

Clients' Satisfaction with Maternal and Child Health Care Service at El-Minia Governorate, Egypt

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Abstract:

Background: Health care services are being provided by health facilities to the community with the objective of fulfilling their satisfaction but sometimes the target population can not be always satisfied. Client satisfaction measurement is a routine tool in health care facilities to assess the quality of service and know whether it meets the clients' expectations. **Aim:** Our study was conducted to assess the satisfaction of clients receiving maternal and child health services at El-Minia MCH facilities in order to elicit suggestion for improving the services.

Research design: It is a cross-sectional descriptive study **Settings:** This study was conducted during April-October 2010, at El-Minia governorate, in Upper Egypt, 234 Km south to Cairo, Egypt. In El-Minia governorate, 233 different health facilities are providing MCH care (10 urban centers and 223 rural health units). **Sample:** The target sample size 300 adult women.

Tool: An interview questionnaire was developed by the authors and filled out from the answers of the female clients who attended the services at El-Minia MCH facilities during a period from April to October 2010. **Results:** As regard to client satisfaction with the provided MCH services, 56.3% of the clients were not satisfied while 43.7% of clients accepted the services and described it as good. Most of the clients (57%) expressed their responses as not satisfactory regarding the assessment of physicians and 66.7 for nursing staff. **Conclusions:** The majority of the interviewed women were not satisfied with most of the aspects that include dealing with the health care providers at all the urban and rural MCH facilities of El-Minia governorate. Consequently, the policy makers and health care providers must revise their quality and quantity of services, and accordingly actions must be taken to improve them to meet the clients' expectations. **Recommendations:** In order to overcome this low level of satisfaction we recommend holding regular mothers' meetings inviting opinions and suggestions from the clients. On the other hand, adoption of an extensive national educational and training program for the proper dealing and patients' rights among health care service providers. Moreover, in the university education for medical and nursing students, there must be special emphasis on patients' rights, human dealings and quality of service that satisfies all health care clients.

Keywords: Client satisfaction, maternal and child health services, El-Minia

Introduction:

Patient satisfaction is a significant indicator of the quality of care provided in the health care facilities. It depends on many aspects that include satisfaction with the dealing, competence and communication with the health facility personnel (physicians, nurses, pharmacist and

social workers), as well as the time spent with the service-providers and awaiting before the service (**Butt et al., 2009**).

In clinical settings, in order to evaluate and improve the quality of care provided, it is of vital importance to investigate the quality of care in the

context of health care. Consequently, quality of care includes investigations that map out patient satisfaction with health care (McCormick, 2008, Das, Amir & Nath, 2001).

In this regard, to improve the quality of health care, the health care providers need to know what factors influence patients' satisfaction.

Maternal and child health "MCH" care is an essential aspect of health care delivery for improving maternal health, especially in the developing countries with the objective of meeting the Millennium Development Goals by reducing about two-thirds of maternal deaths and three-quarters of under-five years' mortality of children. Client satisfaction with the health care provided at the MCH facilities is therefore, essential for the success of the implemented programs and achievement of the goals (Yakong. et al., 2010).

This study aimed at assessing the clients' satisfaction with the MCH care providers and services and elucidating the factors that influence satisfaction with the health care, as seen from the clients' perspective.

Therefore, we designed this cross-sectional study to evaluate the satisfaction status of the adult female clients at different urban and rural MCH facilities at El-Minia governorate, Egypt. For this purpose an interview questionnaire was developed and applied to the adult female clients at the randomly-selected MCH facilities at El-Minia governorate.

Aim of the study:

To assess the satisfaction/dissatisfaction status of the adult female clients at different urban MCH centers and rural health units at El-Minia governorate.

Research question:

What are the essential elements needed in order to achieving Client satisfaction in MCH care services?

Subject and methods:

Research design:

A cross-sectional descriptive study was used.

Settings:

This study was conducted, at El-Minia governorate, in Upper Egypt, 234 Km south to Cairo, Egypt.

Sample size and sampling design:

In El-Minia governorate, 233 different health facilities are providing MCH care (10 urban centers and 223 rural health units).

