Patients' Satisfaction with Primary Health Care Centers' Services, Kingdom of Saudi Arabia 2022

Madihah Zuwayyid Almutairi[1], Azzah Salah Mohammed Shalabi[1], Alhanouf Sanat Alotaibi[2], Mohammed Yahya Almalki[3], Ahmed bin Ali Ayed Al-Zahrani[4], Fahad Mohammad A Allhayani[5], Abdulaziz Saleem Al-lihibi[6], Abdulrhman Hassn Saeed Alghamdi[7], Ali Yahya Namazi[8], Anas Seraj Omar Najjar[9], Anwar Abdulhameed H Alghamdi[10], Sultan Ahmead Almalky[11], Abeer Mohammad Alshahrani[12], Manar Ahmed Mouse Alsaad[13]

[1]Nurse Specialist, King Abdullah Medical Complex, Jeddah, Saudi Arabia.
[2]Nursing technician, Primary Care Almorouj Center, Saudi Arabia.
[3]Laboratory Specialist, Department of Health Volunteer of Public Health of Makkah Cluster, Saudi Arabia.
[4]Pharmacy technician, Department of Health Volunteering and Community Partnerships at Public Health, Makkah Al-Mukarramah Health Cluster, Saudi Arabia.
[5]Technician Public Health, Ibn Sina Hospital, Makkah, Saudi Arabia.
[6]Epidemiology Specialist, Ibn Sina Hospital, Makkah, Saudi Arabia.
[7]Public health specialist, Ibn Sina Hospital, Makkah, Saudi Arabia.
[8]Epidemiology technician, Ibn Sina Hospital, Makkah, Saudi Arabia.
[9]Pharmacy technician, Ibn Sina Hospital, Makkah, Saudi Arabia.
[10]Nursing Technician, Primary health care, Saudi Arabia.
[11]Laboratory technician, Al-Bajidi Health Center, Saudi Arabia.
[12]Nursing technician, Primary Care Al Maruaj Center, Saudi Arabia.
[13]Dental assistant, Al Wadi Health Care Center, Saudi Arabia.

Abstract
Background

Patient satisfaction is regarded as a valid and significant indicator of the medical care delivered. Additionally, it has been shown to be linked to better health outcomes, patient satisfaction is of value to primary health care providers. Concern over the health care services in Saudi Arabia has led to loss of faith in public and private hospitals, low utilization of public health facilities, and increasing outflow of Saudi patients to hospitals in neighboring countries. Under the circumstances, assessment of the country's health care service has become imperative, in which the patient's voice must begin to play a greater role. Patient satisfaction with health care services is considered an important factor of health care. Although research on patient satisfaction has become standard in many developed country, in countries Saudi Arabia the concept of patient satisfaction is still relatively, patient satisfaction is one of the most important factors to determine the success of a health care facility. PHC Patient' satisfaction represents a key marker for the quality of health care delivery and this internationally accepted factor needs to be studied repeatedly for smooth functioning of the health care systems. A key policy being implemented as a part of the development plan in KSA of the Saudi Vision (2030) .

Aim of the study: To assess Patients' Satisfaction with Primary Health Care Centers' Services, Kingdom of Saudi Arabia 2022.

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

Results: show that most of them aged 24-35 were (42.0%) the gender the most participant male were (58.0%) the marital status the most of participant single were (56.0%), regarding the levels of education it was found that majority of the participants had intermediate were (37.0%), occupation the most of participant were government employees (57.0%) and only (18%) were students but the worker were (11.0%)

Conclusion. The paper attempts to present assimilated available information on patient satisfaction in Saudi Arabia . Patient satisfaction is a measure of quality of care provided to the patients but the concept has suffered lack of formal attention to its meaning, however, patient perceptions and other psychological factors are potentially neglected determinants many of the problems identified in this review could be addressed by establishing an independent body in KSA.

Keywords: Patients, Satisfaction, Primary Health Care, Services, Saudi Arabia.

Introduction

Patient satisfaction is a measure of the extent to which a patient is content with the health care they received from their health care provider. Patient satisfaction is one of the most important factors to determine the success of a health care facility; patient satisfaction is of value to primary health care providers Saudi Arabia. [1] In recent years, various measures have been advocated to assess the adequacy of utilization of health services generally and primary health care specifically. One such measure is a determination of a population's reaction to this system through their complaints and their suggestions for improvement, patient satisfaction is considered an indicator.[2] the efficient utilization of health services, as it refers to an individual's attitude about health services received and the extent to which these services meet the person's wants and needs [3] Almaghaslah et al (2022) define a patient satisfaction rating as a personal evaluation of health services and providers.

The health sector occupies an enormously important position in ensuring sustainable overall socio-economic advancement in countries. In Saudi Arabia also, the government has begun to strategically integrate the health sector into its reduction disease . [4] Asserts that 'Improving the health and longevity of the poor is an end in itself, a fundamental goal of economic development'[5]. The efforts of the government and private service providers in the country's health sector have been rewarded with some success, especially in primary health care with its focus on prevention. Immunized of The people in Saudi Arabia [6] and the child mortality rate have declined substantially in the mid-1970s [7]. Maternal mortality, an important indicator of well-being, has also declined, with the introduction of appropriate preventive measures [8].

