THE EFFECT OF QUALITY OF HEALTH CARE IN SAUDI ARABIAN PERCEPTION TO PATIENT SATISFACTION IN MAKKAH IN 2022

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ABSTRACT

Background

Access to healthcare in the Kingdom of Saudi Arabia (KSA) has indeed seen significant improvements over the last three decades. These advancements have, however, posed challenges for healthcare organizations, their personnel, and other stakeholders. The need to enhance the quality of healthcare services has become increasingly evident.

The ambitious Saudi Vision 2030 and the National Transformation Program 2020 (NTP) have made healthcare a central focus area. These challenges include: increasing demand for healthcare services coupled with a rise in costs, changing patterns of disease, shortage of healthcare professionals, a significant annual pilgrim population, a rise in medical errors and long waiting times. A key policy being implemented as a part of the development plan in KSA of the Saudi Vision (2030), with regard to health services, is the need to adopt methods to improve quality of care, and to apply these methods across all health sectors to ensure that appropriate levels of efficiency and quality are achieved. Indeed, measurement of patient satisfaction is central to identifying areas for improvement and thus achieving optimal delivery of healthcare services. In addition to patient satisfaction, it is important to consider access to healthcare as a fundamental quality of care indicator.

Aim of the study: This study aims to assess the effect of service quality of health care in Saudi Arabian on patient satisfaction with respect to primary health care services in Makkah in 2022.

Method: cross-sectional study to determine the relationship between quality of health care system on the quality of services providing in primary healthcare center and the satisfaction of Saudi patient .The study was conducted at primary healthcare centers in the Saudi and more specifically in Makkah. Total of 200 eligible patients participated in this study.

Results: factors entered the regression model of total attitude were: Socio demographic variables (Age, gender, occupation, education, marital status, family income) and total satisfaction level And 6 out of 7 factors had predicted total attitude of the: (Age, gender, occupation, education, marital status, family income).The 6 factors together explained 12.5% of the variation of the total attitude score of the studied patients towards primary health care services. Female, single, being older, low educational level and students, low family Income had higher total attitude score

Conclusion. This review exemplifies the need for further improvement in the quality of healthcare in primary health care in KSA and patient satisfaction was influenced by health service quality. Many of the problems identified in this review could be addressed by establishing an independent body in KSA, which could monitor healthcare services and push for improvements in efficiency and quality of care.

Keywords: Saudi healthcare, quality, perception, patient, satisfaction, effect.

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Introduction

Patient satisfaction has long been considered an important component when measuring health outcomes and quality of care [1,2]. It is a complex relationship between their perceived needs, expectations from the health services received [3]. So, satisfaction is one of the variables affecting the outcomes of health care and use of services. In order to improve the provision of care, predictors of dissatisfaction must be identified and eliminated [4,5]. User satisfaction with the health care is a basic component in evaluating health care quality [6]. The importance of the patient's opinion and his perception of treatment and care at health facilities are now recognized in all developed systems of health care [7]. The primary health care approach is a relatively new concept in the kingdom of Saudi Arabia. In 1978, the concept in the kingdom of Saudi Arabia. In 1978, the kingdom of Saudi Arabia adopted the strategy of (Health for all the year 2000).

Primary Health Care (PHC) is the backbone of the strong healthcare systems, contributing to improve population health and health equity as reported by Olfson and colleagues [8]. Recently, international health policy has paid increased attention to the role of PHC as a strategic policy approach to change healthcare systems‟ orientation from disease-focused systems to person, family and population-focused systems as documented by Ashworth and Millett [9]. Such a paradigm shift has put PHC at the Forefront of international health policies. The recent report of the, “PHC: now more than ever”, is a case in point by World Health Organization (WHO) [10]. This international commitment to make PHC as the cornerstone of healthcare systems has stemmed from the increased recognition of the mounting evidence linking PHC to improved population health De Maeseneer and Flinkenflgel; Kumar [11- 12].

Groene addressed seven ways to improve quality and safety in any health care as the following: (1) ‘Align organisational processes with external pressure. (2) Put quality high on the agenda. (3) Implement supportive organisation-wide systems for quality improvement. (4) Assure responsibilities and team expertise at departmental level. (5) Organize care pathways based on evidence of quality and safety interventions. (6) Implement pathway-oriented information systems. (7) Conduct regular assessment and provide feedback’. [13]

The health system in Saudi Arabia (SA) has three sectors: the Ministry of Health sector (MOH), the private sector and other government sectors. The MOH is the major government provider of health services in SA. [14]

