

*Original Research Article*

# Assessing Patients' Satisfaction with the Quality of Services at the Outpatient Clinics in Minia Maternal and Children University Hospital, Egypt

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## Abstract

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Patient satisfaction is clients' appraisal concerning the efficacy, safety and value of healthcare provided service, it is an integration of healthcare seekers' experience and perception. Patient satisfaction is a principal and frequently utilized pointer for determining the quality of healthcare service provided. Aim of the study is to assess the satisfaction level of patients utilized the outpatient clinics in Minia Maternal and Children University Hospital. Along with identifying the factors associated with patients' satisfaction. Descriptive study design was used. The research approved by Minia Maternal and Children University Hospital research ethics committee. The questionnaire comprehends four main items, including "Appointment, Nursing staff, Physicians, and Environment. Study subjects were randomly selected from Minia Maternal and Children University Hospital Outpatient Clinics which included the obstetrics and gynecology clinics. A randomly selected sample of 20 females per day for two days a week for 18 months obtained. Eventually, overall anticipated size of the sample was 3,120. The study was carried out between end of July 2018 to end of January 2020. Total number of respondents are 1818 clients from overall intended sample size 3,120, which gave response rate of (58.3%). Majority of studied patient satisfied with timing, nursing care, physician care, surrounding environment and overall satisfaction. Waiting time, nurses' directions, physician communication, and surrounding area were the factors which affect patient satisfaction in this study. Finally, it may be concluded that the requirement for constant improvement of the quality and care in the health care setting has become obvious particularly for gaining patient satisfaction.

**Keywords:** Outpatient care, Patient satisfaction, Quality improvement, Women's health

## INTRODUCTION

Patient satisfaction is clients' appraisal concerning the efficacy, safety, and value of healthcare provided service, is an integration of healthcare seekers' experience and perception (Williams, 1994; Tehrani, 2011; Doyle, 2013).

Patient satisfaction is a principal and frequently utilized pointer for determining the quality of healthcare service provided. The greater satisfaction of patient

achieved accordingly it would progress to utmost clinical outcomes and minimum utilization of care resource. Consequently, surveying the satisfaction of the patients is crucial for patients themselves, health care financier, and health care professionals who are providing the care (Säilä, 2008; Kleefstra, 2010; Anhang Price, 2014). It is the initial step for producing plans in healthcare sectors.

lthas impact on medical outcomes, patient retaining, and medical mismanagement claims (Prakash, 2010; Cosma et al., 2020).

Determining healthcare seekers satisfaction is an approach of evaluating the practice of care provided, relating the patient's point of view, and assessing care by reflecting patient history of views back into the system and through comparing facilities (Siegrist, 2013; Dayaratne, 2013). Patient satisfaction become a significant concern in the appraisal of healthcare services along with medical outcomes and economical expenses (Bergenmar, 2009).

Patient satisfaction in healthcare industry is a crucial principle through which the quality of health care services is evaluated (Young, 2002; Goldwag, 2002). Patient satisfaction in health care system could be described as a subjective evaluation of the extent to which patients are pleased with the service received versus the individual's prospects (Sitzia, 1997). Measure of care quality through patient judgment of hospital service quality and their feedback give providers insights into various aspects of quality of care monitoring and improving (Boyer, 2006, Hepner, 2004).

Recently satisfaction and patient concern of the quality while receiving any kind of healthcare service, has gained notoriety and always an important factor when healthcare service encounters. Patient satisfaction is one of the greatest significant aspects to determine the success of a health sectors (Manzoor, 2019).

The aim of this study is to assess the satisfaction level of patients utilized the outpatient clinics in Minia Maternal and Children University Hospital, with view to identify the factors associated with patients' satisfaction.

## METHODS

Descriptive study design was used. The research approved by Minia Maternal and Children University Hospital research ethics committee.

### Questionnaire development

A survey conducted from end of July 2018 to end of January 2020 at Minia Maternal and Children University Hospital Outpatient Clinics, which included the obstetrics, and gynecology clinics.

