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An Investigation into Patient Satisfaction from the Healthcare System in Saudi Arabia: Survey and Analysis of the Major Determinants in the Qassim Region

قياس رضا المرضى عن نظام الرعاية الصحية في المملكة العربية السعودية: مسح وتحليل لأهم المحددات في منطقة القصيم

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Abstract

The main aim of this empirical study is to investigate and assess the degree of patient satisfaction in hospitals in the Al-Qassim region of Saudi Arabia and the primary causes that may contribute to satisfaction or dissatisfaction with the healthcare system. Primary data were acquired from a sample consisting of 292 patients in the Kingdom of Saudi Arabia's Al-Qassim region. The level of patient satisfaction with the healthcare system in Al-Qassim region was investigated using a self-administered questionnaire. The main determinants of patient satisfaction in the healthcare system included patient demographics, expectations, perceptions, and experiences. In Al-Qassim region patient experiences and expectations were the most important elements in influencing their satisfaction level. Further, demographics factors have favorable and substantial effects on people's perceptions and behavior regarding their satisfaction level with healthcare services in the Al-Qassim region. This research will aid healthcare administrators, policymakers, paramedical staff, and physicians in identifying the reasons for patient dissatisfaction and considering viable options to improve patient satisfaction levels in the health care system.

Keywords: patient satisfaction, healthcare system in Saudi Arabia, determinants of satisfaction, experiences, perceptions, and expectations.

الملخص

الهدف الرئيسي من هذه الدراسة التجريبية هو قياس وتقييم درجة رضا المرضى في مستشفيات منطقة القصيم في المملكة العربية السعودية والأسباب الأولية التي قد تسهم في الرضا أو عدم الرضا عن نظام الرعاية الصحية. تم الحصول على البيانات الأولية من عينة تتكون من 292 مريضاً في منطقة القصيم بالمملكة العربية السعودية. تم قياس مستوى رضا المرضى عن نظام الرعاية الصحية في منطقة القصيم باستخدام استبيان ذاتي. تشمل المحددات الرئيسية لرضا المرضى في نظام الرعاية الصحية التركيبة السكانية للمرضى، وتوقعاتهم، وتصوراتهم، وخبراتهم في منطقة القصيم. كانت تجارب المرضى وتوقعاتهم من أهم العناصر في التأثير على مستوى رضاهم. علاوة على ذلك، فإن العوامل الديموغرافية لها تأثيرات إيجابيه وجوهرية على تصورات الناس وسلوكهم فيما يتعلق بمستوى رضاهم عن خدمات الرعاية الصحية في منطقة القصيم. سيساعد هذا البحث مديري الادارات الصحية وصانعي السياسات والموظفين الطبيين وكذلك الأطباء في تحديد أسباب عدم رضا المرضى والنظر في الخيارات القابلة للتطبيق لتحسين مستويات رضا المرضى في نظام الرعاية الصحية

الكلمات المفتاحية: رضا المريض، نظام الرعاية الصحية في السعودية، محددات الرضا، الخبرات، التصورات والتوقعات

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Introduction

The capacity to live a socially and economically active life was recently added to the World Health Organization (WHO) definition of health (WHO, 1948, 1986). It also considers non-clinical aspects of care (Last *et al*., 2000). Healthcare services also aim to improve population health (Lee, 1985).

When the patient's initial feelings regarding the treatment experience are met with unfulfilled expectations, satisfaction wanes (Bowling *et al.*, 2012). Satisfaction is defined as the degree of agreement between a patient's ideal and real care expectations (Al-Emadi *et al*., 2009). Patient satisfaction is a key indication of healthcare service quality globally. Understanding the factors that affect patient satisfaction may lead to the development and implementation of customised strategies and programs that meet both service providers and patients' requirements (Aragon & Gesell, 2003). Studies show that patients are the best judges of their own experiences. Using patient feedback/information can help improve and overcome flaws in the delivery of quality service within the healthcare system (Mohamed *et al*., 2015).

The kingdom of Saudi Arabia, like all other states, has established its healthcare system to meet the country's medical necessities of its population in its distinctive cultural milieu, taking into account the social and cultural environment (Walston, Al-Harbi, & Al-Omar, 2008). The main goal of this healthcare system is to maximize patient satisfaction by promptly offering equitable, competent, inclusive, and inexpensive healthcare services with rapid delivery (WHO, 2000). Patient satisfaction, on the other hand, is a complex and wide concept that encompasses individual perceptions, expectations, and experiences among other things (Bleich *et al.*, 2009).