Improved patient care has become a priority for all health care service providers with the optimum objective of achieving a high degree of patient satisfaction [9]. At the same time, good healthcare service delivery, as compared to their counterparts, provides businesses or

public trusts with the opportunity to distinguish their facilities in a competitive industry [10]. Currently, on account of the expanded expectations for ordinary services and higher customer's needs, it is obligatory for hospitals to give superior health care services to the patients and to fulfill their requirements [11]. In previous decades, healthcare services and their services are one of the rare topics in service studies in countries like Saudi Arabia . While it has received extensive academic study, the need for improvement in healthcare services has grown which leads to challenges for the service provider (i.e., technical or non-technicality) and has become a complex task for scholars, government policymakers, therapeutic specialists and hospital administrators to fulfill the requirements of clients which help toward developing satisfaction [12].

Literature Review

Woo et al.2021[13] and Uzir, et al. [14] indicated that there is an association between patient satisfaction and healthcare service quality. The findings of their studies showed a significant connection between patient satisfaction and healthcare services. Patient satisfaction is also determined by exploring the particularity between the expected and perceived health services.[13,14] Effective public learning can establish trust which can give significant appraisal to the hospital administration [15], described how healthcare service delivery influenced patient satisfaction. Patient satisfaction assists as a mode between behavioral intentions and the quality of healthcare service delivery.[16]

study in Majmaah , Saudi Arabia aimed at determining the level of patients 'satisfaction with Primary Health Care Centers' services , the level of satisfaction with the services provided by PHC centers was high (81.7%). [17] These findings are higher than satisfaction of care of patients in London, India, Kosovo and Iraq where satisfaction with health care were 61.3%, 66%, 73.5% and 50.9% respectively.[18,19] This is also higher than the finding from Riyadh (64.2%) in Saudi Arabia.[20] The patients' satisfaction in this study was lower than findings from Kuwait. [21]

Hayashi et al (2020) addressed seven ways to improve quality and safety in any health care as the following: (1) 'Align organizational processes with external pressure. (2) Put quality high on the agenda. (3) Implement supportive organization-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'

Some studies have been conducted to examine the impact of service in healthcare settings in Saudi Arabia on patient satisfaction. [22] 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.[23] Another study was conducted to examine patient satisfaction in primary health care centers in different regions of Saudi Arabia.[24] It indicated that 77.5% of the primary health care patients were satisfied with the services, 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 .[25]

The most important factor that drives patients' satisfaction is the cleanliness, technical competencies of the staff of PHC centers and good handling. [26] the reasons behind high

level of satisfaction were cleanliness, competence of the staff along with respect and good handling. These finding are in line with other studies conducted in Saudi Arabia. [27]

Aim of the study :
To assess Patients' Satisfaction with Primary Health Care Centers' Services, Kingdom of Saudi Arabia 2022 .

Objectives:
➢ Patient satisfaction is of value to primary health care providers.
➢ This study was to assess Patients' Satisfaction with Primary Health Care Centers' Services, Kingdom of Saudi Arabia .

Rationale
　　Patient Satisfaction to Primary Health Care defined by the world health organization as and quality of care, essential health care made universally accessible to It is a complex relationship between their perceived individuals and families in the community by means needs, expectations from the health services received, acceptable to them through their full participation and at So, satisfaction is one of the variables affecting the a cost the community and the country can afford , outcomes of health care and use of services. In order to Patient's satisfaction regarding health care has often improve the provision of care, predictors of been considered as an objective of the health care. It has dissatisfaction must be identified and eliminated, also been considered as one of the most important User satisfaction with the health care is a basic measures for evaluating the health care, component in evaluating health care quality . It can be defined as judgment made by a recipient of The importance of the patient's opinion and his care as whether their expectations for care have been met perception of treatment and care at health facilities are now recognized in all developed systems of health care

Methodology :
Study design:
　　A cross-sectional study to know the effect of health care in Saudi Arabian perception to patient satisfaction in Saudi Arabia .
Study setting:
　　The present study has been conducted at in primary healthcare centers in Saudi Arabia .

Study population and sampling:
The current study has been conducted at Saudi Arabia 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. 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 300 patients (174 males, 126 females). The ages ranged from 18-61 years, the sample size is (300) 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

Socio demographic 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.

Inclusion criteria:
➢ Adult age 18 -or above
➢ Male and female .
➢ Visiting primary health care seeking health services in the past 2 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 PHCC was 270 patients, adding 10% for non-respondent, 300 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 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 five days in the week to clarify any issue.

- The researcher distributed the questionnaire in the waiting area by themself to the selected patients.
- The questionnaires were collected at the same time.

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 . 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 24 was used to analyse these data. chi-square to compare   t test and ANOVA level was considered at p value>0.5.

Budget

It has be self- funded

Result

Table 1: Socio-demographic characteristics of the participants involved in the study (n=300)

Demographic variables	N	%
Age		
18-23	54	18
24-35	126	42
36-47	72	24
48-57	48	16
Gender		
Male	174	58
Female	126	42
Marital Status		
Single	168	56

Married	132	44
Level of education		
Illiterate	30	10
Elementary	45	15
intermediate	111	37
Secondary	66	22
university	48	16
Occupation		
Student	54	18
Worker	33	11
Government employee	171	57
Private sector employee	15	5
Other	27	9
Family income		
<5000 SR	27	9
5000 – 10000 SR	123	41
>10000SR	150	50

Table 1 demonstrates socio-demographic show that most of them aged 24-35 were (42.0%) followed by age 36-47 years were (24.0%) while 18-23 years were (18.0%) regarding the gender the most participant male were (58.0%) while female were (42.0%) , regarding the marital status the most of participant single were (56.0%) while married were (44.0%). regarding the levels of education it was found that majority of the participants had intermediate were (37.0%) while Secondary were (22.0%) but the university were (16.0%), regarding the occupation the most of participant were government employees (57.0%) and only (18%) were students but the worker were (11.0%), regarding family income state, (41.5%)of participants had income range between 5000-10000 riyals/ month, while 50.0 % had income more than 10000 riyals / month.

