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## **MATERNAL SATISFACTION AMONG WOMEN WITH NORMAL DELIVERY**

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### **ABSTRACT**

#### **Introduction:**

Childbirth is considered as one of the most beautiful, though stressful, events of life for every woman. Maternal satisfaction with the experience of childbirth plays a determinative role in maintaining the mental health of family and society is an indicator for evaluating the quality of childbirth services. Maternal satisfaction with delivery service is a means of secondary prevention of maternal mortality, since satisfied women may be more likely to adhere to health providers' recommendations. World Health Organization (WHO) recommends the assessment of women's satisfaction to improve the quality and effectiveness of health care and also promotes skilled attendance at every birth to reduce maternal mortality. Maternal health is important not only to the individual women requiring maternity care but to her new-born and immediate family. The present study was conducted to assess the Maternal satisfaction among women with normal delivery in a selected hospital, UAE

#### **Methods:**

A quantitative approach using a descriptive cross-sectional design was used for this study among 100 subjects who had a normal delivery at a selected hospital, UAE, using total enumeration sampling. The tools used were a proforma to elicit baseline variable, and a

Standardized Scale for Measuring Maternal Satisfaction in Normal Birth (SMMS- normal birth) to assess maternal satisfaction.

**Results:**

Among 100 women with normal delivery 59% were of the age group of 30-40 years, 59 had diploma qualification, 70% were working, 63% were multigravida, 96% had one day duration stay at hospital after delivery, and 11 babies were shifted for observation to NICU. The mean maternal satisfaction score was 148.6 with a SD of 4.43 and a range of 43. According to the tool cut off of 150(70%), 53% had satisfied maternal scores and 47% had greatly satisfied maternal scores. The study also showed that in relation to the domains of satisfaction, information & involvement in decision making had the highest rank 83.7% in maternal satisfaction, followed by hospital facilities 83.6%, hospital room (83.5%), perception of health professionals (82.5%) and nursing care in normal labor (82.3%).

**Conclusion:**

The study findings have revealed that the maternal satisfaction scores among women with normal delivery were satisfied and greatly satisfied. Majority of mothers were satisfied by the delivery service. Care givers need to fully understand the expectations the mothers have and provide care that is consistent with those expectations. The health system should be devised to increase maternal satisfaction in the health institution and provide maternal-friendly service.

**Key Words:** Maternal satisfaction, Normal delivery, Women, Birth, SMMS- normal birth

## **Introduction**

Childbirth is considered as one of the most beautiful, though stressful, events of life for every woman. Maternal satisfaction with the experience of childbirth plays a determinative role in maintaining the mental health of family and society is an indicator for evaluating the quality of childbirth services.<sup>1</sup> Maternal satisfaction with delivery service is a means of secondary prevention of maternal mortality, since satisfied women may be more likely to adhere to health providers' recommendations. World Health Organization (WHO) recommends the assessment of women's satisfaction to improve the quality and effectiveness of health care and also promotes skilled attendance at every birth to reduce maternal mortality.

Maternal health is important not only to the individual women requiring maternity care but to her new-born and immediate family. Maternal satisfaction is a multidimensional concept, influenced by a variety of factors. It is defined as a positive evaluation of a distinct dimension of childbirth. Maternal satisfaction with delivery service is used to measure the ability of services provided to meet consumers' expectations. In addition, satisfied clients have a higher chance to return to the facility in the future and recommend the institution to their neighbours and relatives.<sup>2</sup> The satisfaction of delivery service helps pregnant women to make a birth plan including delivery site preference, transportation, treatment, and referral in case of complications.<sup>3</sup>

Maternal satisfaction has been widely recognized as one of the critical indicators of the quality and the efficiency of the health care systems. It is a complex and multidimensional measure that is affected by a number of clinical and technical factors, but also by expectations and personal characteristics. Long waiting time, unavailability of basic drugs, cleanliness of the environment (delivery room, waiting area, and wards), the cost paid to service, lack of privacy, lack of consideration for cultural practices, and compassionate respectful care are among the major factors that affect maternal satisfaction in developing countries like Ethiopia.<sup>3</sup>

Mothers' satisfaction with delivery care service is a means of secondary prevention of maternal and neonatal mortality during the perinatal period. An increase in the number of mothers who receive a satisfactory delivery care service will increase the subsequent utilization of the service. It also increases the interests of others to receive the service based on a positive recommendation of satisfied clients. Mothers' satisfaction is also important for mother to infant bonding. Hence, determining the maternal delivery care satisfaction level and identifying its determinants is important to understand the gap and strengthen the existing strategies. Therefore, the purpose of this study was to determine the maternal satisfaction level for normal delivery care services and to identify its associated factors.<sup>4</sup>