Satisfaction is a perceptual and relative emotion that arises from one's personal experiences and expectations of the dominant healthcare system. This concept has been described by experts in the domain of psychology and medical sciences as "a *healthcare recipient's response to the important aspects of his experience of a healthcare service*" (Hills & Kitchen, 2007). Substantial research funds have increased for this topic particularly in the last twenty years. The purpose of this study is to measure patient satisfaction from the standpoint of healthcare services within the overall healthcare system and Saudi Arabia specifically.

Patient satisfaction has been identified in academia as an important component of healthcare quality; it reflects the competence of healthcare service providers to accommodate the demands and prerequisites of patients, including their expectations. In developed and developing countries, it is recognized and acknowledged as a crucial component and signifier of healthcare quality, and the evaluation and estimation of patient satisfaction from their healthcare system, which was outlined as "*the sum of features and characteristics of a service that bear the ability to satisfy the given need of the patients*" (Savage & Armstrong, 1990). Patients are satisfied when receiving medical treatment procedures that are both helpful and accommodating.

The goal of this research was to determine the degree of patient satisfaction as well as the detriments that may contribute to satisfaction or disappointment. Every country including Saudi Arabia may fill in the deficiencies in its healthcare system and make changes to boost its people's health status. Patient satisfaction studies can help increase healthcare professionals' transparency, which can contribute to advances in patient care measures by both hospitals and practitioners. Also, it reduces expenditures on healthcare while also increasing patient safety level. According to recent research, it can be used to evaluate the efficacy of various healthcare systems around the globe. Furthermore, it may assist healthcare managers in identifying healthcare policies, healthcare organizations, and practitioner conducts that considerably improve patients' needs expectations (Quintana *et al*., 2006; Bernhart *et al*., 1999).

With this context, this research article intends to explore, analyze, and discuss the different factors that determine patient satisfaction with the healthcare system of the Kingdom of Saudi Arabia. This study may also help policy makers, healthcare administrators, physicians, and paramedical staff to pinpoint the causes of dissatisfaction among the patients and plan potential interventions in order to build confidence, increase trust and enhance the patient's satisfaction with the healthcare system. The literature review explored multiple sources of information from books to research journals by using several databases such as PubMed, Medline, and Medscape to understand the phenomenon of patient satisfaction and healthcare mechanics that determine the patient satisfaction in Kingdom of Saudi Arabia. Thus, based on the existing literature and experience

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survey, the study intention was to understand the contextual factors and how positively and significantly these may have an impact in determining the satisfaction of patients from Saudi healthcare systems.

Literature Review

Patient satisfaction is a critical healthcare outcome indicator that requires attention from hospital managers. Understanding and achieving patient satisfaction is critical from an administrative perspective (Ancarani *et al*., 2009). Furthermore, it has been observed that satisfied patients follow certain medical regimens and treatment plans; hence, patient satisfaction measurement provides more significant information that is useful for addressing flaws within the system (Braunsberger & Gates, 2002). A literature review was conducted to investigate the topic at hand.

In Saudi Arabia, patient satisfaction is an area that has received little attention overall, and in the Qassim region specifically. Even though the problem is not new, it has been noted that there is an unwillingness to integrate patient feedback and opinions in the provision of healthcare services to meet patients' expectations in both sectors: private and public. Public healthcare facilities have a lower level of patient satisfaction (Shaikh *et al.*, 2008). In Saudi Arabia, research has been conducted to assess patient satisfaction with outpatient, inpatient and emergency facilities. Nevertheless, research conducted at the local level in various regions of the kingdom revealed that patient satisfaction levels differ in healthcare services.