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

Items			Accessibility Items			% of agreement	Chi-square	
			Disagree	Not sure	Agree		X^2	P-value
1	The distance from home to the health center is acceptable	N	45	66	189	82.67	121.020	<0.001*
		%	15	22	63			
2	Working hours at the clinic is suitable for all	N	105	54	141	70.67	38.220	<0.001*
		%	35	18	47			
3	Time spent in the waiting room for a routine visit is very long	N	132	114	54	58.00	33.360	<0.001*
		%	44	38	18			
4	I find it difficult to get an appointment for health care	N	147	33	120	63.67	70.980	<0.001*
		%	49	11	40			
5	The clinic gives me access to medical care at any time I need it	N	102	99	99	66.33	0.060	0.970
		%	34	33	33			

Table 2 Distribution of the Patient Satisfaction of primary health care according to their perceptions about Accessibility to health care show regarding The distance from home to the health center is acceptable while a significant relation were (P-value =0.001) and X^2 (121.020) while % of agreement were (82.67) the majority of participant agree were (63.0%) but the not sure were (22.0%) but disagree were (15.0%), regarding Working hours at the clinic is suitable for all while a significant relation were (P-value =0.001) and X^2 (38.220) while % of agreement were (70.67%) the majority of participant agree were (47.0%) but the not sure were (18.0%) but disagree were (35.0%), regarding Time spent in the waiting room for a routine visit is very long while a significant relation were (P-value =0.001) and X^2 (33.360) while % of agreement were (58.00%) the majority of participant disagree were (44.0%) but the not sure were (38.0%) but agree were (18.0%), regarding I find it difficult to get an appointment for health care while a significant relation were (P-value =0.001) and X^2 (70.980) while % of agreement were (63.67%) the majority of participant disagree were (49.0%) but the not sure were (11.0%) but agree were (40.0%), regarding The clinic gives me access to medical care at any time I need it while no significant relation were (P-value =0.970) and X^2 (0.060) while % of agreement were (66.33%) the majority of participant disagree were (34.0%) but the not sure were (33.0%) but disagree were (33.0%),

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

Items			Continuity Items			% of agreement	Chi-square	
			Disagree	Not sure	Agree		X^2	P-value
1	The clinic contacts me if I didn't come to the follow-up appointment	N	225	63	12	43.00	247.380	<0.001*
		%	75	21	4			
2	I find it easier to transfer a patient from the clinic to the hospital	N	81	30	189	78.67	131.820	<0.001*
		%	27	10	63			
3	I see the same doctor at each visit	N	138	93	69	59.00	24.540	<0.001*
		%	46	31	23			
4	The clinic provides vaccinations necessary for all members of my family	N	63	30	207	82.67	177.180	<0.001*
		%	21	10	69			
5	Doctor can easily access to my medical records	N	21	36	243	91.33	307.860	<0.001*
		%	7	12	81			

Table 3 Distribution of the Patient Satisfaction of primary health care according to their perceptions about Continuity of health care show regarding The clinic contacts me if I didn't come to the follow-up appointment while a significant relation were (P-value =0.001) and X^2 (247.380) while % of agreement were (43.00) the majority of participant disagree were (75.0%) but the not sure were (21.0%) but agree were (4.0%), regarding I find it easier to transfer a patient from the clinic to the hospital while a significant relation were (P-value =0.001) and X^2 (131.820) while % of agreement were (78.67%) the majority of participant agree were (63.0%) but the not sure were (10.0%) but disagree were (27.0%), regarding I see the same doctor at each visit while a significant relation were (P-value =0.001) and X^2 (24.540) while % of agreement were (59.00%) the majority of participant disagree were (46.0%) but the not sure were (31.0%) but agree were (23.0%), regarding The clinic provides vaccinations necessary for all members of my family while a significant relation were (P-value =0.001) and X^2 (177.180) while % of agreement were (82.67%) the majority of participant agree were (69.0%) but the not sure were (10.0%) but disagree were (21.0%),

regarding The Doctor can easily access to my medical records while a significant relation were (P-value =0.001) and X^2 (307.860) while % of agreement were (91.33%) the majority of participant agree were (81.0%) but the not sure were (12.0%) but disagree were (7.0%),

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

	Items		Communication Items			% of agreement	Chi-square	
			Disagree	Not sure	Agree		X^2	P-value
1	Doctor listens to me well	N	51	9	240	87.67	302.820	<0.001*
		%	17	3	80			
2	The doctor does not answer all my questions.	N	27	6	267	93.33	420.540	<0.001*
		%	9	2	89			
3	Doctor sometimes makes me feel like I'm an idiot.	N	228	33	39	45.67	245.940	<0.001*
		%	76	11	13			
4	doctor treating me in a friendly and very nice way	N	27	36	237	90.00	281.940	<0.001*
		%	9	12	79			
5	Time I spent it together with the doctor is enough	N	117	66	117	66.67	17.340	<0.001*
		%	39	22	39			