From these MCH facilities, all the urban MCH centers were included and a 10% of the rural health units were randomly selected from the rural units of each district.

The target sample size was calculated to be 300 adult women according to the formula of $n = P * (1 - P) * (Z_{\alpha} / d)^2$

Based on a pilot study that was carried out on MCH center "on 50 women who were not included in the main study" the proportion of client satisfaction was found to be about 30%.

Validity of tool:

The developed questionnaire was revised by 3 experts in the fields of Public Health, Nursing Education and Nursing Administration to test its validity and evaluate the new modifications. The reviewers' comments on clarity of sentences and appropriateness of content were considered while preparing the final version of the questionnaire

Tool of Data collection:

Tool of data collection was classified into four parts as follows:

- **Socio-demographic characteristics:** age, marital status, level of education, center / unit.
- Questions to assess the dealing of the service providers: physician, nurse, pharmacist and the social officers. Questionnaire contained 47 questions related to information on MCH care with special emphasis on the client satisfaction with the physician, nursing, pharmacy, and the care service in general.
- Assessment of the level of satisfaction related to waiting and consultation time were considered.
- A group of questions were intended to cover a variety of aspects related to providers' technical competence during consultations included why the patient had presented for consultation, whether client had been supplied with a description of the nature of the health problem, whether the clients' privacy had been respected, and whether a physical examination had been conducted and if an advice had been offered or a medicine has been prescribed. Then, whether the medicine was available at the MCH facility's pharmacy and whether the pharmacist explained its usage instructions.

Scoring system:

The collected data were reviewed, scored and input to a computer on a statistical program. For each question there were several answers that indicated the satisfaction level whether, very dissatisfied, dissatisfied, accepting services "fairly satisfied", moderately satisfied and very satisfied.

For statistical purposes we developed a scoring system for each response to denote the "very dissatisfied and dissatisfied" results as "dissatisfied" and the fair, good and excellent responses as "satisfied". For the main domains of satisfaction, special scores were given to the socio-demographic items, physical environment, physicians, nursing quality and dealings and respecting privacy. Then a total score that included the 47 items of all the above domains was calculated either dissatisfied or satisfied. The scoring system was developed for each response to denote the satisfactory and Un-satisfactory response about the clients' satisfaction with each item of the MCH facility service and those responses were respectively scored as 1 for Un-satisfactory, 2 for satisfactory. The scores of every group of items that forms each domain were summed-up then the summation was divided by the number of items, giving a mean score. These scores were converted into a percent score. The detailed satisfaction level was then calculated and ranked as follows; level that was considered satisfactory when it achieved 50% or greater scores and Un-satisfactory if the score was less than 50%.

Field work:

A detailed questionnaire was filled out for each participant during April-October 2010. The collected data were reviewed, scored and input to a computer on a statistical program. A scoring system was developed for each response to denote the poor, good and excellent response about the clients' satisfaction with each item of the MCH facility service.

Pilot study:

Based on a pilot study that was carried out on MCH center "on 50 women who were not included in the main study" the proportion of client

satisfaction was found to be about 30%. Pilot study also the aim of estimating the exact time needed for data collection and detecting any problems related to its application.

Administrative and ethical considerations:

Official permissions were obtained from relevant authorities to proceed with the study. Prior to embarking on the study, ethical approval was obtained from the Scientific Research Ethics Committee of El-Minia University, Faculty of Medicine. Official permission was obtained from the manager of the MCH and the head of each center before data collection. In addition, informed consent was secured from each participant. All the participants were explained about the purpose of the study and were ensured strict confidentiality and anonymity before proceeding in the interview.

Statistical design:

The collected data were thoroughly cleaned and then, tabulated, analyzed, and interpreted by using frequency distribution percentages, chi-square test and Z-test whenever, applicable. All data were analyzed by using the Statistical Package for Social Sciences (SPSS-16) software and $P < 0.05$ was used as the definition of statistical significance.

Results:

This study included 300 participants who were seeking MCH services at El-Minia MCH urban centers (67 woman 22.3%) and rural units (233 woman 77.7%).

