

Factors Associated with Patient Satisfaction in Outpatient Department

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Abstract

Background: Patient satisfaction is an important and direct indicator of quality of health care which is essential for providers to fill their gaps. Outpatient care is made up of medical procedures, tests, and services that can be provided to the patient in a setting that doesn't involve an overnight hospital stay. When patients visit health care facilities, they express a clear desire for high-quality services. The aim of this study is to investigate factors associated with patient satisfaction in adult outpatient department.

Methods: Cross-sectional study design with a total sample of 200 patients was conducted from August to October 2022. All patients who visited the outpatient departments of the chosen health centers were considered the source population, and all patients who visited the outpatient departments during the study period were the study population. Data were collected structured validated questionnaire. Data analysis was conducted with SPSS version 20 to identify predictor variables, applying bivariate and multivariate logistic regression analysis to determine variables that most significantly predicted the outcome variable of the level of patient-satisfaction at 5% level of significance and 95% confidence interval.

Results: There were 200 participants in the study. the present study display the relation between participants' sociodemographic characteristics and total level of satisfaction. There is highly statistical significant with age, gender, educational level and monthly income. While no statistical significant with social status. Also, the outpatient service characteristics and perceptions of study participants. Nearly (45%) of respondents reported the outpatient department they visited was convenient to ask questions. Related to privacy (88%) of them reported that their privacy at the out-patient department was maintained. Inrelation to dialogue with outpatient service providers, the study participants declared to have had a good dialogue with outpatient service providers were (65%). Regarding, politeness (73%) of respondents described outpatient service providers were polite during service provision. The overall patient satisfaction rate of the study were (22%) very satisfied, (35%) satisfied, (21%) neutral, (15%) dissatisfied and (7%) very dissatisfied.

Conclusion: The study's results revealed that the outpatient service characteristics and perceptions of study participants were low of respondents with convenient to ask questions. While, high percentage reported that their privacy at the out-patient department was maintained. Also, Related to dialogue with outpatient service providers, the study participants declared to have had a good dialogue with outpatient service providers. Related to politeness of outpatient service providers who served the respondents were high. The overall patient satisfaction rate of the study were good.

Keywords: *Patient satisfaction, Outpatient Department.*

Introduction

The health care system has changed over time with a shift from being a traditional concept of noble profession toward a customer-oriented service industry (1). This has resulted in a challenge for the healthcare industry in delivering high quality of health care services; safe, equitable, evidence based, timely, efficient, and patient centered services (2). Patient satisfaction is, “a measure of the extent to which a patient is content with the health care which they received from their health care provider” (3). Patient satisfaction is straight forward with the whole healthcare system, and it is also the measurement of healthcare system responsiveness (4, 5). However, it is challenging to find an agreed upon definition, patient satisfaction is a measure of the level of healthcare satisfied they receive from their providers (6, 7). Patient satisfaction is a result of their expectations and experience after obtaining service from healthcare providers (8, 9).

Furthermore, it is expressed through an affective reaction concerning the difference between what the patients expect and what they obtain (10, 11). With this, if the patients obtained low or weak service than their expectations, then they will be dissatisfied. In other words, if the received service is in line with or outside patients' expectations, this will result in patients to be satisfied (12, 13). Since healthcare organizations are operating in an increasingly competitive environment, patient satisfaction is a crucial indicator of the market share influenced by the healthcare service provider (14). Patient satisfaction and the performance of healthcare providers are often

interconnected events (15). Consequently, measuring patient satisfaction can help to improve and maintain the quality of service provision (16).

Additionally, the measurement and knowing about patient satisfaction are vital to the providers to know their performance status, and it is also important tool for examining and predicting patient expectations (17). Furthermore, nowadays patient satisfaction measurement is combined with hospital management strategies to monitor quality patient care processes (18, 19). It is also the direct measurement of organizational strengths and performance of the provision of the services (20). Patient satisfaction maintains healthcare organizations' image, which in turn translated into improved service use and market share (21). Studies found that patient satisfaction has positive and direct effect on patient trust (16, 22). This trust can positively affect patients' perception of their healthcare providers' knowledge and skill of treatment. On the other hand, this patients' perception will likely influence their confidence in healthcare providers' reliability and expertise (22).