Table 4 Distribution of the Patient Satisfaction of primary health care according to their perceptions about communication in health care show regarding Doctor listens to me well while a significant relation were (P-value =0.001) and X^2 (302.820) while % of agreement were (87.67) the majority of participant agree were (80.0%) but the not sure were (3.0%) but disagree were (17.0%), regarding The doctor does not answer all my questions while a significant relation were (P-value =0.001) and X^2 (420.540) while % of agreement were (93.33%) the majority of participant agree were (89.0%) but the not sure were (2.0%) but disagree were (9.0%), regarding Doctor sometimes makes me feel like I'm an idiot while a significant relation were (P-value =0.001) and X^2 (245.940) while % of agreement were (45.67%) the majority of participant disagree were (76.0%) but the not sure were (11.0%) but agree were (13.0%), regarding The doctor treating me in a friendly and very nice way while a significant relation were (P-value =0.001) and X^2 (281.940) while % of agreement were (90.00%) the majority of participant agree were (79.0%) but the not sure were (12.0%) but disagree were (9.0%), regarding Time I spent it together with the doctor is enough while a significant relation were (P-value =0.001) and X^2 (17.340) while % of agreement were

(66.67%) the majority of participant agree were (39.0%) but the not sure were (22.0%) but disagree were (39.0%),

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

Items			Humanness Items			% of agreement	Chi-square	
			Disagree	Not sure	Agree		X^2	P-value
1	The clinic's reception treat me well	N	177	66	57	53.33	89.340	<0.001*
		%	59	22	19			
2	Doctors at the clinic treat me with respect.	N	36	27	237	89.00	281.940	<0.001*
		%	12	9	79			
3	Nurses, specialists and laboratory staff treat me well.	N	207	66	27	46.67	179.340	<0.001*
		%	69	22	9			
4	Officials at the clinic listening to the complaints of the patients.	N	45	33	222	86.33	223.980	<0.001*
		%	15	11	74			
5	The staff at the clinic keeps my health information confidential.	N	9	27	264	95.00	405.060	<0.001*
		%	3	9	88			
6	Health Center provides health services in emergency situations.	N	201	66	33	48.00	158.460	<0.001*
		%	67	22	11			

Table 5 Distribution of the Patient Satisfaction of primary health care according to their perceptions about humanness in health care show regarding The clinic's reception treat me well while a significant relation were (P-value =0.001) and X^2 (89.340) while % of agreement were (53.33) the majority of participant disagree were (59.0%) but the not sure were (22.0%) but disagree were (19.0%), regarding Doctors at the clinic treat me with respect while a significant relation were (P-value =0.001) and X^2 (281.940) while % of agreement were (89.00%) the majority of participant agree were (79.0%) but the not sure were (9.0%) but disagree were (12.0%), regarding Nurses, specialists and laboratory staff treat me well while a significant relation were (P-value =0.001) and X^2 (179.340) while % of agreement were (46.67%) the majority of participant disagree were (69.0%) but the not sure

were (22.0%) but agree were (9.0%), regarding Officials at the clinic listening to the complaints of the patients while a significant relation were (P-value =0.001) and X^2 (223.340) while % of agreement were (86.33%) the majority of participant agree were (74.0%) but the not sure were (11.0%) but disagree were (15.0%), regarding The staff at the clinic keeps my health information confidential while a significant relation were (P-value =0.001) and X^2 (405.060) while % of agreement were (95.00%) the majority of participant agree were (88.0%) but the not sure were (9.0%) but disagree were (3.0%), regarding health Center provides health services in emergency situations while a significant relation were (P-value =0.001) and X^2 (158.460) while % of agreement were (48.00%) the majority of participant disagree were (67.0%) but the not sure were (22.0%) but agree were (11.0%),

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

Items			Comprehensiveness Items			% of agreement	Chi-square	
			Disagree	Not sure	Agree		X^2	P-value
1	All members of my family have a medical file and they are screened routinely in the clinic.	N	63	54	183	80.00	103.740	<0.001*
		%	21	18	61			
2	The data in the medical file are comprehensive and accurate.	N	66	126	108	71.33	18.960	<0.001*
		%	22	42	36			
3	In each medical visit they measured (weight, height, blood pressure, temperature).	N	87	54	159	74.67	57.660	<0.001*
		%	29	18	53			
4	The doctor provides me a comprehensive medical examination when I need it.	N	102	33	165	73.67	87.180	<0.001*
		%	34	11	55			
5	the results of laboratory tests attached	N	27	45	228	89.00	247.380	<0.001*
		%	9	15	76			

	immediately to the file								
6	The medical staffs at the clinic are familiar with the latest medical developments.	N	63	147	90		69.67	36.780	<0.001*
		%	21	49	30				

Table 6 Distribution of the Patient Satisfaction to quality of primary health care according to their perceptions about Comprehensiveness of health care regarding All members of my family have a medical file and they are screened routinely in the clinic while a significant relation were (P-value =0.001) and X^2 (103.740) while % of agreement were (80.0) the majority of participant agree were (61.0%) but the not sure were (18.0%) but disagree were (21.0%), regarding The data in the medical file are comprehensive and accurate while a significant relation were (P-value =0.001) and X^2 (18.960) while % of agreement were (71.33%) the majority of participant not sure were (42.0%) but the agree were (36.0%) but disagree were (22.0%), regarding In each medical visit they measured (weight, height, blood pressure, temperature) while a significant relation were (P-value =0.001) and X^2 (57.660) while % of agreement were (74.67%) the majority of participant agree were (53.0%) but the not sure were (18.0%) but disagree were (29.0%), regarding The doctor provides me a comprehensive medical examination when I need it while a significant relation were (P-value =0.001) and X^2 (87.180) while % of agreement were (73.67%) the majority of participant agree were (55.0%) but the not sure were (11.0%) but disagree were (34.0%), regarding the results of laboratory tests attached immediately to the file while a significant relation were (P-value =0.001) and X^2 (247.380) while % of agreement were (89.00%) the majority of participant agree were (76.0%) but the not sure were (15.0%) but disagree were (9.0%), regarding The medical staffs at the clinic are familiar with the latest medical developments while a significant relation were (P-value =0.001) and X^2 (36.780) while % of agreement were (69.67%) the majority of participant not sure were (49.0%) but agree were (30.0%) but the but disagree were (21.0%),