Service providers are progressively facing a wide range of social, financial, political, regulatory and cultural challenges, associating with demands for greater efficiency, better quality, and lower costs[15] Health care institutions have to go beyond a medical view and replace it with a holistic social approach to healthcare. Precise diagnosis and treatment are not enough, patients will be looking for performance for services they are rendered. It is argued that the focus on the patients is the first among 5 attributes of healthcare quality. [16]

Some studies have been conducted to examine the impact of service quality in healthcare settings in Saudi Arabia on patient satisfaction. Al-Doghaither evaluated the satisfaction of 400 inpatients with health services in Riyadh, and found that the highest mean satisfaction score was admission, and the lowest was communication.[17] Another study was conducted to examine patient satisfaction in primary health care centers in different regions of Saudi Arabia. It indicated that 77.5% of the primary health care patients were satisfied with the services.[18] the most important factor in the choosing was medical services followed by accessibility and administrative services. Since the Saudi government provides 64.5% of healthcare and the rest is provided by the private sector. [19]

Health care quality may be a level of value provided by any health care resource, as determined by some mensuration. Like quality in different fields, it is an assessment of whether something of good or not one thing is nice enough and whether it is appropriate for its purpose. The goal of health care is to produce medical resources of top quality to all or any who want them; that's, to confirm sensible quality of life, to cure diseases once potential, to increase expectancy, and so on. Researchers use a range of quality measures to aim to see health care quality, as well as counts of a therapy's reduction or decrease of diseases known by diagnosing, a decrease within the variety of risk factors which individuals have following preventive care, or a survey of health indicators in an exceedingly population WHO are accessing bound styles of care. [20]

Aim of the study:

To assess the effect of service quality of health care in Saudi Arabian on patient satisfaction with respect to primary health care services in Makkah in 2022.

Objectives:

- Patient satisfaction is of value to primary health care providers.
- This study was to assess the effect of service quality of health care in Saudi Arabian on patient satisfaction in Makkah, Saudi Arabia.

Research Questions

Assess quality of health care in Saudi Arabian to satisfaction patient services in Makkah considered vital importance to support those patients. This study filled the gap in the literature by answering the following research questions:

1) To which degree the patients are satisfied with the PHC provided in Makkah area.
2) Do the patient's satisfaction differ significantly in relation to their socio-demographics (Gender, age, education, marital status, Residence area, distance from PHC, working status, family type? income, & no of living children)

Methodology:

The study population consisted of the patients who came for services to the primary healthcare center in in Makah province, Saudi Arabia from June 2022 to August 2022, on 200 patients (147 males, 53 females). The ages ranged from 18-61 years. The sample size is (200) patients selected randomly. Necessary permission was obtained for the data collection. This was a Cross-sectional descriptive study, a predesigned questionnaire was used that consisted of 47 close-ended questions and specific questions on Sociodemographic background (Age, gender, nationality, were married, marital status, occupation, education and income) characteristics. The questionnaire is divided into six students.

Dimensions of care: Each dimension (Accessibility, continuity, / month, humaneness, comprehensive, communication, health education and overall) has a number of statements that measure patient satisfaction.

1. Accessibility dimension measured satisfaction related to time and efforts require getting an appointment, distance and proximity of site of care, convenience of working hours to the patient etc.
2. Continuity dimension focused on the medical record, referral time, contact between the clinic and the patient
3. Humaneness dimension measured how the reception, doctors, nurses and other staff of the clinic treat the patient, respect, privacy.
4. Comprehensive dimension focused on periodic. check-up, information on medical record ,lab results , etc.
5. Communication dimension measured the satisfaction related to the patient-provider relationship.
6. Health education dimension focused on the availability of educators and education programs in the clinic.

Study design:

A cross-sectional study to know the effect of quality of health care in Saudi Arabian perception to patient satisfaction in Makkah.

Study setting:

The present study has been conducted at in primary healthcare centers in Makkah.

Study Sampling: The current study has been conducted at Makah the study randomly sampled. They has been collected throe the Saudi healthcare system and more specifically in according to the inclusion, exclusion criteria shown below.

Inclusion criteria:

- Adult age 18 -or above
- Male and female.
- Visiting primary health care seeking health services in the past 3 months.

Exclusion criteria:

- The Primary healthcare centers refused to participate in the research.
- The participates refused to answer the questionnaire.

Sample size:

Sample size was calculator by Raosoft Online sample size calculator. It was 200 participant, based on assumption that during the last 3 month, the total number of patients who visited the one clinic the primary health care clinic at Al-Aziziyah Al-Sharqiah PHCC was 270 patients, adding 10% for non-respondent, 200 participants were invited to participate in the study.