Satisfied patients explained their primary healthcare professional as showing authentic interest in their health care problems, able to provide clear explanation of the disease and future health fates, gave them adequately opportunities to discuss health as well as how the disease affected their day to day life (17, 23). Moreover, satisfied patients were more likely to follow to the appointed dates and the treatment provided by the service providers. In addition to this, they will be motivated to reuse the service of providers and refer this service to

other patients (9, 24). Patient satisfaction is one of the indicators of the quality of care. Its evaluation will aid in the improvement of health care services and delivery based on patient feedback (25). Therefore, this study aim to to investigate factors associated with patient satisfaction in adult outpatient department.

Materials and Methods

Cross-sectional study design with a total sample of 200 patients was conducted from August to October 2022. All patients who visited the outpatient departments of the chosen health centers were considered the source population, and all patients who visited the outpatient departments outpatient department at health centers in Saudi Arabia during the study period were the study population. Data were collected structured validated questionnaire. Data analysis was conducted with SPSS version 20 to identify predictor variables, applying bivariate and multivariate logistic regression analysis to determine variables that most significantly predicted the outcome variable of the level of patient-satisfaction at 5% level of significance and 95% confidence interval.

Ethical approval was obtained from the Institutional Review Board (IRB) at KSUMC, reference. The data collection sheet was strictly observed to ensure participants' confidentiality throughout the study using the anonymous unique serial number for each subject. Furthermore, the analysis was encrypted and carried out anonymously. Data collection by using a structured questionnaire. All participants provided a written informed consent after their clinic visits. The purposes of the study were explained to participants. Those who agreed to participate were asked to complete the questionnaire.

Results

Table (1) Study participants' Sociodemographic Characteristics. (N= 200)

Total of 200 patients participated in this study. Table (1) shows the sociodemographic characteristics of the study participants. More than third (38%) of study participants have age between 38-47 years. Most of the patients were femals (65%), married (43%). With regards to educational level, study participants had obtained school education (33%). The majority of the payment status (81%) and had a monthly income 5000 – less than 10000 SAR (33%).

In addition, about (72%) of respondents were visited the health centers more than one times.

Table (1) Study participants' Sociodemographic Characteristics. (N= 200)

	N	%
Age:		
18-27yrs	32	16
28-37yrs	44	22
38-47yrs	76	38
47+yrs	48	24
Gender:		
Male	70	35
Female	130	65
Social status:		
Single	46	23
Married	86	43
Widowed	44	22
Divorced	24	12
Educational level:		
Illiterate	18	9
Read and write	52	26
School education	66	33
Post-secondary diploma	24	12
University education or higher	40	20
Monthly income:		
Less than 5000 SAR	38	19
5000 – less than 10000 SAR	66	33
10,000 less than 15,000 SAR	42	21
More than 15,000 SAR	54	27
Payment status		
Paying	38	19
Free	162	81
Frequency of visit		
First	56	28
Repeated	144	72

Table (2) Resources spent and time taken to arrive at the health centers by respondents

Total of 200 patients participated in this study. Table (2) shows the resources spent and time taken to arrive at the health centers by study participants. concerning time taken to arrive at the health centers were (68%) of study participants reported that the time taken was 31- 60 minutes. According to length of stay in the HCs for outpatient service users were 57% of study participants stated that the length of stay was 2- 6 hours. Whereas, respondents' rating of length of stay in the HCs reported that very long and long were (32%, 29%) respectively. Regarding respondents' rating of the amount of money paid for services in the HCs stated that expensive and fair were (40%, 34%) respectively.

