



Women's Satisfaction with Primary Health Care Services in Al-Hosienia District, Sharkia Governorate, Egypt.

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ABSTRACT

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Background: Customer satisfaction is an important outcome that health services struggle to achieve. Periodic measurement of client satisfaction is necessary to identify changes in the performance of services. **Objective:** This study aimed to measure the women's satisfaction with health services in Al-Hosienia district, Sharkia governorate. **Method:** It's a Facility-based cross-sectional study conducted on randomly selected 400 females attending 3 primary health care (PHC) facilities (one urban health center and two rural health units) located at Al-Hosienia district, Sharkia governorate. Half of the sample was obtained from the attendants of the urban health center (UHC) while the other half from rural health units (RHUs) attendants. An interview was conducted with the selected participants to fill out the study questionnaire. Data were collected about the socioeconomic characters of the participants and their satisfaction with the provided service. **Result:** There were 216 (56.5%) women satisfied with the provided health service. Most of the women were satisfied with accessibility (57.75%), the humanness of the staff (56.5%), and the quality of physical examination (53.75%) while they were unsatisfied with the physical environment of the facility (52.75%) and health education received (63.75%). Women's satisfaction was statistically significantly associated with education, occupation, frequency of visits, and healthcare facility type. **Conclusion:** The overall satisfaction of participants was relatively low. Most of them were unsatisfied with the dimensions of the physical environment and health education most of them were unsatisfied with the provided service.

INTRODUCTION

Primary health care (PHC) is an integral and critical component of the health care system, and it is strongly involved in dealing with many health problems affecting the population health.¹ It includes all the essential health care services provided to the community.

Therefore, the accessibility and availability of PHC services to all populations irrespective of any social,

economic, or geographical variable should be guaranteed.²

Client satisfaction is an important factor for evaluating the quality of service provided by any organization. It is concerned with the extent to which consumers feel their needs and expectations are met by the service provider.³ Client's satisfaction with health care is an objective of the health care. It's also one of the most important measures for

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evaluating health care. Also, it's the complex relationship between patients' perceived needs and expectations from the health services received. Therefore, satisfaction is one of the most important factors that affect the outcomes and use health care of services.⁴

Evaluating the customers' or patients' satisfaction and studying patients' experiences are ways to monitor the primary health care performance and provide the required information about the problems facing the primary health care. Moreover, patients' suggestions can help in finding solutions and reducing health problems.⁵ Satisfied patients are more likely to develop a stronger and long-lasting relationship with the medical providers, leading to improved compliance, continuity of care, and eventually better health outcomes.⁶ From management perspectives, patient satisfaction with health care services is important for several reasons. First, satisfied patients are more likely to maintain a consistent relationship with a specific provider. Second, by identifying sources of patient dissatisfaction, the organization can address system weakness, thus improving its risk management.⁷ Finally, patient satisfaction measurement adds important information on system performance, thus contributing to the organization's improvement.⁸

Patient satisfaction is considered an internationally accepted factor needed to be studied repeatedly for the smooth functioning of the health care systems.⁹ Many factors have a good impact on patients' satisfaction and through these factors, we can measure the quality of health care services especially the quality of primary health care.^{10,11}

This study aimed to measure women's satisfaction regarding primary healthcare service in Al-Hosienia district of Sharkia governorate, either the overall satisfaction or satisfaction towards each dimension of the provided care. These dimensions were accessibility, physical environment, Humanness of staff, quality of physical examination and health education, and also identification of the factors that may affect it.

METHOD

This is a facility-based cross-sectional study conducted in Al-Hosienia district, Sharkia governorate between 9 August and 28 October 2020 to assess the degree of clients' satisfaction with the provided primary health care and the affecting factors. Al-Hosienia district is located in the northern part of Sharkia governorate with a distance of about 140 km northeast to Cairo and a population

number of about 400 thousand. The primary health care services in the Al-Hosienia district are provided through one urban health center which is located in Al-Hosienia city and 21 rural health units in its rural areas. The urban health center and two rural health units were selected as representative of the PHC health service. Rural health units were selected randomly from a list of the units which fulfilled the inclusion criteria (eight units). The criteria of RHU selection depended on the presence of at least one doctor and a pharmacist all over the week and a target population not less than 15000 to guarantee a good attendance rate.

