints. Alshammari [14] reported that the interpersonal dimension ( $M = 3.78$ ) had the highest score of the PS domains, which was represented by six items, among which four (personal interest, reassurance, respect, and support and time offered to the patients by their physicians) were related to relational conduct .

### **Technical skill/knowledge**

Five studies reported the technical skill/knowledge domain [11, 13, 14, 17, 18]. Alshammari [14] identified the technical domain as the second-highest scoring dimension ( $M = 3.76$ ), represented by four items measuring the skill, experience and training of physicians, thoroughness of treatment, examination and accuracy of diagnosis, and positive outcomes of medical care. Mohamed et al. [11] reported that cleanliness (33%), technical competence of staff (24.2%), respect and good handling (23.2%), good service (8.3%) and others (11.2%) had the highest percentages. Mahfouz et al. [13] reported that the proportion of patients from urban areas who were dissatisfied due to lack of thoroughness (the extent to which the patient receives complete care and service) of the service (30.3%) was significantly higher than the corresponding figure (15.6%) among rural patients ( $P < 0.05$ ). Also, Mahfouz et al. [13] reported that 25% of patients were dissatisfied as they felt that their physicians gave them inadequate information.

### **Personal qualities**

Four studies reported the personal qualities domain [10, 13, 14, 17]. In Alshammari's study [14], the highest PS score was  $M = 3.78$ , representing friendliness, courtesy, personal interest, reassurance, respect, and support and time offered to the patient by the physician. Mahfouz et al. [13] reported a difference in PS in the personal qualities domain between urban and rural patients. The patients from urban areas were more dissatisfied (18.2%) compared with rural patients (6.1%) ( $P < 0.05$ ).

Almoajel, Fetohi and Alshamrani [15] measured the humaneness of the physicians and medical staff in a PHC centre in Jubail city. They found that 84% of patients were satisfied that their physicians treated them with respect, whereas 15% were not satisfied or not sure. While Al-Ali and Elzubair [10] found that PS with physician empathy was not high, they did not report the percentage or meaning of 'not high'. The most recent studies (two from 2014 and one from 2016) reported the personal qualities domain, showing that this domain is becoming more and more important in PS [10, 14, 15].

### **Availability and accessibility**

Eight studies reported the availability and accessibility domain, making it the most frequently reported domain in this review [9, 12–18]. Aljasir and Alghamdi [18] reported that the majority of patients were satisfied with PHC working hours, physicians and nurses, which were rated as acceptable or good. Almoajel, Fetohi and Alshamrani [15] found that 86% of patients were satisfied with the accessibility of their clinics, reporting that the distance between their home and the PHC centre was acceptable.

Alshammari [14] reported that the lowest-scoring domain in their PS study was accessibility ( $M = 3.56$ ). The accessibility and availability domain was represented using five items measuring the access to and the convenience of medical care. Availability was indicated using two items: the ease of seeing the physician of choice and the number of physicians at the centre. Ghazwani and Al Jaber [12] reported that 28% of patients were dissatisfied with pre-clinic items that were directly related to the steps performed before meeting the physician. The pre-clinic satisfaction rates were the lowest for PHC accessibility, availability of parking areas, comfortable waiting areas, short waiting times and measurement of the patient's vital

### **signs before meeting the physician.**

Mahfouz and colleagues [13] reported that in the accessibility domain, 35% of patients were not satisfied with the lack of signs to emergency rooms in PHC centres, and 19.4% reported insufficient parking places. Unlike Aljasir and Alghamdi's study [16], 30% of patients in urban areas were dissatisfied with the working hours of PHC centres, compared with 11% of rural patients.

### **Discussion**

The reviewed studies are in some ways contradictory. For example, Alshammari [14] reported that the accessibility and availability score was the lowest, and yet when examining the subdomains of this factor, the time offered to patients by the physicians, represented under personal qualities, was the highest scoring item. The accessibility domain was used differently in this study compared with the other studies as it discussed access when patients were inside the PHC centre, access for the distance from home to the PHC centre, and certain other access factors.

Further, Almoajel et al. [15] showed that 84% of participants reported that their physicians treated them with respect. However, 62% reported that the physician and medical staff did not listen to their complaints. For Maram BanaKhar et al. [17], 52.9% of patients reported that the

number of physicians was adequate and 89% were satisfied. However, 58.6% answered the same question with 'no' and their satisfaction was reported at 82%. While in some responses patients identified issues with PHC, these were not reflected in their overall satisfaction. This review showed that the experience of patients was different from the high satisfaction rates reported. A study conducted in Kuwait on overall PS found that the overall satisfaction of participants was 99.6%. However, when the same participants were asked about their satisfaction with each service, their mean satisfaction rate dropped to 88.6% [20]. This result aligns with other studies. For example, Williams and Calnan [21] showed that while general levels of consumer satisfaction were high, questions of a more detailed and specific nature revealed greater levels of expressed dissatisfaction. Historically, PS measurements were introduced in 1961 from the consumer movement, which viewed patients as consumers of health-care [1]. This means that PS is related to the expectations of the patient, where patient experience is related to the quality of the health services provided.

As most physicians in Saudi Arabia are from overseas, a clearer and deeper examination of the communication domain is needed. An analysis of the communication subdomains is essential to strengthen our understanding of the communication between physicians and patients. Future research should address this gap by comparing patient experiences and satisfaction within the same sample. Research is needed to enhance the use of different PS measurements that represent the actual status of PHC for the Saudi population. Future research should also examine patient experience measurements of PHC in Saudi Arabia.