The World Health Organization recommends monitoring and evaluation of maternal satisfaction in public health care sectors to improve the quality and efficiency of health care during pregnancy, childbirth, and puerperium. The WHO promotes skilled attendance at every birth to reduce maternal mortality and recommends that women's satisfaction be assessed to improve the quality and effectiveness of health care. Patient satisfaction is a subjective and dynamic perception of the extent to which the expected health care is received. It is not important whether the patient is right or wrong, but what is important is how the patient feels.<sup>5</sup> Quality of care is the degree to which maternal health services for individuals and populations increase the likelihood of timely and appropriate treatment for the purpose of achieving desired outcomes. Assessment of satisfaction with maternity services is crucial and helps in future utilization of service. Understanding a woman's perspective and her needs during childbirth and addressing them as part of quality-improvement programme can make delivery care safe, affordable, and respectful. Childbirth is a crucial experience in women's life as it has a substantial psychological, emotional, and physical impact. A positive experience in childbirth is important to the woman, infant's health and well-being, and mother-infant relationship. Furthermore, it is useful for the care providers to guarantee the best preparation, health service, and support to childbearing women. The memories and experiences of childbirth remain with the woman throughout her life. Clearly, the support and care they receive during this period is critical.<sup>6</sup>

A cross-sectional study, was conducted in Turkey among 418 women to investigate early postpartum period satisfaction before hospital discharge. Data were collected using the Scales for Measuring Maternal Satisfaction in Normal and Caesarean Birth. Results showed that satisfaction of women who had normal birth (70.4%) was statistically lower than that of the women who had caesarean (81.3%) ( $p=0.009$ ). Factors such as the high education level of spouses, women's working, and not using enemas during birth were found to increase maternal satisfaction of women who had caesarean birth ( $p<0.05$ ). The study concluded that in the early postpartum period, higher satisfaction was found in women who had caesarean birth. Low level of satisfaction in women who had normal birth is considered to be associated with the interventions during birth. Therefore, identification of the factors affecting satisfaction is of importance. <sup>2</sup>

A descriptive cross-sectional study was done among 178 post- natal mothers in Nepal to find out the maternal satisfaction on delivery service among postnatal mothers in a government hospital. Mothers were interviewed face-to-face using semi-structured interview schedules. The study shows that majority (89.88%) of the mothers were satisfied with the delivery service. The level of satisfaction was higher in interpersonal and technical aspects (93.82%) of care than in informative aspects (91.57%) and health facility-related statements (91.01%). There was no statistically significant association between sociodemographic and obstetric characteristics and maternal satisfaction. Majority of mothers were satisfied by the delivery service. The health system should be devised to increase maternal satisfaction in the health institution and provide maternal-friendly service. <sup>6</sup>

Maternal satisfaction is one of the most frequently reported outcome measures for quality of care, and it needs to be addressed to improve the quality and efficiency of health care during pregnancy, childbirth, and puerperium to provide quality maternal-friendly services. <sup>3</sup> Hence studying maternal satisfaction in normal delivery will help to identify the areas which need to be improved in the post - natal care of both mother and the baby. Thereby overall quality care & nursing care can be improved.

## **Methods**

### **Research Approach and Design**

The research approach is a Quantitative approach with a descriptive cross-sectional design

### **Research Setting**

The study was conducted at the 3<sup>rd</sup> floor ward where mothers are received after normal delivery at a selected hospital, UAE

### **Population**

The population for the study were women who had a normal delivery at a selected hospital, UAE

### **Sample**

Women who had a normal delivery at a selected hospital, UAE, and who satisfied the inclusion criteria

### **Criteria for sample selection**

#### **Inclusion criteria**

- Women who had a normal delivery

#### **Exclusion criteria**

- Women who had delivery through a caesarian section
- Women whose baby were sick in the NICU

### **Sample size estimation**

The sample size achieved was 100 Mothers with a normal delivery who satisfied the inclusion criteria were selected for the study.

### **Sampling technique**

Total enumeration sampling technique was used for the study.

### **Research Instrument**

**Section A** – A proforma to elicit demographic variables of Mothers with normal delivery which includes age, educational qualification, occupation, gravida, number of children, duration of stay in hospital, whether baby is kept for observation in NICU.