Table (2) Resources spent and time taken to arrive at the health centers by respondents

	N	%
Time taken to arrive at the health centers (in minutes)		
< 15	18	9
15-30	46	23
31-60	136	68
Length of stay in the HCs for outpatient service users (in hours)		
< 1hr	22	11
1-2hrs	64	32
2-6hrs	114	57
Respondents' rating of length of stay in the HCs		
Very long	64	32
Long	58	29
Fair	24	12
Short	32	16
Very short	22	11
Respondents' rating of the amount of money paid for services in the HCs		
Very cheap	8	4
Cheap	44	22
Fair	68	34
Expensive	80	40

Table (3) Outpatient service characteristics and perceptions of study participants.

Table 3 showed the outpatient service characteristics and perceptions of study participants. Nearly (45%) of respondents reported the outpatient department they visited

was convenient to ask questions. Out of all respondents, (88%) of them reported that their privacy at the out-patient department was maintained. Related to dialogue with outpatient service providers, the study participants declared to have had a good dialogue with outpatient service providers were (65%). The scale (politely, neutral, impolitely) was used to assess the degree of politeness of outpatient service providers who served the respondents. Thus, (73%) of respondents described outpatient service providers were polite during service provision.

Among the total study participants, (76%) and (66%) reported to have got all ordered laboratory tests and drugs from the health centers, respectively. Exactly (92%) and (72%) of the respondents wish the health center for their future visit and would like to recommend to visit the health center to their friends or relatives, respectively. The overall patient satisfaction rate of the study were (22%) very satisfied, (35%) satisfied, (21%) neutral, (15%) dissatisfied and (7%) very dissatisfied.

Table (3) Outpatient service characteristics and perceptions of study participants.

	N	%
Variables		
The environment was convenient to ask questions		
Yes	90	45
No	110	55
Patient's privacy was maintained in the outpatient department		
Yes	176	88
No	24	12
Had good dialogue with outpatient service provider		
Yes	130	65
No	70	35
Politeness of outpatient service providers		
Polite	144	72
Neutral	36	18
Impolite	20	10
Have got all ordered diagnostic or laboratory tests from the health center		
Yes	134	67

	N	%
No	48	24
Not ordered	18	9
Have got all ordered drugs from the health center		
Yes	132	66
No	68	34
Wish the health center for future visit		
Yes	184	92
No	16	8
Would like to recommend this health center for a friend or relative		
Yes	144	72
No	56	28
General Satisfaction with outpatient services		
Very satisfied	44	22
Satisfied	70	35
Neutral	42	21
Dissatisfied	30	15
Very dissatisfied	14	7

Table (4) Factors associated with patient satisfaction and perceptions of study participants.

Table 4 displayed factors associated with patient satisfaction. This study discovered that there is highly statistical significant related to factors associated with patient satisfaction

Among the satisfaction about nurses' services related to treat patients with courtesy and respect and listen to patient carefully were found to be high (73.8% and 85%) respectively. The score was for the explanation of the medical conditions by the nurses (64.6%). While, Patients' satisfaction about doctors' services have slightly higher levels of satisfaction by their patients related to treat patients with courtesy and respect and listen to patient carefully (79.2% and 85.4%) respectively, and the same addressed issue of explaining the medical condition was reported by study participants. The score was for the explanation of the medical conditions by the doctors (73.4%).

In relation to, patients' satisfaction about cleanliness, noise, privacy and difficulty moving. The results indicated high levels of satisfaction about the rooms were kept clean (89.8%) followed by easy to move around the hospital (74%), while privacy and the area is quiet at night were (62% and 52.6%) respectively. According to patients' satisfaction about explanation of drug-related information. This study revealed that about medications, explaining their purposes, and side effects found those factors as the most satisfying upon all other factors were (86.4% and 85%).

Table (4) Factors associated with patient satisfaction and perceptions of study participants.

