

Determinants of Patient Satisfaction in the Obstetrics Ward at a University Hospital in Saudi Arabia

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Abstract: Patient satisfaction has been an important indicator of measuring quality in health care. It is the health care recipient's reaction to aspects of his or her service experience. Patient satisfaction measures have been incorporated into reports of hospital and health plan quality. So, we aimed to determine the factors that affect patient satisfaction in the obstetrics ward of a university hospital in Saudi Arabia be able to render useful information for the hospital's management and help improve patient satisfaction in the aforementioned country. This cross-sectional study was conducted in the obstetrics ward at King Abdulaziz University Hospital (KAUH) in Jeddah, Saudi Arabia. During the period November 2012 till March 2013, a questionnaire regarding patient satisfaction was given to 150 patients ready for discharge from the hospital. Data were obtained from the response of the patients, based on the care received during hospitalization. The responders are equally dividing regarding the nationality 75 Saudi patients and 75 non-Saudi patients. The percentage of respondents following in KAUH was 97 (64.7%) while those who are not 53 (35.3%). Regarding the educational level 80 (53.3%) had high school or lower level of education and 54 (36%) had higher education. There were 120 (80%) respondents who were admitted through ER and 30 (20%) who were admitted through OPD. 105 (70%) of the participants delivered by way of SVD while 45 (30%) delivered through caesarian section. The results showed that majority of the Saudi participants (86.67%) were satisfied on most of the services provided by the hospital as compared to non-Saudi respondents (13.33%). In conclusion, there are several factors affecting patient satisfaction in the obstetrics and gynecology department in KAUH like demographic characters, mode of admission way of delivery, the type of anesthesia and days of hospitalization. The results showed that the services provided received high satisfaction rate among the local population, contrary to the patient respondents from different culture and nationality who requires more attention and care. In the end, we need to continuously improve our service to become the best healthcare institution in Saudi Arabia and researchers recommended to conduct more studies in the future about the different factors affecting patient satisfaction.

Key words: Patient satisfaction, quality of care, obstetric, care, ER

INTRODUCTION

The manner on how we can keep the patients satisfied with the service has been a trend among hospital institutions. It may be through improving the physical setting of the hospital, facilities, cleanliness but most importantly is through the service and care provided to the patients. The higher the satisfaction rate received, the greater trust will be given to the institution. Satisfied patients are more likely to recommend a specific healthcare institution, one that has given them sufficient service just the way they have expected. The patients views regarding the care received from healthcare

professionals truly matters to any hospital institution. It serves as a guide to determine the quality of care rendered to them. It also shows how satisfied these patients were in line with the way treatment was given. It has been the goal of healthcare institutions to meet the required standards of care. Many hospitals are making investments in quality and process improvement (Pascoe, 1983; Rosenthal and Harper, 1994; Spoeri and Ullman, 1997; Carbone, 2013). They are recognizing that they have customers and they are using patients and their families as a sounding board and integrating their feedback in hospital and healthcare design (Carbone, 2013). Patients do always conceptualize efficient

healthcare service from healthcare providers at all times. The trust and confidence of patients are often acquired every time, they witness and experience an organized flow in the delivery of care. Considering that these patients are also “customers”, they have the right to demand proper medical care and attention. The needs of the patients matters and must be met all throughout their hospitalization experience. They came in to the hospital expecting that their pain and ailment will be alleviated. They prepared themselves to entrust their lives to healthcare providers and assume that they are competent enough to help them acquire treatment. It is therefore, the responsibility of each healthcare providers and the institution to ensure that patients will find satisfaction, specifically with the type of service and medical attention they require to receive.

Literature review: According to Delbanco and Gerteis (2013), patients and their families are eye-witnesses to the processes of health care delivery. They sense that they are in good, competent hands, the care they receive seems effectively coordinated, integrated into a coherent system of care and cognizant of their individual needs and circumstances.

As mentioned earlier, the trust and confidence of the patients can be derived when their healthcare needs are met. In a study conducted by Petersen (2002) and Thom and Campbell (1997), it stated the trust correlates directly with adherence to physician recommendations and patient satisfaction. Safran *et al.* (1998) mentioned in their study that mistrust of the health care system also affects patient's use of services and results in inconsistent care, doctor shopping, self-medicating and an increased demand for referrals and diagnostic tests by patients.