The clients' ages ranged from 18 to 49 years with a mean+SD of 27.17+5.89. Nearly half of the total beneficiaries 146 (48.7%) were in the age group of 21-25 years and 83 (27.7%) were in the age group of 26-30 years. Most of the clients 297 (99%) were married and only 1% of them were widows. More than 20.3%

of the clients were illiterate and 19.3% could read and write, whereas high school and graduate women constituted about 60.4% of the interviewed clients (**Table 1**).

Among the participants; 219 (73%) attended the MCH facility seeking maternal (antenatal, postnatal or family planning) services, while 1.7 came for gynecological complaints and 76 (25.3%) for immunization or other child health services.

More than three-quarters 226 (75.3%) of the clients reported that there are no enough chairs for sitting while waiting for their turn in the MCH centers or units and 157 (52.3%) were dissatisfied with the unclean toilets of the MCH facilities. However, regarding the ventilation and general cleanness of the MCH facilities, the satisfied clients who expressed their satisfaction were 76.3% and 93%, respectively (**Table 2**).

The percentage of the clients who were dissatisfied and complained from the rough "un-human" dealings of the care providers at the MCH facilities ranged between 58.3 - 69.3%. While, 63.3% of clients were dissatisfied because of being unable to feel that their privacy was respected during the whole service providing process, 36.7% of clients expressed their satisfaction with keeping their privacy at the MCH facilities by giving the responses of "to some extent" or "privacy was respected" (**Table 3 & Figure 1**).

Generally, there were significant lower levels of satisfaction among the studied clients regarding the provided MCH services. Assessment of the clients' satisfaction with the MCH facility services revealed that 131 (43.7%) of the clients expressed variable levels of satisfaction while 169 (56.3%) were dissatisfied. All the

MCH service providers (failed to satisfy the clients where 57%, 66.7% and 57.7 reported their dissatisfaction with physicians, nurses and social workers, respectively, (**Table 4 & Figure 2**))

When studying the relationship between level of education and level of clients' satisfaction with MCH facilities services, it was evident that educated clients were significantly less satisfied with nurses, physician and general human dealings as well as nurses' quality ($p=0.0001$, $p=0.02$, 0.001 and $p=0.002$), respectively (**Table 5**).

There was no significant difference between urban and rural MCH facilities regarding satisfaction of the participating clients with the nurses' dealing services level however, rural clients were significantly less satisfied with physician dealings, general human dealings as well as nurses' quality ($p=0.0001$, $p=0.0001$ and $p=0.003$), respectively (**Table 6**).

Discussion:

Assessment of client satisfaction has become an essential administrative and a practical measurement for evaluating and improving the quality of service in all fields that deals with the public including the health care aspects. Studies of client satisfaction are of special importance to the policy makers and decision takers to know the clients expectations and evaluate their current opinions about the services to be considered in their future plans for development (**Johansson, Oléni & Fridlund, 2002**).

In this study, we attempted to assess the satisfaction of clients receiving MCH services at El-Minia urban and rural MCH facilities in order to evaluate whether the provided

services meet the clients expectations and to elicit suggestions for improving the services.

Our results described five domains that have an influence on clients' satisfaction with MCH services: the socio-demographic background of the clients, the MCH facility's physical environment, clients' expectations regarding nursing quality and nurses' medical-technical competence, respecting clients' privacy and the quality of dealing of the MCH care providers i.e., physicians, nurses and social workers.

Regarding the physical environment of the MCH facilities, there were various issues that satisfied the majority of the participated clients such as ventilation and general cleanness of the center 76.3% and 93%, respectively (**Table 2**).

On the other hand, more than three-quarters of the clients were dissatisfied and reported that there are no enough chairs for sitting while awaiting for their turn in the MCH centers or units and more than half of the clients were dissatisfied with the unclean toilets of the MCH centers. Although such physical environmental aspects of the MCH facilities are very essential, most of the clients considered it less important compared to the dealing of the service providers and respecting clients' privacy (**Table 2**).

Although the best MCH services should meet both medical and psychosocial needs, in reality care that meets all medical needs may fail to meet clients' emotional or social satisfaction (**Fitzpatrick, 1991**).