Tool of Data Collection:

A questionnaire was developed by the researcher to collect the needed data. It included two parts:

Tool (I) Questionnaire the first part deals with demographic data such as. Gender, marital status, age

The second part concerns with

Tool (II): consisted of 47 close-ended questions will be assessed by a questionnaire that was previously assesses to have good reliability examines how satisfied the Saudi People are with their public sector healthcare services.

Data Collection technique

- During the study period (June 2022 to August 2022), the researcher was available at the involved primary healthcare centers five days in the week to clarify any issue.
- The researcher distributed the questionnaire in the waiting area by them self to the selected patients.
- The questionnaires were collected at the same time.

Content Validity and reliability:

Tools were submitted to: quality panel to test the content validity. Modification was carried out according to the panel judgment on the clarity of sentences and appropriateness of content. A pilot study was carried out on 10% of the total sample to check the clarity of items, determine the feasibility of the study and estimate the time of data collection and then modifications were made according to pilot study results. Sample included in the pilot was excluded from the study.

Pilot study/pretesting

An exploratory sample was drawn and the stability of each was calculated reliability target value were 0.8 pilot study conducted on 10% of sample size; and modification made according

Field of Work:

- Saudi health care centers will be identified by their record number and names .then the quality of health care to patient satisfaction Saudi of the list .
- The researcher introduced himself to each staff in the centers

Ethical Considerations:

This study was conducted under the approval from the administrator's in Saudi Arabic and more specifically at Makkah. Participants were given explanations about the purpose of the study, Confidentiality of participants' information was assured, and the data were accessed only by the investigators involved in the study.

Data Analysis:

Collected data will be coded and tabulated using a personal computer, then will be statistical package for social science (SPSS) version 20 was used to analyse these data. Chi-square to compare t-test and ANOVA level was considered at p value>0.5.

Potential risks

This study does not directly involve any treatment or intervention.

The Saudi people show a willingness to contribute to public healthcare financing on the condition that there is a clear improvement in the quality of healthcare services. However, this study does not estimate the Saudi people's willingness either to pay, for an improved quality of public healthcare service or to ensure sustainability of the current system.

Budget

It has be self- funded

Result

Table (1) Distribution of Socio-demographic data in study group .

Demographic variables	**N**	**%**
Age		
18-23	24	12
24-35	78	39
36-47	**80**	**40**
48-57	18	9
Gender		
Male	**147**	**73.5**
Female	53	26.5
Marital Status		
Single	45	22.5
Married	155	77.5
Level of education		
Illiterate	2	1
Elementary	6	3
intermediate	10	5
Secondary	104	52
university	78	39
Occupation		
Student	16	8

Worker	12	6
Government employee	151	75.5
Private sector employee	6	3
Other	15	7.5
Family income		
<5000 SR	8	4
5000 – 10000 SR	87	43.5
>10000SR	105	52.5

Table 1 demonstrates socio-demographic characteristics of study participants, most of them aged 36-47 (40%) and the lowest percentage was those in age male (73.5%) and the remaining quarter is female. As regard the levels of education it was found that about half of the participants had secondary education (52%) and only 1% illiterate. More Than three quarters of the sample were married, while singles were 22.5%. Three-quarter were a government employees (75.5%) and only (8%) were students. Regarding economical state, 43.5% of participants had income range between 5000-10000 riyals/ month, while 52.5 % had income more than 10000 riyals / month.

Table 2: Distribution of the Patient Satisfaction to quality of primary health care according to their perceptions about Accessibility to health care

Accessibility Items			**Disagree**	**don't know**	**Agree**	**Mean**	**SD**
1	The distance from home to the health center is acceptable	**N**	23	5	172	2.74	0.64
		%	11.5%	2.5%	86%		
2	Working hours at the clinic is suitable for all	**N**	74	33	93	2.09	0.91
		%	37%	16.5%	46.5%		
3	Time spent in the waiting room for a routine visit is very long	**N**	63	60	77	2.07	0.83
		%	31.5%	30%	38.5%		
4	I find it difficult to get an appointment for health care	**N**	86	40	74	1.94	0.89
		%	43%	20%	37 %		
5	The clinic gives me access to medical care at any time I need it	**N**	97	44	59	1.81	0.86
		%	48.5%	20%	29.5%		

Table 2 demonstrates the patient perception about the accessibility to health care services; the majority (86%) of the patients agreed that the distance between their home and clinic is acceptable while 11.5% are not. About half (46.5%) of the participants agreed that the working hours at the clinic is suitable for them, 16.5% are don't know while 37% are not. 38.5% are report that they waiting for long time 30% were don't know while 31.5% disagreed with that. About two fifths of the participants (37%) found it difficult to get an appointment, (20%) We're don't know and 43% disagreed with that. Finally about one third (29.5%) of them agreed about the access to the medical care at any time they need 20% were don't know and 48.5% did not.