						% of agreement	Chi-Square		
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		X ²	P-value	
Patients' satisfaction about nurses' services.									
1. Nurses treat you with courtesy and respect	N	70	40	64	10	16	73.8	73.800	0.000
	%	35.00%	20.00%	32.00%	5.00%	8.00%			
2. Nurses listen to you carefully	N	106	60	20	6	8	85	183.400	0.000
	%	53.00%	30.00%	10.00%	3.00%	4.00%			
3. Nurses explain things in a way you could understand	N	50	38	32	68	12	64.6	43.400	0.000
	%	25.00%	19.00%	16.00%	34.00%	6.00%			
Patients' satisfaction about doctors' services									
4. Doctors treat you with courtesy and respect	N	68	84	24	20	4	79.2	116.800	0.000
	%	34.00%	42.00%	12.00%	10.00%	2.00%			
5. Doctors listen to you carefully	N	110	50	26	12	2	85.4	185.600	0.000
	%	55.00%	25.00%	13.00%	6.00%	1.00%			

		Level of satisfaction					% of agreement	Chi-Square	
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree		X ²	P-value
6. Doctors explain things in a way you could understand	N	72	50	26	44	8	73.4	59.000	0.000
	%	36.00%	25.00%	13.00%	22.00%	4.00%			
Patients' satisfaction about cleanliness, noise, privacy and difficulty moving.									
7. The rooms were kept clean	N	150	24	10	6	10	89.8	382.800	0.000
	%	75.00%	12.00%	5.00%	3.00%	5.00%			
8. The area is quiet at night	N	38	20	44	26	72	52.6	41.000	0.000
	%	19.00%	10.00%	22.00%	13.00%	36.00%			
10. Staff make sure you have enough privacy	N	46	30	40	66	18	62	32.400	0.000
	%	23.00%	15.00%	20.00%	33.00%	9.00%			
11. It is easy to find your way around the hospital	N	84	30	44	26	16	74	70.600	0.000
	%	42.00%	15.00%	22.00%	13.00%	8.00%			
Patients' satisfaction about explanation of drug-related information.									
12. Staff tell you what is the medicine for (explaining their purposes)	N	128	40	10	12	10	86.4	258.200	0.000
	%	64.00%	20.00%	5.00%	6.00%	5.00%			
13. Staff explain possible side effects	N	132	30	6	20	12	85	272.600	0.000
	%	66.00%	15.00%	3.00%	10.00%	6.00%			

Table (5) and figure (1) illustrated that Level of satisfaction related to factors associated with patient satisfaction. Total satisfaction (41.5%) were high and (58.5%) were average. The majority of the study participants had high

satisfaction about explanation of drug-related information were (70%). Whereas, patients' satisfaction about nurses' services and about doctors' services were average (74% and 68%) respectively.

Table (5) Level of satisfaction related to factors associated with patient satisfaction.

		Level of satisfaction			Score	
		Weak	Average	High	Range	Mean±SD
Patients' satisfaction about nurses' services.	N	15	74	111	5-20.	14.6±3.179
	%	7.5%	37.0%	55.5%		
Patients' satisfaction about doctors' services	N	13	68	119	5-16.	11.6±2.379
	%	6.5%	34.0%	59.5%		
Patients' satisfaction about cleanliness, noise, privacy and difficulty moving.	N	36	82	82	4-20.	13.2±3.980
	%	18.0%	41.0%	41.0%		
Patients' satisfaction about explanation of drug-related information.	N	8	52	140	2-10.	7.99±1.653
	%	4.0%	26.0%	70.0%		
Total satisfaction	N	0	117	83	34-61.	47.4±5.987
	%	0.0%	58.5%	41.5%		

Figure (1) Level of satisfaction related to factors associated with patient satisfaction