Main Determinants of Patient Satisfaction

Patient satisfaction is the primary focus of medical professionals and researchers as the modern concept 'patient centered healthcare services' revolves around the patient satisfaction; this is seen in the flow of activities and resources of healthcare directed towards satisfaction of the patient. Though some of the studies found little or no relationship between patient satisfaction and socio-demographic features of service users, the general trend in satisfaction studies have observed that age, gender, and level of education are positively associated with patient satisfaction in healthcare. These studies have further identified that as compared to males, female was more satisfied. Similarly, less educated individuals were less satisfied. However, some studies in Arab Gulf states like Saudi Arabia have identified a high rate (90%) of patient satisfaction with the accessibility of services in Riyadh, while and another study in Riyadh also reveals an 80% satisfaction rate (Al-Emadi *et al.*, 2009; Al-Yousuf *et al*., 2002).

Globally, the Donabedian philosophy is widely seen as covering the specified variables that assess outcome/patient satisfaction (Donabedian, 1980). The concept addresses the process, structure, or results in as indicators of patient satisfaction. Both medical and non-medical variables are represented in the structure (Clark *et al*., 2008). Medical determinants entail paramedic staff, doctors, equipment, and training, whilst the non-medical determinants include the physical infrastructure facilities that make up the environment. Similarly, process indicators are described as the things that practitioners do to and for the patient during the treatment (Sitzia & Wood, 1997; Donabedian, 1980). In broader terms, patient expectations, perceptions and their experiences from the healthcare system have been identified as the major determinants of patient satisfaction globally. Moreover, studies have found that these domains are interconnected, interdependent, and interrelated to each other and subsequently can have significant impacts on patient satisfaction.

Psychosocial Determinants

To explore and understand the determinants of patient satisfaction from healthcare facilities, one has to consider the psychosocial dynamics of the human psychology. There are a variety of psychosocial elements that could significantly impact and influence patient attitudes towards satisfaction with their healthcare services (Erci & Ciftcioglu, 2010). Psychological disorders like somatic obsession and affective distress might have a detrimental impact on patient satisfaction. A patient's personality serves as an essential influence; those patients with a negative attitude or outlook are less inclined to be satisfied if they are depressed and anxious (Funderburk *et al*., 2012; Desta et al., 2018).

Patient Expectations

It is our nature to demand something from life and from those around us. Patients' expectations of healthcare providers can play a role in patient satisfaction. Most patients compare their healthcare experience to their expectations, which helps healthcare authorities estimate patient satisfaction (Constantino *et al*., 2011). Patient expectations are employed as a quality assurance technique; this outlook could

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complicate the concept of satisfaction. The literature identifies two types of patient expectations: 1) expectations derived from previous consultation and treatment experiences and 2) action expectations, which imply the action the doctor will take, such as a prescription, referral, and even advice of the doctor (Greenberg *et al*., 2006). Due to the nature of patients' expectations that are founded on prior information and experiences, expectations are dynamic and tend to alter with time. Patients with lower expectations have been reported to be more satisfied (Jawaid *et al*., 2009).

The doctor's comprehension of the disease process, offering accurate information, suitable diagnosis and therapy, medication, specialist referral, and patient emotional support are important factors in patient satisfaction (Siddiqui *et al.*, 2011; Qidwai *et al*., 2003). However, these expectations may differ depending on the patient's age, gender, and marital situation.

Patient Perceptions & Satisfaction

Perception is also one of the vital psychological processes that plays a significant role in developing mind and cognitive maps among patients regarding their the healthcare service providers. The patient's impressions of healthcare facilities are vital to research on patient satisfaction (Nguyen *et al.*, 2002). Many studies have found that the patient's self-perceived health and personality are crucial aspects that create or break patient perceptions. Saudi Arabian research demonstrates a dearth of exploration of this essential patient satisfaction domain (Al-Yousuf *et al*., 2002). More doctors, paramedics, drugs, equipment, and less waiting time could significantly improve patient satisfaction and perceived quality of care (Loevinsohn et al, 2009).

Patient Experience & Satisfaction

Researchers recognize the patient's experience as a strong predictor of patient satisfaction; consequently, the majority of research surveys conducted throughout the world have been designed to assess the patient's experience with the health system in addition to enhancing the healthcare system and services quality. The WHO has also used it to assess patient experience with the healthcare system as one of the indicators of the system's responsiveness (Sultana *et al*., 2010). According to the WHO, responsiveness of healthcare can be measured through a person's experience with healthcare services (Jawaid *et al*., 2009); thus, patient satisfaction, healthcare quality, and the patient's own experience are considered to be the cornerstones of responsiveness of the healthcare system. Though patient satisfaction varies by place and country, the diversity in patient satisfaction is explained by the patient's experience (Saleem *et al*., 2009).