Table 3: Distribution of the Patient Satisfaction to quality of primary health care according to their perceptions about Continuity of health care:

Continuity Items			**Disagree**	**don't know**	**Agree**	**Mean**	**SD**
1	The clinic contact me if I didn't come to the follow-up appointment	**N**	130	32	38	1.51	0.75
		%	65%	19%	16%		
2	I find it easier to transfer a patient from the clinic to the hospital	**N**	34	33	124	2.40	0.82
		%	21.5%	16.5%	62%		
3	I see the same doctor at each visit	**N**	61	41	98	2.18	0.87
		%	30.5%	20.5%	49%		
4	The clinic provides vaccinations necessary for all members of my family	**N**	28	27	145	2.58	0.72
		%	14%	13.5%	72.5%		
5	Doctor can easily access to my medical records	**N**	23	39	138	2.57	0.69
		%	11.5%	13.5%	69.0%		

Table 3 demonstrates the patient perception about the continuity of health care services; nearly two thirds (65%) reported that the clinic does not contact them when they miss an appointment, 19% were don't know. while 16% reported the opposite. About two thirds of about two thirds of showed that the nurses, specialists and the laboratory the patients (62%) showed that the referral procedure from the clinic to the hospital easy while 21.5% did not and 16.5 were don't know. About half of the patients (49%) saw the same doctor each visit while 30.5% did not and 20.5 % were not sure about that. About three-quarters of the patients (72.5%) agreed that the clinic provide all vaccines for their family member, 13.5% were don't know and 14% did not agree. More than two thirds of the patients (69%) reported that the doctors can easily access to their medical records 13.5% were don't know while11.5 did not.

Table 4: Distribution of the Patient Satisfaction to quality of primary health care according to their perceptions about communication in health care.

Communication Items			**Disagree**	**don't know**	**Agree**	**Mean**	**SD**
1	Doctor listens to me well	**N**	31	29	140	2.54	0.74
		%	15.5%	14.5%	70%		
2	The doctor does not answer all my questions.	**N**	101	51	48	1.73	0.82
		%	50.5%	25.5%	24%		
3	Doctor sometimes makes me feel like I'm an idiot.	**N**	128	36	36	1.54	0.78
		%	64%	18%	18%		
4	doctor treating me in a friendly and very nice way	**N**	29	51	120	2.45	0.73
		%	14.5%	25.5%	60%		
5	Time I spent it together with the doctor is enough	**N**	43	29	128	2.42	0.82
		%	21.5%	14.5%	64%		

Table 4 demonstrates the patients' perception about the communication in health care services; about three-quarters of the patients (70%) reported that the doctor listen to them well while (15.5%) disagreed and (14.5%) were not sure. About one-half of the patients (50.5%) reported that the doctor answer all their while (24%) disagreed and (25.5) were not sure. About two thirds of the patients (64%) denied that the doctors make them feel idiot while (18%) agreed with that and (18%) were don't know. About two thirds of the patients (60%) reported that the doctor treat them in a very nice way; while (14.5%) disagreed with that and (25.5) were not sure about that. Finally about two thirds of the patient . (64%) reported that the time they spent it with the doctor is enough and (14.5%) were not sure while (21.5%) Thought that is not enough.

Table 5: Distribution of the Patient Satisfaction to quality of primary health care according to their perceptions about humanness in health care .

Humanness Items			**Disagree**	**don't know**	**Agree**	**Mean**	**SD**
1	The clinic's reception treat me well	**N**	18	18	165	2.73	0.61
		%	9%	8.5%	82.5%		
2	Doctors at the clinic treat me with respect.	**N**	18	13	169	2.75	0.60
		%	9%	6.5%	84.5%		
3	Nurses, specialists and laboratory staff treat me well.	**N**	31	27	142	2.55	0.74
		%	15.5%	13.5%	71%		
4	Officials at the clinic listening to the complaints of the patients.	**N**	62	68	70	2.04	0.81
		%	31%	34%	35%		
5	The staff at the clinic keeps my health information confidential.	**N**	17	74	109	2.46	0.64
		%	8.5%	37%	54.5%		
6	Health Center provides health services in emergency situations.	**N**	69	49	82	2.06	0.86
		%	34.5%	24.5%	41%		

Table 5 demonstrates the patient perception About the humanness in health care services, the majority of the patients (82.5%) reported that the reception in the clinic treats them well, (8.5%) were don't

know while (9%) disagreed. The majority of the patients (84.5%) agreed that the doctors treat them with respect while (9%) did not agree and (6.5%) were don't know. About three-quarters of the patients (71%) showed that the nurses, specialists and the laboratory staff treat them well while (15.5%) did not and (13.5) were don't know. About two thirds of the patients (62%) reported that the clinic did not listen to their complaints while (35%) disagreed with that and (34%) were don't know. More than half of the patients (54.5%) reported that the officials at the clinic keep their health information confidential while (8.5%) disagreed with that and (37%) we're don't know. About two fifths (41%) agreed that the health services in emergency situations (24.5) were don't know while (34.5) disagreed with that.