Sample size calculation was based on the estimated prevalence of patient satisfaction in a previous study which was about 55.9%¹², with a confidence level of 95% and 5% marginal error. These requirements necessitate study participants to be 379 subjects. So, we selected 400 attendants (about 5% more than the calculated number) to be the sample size of the study with half of them from attendants of the urban health center and the other half from attendants of two rural health units (100 attendants from each unit).

Any married woman aged 18-45 years who were present at the health facility during study conduction was liable to be included in the study. Women must be from the target areas of the studied facilities and there is at least one previous visit for the studied facility in the last 12 months. The study was restricted to married females only because they constitute the majority of attendants in the studied facilities. They were mostly attending antenatal care, immunization, family planning, and childcare services. Women who fulfill the inclusion criteria and approved to be included in the study were interviewed in the waiting area at the end of the visit to fill the study questionnaire.

Study tool: The tool used for data collection was an Arabic questionnaire which was constructed after reviewing the previous literature with similar objectives where the most relevant items were selected to be used in the study. The questionnaire was reviewed by a staff member at the community medicine department, Al Azhar faculty of medicine, and two primary care physicians where some modifications were performed. Also, a pilot study was conducted on 30 persons to test the applicability of the study questionnaire and training the data collectors. Data generated from the pilot study were not included in the final data analysis.

The questionnaire included data on participants' socio-economic characters (age, education,

Table 1: Client's satisfaction according to dimensions of provided service.

	Satisfied		Unsatisfied		P value
	No.	%	No.	%	
Accessibility					
- UHC	123	61.5	77	38.5	0.13
- RHUs	108	54.0	92	46.0	
- Total	231	57.75	169	42.25	
Physical environment					
- UHC	68	34.0	132	66.0	<0.0001**
- RHUs	121	60.5	79	39.5	
- Total	189	47.25	211	52.75	
Humanness of staff					
- UHC	116	58.0	84	42.0	0.12
- RHUs	131	65.5	69	34.5	
- Total	226	56.5	174	43.5	
Quality of physical examination					
- UHC	96	48.0	104	52.0	0.07
- RHUs	114	57.0	86	43.0	
- Total	210	53.75	190	46.25	
Health education					
- UHC	94	47.0	106	53.0	0.27
- RHUs	83	41.5	117	58.5	
- Total	177	44.25	223	63.75	

** Highly significant

Table 2: Client's satisfaction according to socio-demographic characters.

	Satisfied (No.= 214)		Unsatisfied (No.=186)		Total (No.=400)		P value
	No.	%	No.	%	No.	%	
Age							
- <20	13	6.1	11	5.9	24	6.0	0.97
- 20-24	77	36.0	69	37.1	146	36.5	
- 25-29	70	32.7	55	29.6	125	31.2	
- 30-34	34	15.9	32	17.2	66	16.5	
- ≥35	20	9.3	19	10.2	39	9.8	
Education							
- Illiterate	42	19.6	21	11.3	63	15.8	0.003**
- Read and write	15	7.0	12	6.5	27	6.8	
- Primary/Preparatory	56	26.2	37	19.9	93	23.2	
- Secondary	81	37.9	76	40.9	157	39.2	
- University	20	9.3	40	21.5	60	15.0	
Occupation							
- Worker	51	23.8	93	50.0	144	36.0	<0.001**
- Not-working	163	76.2	93	50.0	156	64.0	
Method of arrival							
- Walking	89	41.6	80	43.0	169	42.3	0.08
- Public transport	121	56.5	95	51.1	216	54.0	
- Own car	4	1.9	11	5.9	15	3.7	

** Highly significant

occupation, and mode of transport to the center) and visiting frequency.

Also, the questionnaire included five sections to identify the women's satisfaction with the dimensions of the provided service. These sections include: Accessibility: it was assessed using four

items; distance from my home to the health center\unit is acceptable, it's easy to reach health center\unit, the operating hours of the health center\unit are suitable, and the time spent in the waiting room is acceptable; Physical environment: it was assessed using four items; the building

condition of the facility is appropriate, the facility has adequate size and enough rooms, the health

center\unit is always clean and tidy, and the waiting area has enough and comfortable seats;

Table 3: Client's satisfaction according to service utilization and type of facility.