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

	Items		Education Items			% of agreement	Chi-square	
			Disagree	don't know	Agree		X^2	P-value
1	A large number of brochures about common health problems are available in the clinic	N	147	63	90	60.33	36.780	<0.001*
		%	49	21	30			
2	The language used in brochures is simple and easy to understand.	N	105	117	78	63.67	7.980	0.018*
		%	35	39	26			
3	The Specialist give me enough information about my health .	N	99	81	120	69.00	7.620	0.022*
		%	33	27	40			
4	The Specialist explain to me the reason to do the tests and treatment adherence	N	96	72	132	70.67	18.240	<0.001
		%	32	24	44			
5	There are educational films displayed in waiting rooms	N	270	24	6	37.33	435.120	<0.001*
		%	90	8	2			
6	the number of awareness programs which is held in the center is appropriate to the patients' needs	N	225	63	12	43.00	247.380	<0.001*
		%	75	21	4			
7	Center does not care to provide	N	126	114	60	59.33	24.720	<0.001*

	educational brochures to the patient	%	42	38	20			
8	There is a place for the educational sessions.	N	165	111	24	51.00	101.220	<0.001*
		%	55	37	8			
9	There is a diversity of educational resources (audio \ visual)	N	237	33	30	43.67	281.580	<0.001*
		%	79	11	10			
10	specialist shows his enthusiasm and interest in the sessions	N	177	93	30	50.33	108.780	<0.001*
		%	59	31	10			

Table 7: Distribution of the Patient Satisfaction of primary health care according to their perceptions about health education in health care show regarding A large number of brochures about common health problems are available in the clinic while a significant relation were (P-value =0.001) and X^2 (36.780) while % of agreement were (60.33) the majority of participant disagree were (49.0%) but the not sure were (21.0%) but disagree were (30.0%), regarding The language used in brochures is simple and easy to understand while a significant relation were (P-value =0.018) and X^2 (7.980) while % of agreement were (63.67%) the majority of participant not sure were (39.0%) but the disagree were (35.0%) but agree were (26.0%), regarding The Specialist give me enough information about my health while a significant relation were (P-value =0.022) and X^2 (7.620) while % of agreement were (69.00%) the majority of participant agree were (40.0%) but the not sure were (27.0%) but disagree were (33.0%), regarding The Specialist explain to me the reason to do the tests and treatment adherence while a significant relation were (P-value =0.001) and X^2 (18.240) while % of agreement were (70.67%) the majority of participant agree were (44.0%) but the not sure were (24.0%) but disagree were (32.0%), regarding There are educational films displayed in waiting rooms while a significant relation were (P-value =0.001) and X^2 (435.120) while % of agreement were (37.33%) the majority of participant disagree were (90.0%) but the not sure were (8.0%) but agree were (2.0%), regarding the number of awareness programs which is held in the center is appropriate to the patients' needs while a significant relation were (P-value =0.001) and X^2 (247.380) while % of agreement were (43.00%) the majority of participant disagree were (75.0%) but not sure were (21.0%) but the but agree were (4.0%), regarding Center does not care to provide educational brochures to the patient while a significant relation were (P-value =0.001) and X^2 (24.720) while % of agreement were (59.33) the majority of participant disagree were (42.0%) but the not sure were (38.0%) but agree were (20.0%), regarding There is a place for the educational sessions while a significant relation were (P-value =0.001) and X^2 (101.220)

while % of agreement were (51.00%) the majority of participant disagree were (55.0%) but the not sure were (37.0%) but agree were (8.0%), regarding There is a diversity of educational resources (audio \ visual) while a significant relation were (P-value =0.001) and X^2 (281.580) while % of agreement were (43.67%) the majority of participant disagree were (79.0%) but the not sure were (11.0%) but agree were (10.0%), regarding specialist shows his enthusiasm and interest in the sessions while a significant relation were (P-value =0.001) and X^2 (108.780) while % of agreement were (50.33%) the majority of participant disagree were (59.0%) but the not sure were (31.0%) but agree were (10.0%),

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

	Weak		Average		High		Chi-square	
	N	%	N	%	N	%	X^2	P-value
Accessibility	93	31	66	22	141	47	28.860	<0.001*
Continuity	39	13	57	19	204	68	163.860	*<0.001*￼
Communication	57	19	51	17	192	64	127.140	*<0.001*￼
Humanness	33	11	54	18	213	71	193.740	*<0.001*￼
Comprehensiveness	45	15	96	32	159	53	65.220	*<0.001*￼
Education	150	50	60	20	90	30	42.000	*<0.001*￼