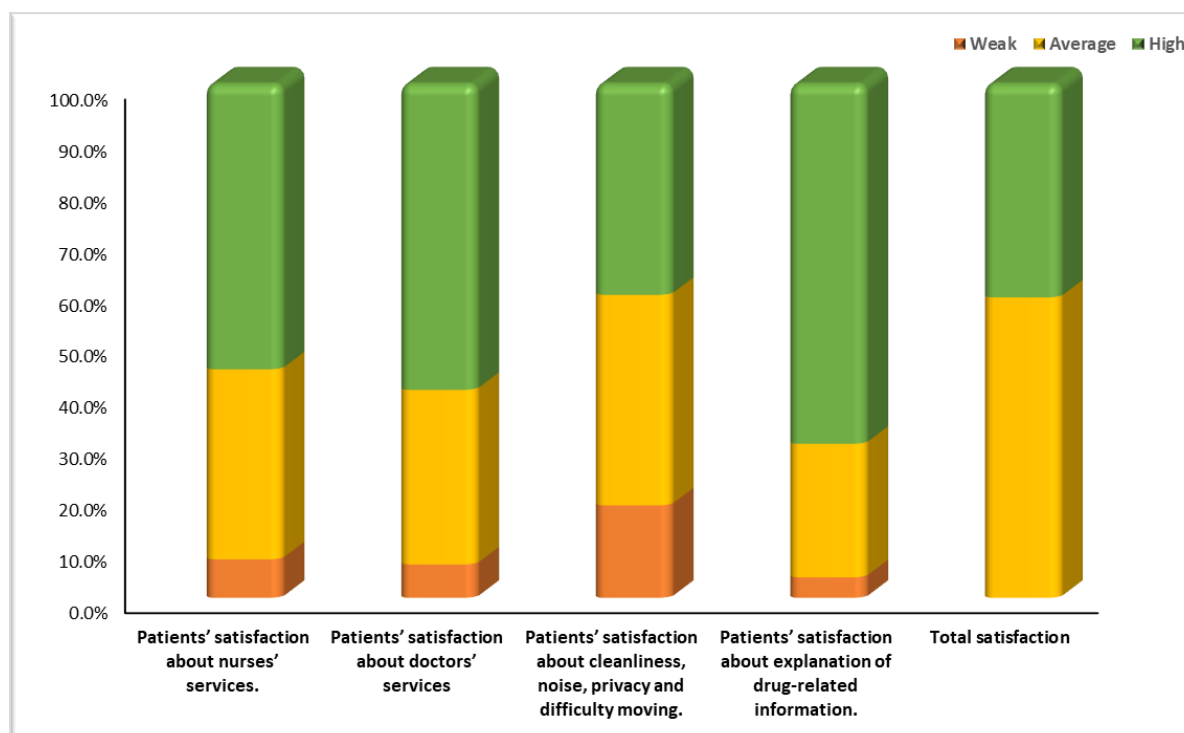


Table (6) and figure (2) the present study display the relation between participants' Sociodemographic Characteristics and total level of satisfaction. There is highly statistical

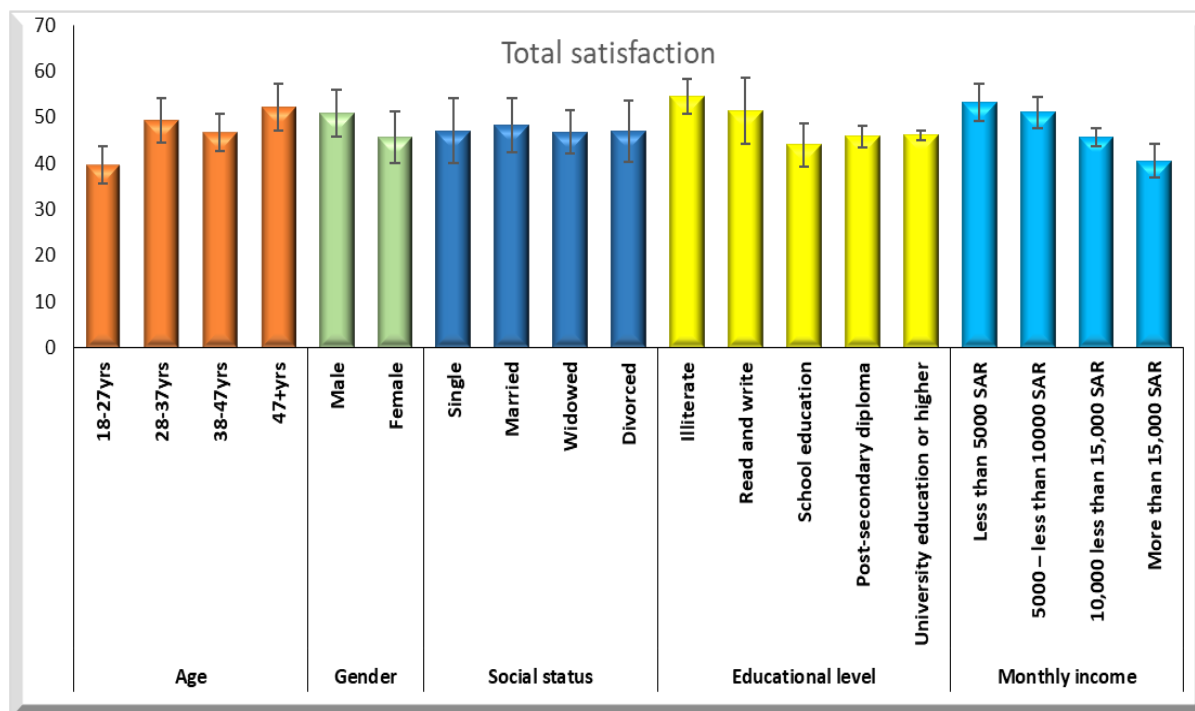
significant with age, gender, educational level and monthly income. While no statistical significant with social status.