MATERIALS AND METHODS

A cross-sectional study was conducted in the obstetrics ward at King Abdulaziz University Hospital (KAUH) in Jeddah, Saudi Arabia. During the study on the second half of the year 2013, a questionnaire regarding patient satisfaction was given to 150 patients ready for discharge from the hospital and meet all the exclusion and inclusion criteria which were complete full follow-up history, pre-operatively and post-operatively and a complete investigation (Appendix 1). These parameters assured more accurate data. The questionnaire has 5 indices; Emergency index which has 1 question; OPD and Admission Office index with 1 question; service before the operation with 3 questions; service after the operation with 4 questions and finally, service in general index with 6 questions. Then researchers obtained the data from the

response of the patients, based on the care received during hospitalization. To ensure quality, there were groups responsible for quality control. Their aim were to check if the data were complete or not coding, data entry and to do random checks.

Statistical analysis: The Statistical Package for the Social Sciences (SPSS) version 16 was used for the statistical analysis. The qualitative data were presented as numbers and percentages. The χ^2 -test was used as a test of significance for qualitative data, Yates correction was employed when the expected cell was <5 . The quantitative data were expressed as the mean and standard deviation.

RESULTS

The respondents included (Table 1) 75 Saudi patients (50%) and 75 non-Saudi patients (50%). The percentage of respondents following in KAUH was 97 (64.7%) while those who are not 53 (35.3%). The average age of patients was 29.03 (± 5.37). Patient respondents included 16 (10.7%) who did not have proper education, 80 (53.3%) of them went to high school or lower and 54 (36%) have had above high school education. There were 120 (80%) respondents who were admitted through ER and 30 (20%) who were admitted through OPD. The 105 (70%) of the participants delivered by way of SVD while 45 (30%) delivered through caesarian section. Majority of the respondents have had spinal anesthesia 39 (26%) while

Table 1: Demographic characters of the participants

Questions	Number (total 150)	Percentage
Nationality		
Saudi	75	50.0
Non Saudi	75	50.0
Following in KAUH		
Yes	97	64.7
No	53	35.3
Age Mean (SD)	29.03(± 5.37)	
Level of education		
Non	16	10.7
High school or lower	80	53.3
Above high school	24	36.0
Admitted through		
ER	120	80.0
OPD	30	20.0
Way of delivery		
SVD	105	70.0
Cesarean section	45	30.0
Type of anesthesia		
General	6	4.0
Spinal	39	26.0
Blood loss		
0-500	120	80.0
501-1000	29	19.3
1001-1500	1	0.7
Hospitalization		
1-3 days	141	94
4-6 days	9	6

the rest undergone general anesthesia 6 (4%). The number patients who participated with blood-loss range from 0-500 were 120 (80%), 501-1000 was 29 (19.3%) and 1001-1500 was 1 (0.7%). There were 141 (94%) participants who were hospitalized for 1-3 days and 9 (6%) of them stayed in the hospital for 4-6 days. The results showed that majority of the Saudi participants (86.67%) were satisfied on most of the services provided by the hospital as compared to non-Saudi respondents (13.33%). Based on the results in (Table 2), majority of the Saudi respondents (2.28 mean) were satisfied on the response speed of obstetric on call team in the emergency ($p = 0.005$) as compared with the non-Saudi (1.77 mean). Most of the Saudi participants (2.13 mean) were satisfied with the service provided at the OPD and admission office ($p = 0.005$) while non-Saudis (1.76 mean) were less satisfied with the service received in the same area. The participants' satisfaction were also determined based on the services before the operation ($p = 0.005$). First was the explanation of the obstetric team regarding postnatal medication where in most of the Saudi patients (2.00 mean) found satisfaction contrary to the non-Saudi patients (1.89 mean) who were satisfied. Next to this were the explanations of the obstetrics team regarding delivery nature, 1.83 mean of the satisfied non-Saudi patients were satisfied as opposed to 1.81 mean of the Saudi participants. Third were the explanations of the obstetric team regarding complications of the delivery where majority of the non-Saudi participants (2.07 mean) found satisfaction as compared to 2.04 mean of satisfied Saudi respondents. There were 4 indices under service after operation, first was based on the explanations of the obstetric team regarding postnatal medications where in majority of Saudi participants (2.00 mean) found satisfaction as compared to the non-Saudi patients (1.89). Most of the Saudi respondents (1.80 mean) were also satisfied with the response speed to their questions (second index), contrary to satisfied response speed to the patient's demands in which non-Saudi patients (1.63 mean). The third was the majority of the Saudi respondents (2.04 mean) has found satisfaction while non-Saudi patients (1.69 mean) were less satisfied with it. The fourth index was the explanations of the team regarding daily habits after delivery. Most of the Saudi participants (2.29 mean) were satisfied with it as compared to non-Saudi (1.96 mean) patients. The respondents were also asked regarding the service in general. The Saudi participants (1.67 mean) were more satisfied with the nursing team than the non-Saudi patients (1.47 mean). Majority of the Saudi respondents (1.69 mean) found satisfaction with the nursing team performance as compared with the satisfaction, it has given to non-Saudi participants (1.43 mean). Results also showed that the cleaning of the in patient room gave more satisfaction to Saudi participants (1.77 mean) while