Table 8: Distribution of the Patient Satisfaction of primary health care according to their overall satisfaction about health care center show regarding Accessibility while a significant relation were (P-value =0.001) and X^2 (28.860) the majority of participant in High were (47.0%) but the weak were (31.0%) but average were (22.0%), regarding Continuity while a significant relation were (P-value =0.001) and X^2 (163.860) the majority of participant in high were (68.0%) but the average were (19.0%) but weak were (13.0%), regarding Communication while a significant relation were (P-value =0.001) and X^2 (127.140) the majority of participant in the high were (64.0%) but average were (17.0%) but weak were (19.0%), regarding Humanness while a significant relation were (P-value =0.001) and X^2 (193.740) the majority of participant in high were (71.0%) but the average were (18.0%) but weak were (11.0%), regarding Comprehensiveness while a significant relation were (P-value =0.001) and X^2 (65.220) the majority of participant in high were (53.0%) but the average were (32.0%) but weak were (15.0%), regarding the Education while a significant relation were (P-value =0.001) and X^2 (42.000) the majority of participant in weak were (50.0%) but high were (30.0%) but the average were (20.0%),

Figure (1) Distribution of the Patient Satisfaction of primary health care according to their overall satisfaction about health care center
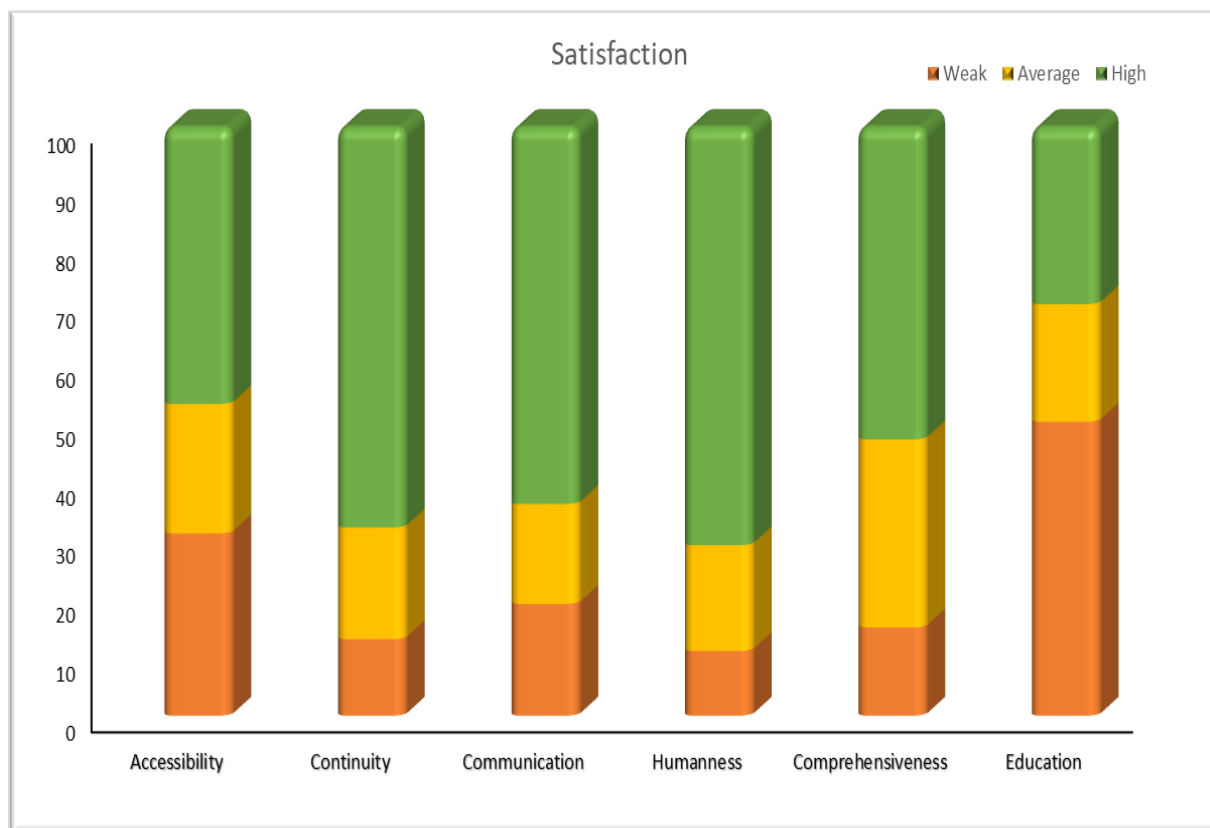
Discussion

The main objective of the present study is to assess patients' Satisfaction with primary health care centers' services, kingdom of Saudi Arabia 2022. This study has been conducted in public primary health care in Saudi Arabia. Three health care services were chosen, to assess Patients' Satisfaction.

This study provides knowledge and contribution to health care literature. While trawling through the literature, it was evident that many of the studies have been conducted in emerging, developing and developed countries [28]. Prior studies demonstrated patient satisfaction in mental health care [86], as well as cancer patient satisfaction [29].