Our results showed that 60% of the clients were dissatisfied because of the rough "un-human" dealings of the care providers at the MCH facilities care providers. These results are in agreement with those of (**Ngui**

& Flores, 2006) who found that clients were significantly satisfied with the efficiency of the nursing staff (93.3%) however, the poor dealing they experienced from the nursing and other care providers (60%) affected the overall clients' satisfaction with the MCH services.

Satisfaction on privacy is one of the important determinants of clients' satisfaction. In this study, 63.3% of clients were dissatisfied because of being unable to feel that their privacy was respected during the whole service providing process and 36.7% of clients expressed their satisfaction with keeping their privacy at the MCH facilities as shown in table 3. In a similar study preformed in a rural area in Bangladesh, it was found that privacy was maintained in less more than 45.1% of cases (**Mendoza Aldana, Piechulek & Al-Sabir 2001**) however, privacy is respected in most of the developed countries such as UK and the USA (**Johansson et al., 2002**).

Our findings revealed that the MCH services provided by El-Minia urban and rural MCH health facilities had not succeeded in achieving satisfaction and ensuring service utilization among majority of the studied female clients. Generally, there were significant levels of dissatisfaction among the studied clients regarding the provided MCH services; where, around 131 (43.7%) of the clients expressed variable levels of satisfaction while 169 (56.3%) were dissatisfied (Table 4). Such levels of satisfaction are considered too low compared to western countries and too many of the developing countries (**Johansson et al., 2002; Das et al., 2010**).

When studying the relationship between level of education and level of clients' satisfaction with MCH facilities services, it was evident that

educated clients were significantly, less satisfied with nurses' physicians' and general human dealings as well as nurses' quality ($p=0.0001$, $p=0.02$, 0.001 and $p=0.002$), respectively (Table 5). Many of the illiterate clients considered the quality of services to be satisfactory or good whereas high school and graduate mothers responded mostly by considering them as bad and poor (72.97%). These results are expected since increasing level of education is usually accompanied with increasing one's expectations. Other researchers have reported similar findings for inverse relationships between levels of satisfaction with education, where, most of their illiterate mothers considered the quality of services to be satisfactory or good (**Banerjee, 2003**).

There was no significant difference between urban and rural MCH facilities regarding satisfaction of the participating clients with the nurses' dealing however, rural clients were significantly less satisfied with physicians' dealing, general human dealings as well as nurses' quality ($p=0.0001$, $p=0.0001$ and $p=0.003$), respectively (Table 6). These findings stimulate urgent revision of the health care provider's attitudes towards clients and their rights to service.

Regardless the differences between urban and rural MCH facilities, it is evident that all the MCH centers have provided low quality services that stimulated a poor satisfaction level of perception among majority of the clients served, which needs full revision of the health care service policy.

One of the strengths of our study is that it included clients from different urban and rural MCH centers of El-Minia governorate that can be considered as a multicentric study and its results can be generalized and

represent the MCH services at upper Egypt. Moreover, it revealed several elements and aspects of clients' dissatisfaction with the MCH services, which included mainly the performance, conduct and dealings of the service providers more than their knowledge and quality or other elements as structure of the MCH facility or its physical environment.

Conclusion:

Our study we conclude that in our study we have thrown light on level of satisfaction of clients receiving MCH services at urban and rural health centers/units at El-Minia governorate, Egypt. The degree of client satisfaction was significantly lower with almost all the studied satisfaction domains of service providers' performance, service providers' dealing, respecting clients' privacy as well as time spent with the physician.

Recommendations:

In order to overcome this low level of satisfaction we recommend holding regular mothers' meetings inviting opinions and suggestions from the clients and encouraging enhanced community participation for generating awareness of the rights and needs among the clients and the community. On the other hand, adoption of an extensive national educational and training program for the proper dealing and patients' rights among health care service providers; physicians, nurses and all health care workers, will help to improve clients' satisfaction with health care services. Moreover, in the university education for medical and nursing students, there must be special emphasis on patients' rights, human dealings and quality of service that satisfies all health care clients.