**Section B** –A Standardized Scale for Measuring Maternal Satisfaction in Normal Birth (SMMS- normal birth) consists of 43 items and 10 subscales. Subject scores on the total scale can range from 43 to 215 points. The cut-off score was calculated as 150.5 for the SMMS-normal birth and scores above the cut-off value indicates greater satisfaction. Subject scores on the total scale can range from 43 to 215 points. Responses are coded as in the following. 1-Strongly Disagree, 2-Partially Disagree, 3-Undecided, 4- Agree, 5- Strongly Agree. The scale has 13 negatively worded items (7,8,9,10,19,20,21,22,35,36,38,41,42) so that these items should be recoded before calculation of scores as in the following. 5- Strongly Disagree, 4-Partially Disagree, 3-Undecided, 2- Agree, 1- Strongly Agree

### **Data collection Method**

Ethical clearance was obtained from Institution Review Board of Gulf Medical University and permission was obtained from the selected hospital, UAE, to conduct the study. Subjects were selected by total enumeration sampling technique based on the inclusion and exclusion criteria. A written informed consent was taken from the mothers after explaining the details of the study. Demographic data and the tool to assess maternal satisfaction was administered face to face to the subjects at the time of discharge. The subjects were given 20-25 minutes to complete the questionnaire.

### **Ethical consideration**

The study proceeded after obtaining the approval from the Institution Review Board of Gulf Medical University and permission from a selected hospital, UAE. Informed written consent was obtained and confidentiality of data was maintained.

## Results

### Distribution of baseline variables among women with normal delivery in a selected hospital, UAE.

The demographic variables showed that 59% were of the age group of 30-40 years, 59% had diploma qualification, 70% were working, 63% were multigravida, 96% had one day duration stay at hospital after delivery, and 11 babies were shifted for observation to NICU.

**Table 1: Frequency and percentage distribution of Baseline variables among women with normal delivery in a selected hospital, UAE.**

n=100

Personal characteristics	Number (n)	Percent (%)
<b>Age</b>		
• 18 <30 years	36	36
• 30 <40 years	59	59
• 40 <50 years	5	5
<b>Education Qualification</b>		
• Undergraduate	9	9
• Diploma	59	59
• Bachelor Degree	27	27
• Post Graduate	5	5
<b>Occupation</b>		
• No	30	30
• Yes	70	70
<b>Gravida</b>		
• Primigravida	37	37
• Multigravida	63	63
<b>Duration of Hospitalization</b>		
• One day	96	96
• Two days	4	4
<b>Babies shifted to NICU for observation</b>		
• No	89	89
• Yes	11	11



The table I shows that 59% were of the age group of 30-40 years, 59 had diploma qualification, 70% were working, 63% were multigravida, 96% had one day duration stay at hospital after delivery, and 11 babies were shifted for observation to NICU.

**Description of Maternal satisfaction among women with normal delivery in a selected hospital, UAE.**

The mean satisfaction score was 148.6 with a SD of 4.43 and a range of 43, with a mean percentage of 69.13%. According to the tool cut off of 150(70%), 53% had satisfied maternal scores and 47 % had greater satisfaction which is above and below the cut-off score of 150.5. In relation to the domains of satisfaction, information & involvement in decision making had the highest rank (83.7%) in maternal satisfaction, followed by hospital facilities (83.6%), hospital room (83.5%), perception of health professionals (82.5%) and nursing care in normal labor (82.3%).

**Table2a: Mean, Range and standard deviation of scores of Maternal satisfaction scores among women with normal delivery in a selected hospital, UAE.**

n=100

<b>Variable</b>	<b>Max score</b>	<b>Mean</b>	<b>SD</b>	<b>Range</b>	<b>Mean %</b>
Maternal Satisfaction	215	148.64	4.43	43	69.13

The table 2a shows that the mean satisfaction score was 148.6 with a SD of 4.43 and a range of 43, with a mean percentage of 69.13%.