	Satisfied (n=214)		Unsatisfied (n=186)		Total (n=400)		P value
	No.	%	No.	%	No.	%	
Frequency of visits in last 12 months							
- Once	22	10.3	76	40.8	98	24.5	<0.001**
- Twice	34	15.9	44	23.7	78	19.5	
- Three times	65	30.5	36	19.4	101	25.2	
- ≥ four times	93	23.3	30	16.1	123	30.8	
Health care facility							
- UHC	91	45.5	109	54.5	200	50.0	<0.001**
- RHUs	123	61.5	77	38.5	200	50.0	

** *Highly significant*

Humanness of the staff: it was assessed using four items; the receptionists treat me well and with respect, the nursing staffs at the health center\unit treat me well and with respect, the doctors treat me well and with respect, and the laboratory staffs at the clinic treat me well and with respect; Quality of the medical examination: it was assessed using eight items; there are appropriate numbers of staff to perform all the tasks I required at each visit, the doctor provides comprehensive medical examination, the doctor answers all my questions, the time spent with the doctor is appropriate, the doctors at the clinic respect my privacy, In my opinion, doctors working in the clinic are competent, equipment at the clinic works properly, and the prescribed drugs were available at the pharmacy; Health education: it was assessed using five items: doctors give me enough information, nurses provide helpful education and advice, the clinic provides health education materials like brochures, there are educational films displayed in waiting rooms, and there is a place for the educational sessions.

Women's response for each item was scored using five points Likert scale as follows: strongly agree; 5, somewhat agree; 4, not sure; 3, and somewhat disagree; 2 and strongly disagree; 1. The attendant's score was calculated for each domain. Also, the total score of the domains was considered as the total satisfaction score of the participant. Attendants were categorized as satisfied or unsatisfied based on cut-off point > 60% of the score whether for each domain or the total satisfaction scores.¹³

Data collection: Data collected using the personal interview technique with study participants who fulfilled the inclusion criteria at the end of the visit

after explaining the objective of the study and getting their permissions (verbal consent). Data collection was done by three data collectors (one for each facility) after training by the researcher. Data collectors were university graduated and reside in the target area of the facility. The data collection process continued until the estimated number of participants was obtained.

Data analysis was performed using SPSS version 20. Descriptive statistics were calculated in the form of numbers and percentages. Chi-square was used to assess differences between participants in the studied centers regarding their socio-demographic characters and satisfaction with the service. P-value < 0.05 was used as a sign of significance.

RESULTS

This study revealed clients were satisfied with accessibility (57.75%), the humanness of the staff (56.5%), and the quality of physical examination (53.75%) while they were unsatisfied with the physical environment of the facility (52.75%) and health education received (63.75%). Clients of urban health centers were more satisfied with accessibility and health education than clients of rural health units while most of the satisfied clients with the dimensions of the physical environment, the humanness of the staff, and quality of physical examination were those of rural health units. Also, satisfaction was significantly different between UHC and RHUs clients regarding the dimension of the physical environment of the facilities (Table 1). It was observed that 214 clients are satisfied with the provided service constituting a 53.5% satisfaction rate. Most of the satisfied women were aged 20-24

(36.0%), secondary educated (37.9%), non-worker (76.2%), and using public transport to reach the health facility (56.5). There were statistically significant differences between satisfied and unsatisfied women regarding education and occupation and insignificant differences regarding age and method of arrival (Table 2).

This study was conducted at three primary healthcare facilities (one urban healthcare center and two rural healthcare units) representing the PHC service provided in both urban and rural areas in Al-Hoseinia district of Sharkia governorate to assess the level of women's satisfaction with the different dimensions of the provided primary health care service (accessibility, physical environment, humanness of the staff, quality of physical examination and health education).

The prevalence of women's satisfaction was 53.5%. Women's education, occupation, and utilization of service were significantly different between satisfied and unsatisfied women. Also, there is a significant difference between UHC and RHUs attendants.

There was a significant difference between UHC and RHUs attendants concerning accessibility and physical environment. Most UHC clients were unsatisfied with the physical environment of the facility. This can be explained by the fact that the urban health care center is located in a rented poor quality flat where a new health center is under construction.