Table (1): Sociodemographic characteristics of the studied clients attending MCH facilities at El-Minia governorate, 2010

Socio-demographic Characters	Frequency Distribution		Mean + SD
	No.	(%)	
Age groups			
≥ 25	146	48.7	27.17 + 5.89
26 – 30	83	27.7	
31-35	49	16.3	
36 – 40	16	5.3	
41 ≤	6	2.0	
Residence			
Urban	67	22.3	
Rural	233	77.7	
Marital status			
Married	297	99.0	
Widowed	3	1.0	
Level of Education			
Illiterate	61	20.3	
Read and write	58	19.3	
Secondary school	157	52.3	
University --	24	8.1	

Table (2): Level of satisfaction of the studied women with the time factors and structure of El-Minia governorate's MCH center/unit, 2010

Item	Satisfactory		Dissatisfactory		Z	P
	No.	%	No.	%		
Ventilation	229	76.3	71	23.7	10.7	0.0001
General cleanness	279	93.0	21	7.0	29.2	0.0001
Toilet cleanness	143	47.7	157	52.3	-0.81	0.21
Waiting seats	74	24.7	226	75.3	-10.2	0.0001
Time awaiting before the service	207	69.0	93	31.0	7.1	0.0001
Time to respond to your requests	69	23.2	229	76.8	-10.9	0.0001
Time spent with the physician	88	29.3	212	70.7	-7.9	0.0001

Table (3): Level of satisfaction of the studied women with privacy issues and dealings of the MCH center health service providers at El-Minia governorate, 2010

Item	Satisfactory		Dissatisfactory		Z	P
	No.	%	No.	%		
Physician dealing	97	32.3	203	67.7	- 6.5	0.0001
Nurse dealing	92	30.7	208	69.3	- 7.3	0.0001
Social worker dealing	125	41.7	175	58.3	- 2.9	0.001
General dealing	120	40.0	180	60.0	- 2.5	0.0001
Respecting privacy	110	36.7	190	63.3	- 4.8	0.0001