This study has the main focus of primary health care centers' services to patient satisfaction in countries, like Saudi Arabia. The findings of the present study showed that healthcare services and patient satisfaction are positively and significantly associated with each other. For instance, the predictor variable, healthcare service are positively and significantly associated with the predicted variable of patient satisfaction. The findings from this research support a previous study highlighting the assessment of customer satisfaction with the clinical laboratory services provided in King Abdullah Medical City, Makkah [30]. demonstrates socio-demographic show that most of them aged 24-35 were (42.0%) followed by age 36-47 years were (24.0%), regarding the gender the most participant male were (58.0%), regarding the marital status the most of participant single were (56.0%), regarding the levels of education it was found that majority of the participants had intermediate were (37.0%), the occupation the most of participant were government employees (57.0%),

family income state, (41.5%)of participants had income range between 5000-10000 riyals/ month (See table 1)

The recent efforts made by the Saudi government to improve health care 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). See Table (2,3)

The surveyed patients said the doctor listens to them About two thirds of the patients reported that the doctor treat them in a very nice way About two thirds of the patients, denied that the doctors make them feel idiot, while the majority of the patients reported that doctors at the clinic treat me with respect About three-quarters of the patients showed that the nurses, specialists and laboratory staff treat me well , more than one half of the patients 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 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 (7)

Regarding the Distribution of the Patient Satisfaction of primary health care according to their overall satisfaction about health care center show regarding Accessibility while a significant relation were (P-value =0.001) and X2 (28.860) the majority of participant in High were (47.0%) but the weak were (31.0%) , regarding Continuity while a significant relation were (P-value =0.001) and X2 (163.860) the majority of participant in high were (68.0%), regarding Communication while a significant relation were (P-value =0.001) and X2 (127.140) the majority of participant in the high were (64.0%) , regarding Humanness while a significant relation were (P-value =0.001) and X2 (193.740) the majority of participant in high were (71.0%) , regarding Comprehensiveness while a significant relation were (P-value =0.001) and X2 (65.220) the majority of participant in high were (53.0%).(See table 8)

Conclusions

We contend that improving medical care in Saudi Arabia requires attention to service features that are regularly rated by patients. These features include doctors, nurses, tangibles, process features, etc. However, additional organizational and extra organizational issues that play a vital role must also be addressed to improve the health care system. For example, studies are needed to examine the influence of political elements, the commitment of the higher authorities of the MOH (especially those in the Directorate of Health), the cooperation and coordination achieved with affiliated ministries such as the Ministry of Establishment

and the Ministry of Finance (which makes funds available), and the role and quality of involvement of the development partners , Changes in attitudes and practices at these higher tiers of the health design and delivery system, where human, financial, technical and policy matters are negotiated, are essential for the health care system to respond optimally and provide the needed services to deliver patient satisfaction..

References

[1] Sulaiman, A. A., Rabbani, U., Alshaya, S., Alyahya, M., Al-Gabbany, S. A., Kalevaru, C. S., ... & AlAhajji, B. A. (2022). Why patients go to private health care facilities? Perspectives from Qassim, Saudi Arabia. *Middle East Journal of Family Medicine*, *20*(1).

[2] Amporfro, D. A., Boah, M., Yingqi, S., Cheteu Wabo, T. M., Zhao, M., Ngo Nkondjock, V. R., & Wu, Q. (2021). Patients satisfaction with healthcare delivery in Ghana. *BMC health services research*, *21*(1), 1-13.

[3] Alahmadi, A. M., Albaz, N. K., & Alharbi, N. S. (2023). Evaluation of learning environment of different family medicine programs, Jeddah-KSA, 2021. *Journal of Family Medicine and Primary Care*, *12*(3), 551.

[4] Almaghaslah, D., Alsayari, A., Almaghaslah, S., & Alsanna, H. (2022, April). Patients' satisfaction with E-Prescribing (Wasfaty) in Saudi Arabia: a survey of country-level implementation. In *Healthcare* (Vol. 10, No. 5, p. 806). MDPI.

[5] Chowdhury, S., Mok, D., & Leenen, L. (2021). Transformation of health care and the new model of care in Saudi Arabia: Kingdom's Vision 2030. *Journal of Medicine and Life*, *14*(3), 347.

[6] Al Khashan, H., Abogazalah, F., Alomary, S., Nahhas, M., Alwadey, A., Al-Khudhair, B., ... & Hassanein, M. (2021). Primary health care reform in Saudi Arabia: progress, challenges and prospects. *Eastern Mediterranean Health Journal*, *27*(10), 1016-1026.

[7] Eddine, I. S., & Zedan, H. S. (2021). Telehealth role during the COVID-19 pandemic: lessons learned from health care providers in Saudi Arabia. *Telemedicine and e-Health*, *27*(11), 1249-1259.

[8] Rahman, R., & Qattan, A. (2021). Vision 2030 and sustainable development: state capacity to revitalize the healthcare system in Saudi Arabia. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, *58*, 0046958020984682.

[9] Qureshi, N. A., Al-Habeeb, A. A., & Koenig, H. G. (2013). Mental health system in Saudi Arabia: an overview. *Neuropsychiatric disease and treatment*, 1121-1135.

[10] Al-Sofiani, M. E., Alyusuf, E. Y., Alharthi, S., Alguwaihes, A. M., Al-Khalifah, R., & Alfadda, A. (2021). Rapid implementation of a diabetes telemedicine clinic during the coronavirus disease 2019 outbreak: our protocol, experience, and satisfaction reports in Saudi Arabia. *Journal of diabetes science and technology*, *15*(2), 329-338.

[11] Alabbasi, K., Kruger, E., & Tennant, M. (2021). Evaluation of Emergency Health-Care Initiatives to Reduce Overcrowding in a Referral Medical Complex, Jeddah, Saudi Arabia. *Saudi Journal of Health Systems Research*, *1*(4), 134-139.