**Table2b: Maternal satisfaction scores among women with normal delivery in a selected hospital, UAE.**

n=100

Variable	Maximum score (Tool)	Satisfied (<150*)		Greater satisfaction(>150*)	
		f	%	f	%
Maternal Satisfaction	215	53	53	47	47

\* cut-off score = 150.5

The table 2b shows that according to the tool cut off of 150(70%), 53% had satisfied maternal scores and 47 % had greater satisfaction which is above and below the cut-off score of 150.5

**Association of Maternal satisfaction with selected baseline variables among women with normal delivery in a selected hospital, UAE.**

Results show that there was no significant association between age, educational qualification and information received at  $p < 0.05$  level of significance

**Table 3: Test of significance & p value of Maternal satisfaction scores with baseline variables among women with normal delivery in a selected hospital, UAE.**

n=100

Baseline Variables	Satisfied	Greater satisfaction	H (p) value
<b>Age</b>			
18 <30 years	19	17	0.376* (0.829)
30 <40 years	32	27	
40 <50 years	2	3	
<b>Education Qualification</b>			
Undergraduate	4	5	0.439* (0.932)
Diploma	31	28	
Bachelor Degree	15	12	
Post Graduate	3	2	
<b>Information received</b>			
No	14	16	$\chi^2=0.690^*$
Yes	39	31	(0.406)

$\chi^2$ : chi-square test

H: Kruskal-Wallis tests

\*Not Significant (P<0.05).

The table 3 shows that is no significant association between age, educational qualification and information received at p<0.05 level of significance

## Discussion

### Findings related to baseline variables among women with normal delivery:

In the present study among 100 mothers 59% were of the age group of 30-40 years, 59 had diploma qualification, 70% were working, 63% were multigravida, 96% had one day duration stay at hospital after delivery, and 11 babies were shifted for observation to NICU.

In a study done in Nepal among 178 mothers, nearly half of the postnatal mothers (47.8%)

were between 20 and 24 years of age, 18.5% were below 20, and only (2.2%) of the postnatal mothers were 35 years and above. The mean age of the postnatal mothers was 23.17 years with SD of 4.219 years and ranging from 16 to 37 years. More than half (54.5%) of the postnatal mothers were primiparous. Majority (80.43%) of the postnatal mothers had one child. <sup>6</sup>

### **Findings related to Maternal Satisfaction among women with normal delivery**

In the present study the mean satisfaction score was 148.6 with a SD of 4.43 and a range of 43. The mean percentage of maternal satisfaction was 69.13%. According to the tool cut off of 150(70%), 53% had satisfied maternal scores and 47 % had greater satisfaction. Similar findings were seen in a study conducted in Turkey among 418 women where the satisfaction of women who had normal birth was 70.4%. Another Ethiopian community based among 398 mothers revealed that the overall satisfaction on delivery service was found to be 81.7%.<sup>5</sup>Where as in a study among 178 post- natal mothers in Nepal to find out the maternal satisfaction on delivery service among postnatal mothers 89.88%.

In the present study in relation to the domains of satisfaction, information & involvement in decision making had the highest rank (83.7%) in maternal satisfaction, followed by hospital facilities (83.6%), hospital room (83.5%), perception of health professionals (82.5%) and nursing care in normal labor (82.3%). In a supporting study done in Nepal, informative aspects of care were highest percentage (85.4%). In a study done in Ethiopia the level of satisfaction was higher in interpersonal and technical aspects (93.82%) of care than in informative aspects (91.57%) and health facility-related statements (91.01%). <sup>6</sup>

### **Findings related to association of Maternal satisfaction with selected baseline variables among women with normal delivery**

In the present study it shows that is no significant association between age, educational qualification and information received at  $p < 0.05$  level of significance. Similar findings were seen in a study done among 178 post- natal mothers in Nepal on maternal satisfaction on

delivery service among postnatal mothers in a government hospital. There was no statistically significant association between sociodemographic and obstetric characteristics and maternal satisfaction.<sup>6</sup>In a study done in Ethiopia also there was no statistically significant association between sociodemographic and obstetric characteristics and maternal satisfaction.<sup>6</sup>

### **Limitations of the study**

This research study is limited to a selected hospital, UAE

### **Recommendations**

- A similar study can be replicated on a larger sample among many hospitals in UAE.
- A study can be done on to compare maternal satisfaction among normal delivery and caesarian section mothers.

### **Conclusion**

In conclusion the present study findings have reveals that the maternal satisfaction among mothers with normal delivery was satisfied and greatly satisfied. Majority of mothers were satisfied by the delivery service. Care givers need to fully understand the expectations the mothers have and provide care that is consistent with those expectations. The health system should be devised to increase maternal satisfaction in the health institution and provide maternal-friendly service.

