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Original Research Article

Maternal satisfaction with delivery services at tertiary university hospital in upper Egypt, is it actually satisfying?

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ABSTRACT

Background: Maternal health has therefore become an important aspect of policy and planning for healthcare, as reflected by its inclusion as the fifth Millennium Development Goal (MDG). The objective of the present investigation was to determine the maternal satisfaction towards delivery services at Women's Health Hospital, Assiut University, Upper Egypt

Methods: A cross sectional study was performed. The study was conducted during February- April 2016 on a sample of 400 delivering mothers; the data were collected using a semi-structured questionnaire and analyzed by SPSS version 21. Statistical tests were used, and significance level was taken at p-value <0.05.

Results: A total of 400 delivering mothers were interviewed, of which 67.0 % of the respondents were between the age group of 20-30, 76.75 % were from rural areas, 48.0% were illiterate, 86.75% were house wives and 46.0% belonged to the income group of less than 500 EGP. The findings of the study showed that the overall maternal satisfaction level with the delivery services rendered at the hospital was 78.5%, while 21.5% were dissatisfied. Furthermore, satisfaction with the delivery service was found to have a significant association with the age of the respondents and educational level of the respondents. Moreover, results suggest that women are satisfied with the communication factors, interpersonal behavior, good management, and general satisfaction. Women were least satisfied with privacy sensation during hospital stay and obligatory blood donation.

Conclusions: Although most participants were satisfied by the delivery service provided to them during delivery, Dissatisfaction by a minority group resulted in a limited ability of communication with mothers, lack of privacy sensation during hospital stay and obligatory blood donation. Thus, mechanisms should be developed to increase maternal satisfaction in our hospital.

Keywords: Delivery, Maternal, Pregnancy, Satisfaction

INTRODUCTION

Satisfaction is an individual's state of being pleased with an event. Lari and colleagues defined patient satisfaction as the extent of an individual's experience compared with her expectations. Or: What patients' and the population as a whole desire to receive from health care services.¹

Satisfied patients are likely to return to the services they need and to recommend the services to others. Patients are considered the best people to know what is best for them and their communities.² Patients are naturally more satisfied when they are empowered with knowledge.³ Another important finding was that, patients want to be informed, have choices and be protected; hence,

providers should strive to provide an environment, which both empowers and protects patients.⁴

Maternal health has therefore become an important aspect of policy and planning for healthcare, as reflected by its inclusion as the fifth Millennium Development Goal (MDG).⁵

WHO encourages the presence of skilled doctors at each birth to reduce maternal mortality and recommends that women's satisfaction be assessed to improve the quality and effectiveness of health care.⁵ For that: Maternal health researchers Affirms the importance of assessing women's evaluations of their birth experiences in order to identify the medical and psychosocial factors that contribute to poor outcomes.⁶

Maternal satisfaction with the delivery service may have immediate and remote effects on health of the mothers. Negative feedback of childbirth process, immediately: increases the risk of post-partum depression and dissatisfaction and remotely: change the maternal attitudes towards future pregnancies and future choice of mode of delivery. However, some identified negative impacts were reflected in a number of health outcomes, including maternal and infant mortality rate, perinatal infections, perceived health status, and hygiene compliance.⁷ Feelings of satisfaction are essential to maintaining maternal health, as well as providing continuous quality care of maternal and child health.⁷ In short, continuity of maternal and child care is related to the levels of satisfaction of mother and family members with health providers and health facilities.⁸

Patient satisfaction is a key determinant of quality of care and an important component in measuring performance.⁹ In addition, it is important that the hospitals promoting client-oriented health services should carry out in-depth research on factors determining satisfaction in the respective culture.¹⁰

Therefore, the specific objective of the study was to determine or to assess maternal satisfaction with the care they received when they came to deliver at women's health hospital, Assiut University. Hopefully, the results of this study will provide scientific evidence regarding maternal satisfaction with delivery care. Consideration of satisfaction by health policy makers might be necessary for improving the quality of mother care and reducing maternal mortality rate.

METHODS

This cross-section hospital-based study was conducted at Women's Health Hospital, Assiut University, in the period between February to April 2016. Delivered mothers who were at postpartum wards were invited to participate in the study. Women who delivered outside the hospital were excluded.

Sample Size calculation

The sample size was determined using Epi- Info. Program with confidence level (95 %) and confidence interval (5%). The sample size estimated to be (384) postpartum mothers. Hence, we interviewed a total of 400 women.

Outcomes of the study

The primary outcome was to determine maternal satisfaction with delivery services. Secondary outcomes included other factors that may affect the maternal satisfaction as socio-demographic characteristics including age, marital status, education, occupation, level of family monthly income, parity, mode of labor for last delivery and maternal and neonatal outcome.

Data Collection tool and method

The data were collected by interviewing the mothers after delivery using a semi-structured questionnaire which has three parts.