A preceding surveys and studies of outpatients' satisfaction investigated and reviewed, in order to compose the item pool of the questionnaire. Participants were asked to mention their personal data as (age, visiting number, level of education, and condition of chronic disease). In accord to the pilot study outcomes, (which made on 50 patients) the final questionnaire version comprehends Four main items including 1- Appointment (6 items), 2- Nursing staff (5 items), 3-

Physicians (10 items), and 4- Environment (9 items).

All the participants were consented verbally before replying on the questionnaire. Subsequently receiving the data about the study purpose and objectives, the respondents enquired to put response for each question from 30 questions on a five -points Likert Scale with categories ranging from "1" representing "very dissatisfied" to "5" representing "very satisfied". The investigators explained all questions to the participants and clarified the purpose of the study. Scoring system of the questionnaire was in between 30 to 150, and the highly scores of participants, the highly patient satisfaction.

## Sampling

The population of the study involved randomly stratified subjects whom undergoing a diagnostic procedure or examination screening for themselves or their children in any of the clinics. Furthermore, among each clinic clients, a random sample of the days of the examination was used for assessment. A systematic randomly selected sample of 20 females per day for two days a week for 18 months was obtained. Eventually, overall anticipated size of the sample was 3,120, permitting a confidence interval (CI) estimate of 95% in the range of  $\pm 2$  under the assumption of a 50% satisfaction rate. The study was carried out between end of July 2018 to end of January 2020.

The questionnaire acceptability and feasibility assessed through the pilot study (N=50) excluded from sampling. The measurement instrument "questionnaire" verified for its reliability and validity. Reliability assessed through Cronbach's alpha ( $\alpha$ ) coefficient where a value of  $\geq 0.7$  reflected reliable generally. Validity confirmed through confirmatory factor analysis (CFA) (Hair and Anderson, 1995). Also, two expertize revised the questionnaire.

## Statistical analysis

Descriptive data tabulated in order to represent participants' demographic. All data analyzed using SPSS (IBM 25).

## RESULTS

Total number of respondents are 1818 clients from overall intended sample size 3,120, which gave response rate of (58.3%). Table 1.

In this study 1818 participants were involved, there were 1250 (68.8%) had the first visit and 568(31.2%) had the follow up visits. Most of the patients 1293 (71.1%) were between 18-35 years old. Near to half of the participants had diploma or secondary school

Table 1. Sociodemographic characteristics of the patients participating in the study (n= 1818)

Items	No.	%
<b>Visiting</b>		
First visit	1250	68.8
Follow-up	568	31.2
<b>Age / year (Mean <math>\pm</math> SD 30.93 <math>\pm</math> 6.9 year)</b>		
18- 35	1293	71.1
36- 55	525	28.9
<b>Educational level</b>		
Illiterate	531	29.2
Secondary	1056	58.1
University	231	12.7
Total	1818	100.0



Figure 1. Percentage distribution of patient according to their general health condition (N= 1818).

Table 2. Distribution of patient satisfaction domains and its overall (n= 1818)

Item	Very dissatisfied		Dissatisfied		Neither satisfied nor dissatisfied		Satisfied		Very satisfied		Mean $\pm$ SD
	No.	%	No.	%	No.	%	No.	%	No.	%	
Timing	3	0.2	27	1.5	172	9.5	1270	69.9	346	19.0	82.4 $\pm$ 11.0
Nurses	3	0.2	27	1.5	172	9.5	1270	69.9	346	19.0	83.6 $\pm$ 10.2
Physician	2	0.1	50	2.8	219	12.0	1277	70.2	270	14.9	82.6 $\pm$ 10.4
Surrounding environment	22	1.2	42	2.3	334	18.4	1211	66.6	209	11.5	80.8 $\pm$ 10.5
Overall Patient satisfaction	2	0.1	40	2.2	404	22.2	1226	67.4	146	8.0	82.2 $\pm$ 11.0

education (Figure 1).

General health condition. Near to forty percent (38.8%) of the participants rated their general health condition as excellent, (58.8%) rated it as good, and only (2.4%) rated it as poor.