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## References

1. Ozkan, SA., Bal, MD.,(2019) Satisfaction in Normal and Caesarean Birth: A Cross-Sectional Study. *International Journal of Caring Sciences*,12,(I),408-413  
[www.internationaljournalofcaringsciences.org](http://www.internationaljournalofcaringsciences.org)
2. Gejea, T., Abadiga, M., & Hasen, T. (2020). Maternal Satisfaction with Delivery Services of Government Hospitals in Ambo Town, West Shoa Zone, Oromia Region, Ethiopia, 2020. *Patient preference and adherence*, 14, 1225–1235.  
<https://doi.org/10.2147/PPA.S251635>
3. Debela, A. B., Mekuria, M., Kolola, T., Bala, E. T., & Deriba, B. S. (2021). Maternal Satisfaction and Factors Associated with Institutional Delivery Care in Central Ethiopia: a Mixed Study. *Patient preference and adherence*, 15, 387–398.  
<https://doi.org/10.2147/PPA.S297662>
4. Karoni, H. F., Bantie, G. M., Azage, M., Kasa, A. S., Aynie, A. A., & Tsegaye, G. W. (2020). Maternal satisfaction among vaginal and cesarean section delivery care services in Bahir Dar city health facilities, Northwest Ethiopia: a facility-based comparative cross-sectional study. *BMC pregnancy and childbirth*, 20(1), 473.  
<https://doi.org/10.1186/s12884-020-03170-w>
5. Bitew, K., Ayichiluhm, M., & Yimam, K. (2015). Maternal Satisfaction on Delivery Service and Its Associated Factors among Mothers Who Gave Birth in Public Health Facilities of Debre Markos Town, Northwest Ethiopia. *BioMed research international*, 2015, 460767. <https://doi.org/10.1155/2015/460767>
6. Panth, A., Kafle, K. (2018). Maternal Satisfaction on Delivery Service among Postnatal Mothers in a Government Hospital, Mid-Western Nepal, *Obstetrics and Gynecology International*, 2018, 4530161. <https://doi.org/10.1155/2018/4530161>
7. Gungor, I., & Beji, N. K. (2012). Development and psychometric testing of the scales for measuring maternal satisfaction in normal and caesarean birth. *Midwifery*, 28(3), 348–357. <https://doi.org/10.1016/j.midw.2011.03.009>

8. Kabakian-Khasholian, T., Bashour, H., El-Nemer, A., Kharouf, M., Sheikha, S., El Lakany, N., Barakat, R., Elsheikh, O., Nameh, N., Chahine, R., & Portela, A. (2017). Women's satisfaction and perception of control in childbirth in three Arab countries. *Reproductive health matters*, 25(sup1), 16–26. <https://doi.org/10.1080/09688080.2017.1381533>
9. Larkin, P., Begley, C. M., & Devane, D. (2009). Women's experiences of labour and birth: an evolutionary concept analysis. *Midwifery*, 25(2), e49–e59. <https://doi.org/10.1016/j.midw.2007.07.010>
10. Paudel YR, Mehata S, Paudel D et al. Women's satisfaction of maternity care in Nepal and its correlation with intended future utilization. *International Journal of Reproductive Medicine*.2015;9. Article ID 783050.
11. Shrestha, B., Prasad Paneru, D., Shrestha, N., & Dhimal, B. (1). Client's Satisfaction on Maternity Services at Paropakar Maternity and Women's Hospital, Kathmandu. *Journal of Health and Allied Sciences*, 1(1), 56-59. <https://doi.org/10.37107/jhas.94>
12. Varghese, J., Rajagopal, K. (2012). A study to evaluate the level of satisfaction perceived by postnatal mothers following nursing care in postnatal wards as expressed by themselves: pilot study. *Journal of Biology, Agriculture and Healthcare*. 2(6):101–111.
13. Amdemichael, R., Tafa, M., Fekadu, H. (2014). *Maternal Satisfaction with the Delivery Services*. in *Assela Hospital, Arsi Zone, Oromia Region*. *Gynecology and obstetrics*, 4(257), 2161-0932.
14. Tayelgn, A., Zegeye, D. T., & Kebede, Y. (2011). Mothers' satisfaction with referral hospital delivery service in Amhara Region, Ethiopia. *BMC pregnancy and childbirth*, 11, 78. <https://doi.org/10.1186/1471-2393-11-78>
15. Oikawa, M., Sonko, A., Faye, OE., Ndiaye, Diadhiou PM., Kondo M. (2014). Assessment of maternal satisfaction with facility - based childbirth care in the rural region of Tambacouda, Senegal. *African Journal of Reproductive Health*. 18(4),95–104