The patient's experience with medical health, the building, the cleanliness of the rooms and the availability of beds, the availability of medication in the pharmacy, the availability of time, and gaining the attention of the nurse and doctor are all positively associated with patient satisfaction and have a greater impact on determining their satisfaction (Campbell *etal.*, 2007); however, non-availability of beds and a lengthy waiting time for admission are negatively associated with patient satisfaction (Funderburk *et al*., 2012).

Participation and involvement of patients in treatment decisions, illiteracy, and a lack of awareness about patients' rights may all contribute to patients' dissatisfaction with the system, as well as a lack of continuity of care at various levels and appropriate referrals (Ahmad *et al*., 2005), whereas one of the primary concerns of any healthcare institution is achieving a high level of patient satisfaction through advanced and higher-quality services (Ahmad *et al*., 2005).

Demographic Characteristics of Patients

Patient characteristics such as age, gender, socioeconomic, education, and marital status are widely recognized and used by researchers to assess patient expectations through quantitative surveys (Bleich *et al*., 2009). Age, gender, socioeconomic status, education, and marital status have been found in several studies that might have significant influence in predicting the patient expectations from the healthcare as identified by patient satisfaction surveys in developing countries like Pakistan. Younger people have greater expectations in comparison to older patients. Though gender has been found to be a variable predictor, some research shows that males are more satisfied with doctor and paramedical care than females (Sultana *et al*., 2010).

The level of education and literacy has also been linked to patient satisfaction such that higher levels of education are linked to lower patient satisfaction. Educated consumers understand diseases better and can interact effectively with healthcare providers (Jawaid *et al*., 2009). Similarly, the relationship between

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socioeconomic status and patient satisfaction is another critical factor in determining patient satisfaction. People from lower social backgrounds were more satisfied with the treatment than those from more affluent social backgrounds (Saleem *et al*., 2009; Campbell *etal.*, 2007).

Research Methodology

This study used secondary data from books, research journals, and online resources while collecting primary data from participants via structured questionnaires using nominal, ordinal, and continuous scales. Surveys are the most extensively used method in medical and social research to study and comprehend people's attitudes, behaviors, and perceptions. Since the study was social in nature and the goal was to assess patient satisfaction with healthcare services in the Qassim region of Saudi Arabia, a survey was used to gather data.

A 5-point Likert scale using the following terms, 1. strongly agree, 2. agree, 3. uncertain, 4. disagree, and 5. strongly disagree, was borrowed and administered from Bourque et al., (2003). A cross-sectional quantitative survey was conducted to address the objectives. The population was comprised of patients who visited four randomly chosen hospitals in the Qassim region over a two-month period. Bukayriyah, Buraydah, Muznib, and Unaiza hospitals were chosen at random based on their capacity and geographic location. Because the population was infinite, the sample size was chosen by utilizing a statistical formula for infinite populations (Daniel, 1999), n = Z2 p (1-p)/d2, where Z is the statistic for level of confidence, p is expected prevalence or proportion, and d2 is the proposed accuracy and, therefore, the sample size for this study was determined as (1.96) 2 0.5 (1-0.5) /0.0252 = 292 participants. Over a two-month period, questionnaires were distributed randomly to every fifth patient aged 18 years or older who visited one of four selected hospitals (February to March 2021). All responders' identities were kept anonymous. The research team collected 292 questionnaires for patients who visited the selected hospitals in the Qassim region.

Figure 1 shows the theoretical model of the study based on the research factors (correlation analysis). This model illustrates the association/relationship between independent variables and a dependent variable, as well as the impact of independent variables and respondents' demographics on the dependent variable (regression analyses and test of significance i.e., t-test and ANOVA).