Table 6: Distribution of the Patient Satisfaction to quality of primary health care according to their perceptions about Comprehensiveness of health care .

Comprehensiveness Items			**Disagree**	**don't know**	**Agree**	**Mean**	**SD**
1	All members of my family have a medical file and they are screened routinely in the clinic.	**N**	63	32	105	2.21	0.89
		%	31.5%	16%	52.5%		
2	The data in the medical file are comprehensive and accurate.	**N**	36	73	91	2.27	0.74
		%	18%	36.5%	45.5%		
3	In each medical visit they measured (weight, height, blood pressure, temperature).	**N**	66	33	101	2.17	0.89
		%	33%	16%	50.5%		
4	The doctor provides me a comprehensive medical examination when I need it.	**N**	56	42	102	2.23	0.86
		%	28%	21%	51%		
5	the results of laboratory tests attached immediately to the file	**N**	18	69	113	2.47	0.65
		%	9%	34.5%	56.5%		
6	The medical staffs at the clinic are familiar with the latest medical developments.	**N**	40	107	52	2.06	0.68
		%	20%	53.5%	26.5%		

Table 6 demonstrates the patients' perception about the comprehensiveness in health care services; more than half the patients (52.5%) agreed that all members of their family have a medical file and they are screened routinely in the clinic while (31.5%) disagreed and (16%) were don't know. About one-half of the patients (45.5%) reported that the data in the medical file are comprehensive and accurate while (18%) disagreed and (36.5%) were don't know. About one-half of the patients (50.5%) agreed that in each clinical visit they measured (weight, height, blood pressure, temperature) while (33%) disagreed and (16.5) were don't know. About one half of the patients (51%) reported that the doctor provide them with a comprehensive medical examination when they need it; while (28%) disagreed and 21% were don't know. more than one half of the patients (56.5%) agreed that the laboratory test attached immediately to the file, (34.5%) were don't know in the clinic while (31.5%) disagreed and (16%) were not and (9%) disagreed. More than one quarter of the patients (26.5%) showed that the medical staffs at the clinic are familiar with the latest medical developments while (20%) did now and more than one half of them (53.5%) were don't know.

Table 7: Distribution of the Patient Satisfaction to quality of primary health care according to their perceptions about health education in health care .

Education Items			**Disagree**	**don't know**	**Agree**	**Mean**	**SD**
1	A large number of brochures about common health problems are available in the clinic	**N**	111	61	28	1.58	0.72
		%	55.5%	30.5%	14%		
2	The language used in brochures is simple and easy to understand.	**N**	68	67	65	1.98	0.81
		%	34%	33.5%	32.5%		
3	The Specialist give me enough information about my health .	**N**	64	47	89	2.12	0.86
		%	32%	23.5%	44.5%		
4	The Specialist explain to me the reason to do the tests and treatment adherence	**N**	61	41	98	2.18	0.87
		%	30.5%	20.5%	49%		
5		**N**	158	35	7	1.24	0.50

	There are educational films displayed in waiting rooms	**%**	79%	17.5%	3.5%		
6	the number of awareness programs which is held in the center is appropriate to the patients' needs	**N**	128	52	20	1.46	0.67
		%	64%	26%	10%		
7	Center does not care to provide educational brochures to the patient	**N**	77	64	59	1.91	0.82
		%	38.5%	32%	29.5%		
8	There is a place for the educational sessions.	**N**	118	67	17	1.50	064
		%	58%	33.5%	8.5%		
9	There is a diversity of educational resources (audio \ visual)	**N**	123	61	16	1.46	0.64
		%	61.5%	30.5%	8%		
10	specialist shows his enthusiasm and interest in the sessions	**N**	92	64	44	1.76	0.79
		%	46%	32%	22%		