Table 2: Comparison between Saudi and Non-Saudi satisfaction

Parameters	Saudi	Non-Saudi	p-values
Emergency			
The response speed of obstetric on call team	2.28	1.77	0.005
OPD and admission office			
Provided service at the OPD and Admission office	2.13	1.76	0.005
Service before the operation			
Radiological investigations' during your pregnancy	1.97	1.92	
Explanations of the obstetric team regard the delivery nature	1.81	1.83	0.005
Explanations of the obstetric team regard complications of the delivery	2.04	2.07	
Service after the operation			
Explanations of the obstetric team regard postnatal medications	2.00	1.89	
Response of the team for your questions	1.80	1.63	0.005
The response speed for your demands	2.04	1.69	
Explanations of the team regard daily habits after delivery	2.29	1.96	
Service in general			
The nursing team	1.67	1.47	
The nursing team performance	1.69	1.43	
The cleaning of the inpatient room	1.77	1.45	0.005
The cleaning of the bathroom	1.99	1.61	
The served food in the hospital	2.35	1.80	
Satisfaction of the room to your needed	1.80	1.41	

only 1.45 mean among non-Saudi respondents were satisfied with it. The cleaning of the bathroom also gave greater satisfaction among the Saudi patients (1.99 mean) than the satisfaction it gave among non-Saudi participants (1.61 mean). The Saudi respondents (2.35 mean) found satisfaction with the served food in the hospital while only 1.80 mean of the non-Saudi patients were satisfied with it. Based on the satisfaction of the room needed, Saudi participants (1.80 mean) were more satisfied than the non-Saudi respondents (1.41 mean).

DISCUSSION

Quality measures by way of patient satisfaction survey provides information on how well healthcare providers cared for their patients. Tools were used to review and help improve the quality of care they render. Such measures have been designed to gauge and determine evidence based care. In a study by Hall (2010), she stated, hospitals need to show the community that they are interested in quality care and they need to find ways to improve in order to remain competitive. Patients are the customers and as customers, they have the right to choose where to go for their medical care. Patients are easier to serve if they feel their needs are being met. This results in happier staff and patients. Conversely, when patients' needs are not met, we often hear about it through angry letters, poor satisfaction scores or sometimes publicly in local studies. This study revealed that several factors affect patient satisfaction in obstetrics and gynecology department in KAUH. These factors are the

Table 3: Correlation between delivery way and patient satisfaction

Parameters	Significance values
Emergency	
The response speed of obstetric on call team	0.867
OPD and admission office	
Provided service at the OPD and admission office	0.772
Service before the operation	
Radiological investigations' during your pregnancy	0.318
Explanations of the obstetric team regard the delivery nature	0.114
Explanations of the obstetric team regard complications of the delivery	0.067
Service after the operation	
Explanations of the obstetric team regard postnatal medications	0.784
Response of the team for your questions	0.640
The response speed for your demands	0.241
Explanations of the team regard daily habits after delivery	0.441
Service in general	
The nursing team	0.900
The nursing team performance	0.962
The cleaning of the inpatient room	0.142
The cleaning of the bathroom	0.028*
The served food in the hospital	0.029*
Satisfaction of the room to your needed	0.537

*Correlation is significant at the 0.05 level (2-tailed)