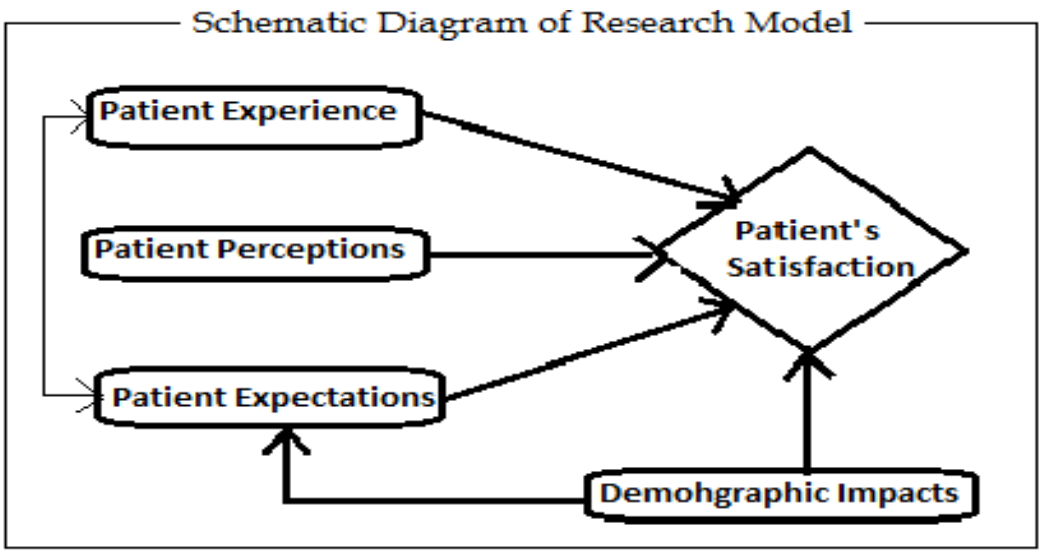

Figure 1. Schematic Diagram of the Theoretical Framework.
Source: Developed by researcher from the review of the literature.

Both descriptive and inferential analyses were done through frequencies, cross tabulation, and application of statistical tests to substantiate or otherwise reject the null hypotheses of the study and to draw conclusions from the results.

Criteria for Selection of Variables and Items of the Survey Instrument

The items in this study were derived and modified from Marshall et al. (1994), PSQ-III (long form patient satisfaction questionnaire) of

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the Rand Corporation's Rand's patient satisfaction questionnaire.

Ware and his colleagues first developed the Patient Satisfaction Questionnaire (PSQ), which contains 80 items (Ware, Snyder, & Wright, 1976). The most recent version of the questionnaire is the PSQ-III, which contains 50 items and assesses (patient expectations, patient perceptions, and patient experiences) in relation to six dimensions of care, namely interpersonal manner, time spent with the doctor, financial aspects of care, communication, technical quality, and accessibility of care.

Reliability and Validity of the Survey Instrument

Nunnally (1978), asserts that instruments employed in fundamental research should have a reliability of at least .70. Additionally, he contends that extending reliability beyond .80 is a waste of time in fundamental research. On the other hand, he believes that a reliability of .80 for equipment employed in practical research is insufficient. Similarly, because we make significant decisions regarding individuals' fates based on exam scores, their reliability must be at least .90, and preferably .95 or higher. To check reliability and consistency, the Cronbach Alpha was computed through SPSS software. The reliability score for 4 variables measuring 34 items was 0.873, which is above the threshold value of 0.70; hence, it was assumed that the scale is reliable and consistent. The reliability statistics are given below in table 1.

Table 1.
Reliability Statistics of the Scale.

No of Items	*Cronbach Alpha*
34	.873

Source: Developed by researcher.

The researchers of this study have used multidimensional variables, which were based on the earlier studies of patient satisfaction surveys. The measurement properties such as structural validity, content validity, cross cultural validity, internal consistency, and reliability of the instrument used in this study with psychometric values (a > 0.86 and r > 0.579) were consistent with earlier studies on the same scale such as Ekwall & Davis (2010) a > 0.70, Webster et al. (2011) a > 0.70 and r > 0.6, and Dyer et al. (2012) a > 0.75. Thus, our scale had sufficient internal consistency and reliability as the alpha score was 0.86, which is higher than the value of .070 and it is also consistent with the Nunnally (1978) and Cronbach (1951).