Table 7 demonstrates the patient perception about the health education in the health care center ;more than one half of the patients (55.5%) reported that a large number of brochures about common health problems is available in the clinic while (14%) disagreed with that and (30.5%) were don't know. About the language that used in the brochures (32.5%) reported that is easy to understand and simple while (34%) disagreed and (33.5%) were don't know. more than two fifths of the patient (44.5%) reported that the Specialist gave them enough information about not their health,(23.5%) were don't know while (32%) of the patients denied that. About one half of the patients (49%) agreed about that the Specialist explain to them the reason to do the tests and treatment adherence and (20.5) were don't know while (30.5%) disagreed with that. Only (3.5%) of the patients reported that there are educational films displayed in waiting rooms while (79%) denied that and (17.5%) were don't know about it. Only (10%) of the patients reported that the number of awareness programs which is held in the center is appropriate to the patients' needs with that and while more than a half (64%) disagreed with that and (26%) were don't know. About the educational brochures (29.5%) of the patients reported that the center cares to provide it, while (38.5%) disagreed with them and (32%) were don't know about it. Only (8.5%) of the patient agreed that the center had a place for the educational sessions and (33.5%) were don't know while more than a half of them (58%) denied that. About the diversity of educational resources, only (8%) approved that the resources is Diverse while (61.5%) disagreed and (30.5%) were don't know. Only (22%) of the patients reported that the specialist show his\her enthusiasm and interest during the session, while (46%) disagreed and (32%) were don't know (30.5%) were not sure. About the language that used in about that.

Table 8: Distribution of the Patient Satisfaction to quality of primary health care according to their overall satisfaction about health care center .

Overall Satisfaction Items			**Disagree**	**don't know**	**Agree**	**Mean**	**SD**
1	The Centre is always tidy.	**N**	26	20	154	2.64	0.70
		%	13%	10%	77%		
2	Instruments and equipment in the center is working correctly.	**N**	54	72	74	2.10	079
		%	27%	36%	37%		
3	I think that the services provided at the center can be better than it is right now.	**N**	26	29	145	2.59	0.70
		%	13%	14.5%	72.5%		

Table (8) demonstrates the overall satisfaction of the patients; more than three-quarters of the patients (77%) reported that the center is always tidy and (10%) were a not sure, while (13%) disagreed. More than one third of them (37%) agreed that the Instruments and equipment's in the center are working correctly; while (27%) disagreed and (36%) were don't know. About three-quarters of the patients (72.5%) thought that the services provided at the center can be better than it is right now, while (13%) disagreed with that and (14.5%) were don't know.

Table 9: Distribution of the Relationship between their satisfaction of the Patient of quality of primary health care according to the care and Socio-demographic characteristics (Gender , Marital Status, Level of education , Occupation , Family economic)

Variables		The Level of Satisfaction					
		Unsatisfaction		Satisfaction		Total	P value
		No	%	No	%	No	
Gender	Male	67	45.6	80	54.4	147	0.000
	Female	3	5.7	50	94.3	53	
Marital status	Single	15	33.3	30	66.7	45	0.790
	Married	55	35.5	100	64.5	155	
Education	Illiterate	0	0.0	2	100	2	0.521
	Elementary	1	16.7	5	83.3	6	
	intermediate	2	20.0	8	80	10	
	Secondary	38	36.5	66	63.5	104	
	university	29	37.2	49	62.8	78	
Occupation	Student	0	0.0	16	100	16	0.001
	Worker	3	25.0	9	75.0	12	
	Government employee	64	42.4	87	57.6	151	
	Private sector employee	2	33.3	4	66.7	6	
	Other	1	6.7	14	93.3	15	
Family Income	<5000 SR	1	12.5	7	87.5	8	0.087
	5000 – 10000 SR	37	42.5	50	57.5	87	
	>10000SR	32	30.5	73	69.5	105	

Table 9 demonstrates the level of patients' satisfaction and the their relation with socio-demographic variables; the table shows a significant between the level of satisfaction and gender (P<0.05), the females showed the highest satisfaction level (94.3%), while only (54.4%) of the males were satisfied. was a significant relationship between the level of satisfaction and occupation where the students showed the highest satisfaction(100%) followed by the workers (75%).

Table 10: Distribution of the Patient of quality of primary health care according to the relationship between their Attitude score about care and Socio-demographic characteristics (Gender , Marital Status, Level of education , Occupation , Family economic)

Variables		Attitude score								
		Negative		Neutral		Positive		Mean attitude score	ANOVA test	P value
		No	%	No	%	No	%	X ±SD		
Gender	Male	9	6.1	85	57.8	53	36.1	2.29±0.57	9.268	0.000
	Female	0	0.0	17	32.1	36	67.9	2.67±0.47		
Marital status	Single	2	4.4	20	44.4	23	51.1	2.46±0.58	0.525	0.589
	Married	7	4.5	82	52.9	66	42.6	2.38±0.57		
Education	Illiterate	0	0.0	0	0.0	2	100	3.00±0.0	1.817	0.481
	Elementary	0	0.0	2	33.3	4	66.7	2.66±0.51		