The first part asks about socio-demographic information of mothers, the second part asked about health worker attitude and communications. Finally, the satisfaction of mothers was measured using 17 questions which were adopted from Donabedian quality assessment framework.¹¹

Statistical analysis

Data were entered and analyzed by using SPSS "version 21". Statistical tests were used, and significance level was taken at p-value<0.05.

RESULTS

The study included 400 mothers; the majority 67.0% belonged to the age group 20-30 years, 76.75% were from rural areas, 48.0% were illiterate, 86.75% were house wives and 46.0% belonged to the income group of less than 500 EGP.

The mean age of the mothers was 25.74±5.02 (SD) years. More than half (66.5%) of women had 1-5 deliveries, while (33.5%) of women were their first delivery, (51%) of them were delivered by cesarean section while (49%) of them were delivered vaginally (Table 1).

Table 2 shows the Health Workers' Attitude related respondent's satisfaction. High percentage of the respondents stated that the medical team welcomed them at admission, the behavior of the medical team was good, and they always got the full attention of the medical team. But the medical team did not identify themselves to the respondents.

Table 1: Socio-demographic characteristics of the study participants.

Item	Frequency (N=400)	Percentage
Age (years)		
Mean ± SD	25.74±5.02	
<20 years.	69	17.2 %
20-30 years.	268	67.0 %
>30years.	63	15.8 %
Residence		
Rural	307	76.75 %
Urban	93	23.2%
Education		
Illiterate	192	48.0%
Read and Write	20	5.0%
Primary and preparatory	99	24.8%
University	89	22.2%
Marital Status		
Married	398	99.5%
Widowed	2	0.5 %
Divorced	0	0
Work		
Housewife	347	86.75%
Work	53	13.25%
Income/month		
Less than 500 EGP	184	46.0%
Between 500-1000 EGP	173	43.2%
More than 1000 EGP	43	10.8%
Mode of delivery		
Vaginal	196	49%
C.S	204	51%
Parity		
Mean ± SD	3.21±1.01	3.66±1.85
Primipara	134	33.5%
Multipara	266	66.5%

Table 2: Health Workers' Attitude related respondent's satisfaction.

Item	Frequency (N=400)	Percentage
Welcoming at admission prior to arrival to the ward		
Yes	313	78.25%
No	87	21.75 %
If the medical team identified himself to the patient		
Yes	95	23.75%
No	305	76.25%
Badly handling of the patient "bad medical team behavior"		
Yes	85	21.25%
No	315	78.75%
Courtesy, full attention and helpfulness of the medical team towards patients		
Always	166	41.5 %
Usually	194	48.5 %
Sometimes	40	10 %
Never	0	0

As shown in Table 3, the medical team had explained the plan of treatment to only (61.25%) of respondents. High percentage (73.2%) of the respondents said that they did not receive any encouragement to ask about the plan of treatment or to ask about discharge time. So, the findings would alert the health care system to design a client friendly approach to enhance communication.

Table 3: Communication skills of the medical team with the study participants.

Item	Frequency (N=400)	Percentage
Explanation of the treatment plan for delivery to mothers		
Yes	245	61.25%
No	155	38.75%
Encouragement to ask about plan of treatment		
Yes	107	26.8%
No	293	73.2%
Encouragement to ask about discharge time		
Yes	45	11.25%
No	355	88.75%
Tell mothers about fasting before operation		
Yes	377	94.2%
No	23	5.8%
Give instruction of care before discharge		
Yes	370	92.5%
No	30	7.5%

Facilities available in hospital or Environment were found to be one of the major factors affecting client satisfaction outcomes. Of these dimensions, cleanliness, hand hygiene, bathroom facilities and breadth of patient room are important structural determinant of maternal satisfaction (Table 4). Regarding the general assessment of the childbirth process, (78.5%) were satisfied and (21.5%) of them were dissatisfied (Table 5). The problems that were faced by the respondents in the hospital, the first one was the problem of mandatory blood donation, which represented (55.0%), despite that only (74.8%) said that they donated blood while (25.2%) of them did not and the other significant problem was the sense of privacy, which represented (42.7%).

Regarding mothers whose evaluated the delivery in Women's health hospital, Assiut University as (good), (51.0%) were illiterate while (100%) could read and write, (46.5%) had primary and preparatory education and (49.4%) had university education with a highly significant difference ($P=0.0001$) with type of education. From these findings the satisfaction was found to be inversely proportional to the educational level (Table 6).

Almost half of the mothers (46%) who had poor expectation were highly satisfied. In addition, mothers who had good expectation (47%) also, were highly satisfied. However, there was no significant association between expectation level and maternal satisfaction (Table 7).

Table 4: Maternal satisfaction related to facilities available in hospital.