Table (6) The relation between participants' Sociodemographic Characteristics and total level of satisfaction.

Items	N	Total satisfaction		F or T	ANOVA or T-test	
		Mean	± SD		Test value	P-value
Age	18-27yrs	32	39.719 ± 4.010	F	52.387	<0.001*
	28-37yrs	44	49.341 ± 4.884			
	38-47yrs	76	46.750 ± 4.080			
	47+yrs	48	52.167 ± 5.025			
Gender	Male	70	50.886 ± 5.006	T	6.448	<0.001*
	Female	130	45.669 ± 5.683			
Social status	Single	46	47.000 ± 7.014	F	0.952	0.417
	Married	86	48.314 ± 5.823			
	Widowed	44	46.773 ± 4.630			
	Divorced	24	46.833 ± 6.638			
Educational level	Illiterate	18	54.556 ± 3.807	F	28.514	<0.001*
	Read and write	52	51.365 ± 7.217			
	School education	66	44.000 ± 4.717			
	Post-secondary diploma	24	45.792 ± 2.245			
Monthly income	University education or higher	40	46.075 ± 0.971	F	147.953	<0.001*
	Less than 5000 SAR	38	53.316 ± 4.041			
	5000 – less than 10000 SAR	66	51.091 ± 3.373			

Items	N	Total satisfaction		F or T	ANOVA or T-test	
		Mean	± SD		Test value	P-value
10,000 less than 15,000 SAR	42	45.595	± 1.926			
More than 15,000 SAR	54	40.481	± 3.607			

Figure (2) The relation between participants’ Sociodemographic Characteristics and total level of satisfaction



Discussion

Researchers have proved that satisfaction level is related to a range of factors like ethnic group, patient education, waiting times and attitudes of providers as well as patients’ perception of a relationship of trust, providers’ answering of questions and provision of adequate information, patients’ feeling of being involved in decisions about their care (26). The aim of this study was to investigate factors associated with patient satisfaction among outpatient department attending patients at health centers in Saudi Arabia. The present study revealed that the age had significant effect on patients’ satisfaction with older and middle age group (28-37), (38-47) and (47) years showed significantly higher satisfaction level compared with younger age group (18-27) years. This may be due to the younger age reflect their

relatively high expectations that can’t be easily met.

This study matching with other studies conducted in Pakistan by Afzal et al (27) and in the United State by Hall and Dornan (28) which revealed that the age have significant effect on patients’ satisfaction and the highest satisfaction was found in age group (25-35) years. From another point of view, The effect of the age variable on satisfaction was not significant in Japipaul study, but it showed interesting results, the greatest level of satisfaction was in the group (15-24) years old, and then it decreased gradually and increased again in the group who were over 60 years old (29) . According to Rahmqvist, age is a well known determinant of patient satisfaction index with older patients scoring more highly and being more satisfied than young and middle aged patients (30). This fact was also seen in

other study which concluded that some demographic variable are important including age which consistently shows that elderly patients are more satisfied (31).