	intermediate	0	0.0	3	30.0	7	70.0	2.70±0.48		
	Secondary	6	5.8	55	52.9	43	41.3	2.35±0.58		
	university	3	3.8	42	53.8	33	42.3	2.38±0.56		
Occupation	Student	0	0.0	5	31.3	11	68.8	2.68±0.47	0.108	0.023
	Worker	2	16.7	7	58.3	3	25.0	2.66±0.66		
	Government employee	6	4	84	55.6	61	40.4	2.70±0.55		
	Private sector employee	1	16.7	1	16.7	4	66.7	2.35±0.83		
	Other	0	0.0	5	33.3	10	66.6	2.66±0.48		
Family Income	<5000 SR	0	0.0	3	37.5	5	62.5	2.62±0.51	0.574	0.533
	5000 – 10000 SR	6	6.9	43	49.4	38	43.7	2.36±0.61		
	>10000SR	3	2.9	56	53.3	46	43.8	2.40±0.54		

Table 10 demonstrates attitude score among the participants in relation to their socio-demographic characteristics. As regard of gender, it was found the highest mean score of attitude was among female (2.67±0.47) and 67.9% of them had positive attitude about PHC services; while the male had the lowest mean score (2.29±0.57), All these differences were statistically highly significant. Concerning occupation, it was found that the highest mean attitude score was among individuals who are working at the government (2.70±0.55) and 40.4 %of them had positive attitude level followed by the students who had a mean score of (2.68±0.47), surprisingly, individuals working in private sectors had the lowest mean score of attitude (2.35±0.83) and 66.6% of them had positive attitude level about PHC services. All these differences were statistically significant. Regarding educational level, it was found that the highest mean score of attitude surprisingly was among illiterate individuals (3.00±0.0) and followed by intermediate educated individuals who had a mean score of (2.7±0.48), secondary educated individuals had the lowest mean score of attitude (2.35±0.58)and only 41.3% of them had positive attitude level of with (P <0.05).

Table 11: Total of Stepwise Multiple Regression Analysis for total attitude score for the primary health care patients (N=200):

predictors	**B**	**Beta**	**SE**	**T**	**F ratio**	**P value**
Model total attitude score(Constant)	76.49%	----------	9.220	8.297	**5.733**	0.000
Gender	12.55	0.383	2.294	5.473		
Marital status	-3.692	-.107	2.993	-1.234		
The age	.253	.168	.146	1.727		
Education	-1.354	-.072	1.323	-1.023		
Occupation	-.889	-.052	1.216	-.731		
Family Income	-.419	-.017	1.852	-.226		

a. Predictors: (Constant), Family Income, occupation, Education, Gender, marital status, Age and total satisfaction level
b. Dependent Variable: total attitude

Table 11 shows total of Stepwise Multiple Regression Analysis that factors entered the regression model of total attitude were: Socio demographic variables (Age, gender, occupation, education, marital status, family income) and total satisfaction level And 6 out of 7 factors had predicted total attitude of the: (Age, gender, occupation, education, marital status, family income).The 6 factors together explained 12.5 % of the variation of the total attitude score of the studied patients towards primary health care services. Female, single, being older, low

educational level and students, low family Income had higher total attitude score.

DISCUSSION

The effect of quality of health care in Saudi Arabian perception to patient satisfaction in Makkah health care center this study aims to assess the effect of service quality of health care in Saudi Arabian on patient satisfaction with respect to primary health care services in Makkah in 2022. The study was carried out during June 2022 to August 2022, on 200 patients the results of the current study support the emerging literature regarding health service quality and patient satisfaction, especially in Saudi Arabia. [21] to identify the component of primary health care that cause most concern to service users and to identify sociodemographic and other factors associated with satisfaction among the users of primary healthcare centers .

The recent efforts made by the Saudi government to improve health care quality may, to some extent, contribute to the study results. Patients rendered a high level of service quality would report a high satisfaction rate when filling out an ad hoc survey and vice versa.[22]

The results of the study showed that out that the waiting area structure, confidentiality measures and environmental structure were the areas that caused most concern to service users. The factors that showed the greater association with satisfaction were the type of the primary health care center building (Purpose-built or rented), literacy status of the household head (Literate or illiterate), the extent of the primary health care center utilization (Regular or infrequent).Surprisingly, age showed no association when other characteristics of respondents were adjusted for and sex was less important than in other studies. See Table (1,2,3)