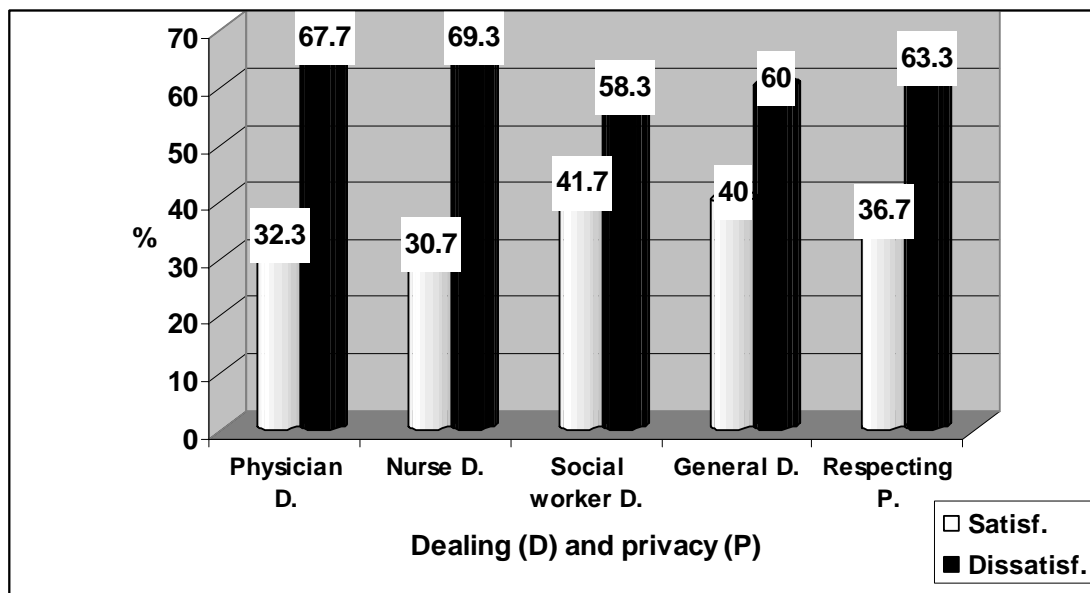
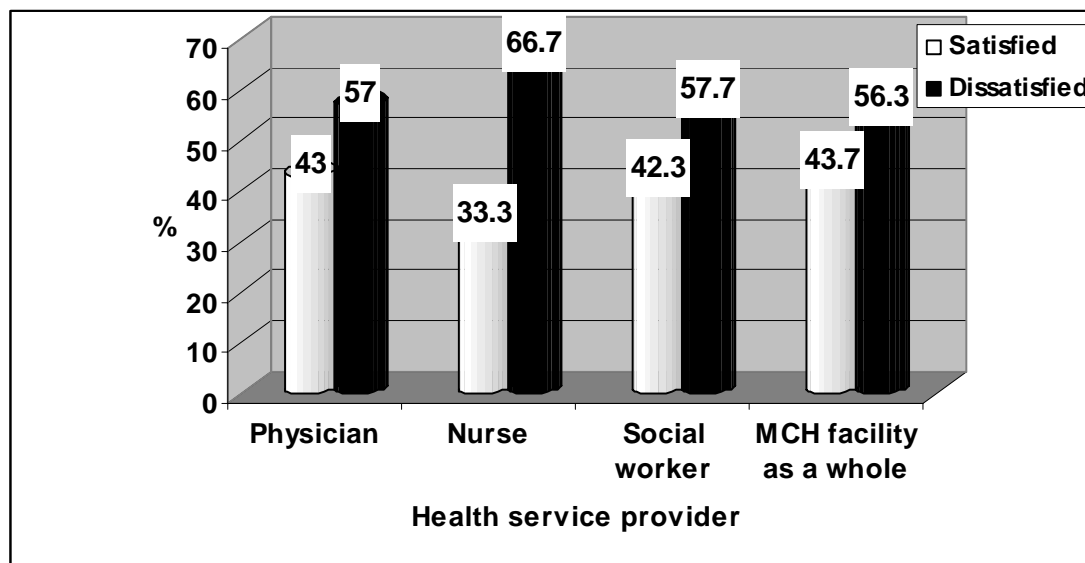
**Figure (1): Level of satisfaction of the studied women with privacy issues and dealings of the MCH center health service providers at El-Minia governorate, 2010**

Table (4): Total level of satisfaction of the studied women with the MCH facilities' service providers at El-Minia governorate, 2010

MCH service provider	Satisfactory		Dissatisfactory		Z	P
	No.	%	No.	%		
Physician	129	43.0	171	57.0	- 2.4	0.007
Nurse	100	33.3	200	66.7	- 6.1	0.0001
Social worker	127	42.3	173	57.7	- 2.7	0.003
MCH facility as a whole	131	43.7	169	56.3	- 2.2	0.014

**Figure (2): Total level of satisfaction of the studied women with the MCH facilities' service providers at El-Minia governorate, 2010****Table (5): Relationship between the education level and the studied women satisfaction with the provided MCH services at El-Minia governorate, 2010.**

Satisfaction with:	Illiterate		Educated		Chi	P-Value
	No. =119	%	No. =181	%		
Nurse dealing	43	36.1	14	7.7	23.5	0.0001
Physician dealing	52	43.7	57	31.5	5.2	0.02
Nurse quality	44	39.9	37	20.4	9.1	0.002
General human dealing	61	51.3	58	32.0	10.1	0.001
Service level	43	36.1	87	48.1	4.34	0.037

Table (6): Distribution of the studied women regarding their satisfaction with the urban and rural MCH services at El-Minia governorate, 2010

Satisfaction with:	MCH Urban center		Rural Unit		Chi	P-value
	No.= 67	%	No.= 233	%		
Nurse dealing	28	41.8	72	30.9	2.3	0.13
Physician dealing	49	73.1	80	34.3	30.4	0.0001
Nurse quality	28	41.8	53	22.7	8.63	0.003
General human dealing	49	73.1	70	30.0	38.3	0.0001
Service level	29	43.2	101	43.4	0.011	0.09

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