This paper (1) examined literature from January 2005 to January 2020 on PS of PHC and the relationship between patient and physicians in Saudi Arabia. It (2) highlighted the quality of the literature and (3) addressed the knowledge gap in terms of the quality of PHC from the patient's perspective. It provides stakeholders and researchers with the information to reassess the priority areas in providing better quality measurements in Saudi PHC. The aims of this paper (4) aligned with the aims associated with the transition of the Saudi MoH healthcare system to a privatized system and the Saudi 2030—vision to improve the quality of PHC.

### **Limitations**

This systematic review has three main limitations. Firstly, the limited number of studies analyzed in this review may not represent the actual PS with MoH PHC centres in Saudi Arabia. Secondly, this review was restricted to English publications due to the lack of relevant research literature in Arabic. Finally, while the quality of some of the studies was low, they were nonetheless included to represent what the available literature says about PS in Saudi Arabia.

### **Conclusion**

The overall satisfaction reported in almost all studies was ranging from 75% and above. Six studies reported the domains of communication. Only three studies reported the relational conduct domain. Five studies reported the technical skills/knowledge domain, while four studies reported the personal qualities domain. Eight studies examined the availability and accessibility domain, making it the most commonly reported domain in this review. There was a contradiction in the patients' responses to the tools assessing PS and their actual experience. The participants' level of education and income may contribute to the overestimation of PS. While the patients reported that they were satisfied with PHC centres, they frequently attended emergency departments directly. This indicated that they were unlikely to be satisfied with the PHC centres. More research is needed to examine the link between patients' experiences and satisfaction in Saudi Arabia.

### **Reference:**

1. Boquiren VM, Hack TF, Beaver K et al. What do measures of patient satisfaction with the doctor tell us? *Patient Educ Couns* 2015;98:1465–73.
2. Marcinowicz L, Chlabicz S, Grebowski R. Understanding patient satisfaction with family doctor care. *J Eval Clin Pract* 2010;16:712–15.
3. Wang MC, Mosen D, Shuster E et al. Association of patient-reported care coordination with patient satisfaction. *J Ambul Care Manage* 2015;38: 69–76.
4. Almalki M, FitzGerald G, Clark M. Health care system in Saudi Arabia: an overview/Aperçu du système de santé en Arabie saoudite. *East Mediterr Health J* 2011;17:784.
5. Alyasin A, Douglas C. Reasons for non-urgent presentations to the emergency departments in Saudi Arabia. *Int Emerg Nurs* 2014;22:220–25.
6. Almutairi KM. Culture and language differences as a barrier to provision of quality care by the health workforce in Saudi Arabia. *Saudi Med J* 2015;36:425–31.
7. Al-Ahmadi H, Roland M. Quality of primary health care in Saudi Arabia: a comprehensive review. *Int J Qual Health Care* 2005;17:331–46.
8. The Joanna Briggs Institute. Critical appraisal tools for use in JBI systematic reviews. Checklist for analytical cross-sectional studies. Adelaide: The Joanna Briggs Institute. 2017.
9. Alfaqeeh G, Cook EJ, Randhawa G et al. Access and utilisation of primary health care services comparing urban and rural areas of Riyadh Providence, Kingdom of Saudi Arabia. *BMC Health Serv Res* 2017;17:106.
10. Al-Ali AA, Elzubair AG. Establishing rapport: physicians' practice and attendees' satisfaction at a primary health care center, Dammam, Saudi Arabia, 2013. *J Fam Community Med* 2016;23:12–7.
11. Mohamed EY, Sami W, Alotaibi A et al. Patients' satisfaction with primary health care center services, Majmaah, Kingdom of Saudi Arabia. *Int J Health Sci* 2015;9:163.
12. Ghazwani EY, Al Jaber OA. Study of satisfaction of diabetic patients attending the diabetic clinic at primary health centers in Abha city, Saudi Arabia. 2014.
13. Mahfouz A, Abdel Moneim I, Khan M et al. Primary health care emergency services in the Abha district of southwestern Saudi Arabia. 2007.
14. Alshammari F. Patient satisfaction in primary health care centers in Hail City, Saudi Arabia. *Am J Appl Sci* 2014;11:1234.
15. Almoajel A, Fetohi E, Alshamrani A. Patient satisfaction with primary health care in Jubail City, Saudi Arabia. *World J Med Sci* 2014;11: 255–64.
16. Aljasir B, Alghamdi M. Patient satisfaction with mobile clinic services in a remote rural area of Saudi Arabia/Niveau de satisfaction des patients vis- a-vis des services sanitaires mobiles dans une zone rurale isolée en Arabie saoudite. *East Mediterr Health J* 2010;16:1085.
17. Maram BanaKhar SA-K, Fllatah S, Al-Abdul Aziz H et al. Patient satisfaction with primary health care services. Jeddah: King Abdul Aziz University, 2006.
18. Abdalla A, Saeed A, Magzoub M et al. Consumer satisfaction with primary health care services in Hail City, Saudi Arabia. *Saudi Med J* 2005; 26:1030–2.
19. Moher D, Liberati A, Tetzlaff J et al. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Ann InternMed* 2009;151:264–49.
20. Al-Eisa IS, Al-Mutar MS, Radwan MM et al. Patients' satisfaction with primary health care services at capital health region, Kuwait. *Middle East J Family Med* 2005;3:10–6.
21. Williams SJ, Calnan M. Key determinants of consumer satisfaction with general practice. *Fam Pract* 1991;8:237–42