[12] Khan, A., Alahmari, A., Almuzaini, Y., Alturki, N., Aburas, A., Alamri, F. A., ... & Jokhdar, H. A. (2021). The role of digital technology in responding to COVID-19 pandemic: Saudi Arabia's experience. *Risk Management and Healthcare Policy*, 3923-3934.

[13] Woo, S., & Choi, M. (2021). Medical service quality, patient satisfaction and intent to revisit: Case study of public hub hospitals in the Republic of Korea. *Plos One*, *16*(6), e0252241.

[14] Uzir, M. U. H., Al Halbusi, H., Thurasamy, R., Hock, R. L. T., Aljaberi, M. A., Hasan, N., & Hamid, M. (2021). The effects of service quality, perceived value and trust in home delivery service personnel on customer satisfaction: Evidence from a developing country. *Journal of Retailing and Consumer Services*, *63*, 102721.

[15] Nikiphorou, E., Santos, E. J. F., Marques, A., Böhm, P., Bijlsma, J. W., Daien, C. I., ... & Bosworth, A. (2021). 2021 EULAR recommendations for the implementation of self-management strategies in patients with inflammatory arthritis. *Annals of the rheumatic diseases*, *80*(10), 1278-1285.

[16] Cham, T. H., Lim, Y. M., & Sigala, M. (2022). Marketing and social influences, hospital branding, and medical tourists' behavioural intention: Before-and after-service consumption perspective. *International Journal of Tourism Research*, *24*(1), 140-157.

[17] Albahrani, S., Albidy, H., Alomar, N., Mutreb, L. B., Alkhofi, A., Alsaleh, Z., ... & Alarbash Sr, A. (2022). Patient satisfaction with primary healthcare services in Al-Ahsa, Saudi Arabia. *Cureus*, *14*(11).

[18] Al-Ali, B. A., Al Mousawi, A., Hatef, Z. S., & Mohammed, H. R. (2020). Patient's Satisfaction with Primary Health centers in Kerbala City/Iraq in 2018. *Journal of Critical Reviews*, *7*(11), 1072-85.

[19] Alenazi, A. A. R., Alhazmi, T. M. A., Almatrafi, A. R. H., & Alshammari, M. B. A. (2021). Patient's satisfaction with primary health care services in Arar city, Saudi Arabia. *Med Sci*, *25*(113), 1558-1566.

[20] Alsaad, H. A., Almahdi, J. S., Alsalameen, N. A., Alomar, F. A., & Islam, M. A. (2022). Assessment of self-medication practice and the potential to use a mobile app to ensure safe and effective self-medication among the public in Saudi Arabia. *Saudi Pharmaceutical Journal*, *30*(7), 927-933.

[21] Kuwaiti, A. A., Bicak, H. A., & Wahass, S. (2020). Factors predicting job satisfaction among faculty members of a Saudi higher education institution. *Journal of Applied Research in Higher Education*, *12*(2), 296-310.

[22] Hayashi, R., Fujita, S., Iida, S., Nagai, Y., Shimamori, Y., & Hasegawa, T. (2020). Relationship of patient safety culture with factors influencing working environment such as working hours, the number of night shifts, and the number of days off among healthcare workers in Japan: A cross-sectional study. *BMC Health Services Research*, *20*(1), 1-9.

[23] Vanichchinchai, A. (2021). Priority nonconformity and service quality analysis of hospitals in Thailand: a care provider perspective. *The TQM Journal*, *33*(6), 1395-1410.

[24] Almezaal, E. A. M., Elsayed, E. A. H., Javed, N. B., Chandramohan, S., & Mohammed, A. M. (2021). Chronic disease patients' satisfaction with primary health-care services provided by the second health cluster in Riyadh, Saudi Arabia. *Saudi Journal for Health Sciences*, *10*(3), 185-190.

[25] Alotaibi, H. M. H. (2022). Assessment of Quality of Health Care in Saudi Arabian Perception to Patient Satisfaction in Primary Healthcare Centers in Saudi Arabian, 2022. *Annals of the Romanian Society for Cell Biology*, *26*(01), 4040-4054.

[26] Alfaraj, A., Halawany, H. S., Al-Hinai, M. T., Al-Badr, A. H., Alalshaikh, M., & Al-Khalifa, K. S. (2021). Barriers to dental care in individuals with special healthcare needs in qatif, saudi arabia: a caregiver's perspective. *Patient Preference and Adherence*, 69-76.

[27] A'aqoulah, A., Kuyini, A. B., & Albalas, S. (2022). Exploring the gap between patients' expectations and perceptions of healthcare service quality. *Patient preference and adherence*, 1295-1305.

[28] Wajid, S., Siddiqui, N. A., Mothana, R. A., & Samreen, S. (2020). Prevalence and practice of unused and expired medicine—a community-based study among Saudi adults in Riyadh, Saudi Arabia. *BioMed Research International*, *2020*.

[29] Fortin, M., Bamvita, J. M., & Fleury, M. J. (2018). Patient satisfaction with mental health services based on Andersen's Behavioral Model. *The Canadian Journal of Psychiatry*, *63*(2), 103-114.

[30] Alghamdi, S. A., Alyamani, A. M., Aljohani, R. R., Benjabi, W. M., Althobaiti, R. A., Takrooni, W. A., ... & Abdelmonim, S. K. (2021). Management of vocal complications post thyroidectomy at king abdullah medical city from 2011 to 2018. *Saudi Journal of Otorhinolaryngology Head and Neck Surgery*, *23*(1), 16-20.