The findings of this study revealed that the gender, educational level and monthly income had significant effect on patients' satisfaction. In this study it was noted that the higher satisfaction was seen in males with mean percent satisfaction score of (50.886 ± 5.006) as compared with female patients. In other study, contrary to present study it was noted that female patients with short duration of hospitalization were less satisfied with staff's care than men (32).

The results of this present study showed that the rate of satisfaction decreased as the educational level increased and mean percent satisfaction score (54.556 ± 3.807) was in patients who had educational level of illiterate. The results contradicted with other study showed that the rate of satisfaction increased as the educational level increased and mean percent satisfaction score (67.75 ± 5.08) was in patients who had educational level of intermediate (27). Similarly highest satisfaction was seen in low income class who had mean percent satisfaction score of (53.316 ± 4.041) and it decreased as income level increased.

The present study explain that patients' satisfaction about explanation of drug-related information of health service provider's was higher. This may be due to high patient turnover, occupational stress and stringent work targets could affect the communication and interpersonal relationship between patients and providers. There is a link between communication capabilities of clinicians and patient satisfaction. Ineffective communication like unfriendliness and discourtesy by doctors, insufficient explanations on diagnosis and management protocol have been implicated in the dissatisfaction of patients with health care (33, 34).

The overall level of with the findings of a study were (41.5%) high and (58.5%) average. This result matching with several studies conducted in Ethiopia by Olijera and Gebresilasses (2001)

(35) reported that satisfaction with outpatient health services at Jimma hospital was (57.7%), Mezemir et al., (2014) (36) noted that level of satisfaction in Debrebirhan hospital was (61.9%) and Tayelgn et al., (2011) (37) reported that level of satisfaction at Amhara Region (65.9%). On the other hand, this finding was higher than the findings of a study conducted in East-ern Ethiopia (54.1%), Tigray Zonal hospital (43.6%) and Gondar referral hospital (22%) (38-40). The reason might be one would ordinarily expect a higher level of satisfaction with care received at a tertiary hospitals and hospitals because of the available expertise, technology and sophisticated procedures that can be obtained rather than health centers.

Patients who did not claim the existence of a convenient environment to ask questions and patients who did not have a good dialogue with outpatient health service providers were less satisfied. A study carried out in health centers in central Ethiopia also revealed that good dialogue and non-verbal communications to be predictors of high degree of patients' satisfaction (41). This is also supported by a study conducted in United Arab Emirates at public hospitals which identified perceived welcoming approach of service providers as a significant determinant of patient satisfaction (42). A study conducted in South Africa revealed lack of communication and relevant messages to patients were identified as an important issue impacting on quality thus affecting client satisfaction (43).

The findings of this study are generally supportive to the literature. Where most of the participants were satisfied about the services provided. In our study, patients were slightly more satisfied about doctors than nurses with high levels of satisfaction for both, where the literature have found that nurses had the highest scores for patients' satisfaction (44, 45). The limitations of this study were the relatively low sample size, and the exclusion of private hospitals. The low sample size will not make the conclusive data generalizable to Saudi Arabia.

Conclusion

The outpatient service characteristics and perceptions of study participants were low of respondents with convenient to ask questions. While, high percentage reported that their privacy at the out-patient department was maintained. Also, Related to dialogue with outpatient service providers, the study participants declared to have had a good dialogue with outpatient service providers. Related to politeness of outpatient service providers who served the respondents were (73%). Among the total study participants, (76%) and (66%) reported to have got all ordered laboratory tests and drugs from the health centers, respectively. Exactly (92%) and (72%) of the respondents wish the health center for their future visit and would like to recommend to visit the health center to their friends or relatives, respectively. The overall patient satisfaction rate of the study were (22%) very satisfied, (35%) satisfied, (21%) neutral, (15%) dissatisfied and (7%) very dissatisfied.

Recommendation

The study recommend that guide administrators to constantly monitor factors associated with patient satisfaction and identify issues and appropriate action and decisions be implemented. Regular training to all categories of staff on attitudes, behavior, and communication is recommended.

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