There was a significant difference observed in this study between the satisfaction status of the participants and their educational status, where about two-thirds of the illiterate women were satisfied with the provided service while two-thirds of the university-educated women were unsatisfied with the provided service. The definition of quality health services is based on the increasing public awareness which is much more about the educated personnel. Also, individuals with higher levels of education are usually had higher income and social status, and consequently, their expectations are high.¹⁴ The educated clients with unmet high expectations experience more dissatisfaction with the provided medical service.¹⁵

However, other Egyptian studies revealed insignificant relation between client's education and their satisfaction status.^{12,16} These dissimilarities may be due to the effect of the study setting where the first study was conducted on the attendants of outpatient services in Saied health center, Tanta, Gharbia governorate while the other study was

Most of the satisfied attendants were frequent users (visiting the facility 3 and ≥ 4 times in the last 12 months) and RHUs attendants. There were statistically significant differences between satisfied and unsatisfied women regarding the frequency of visits and type of health care facility (Table 3).

DISCUSSION

conducted on attendants of PHC services at Sharkia and Menya governorates with the resulting differences in the participant's socio-demographic characters, client's standards for care evaluation, or politeness bias or it may be due to actual regional variation in the quality of service provided.

On the other side, many international studies found a significant relationship between the satisfaction of clients and their educational status.^{17,18,19}

Also, the occupation of the attendants significantly affects their satisfaction with the provided service with less degree of satisfaction among working women. This may be due to working women are more educated with more income and high social status and consequently have high expectations.

Many studies found a significant relationship between the client's income and their satisfaction with the provided service.^{14,15}

In this study, we found difficulty in asking the clients about their income because they either refuse to give a response or they don't know exactly the income of their husbands. Instead of this, we consider the method of arrival as a proxy measure of the family income. However, there is no significant difference between the satisfaction of the participants regarding their mode of transport. This may be due to the ineffectiveness of the proxy measure used in the current study. Also, this can be attributed to the sample size of the study which was insufficient to give statistically significant results.

Also, there is a significant difference between women's satisfaction regarding utilization of service where satisfied clients have more utilization rate. Utilization rate by itself is a good indicator for continuity of service and client satisfaction.¹³

Satisfaction significantly differs between UHC and RHUs attendants where most of RHUs attendants were satisfied with the provided service. Rural clients are generally less educated, less income, and less social status, and consequently less social perspectives.

Many studies were conducted in Egypt^{6,12,16} and other nearby countries^{14,15,17,18} to assess the satisfaction among primary healthcare attendants

with variable degrees of client's satisfaction and variable predictors.

It was found that system-related factors were responsible for 28% to 48% of the variability in clients' satisfaction with the provided service. Also, differences in providers' capabilities greatly affect client satisfaction than differences between localities.¹⁹

Study limitations

The limitations of this study include the fact that being a cross-sectional design; it only could assess satisfaction for one visit while periodic surveys could be more informative to the center.

Because the study was restricted to the PHC facilities in the Al-Hosienia district, we can't generalize the results of this study to other types of health services or other localities in Egypt. However, when the finding of this study is combined with the findings of other studies conducted in other areas all over Egypt, they can give a complete picture of the PHC situation in the country.

Also, response bias is probable due to what's called "halo effect". This type of bias occurs in the facility-based studies due to the immediately short-lived over-satisfaction of the clients after obtaining the service.

CONCLUSION

The satisfaction of the participant is relatively more among the rural attendants. Physical environment and health education dimension have the least satisfaction scores. Women's satisfaction differs significantly regarding the education, occupation, and utilization rate of the participants. Also, there is a significant difference between attendants of urban and rural facilities.

Due to the great importance of identifying women's satisfaction to improve the quality of provided service and due to variability between different studies in the satisfaction rate and its predictors, a large-scale nationwide study is needed to be the basis for any improvement efforts.

Ethical Consideration

Participation in the study was voluntary after obtaining verbal consent with the anonymity of participants and confidentiality of the collected data. Approval of the ethical committee at Al-Azhar faculty of medicine was obtained. Also, approval of the responsible authorities to perform the study was obtained.

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Conflict of interest

No conflict of the interest

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