Major findings and data analyses

According to Babbie (1993), researchers routinely employ survey methods to acquire data in social sciences, including health research. Similarly, Yin (2016) claims that surveys allow researchers to obtain diverse data and answer research questions. The survey method was used because it offers 'excellent vehicles to measure the attitudes and orientations of patient satisfaction (Sekaran, 2003). Thereafter, the literature on the topic was analyzed to generate research cards containing key concepts, variables, major findings, solutions, or new research models. Afterwards, the cards' content was categorized and re-classified for usability and qualitative research. A structured questionnaire on 5-point Likert scale was generated from the literature and administered from the sample male & female respondents randomly. To understand the validity, an expert panel was requested for refining the language, format, and items for legibility and logical order. Then, their feedback was incorporated into the final instrument.

Analyses of the Descriptive Results

To understand the descriptive properties of the research variables, the descriptive statistics were computed; the table 2 below portrays the descriptive statistics for the same:

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Table 2.
Descriptive Statistics on the Research Variables.

Variables	n	Min	Max	Mean	SD
Patient Experience	292	2.79	4.46	3.75	.48
Patient Perception	292	2.85	5.00	3.92	.37
Patient Expectations	292	2.44	4.55	3.31	.45
Patient Satisfaction	292	3.25	5.00	3.66	.42

Source: Developed by researcher.

Testing of Hypothesis

Association of Predictors with Criterion Variable

H_1: The predictors are positively significantly correlated with criterion variable:

Table 3.
Correlation Coefficient Analysis.

		PE	**PP**	**PEs**	**PS**
PE	Pearson Correlation	1	.522**	.517**	.429**
	Sig. (2-tailed)		.000	.000	.000
	n	292	292	292	292
PP	Pearson Correlation	.522**	1	.395**	.453**
	Sig. (2-tailed)	.000		.000	.000
	n	292	292	292	292
PEs	Pearson Correlation	.517**	.395**	1	.587**
	Sig. (2-tailed)	.000	.000		.000
	n	292	292	292	292
PS	Pearson Correlation	.429**	.453**	.587**	1
	Sig. (2-tailed)	.000	.000	.000	
	n	292	292	292	292

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Developed by researcher.

It could be observed from the correlation table 3 that the highest correlation exists between a predictor and criterion variable such as the 'patient expectations (PES)' and 'patient satisfaction (PS)' (r=0.587 with 0.000 p-value providing 100% significance of the relationship. Though, the results show that all three predictors are significantly correlated with patient satisfaction with r-scores ranging from r= 0.429 to 0.587 with 0.000 p-values on all computations, however, the lowest correlation could be seen between the two predictors i.e., 'patient perception (PP)' and 'patient expectation (PES)', where r=0.395 is significant with a p-value at 0.000 level. Therefore, based on the above results, we accept our H_1 as true and substantiated; this means that all of the variables of the study positively and significantly correlated with one another.

Prediction of the Dependent Variables

H_2: All the three predictors i.e., PE, PP and PES significantly predict the patient satisfaction

Table 4.
Model Summary of Multiple Regressions [H2]

R	**R^2 Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**F**	**Sig.**
.698[a]	**.692**	.483	.36755	24.671	.000[a]

Source: Developed by researcher.

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Table 5.
Coefficients of Regression [H_2]

Model-1	Unstandardized		Standardized	t	Sig.
	B	Std. Error	Beta		
(Constant)	.003	.385		.004	0.001
Patient Experiences	.102	.067	.139	1.839	*0.006*
Patient Perception	.256	.084	.189	2.997	0.015
Patient Expectations	.223	.098	.247	2.663	0.000

Predictors: (Constant), patient experiences, patient perception, patient expectations
Dependent Variable: Patient satisfaction
Source: Developed by researcher.

The regression table 4 showing model summary, that points that the predictors are accountable for 69.2% of variation in patient satisfaction (R^2 = 0.692). Moreover, the table 5 elucidate role that is played by each single predictor of the study. The result shows that 'patient experiences *0.006*, patient perception 0.015, and patient expectations 0.000' are the respectively three significant variables at *p-values* < *.95.* Given the above statistics, since predictors have significant impacts, therefore, the H_2 is substantiated and accepted true.

Discussion

Studies on patient satisfaction throughout the globe are getting attention of the researcher in general and in the Gulf region such as Saudi Arabia in particular. Patient satisfaction with healthcare has been studied in western context due to its instrumental role in determining the quality of healthcare. This study was aimed to investigate and determine the level of patient satisfaction that could possibly result into satisfaction or otherwise into dissatisfaction from the healthcare facilities in Al-Qassim region Kingdom of Saudi Arabia.