Table (2) represents that majority of studied patient satisfied with timing, nursing care, physician care, surrounding environment and overall satisfaction. regarding mean scores of timing domain was 82.4  $\pm$  11.0, nursing care domain 83.6  $\pm$  10.2, physician care

**Table 3.** Linear multiple regression results of the factors effecting the patients' satisfaction

	Timing		Nurses		Physician		Surrounding environment		Overall Patient satisfaction	
	B	P-value	B	P-value	B	P-value	B	P-value	B	P-value
Visit										
First visit	--	---	--	----	--	---	---	---		
Follow-up	.339	<b>.043*</b>	.094	<b>.017*</b>	.152	.561	.138	.563	.448	.526
Age / year										
18- 35	--	---	--	----	--	---	---	---		
36- 55	.003	.817	.006	.505	.004	.832	.008	.613	.008	.874
Educational level										
Illiterate	--	----	----	----	----	---				
Secondary	.881	<b>.0001**</b>	.848	<b>.0001**</b>	1.477	<b>.0001**</b>	.830	<b>.0001**</b>	4.036	<b>.0001**</b>
University	.357	<b>.01</b>	.271	<b>.01*</b>	.491	<b>.026*</b>	.125	.523	1.243	<b>.035</b>

82.6 %  $\pm$  10.4, surrounding environment 80.8 %  $\pm$  10.5 and the overall patient satisfaction was 82.2%  $\pm$  11.0

Table (3) shows the regression analysis. Furthermore, the influence of other factors on overall satisfaction including waiting time, nurses' directions, physician communication, and surrounding area studied. For general satisfaction, significant difference with patient education ( $P=0.001$  CI: 0.035) only found.

## DISCUSSION

Enhancing the healthcare communication quality with patients will increase the interest of healthcare seekers and trustworthiness to the healthcare institution, which is a target cannot be effortlessly sustained (Roberts, 2006). It is recognized that the well-established interaction in between the patients and healthcare providers is significant because it may influence the outcome, which is the reason behind the patients' interest in building a relationship with their healthcare providers (Sweeney, 2015). The requirement for constant progress of quality and care in the health care setting has become obvious (Samy, 2015).

The study results showed that communication with healthcare professionals has great outcome on patient's overall impression concerning the healthcare facility and provided services. Our study allied with Singh Gaur S, 2011, who found that the patient satisfaction considering a probable transferal from more treatment focus to more behavioral focus.

Regarding waiting time in outpatient clinics in this study we found that more than eighty percent of the patients satisfied with it because the huge number of clinics and multitude number of physicians. This result was in consistent with McCarthy (2000) who reported that prolonged waiting times in outpatient sittings considered as significant challenge confronting the healthcare facilities.

Our study results in this point were in accordance with another study done in Jordanian that found that timing

was a significant factor for patient satisfaction. The opposing negative consequences of waiting duration and its influence on the satisfaction rates associated with the patient anticipations and prospects reported by AlRyalat (2019). These results in accordance with a study of Zineldin (2006) which conducted in both Jordanian and Egyptian outpatient's healthcare sittings, and reported that long waiting durations discovered to be the major problem at the back of low patient's satisfaction.

In relation to personal characters that affect patient satisfaction, in this study we found that educational level influenced patient satisfaction. The highly educated persons more patient and more agree and accept the staff instructions. The study results were in congruent with the study of Alhusban (2009), which conducted in Jordan, and found that the patient's satisfaction investigated around the nursing practice of care and building rapport through communication; resulted that patient's gender and education levels could influence the satisfaction.

Pertaining to general surrounding environment cleanliness, availability and calmness the study revealed a significant element of patient's satisfaction, because of clean environment decrease the anxiety and tension level and make the patient more relaxed and more satisfied. This results in matching with a prior research done by Quintana (2006), and stated that sanitation affect the satisfaction of patients who are having a higher level of education.

## CONCLUSION

Finally, it may be concluded that the requirement for constant improvement of the quality and care in the health care setting has become obvious particularly for gaining patient satisfaction. The findings of this study can be understood as the majority of studied patient satisfied with timing, nursing care, physician care, surrounding environment and overall satisfaction. Waiting time, nurses' directions, physician communication, and surrounding

area were the factors which affect patient satisfaction in this study.

## RECOMMENDATIONS

The survey results hint high percentage of patient satisfaction for the hospital quality of services provided. However, it can be recommended to arrange seminars for health care providers in order to provide a self-identification for patients and professional communication skills. Also, the surrounding environments need more efforts for administrative authorities such as continuous follow up for cleaning of bathrooms.

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