Table 4: Correlation between hospital stay and patient satisfaction

Parameters	Significance values
Emergency	
The response speed of obstetric on call team	0.928
OPD and admission office	
Provided service at the OPD and Admission office	0.544
Service Before the operation	
Radiological investigations' during your pregnancy	0.119
Explanations of the obstetric team regard the delivery nature	0.193
Explanations of the obstetric team regard complications of the delivery	0.283
Service After the operation	
Explanations of the obstetric team regard postnatal medications	0.134
Response of the team for your questions	0.542
The response speed for your demands	0.764
Explanations of the team regard daily habits after delivery	0.320
Service in general	
The nursing team	0.595
The nursing team performance	0.629
The cleaning of the inpatient room	0.832
The cleaning of the bathroom	0.003**
The served food in the hospital	0.270
Satisfaction of the room to your needed	0.839

**Correlation is significant at the 0.01 level (2-tailed)

demographic characters of the participants such as the nationality, age, level of education, mode of admission, way of delivery (Table 3), the type of anesthesia, blood loss and days of hospitalization (Table 4), type of delivery (Table 5) The response speed of the obstetric on call team, service provided at the OPD and admission office, service before and after the operation and service in general such as the nursing team performance, cleanliness of in-patient room and bathroom, served food in the hospital and the room provided are also important factors to be considered in determining patient satisfaction.

Table 5: Comparison of mean for delivery way and patients satisfaction

Parameters	SVD	C/S
Emergency		
The response speed of obstetric on call team	2.02	2.04
OPD and admission office		
Provided service at the OPD and admission office	1.93	1.98
Service before the operation		
Radiological investigations' during your pregnancy	2.00	1.82
Explanations of the obstetric team regard the delivery nature	1.90	1.64
Explanations of the obstetric team regard complications of the delivery	2.16	1.80
Service after the operation		
Explanations of the obstetric team regard postnatal medications	1.96	1.91
Response of the team for your questions	1.73	1.67
The response speed for your demands	1.81	2.00
Explanations of the team regard daily habits after delivery	2.17	2.02
Service in general		
The nursing team	1.57	1.56
The nursing team performance	1.56	1.56
The cleaning of the inpatient room	1.55	1.76
The cleaning of the bathroom	1.70	2.04
The served food in the hospital	1.95	2.36
Satisfaction of the room to your needed	1.58	1.67

CONCLUSION

As healthcare providers, it is the responsibility to alleviate the patients' illnesses and pain. But, it does not stop there, we always need to ensure that we provide them quality healthcare. The patients should be treated uniquely in a manner that they would feel that we are always showing empathy and concern to them. It is a must to gain their trust and confidence by way of a systematic approach in the delivery of healthcare. The results showed that the services provided received high satisfaction rate among the local population, contrary to the patient respondents from different culture and nationality who requires more attention and care.

RECOMMENDATIONS

Considering the factors affecting patient satisfaction in the obstetrics and gynecology department in KAUH, it is recommended that we improve the current healthcare system being implemented. Continuously, seek for data or aspects that cause dissatisfaction to the patients. The efforts to achieve higher patient satisfaction survey results should be consistently monitored to trace at which point or instance we have done good or bad service to the patients.

IMPLEMENTATIONS

Implementation of quality healthcare service among the patients is a major step that would greatly contribute to the goal to become the best healthcare institution in Saudi Arabia. It is recommended to conduct more studies in the future about the different factors affecting patient satisfaction.

Appendix 1: Questionnaire for determinants of patient satisfaction in the obstetrics ward at a university hospital in Saudi Arabia

Question	Strongly agree	Agree	Average	Disagree	Strongly disagree
Emergency					
1-Are you satisfied about how quick is the response of the obstetric on call team?					
OPD/Admission Office					
2-Are you satisfied about admission office employer?					
Service before the delivery					
3-Are you satisfied about the explanation of the obstetric team about your pregnancy?					
4-Are you satisfied about the explanation of the doctor about the nature of your cesarean /delivery					
5-Are you satisfied about the explanation of the obstetric team about the possible complications of the cesarean section/delivery?					
Service After the delivery/cesarean					
6-Are you satisfied about the explanation of the obstetric team about the medications that should be used after the delivery/cesarean?					
7-Are you satisfied about the response of the team for your questions?					
8-Are you satisfied about how quick is the response of the team for your demands?					
9-Are you satisfied about the explanation of the obstetric team about the daily habits after the delivery/ cesarean?					
Service in general					
10-Are you satisfied about the nursing team?					
11-Are you satisfied about the nursing team performance?					
12-Are you satisfied about the cleaning of the inpatient room?					
13-Are you satisfied about your bathroom cleaning?					
14-Are you satisfied about the food in the hospital?					
15-Does the inpatient room satisfy your needs?					

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