Our results are consistent with Al-Emadi *et al*., (2009); Al-Yousuf *et al.* (2002); and Funderburk *et al*. (2012) patients expectations (Constantino *et al*., 2011; Siddiqui *et al*., 2011), patient perceptions (Al-Yousuf, *et al*., 2002; Loevinsohn et al, 2009), patient experience (Funderburk, 2012; Sultana *et al*., 2010; Saleem *et al*., 2009). Results of this study illuminate that patient expectations and patient satisfaction are correlated, which implies that predictors are significantly associated with patient satisfaction however, lowest correlation was found between the patient perception and patient expectation, thus our results are consistent with results are consistent with (Al-Emadi *et al*., 2009; Al-Yousuf *et al*., 2002). Furthermore, patient experience was studied by Funderburk *et al.* (2012), patients expectations by Constantino *et al*., (2011) and Siddiqui *et al*. (2011), patient perceptions by Al-Yousuf, *et al*. (2002) and Loevinsohn et al, (2009) while patient experience was investigated by Funderburk (2012); Sultana *et al*. (2010) and Saleem *et al.* (2009).

The results of the association lead us to the next step, the application of regression. As for as results for regressions are concerned, the study found that predictors significantly predicted patients satisfaction for example, patient experiences, perception, and expectations The study found that patient perception with beta .189 significant at 0.015 and their expectation with beta .247 significant at 0.000 were the most significant factors in determining their level of satisfaction in Saudi Arabia. The implies that lack of privacy, autonomy, participation in decision making, weak communication, and non-hygienic environment also leads the patients towards good or bad experiences. Again, our results were aligned with reviewed studies. The study has also found positive and significant impacts of the demographics i.e., 'young age, gender, literacy, and affluent social class in determining their perception and attitude towards satisfaction from healthcare services in Saudi Arabia. This means that demographics factors play significant role in determining the patient's perception and attitude towards satisfaction as studied by Sultana *et al*. (2010); Bleich *et al*. (2009), and Jawaid *et al.* (2009).

Conclusion

The research sought to ascertain patients' satisfaction with healthcare services and the quality of care received at hospitals in Saudi Arabia's Qassim province. Patient satisfaction is a critical indicator of care quality. While researchers have examined the topic in the context of western countries, there is a dearth of research in developing countries and the Middle

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East, particularly Saudi Arabia. As a result of the findings above, this study reveals that patients are more satisfied with health care services when a country's health system is responsive to their needs and expectations in terms of respect, autonomy, dignity, and rapid response to their needs and expectations.

While this study discovered that patient expectations are mostly determined by the patient's attributes, such as age, socioeconomic status, and education, it also discovered that gender and ethnicity play a minor effect in predicting patient happiness. Similarly, the patient's viewpoint and other psychological elements may be at fault. In Saudi Arabia, the private health care sector is growing as a result of the government's radical policies encouraging and compensating the private sector for sharing the government's burden. However, despite these efforts and incentives, the majority of health services are still provided by government-managed public sector hospitals despite the fact that the private sector has been found to be somewhat responsive in previous studies conducted in indigenous settings. On the other hand, when compared to the private sector, the public sector is significantly underutilized; additionally, it has been discovered that public sector officials lack an understanding of quality improvement and service quality in public sector healthcare institutions.

With this context in mind, our study implies that general improvements in patient satisfaction interventions are necessary not just at the individual level, but also at the hospital and health care system level. These treatments could be associated with the orientation of the quality of care ideas among healthcare professionals such as strengthening staff competency, including motivation, which is critical for increasing patient trust and satisfaction.

Additionally, this study suggests that patient satisfaction can be improved by strengthening healthcare professionals' capacity through refresher courses and training sessions in which they can share and express their perspectives, knowledge, and experiences in order to improve their interpersonal and communication skills, as most studies on patient satisfaction surveys report and support. It will be more appropriate for resource-poor nations because, given the strain on their economy, it is more cost effective than focusing entirely on the development of technical facilities. Finally, but certainly not least, applying patient satisfaction research findings to national and local policy levels may be critical for increasing patient satisfaction with the Saudi Arabian healthcare system. With domestic policy, patient satisfaction with the Saudi healthcare system has the potential to be significantly increased.

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