70% percent of the surveyed patients said the doctor listens to them About two thirds of the patients (60%) reported that the doctor treat them in a very nice way About two thirds of the patients (64%) denied that the doctors make them feel idiot . while the majority of the patients (82.5%) reported that doctors at the clinic treat me with respect About three-quarters of the patients (71%) showed that the nurses, specialists and laboratory staff treat me well. more than one half of the patients (56.5%) agreed that the laboratory test attached immediately to the file .See Table (4,5,6). The factors entered the regression model of total attitude were: Socio demographic variables (Age, gender, occupation, education, marital status, family income) and total satisfaction level And 6 out of 7 factors had predicted total attitude of the: (Age, gender, occupation, education, marital status, family income).The 6 factors together explained 12.5 % of the variation of the total attitude score of the studied patients towards primary health care services. Female, single, being older, low educational level and students, low family Income had higher total attitude score. See Table (10,11)

CONCLUSION

Additional studies should also include other aspects the study identified that patients were generally rated positively the level of general practice care; however, some aspects of clinical behavior and organization of care need to be improved. Primary Health Care providers should pay more attention to their patients' opinions and introduce patients' satisfaction.

REFERENCES

1. Donabedian, A. Evaluating the quality of medical care. *The Milbank memorial fund quarterly* 1966; *44*(3), 166-206.
2. Ware JE. The measurement of patient satisfaction. Health and Medical Care Services Review. 1978; 1(1):5-15.
3. Gajovic G, Kocic S, Radovanovic S, Ilic B, Milosavljevic M, Radevic S, Ignjatovic DR. Satisfaction of users in primary health care. HealthMED. 2012 Jan 1;6:4185-93.
4. Tong D, Chung F, Wong TD. Satisfaction in Ambulatory Surgical Patients. Anesthesiology. 1997 Oct;87(4):856-64.
5. Larrabee JH, Ferri JA, Hartig MT. Patient satisfaction with nurse practitioner care in primary care. Journal of Nursing Care Quality. 1997 Jun;11(5):9-14.
6. Miro Solves, J., J. Bui lAina and M. Rodriguez. the perceived quality of hospital care. Gac Sanit 1997;11(4): 89-176
7. Almoajel A, Fetohi E, Alshamrani A. Patient satisfaction with primary health care in Jubail City, Saudi Arabia. World Journal of medical sciences. 2014;11(2):255-64.
8. Olfson M, Kroenke K, Wang S, Blanco C. Trends in office-based mental health care provided by psychiatrists and primary care physicians. The Journal of clinical psychiatry. ;2014 Mar.
9. Ashworth M, Millett C. Quality improvement in UK primary care: the role of financial incentives. The Journal of ambulatory care management. 2008; Jul 1;31(3):220-5.
10. Van Lerberghe W. The world health report 2008: primary health care: now more than ever. World Health Organization; 2008.

11. De Maeseneer J, Flinkenflögel M. Primary health care in Africa: do family physicians fit in?. Br J Gen Pract. 2010; Apr 1;60(573):286-92.
12. Kumar R. Revitalize primary health care for confronting current public health challenges. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine. 2008; Jan;33(1):1.
13. Groene O, Kringos D, Sunol R. Seven ways to improve quality and safety in hospitals. An evidence basedguide. Duque Collaboration. 2014;1-65.
14. *Ministry of Health. Health statistical annual book. Riyadh, Saudi Arabia: Ministry of Health, 2013.*
15. Che Rose R, Uli J, Abdul M, Looi Ng K. Hospital service quality: a managerial challenge. International Journal of Health Care Quality Assurance. 2004 ;May 1;17(3):146-59.
16. Elleuch A. Patient satisfaction in Japan. International journal of health care quality assurance. 2008 ; Oct 3;21(7):692-705.
17. Al Doghaither, A. H. Inpatient satisfaction with physician services at king khalid university hospital, riyadh, saudi arabia. *EMHJ-Eastern Mediterranean Health Journal .2004;10 (3), 358-364.*
18. Alahmadi A. Study of patient satisfaction in primary healt h care centers in different regions of Saudi Arabia. The Egyptian journal of community medicine. 2004;22(1):49-60.
19. Al-Doghaither AH, Abdelrhman BM, Saeed AW, Magzoub ME. Factors influencing patient choice of hospitals in Riyadh, Saudi Arabia. The journal of the Royal Society for the Promotion of Health. 2003 Jun;123(2):105-9.
20. Al-Ahmadi H. Factors affecting performance of hospital nurses in Riyadh Region, Saudi Arabia. International journal of health care quality assurance. 2009 Feb 6;22(1):40-54.
21. Zamil AM, Areiqat AY, Tailakh W. The impact of health service quality on patients' satisfaction over private and public hospitals in Jordan: a comparative study. International Journal of Marketing Studies. 2012 Feb 1;4(1):123-137
22. Almalki M, Fitzgerald G, Clark M. Health care system in Saudi Arabia: an overview. *East Mediterr Health J* 2011; 17: 784-793.