Item	Frequency (N=400)	Percentage
Breadth of the patient's or labour ward room		
Excellent	86	21.5%
Very good	180	45.0%
Good	0	0
Suitable	134	33.5%
Poor	0	0
Quietness in the patient's room		
Excellent	0	0
Very good	166	41.5%
Good	222	5.5%
Suitable	12	3%
Poor	0	0
Cleanliness of the patient's room		
Excellent	0	0
Very good	125	31.25%
Good	232	58.0%
Suitable	43	10.75%
Poor	0	0
Hand hygiene of the medical team		
Excellent	0	0
Very good	115	28.75%
Good	203	50.75%
Suitable	82	20.5%
Poor	0	0
Bathroom facilities and cleanliness		
Excellent	13	3.2%
Very good	0	0
Good	228	57.0%
Suitable	159	39.8%
Poor	0	0
Quality of food		
No food	28	7.0%
Excellent	0	0
Very good	26	6.5%
Good	153	38.25%
Suitable	193	48.25%
Poor	0	0

Table 5: General assessment of the childbirth process.

Item	Frequency (N=400)	Percentage
Satisfaction with the admission Process		
Yes	294	(73.5%)
No	106	(26.5%)
General assessment of the child birth process		
Excellent	0	0
Very good	92	(23%)
Good	222	(55.5%)
Suitable	65	(16.25%)
Poor	21	(5.25%)

DISCUSSION

From this study it was found that there was an association between age group and education with overall satisfaction being statically significant. Where it was found the satisfaction increased with increased age and lower educational status. Also, the findings of our study would alert the policy makers to design a patient friendly approach to enhance the health workers behavior and communication.

This aspect appeared to be much more important to patients than technical ability of providers. Regarding participants' educational status, less educated mothers have higher satisfaction than the educated ones. 48% of the respondents who were illiterate were more satisfied compared to (22.25%) who were in university. This finding is consistent with the studies conducted by Tayelgn, et al, in which less educated patients tended to have high satisfaction.¹²

Mothers' level of satisfaction was also related to the monthly family income as among mothers who assess the delivery as (good), the high percentage of them (63%) belonged to the income group of less than 500 EGP while (51.2%) belonged to the income group of more than 1000 EGP. And among those who assess the delivery as (very good), (25.6%) belonged to the income group of less than 500 EGP while (48.8%) belonged to the income group of more than 1000 EGP with a highly significant difference (P<0.000).

Table 6: Relation between assessments of delivery and educational status.

Item	Educational state				P-value
	Illiterate (n=192) 48%	Read and Write (n=20) 5%	Primary and preparatory (n=99) 24.75%	University (n=89) 22.25%	
Excellent	34 (17.7)	0	0	0	0.0001 *
Very good	60 (31.2)	0 (0)	44 (44.4)	25 (28.0)	
Good	98 (51.0)	20 (100)	46 (46.5)	44 (49.4)	
Suitable	0	0	9 (9.1)	10 (11.3)	
Poor	0	0	0	10 (11.3)	

* Statistical significant difference

Table 7: The relation between service expectation level and satisfaction of the mothers.

Characteristics	Number (N=400)	Unsatisfied (%)	Low satisfaction (%)	Moderate satisfaction (%)	High satisfaction (%)	p-value
Service expectation level						
Poor	63	10 (15.9)	13 (20.6)	11 (17.5)	29 (46)	0.03*
Fair	88	11 (12.5)	23 (26.3)	13 (14.6)	41 (46.6)	
Good	249	17 (6.8)	33 (13.2)	82 (33)	117 (47)	

This agrees with Melese, et al study that demonstrated higher income clients had a higher level of satisfaction with health care providers' attitude and a lower level of satisfaction with the hospital environment.¹³

As regards explanation of the treatment plan for delivery to mothers, the majority of the studies investigated explanation of the patients' problem to the patient, explanation about examination or procedure to be done, and information to the patient on drugs prescribed to the patient and information and counseling to the patient on discharge has yielded a general satisfaction rate with decreasing order if not concerned.

The findings of our study would alert the health care system to design a client friendly approach to enhance communication

Regarding prenatal counseling, it is a major determinant of satisfaction, as it is critical for a woman's understanding of her health condition and her participation in the pregnancy and delivery process.¹⁴ The use of praising words by the medical staff or by the obstetrician or midwife during delivery encouraged women and boosted their self-esteem, as reported in a study conducted in Lebanon.¹⁵

In the present study (42.75%) of the respondents have a problem in privacy and (55.0 %) of the respondents have a problem with blood donation and high percentage of respondents (55.0%) suggests rendering the blood donation not be obligatory. So, this study revealed that the overall satisfaction of mothers on delivery service was found to be suboptimal.

Environment was found to be one of the major factors affecting client satisfaction outcomes. Of these dimensions, cleanliness is another important structural determinant of maternal satisfaction. This agrees with Dzomeku, et al.¹⁶ Therefore, this study helps to evaluate health care services from the patient's point of view, facilitate the identification of problem areas, and help generate ideas towards resolving these problems.

The overall proportion of mothers who were satisfied with delivery care was suboptimal. The study strongly suggested that more could be done to assure that the service provided is more patient centered.

CONCLUSION

Although most participants were satisfied by the delivery service provided to them during delivery, Dissatisfaction by a minority group resulted in a limited ability of communication with mothers, lack of privacy sensation during hospital stay and obligatory blood donation. Thus, mechanisms should be developed to increase maternal satisfaction in our hospital.

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