

**Maternal satisfaction with Intrapartum care at the Jos University Teaching Hospital**Maryam J Ali,<sup>1</sup> Amaka N Ocheke,<sup>1</sup> Christopher O Egbodo,<sup>2</sup> Fatima M Tsoho**Abstract**

**Background:** A woman's satisfaction with the delivery service may have immediate and long term effects on her health and subsequent utilization of the services. Maternal satisfaction is an essential indicator of the quality and efficiency of health care systems. Providing skilled and satisfying care during pregnancy, intrapartum and postpartum period saves lives of both mother and neonates and so increases service utilization. Women play a principal role in the upbringing of children and the management of family affairs, and their loss from pregnancy related causes is a significant social and personal tragedy. Hence we sought to assess maternal satisfaction with the delivery service in Jos University Teaching Hospital and to determine satisfaction in relation to three dimensions; interpersonal care, information and involvement in decision making and physical birth environment

**Methods:** A cross sectional study of postnatal women that attended the family health clinic between January to March 2015. A simple random sampling was used on eligible participants. An interviewer administered questionnaire that included respondents sociodemographic characteristics and validated 14 items maternal satisfaction with intrapartum care

scale was used. Data was analysed using SPSS version 23.

**Results:** A total of 173 mothers were interviewed, of which 64.6% of the respondents were between the ages of 20-34 years. All the respondents were married and had a mean age of 27.3±3.2 years. Greater than half of the participants (50.9%) had secondary level of education, 67.1% were multiparous while 32.9% were primiparous. Overall maternal satisfaction level with the delivery services rendered at the hospital was 86.7%.

**Conclusion:** Although the majority of the participants were satisfied with the services given to them during delivery, lack of satisfaction by the minority group will limit their ability to engage in health facility delivery which will further contribute to maternal mortality. Thus, mechanisms should be devised to increase maternal satisfaction in this health institution.

**Keywords:** Maternal satisfaction, Intrapartum care, Labour, Nigeria

Date received: 06 May 2022; accepted: 22 July 2022

Highland Med Res J 2022;22(1):51-55

**Introduction**

The transition to motherhood is a life event that imposes a dramatic change in a woman's life situation. Physical and social adjustments as well as the development of maternal identity are involved in this process. The woman is exposed to new challenges, and this period of pregnancy, labour and delivery entails much uncertainty, which motivates her to seek help and information. This help and care received during childbirth may have a long term effects on the woman, the baby and the family.<sup>1</sup> In recent times determining the level of patient satisfaction has been found to be the most useful tool for getting patients views on how to provide care. This is based on two major principles: patients are the best source of information on quality of health services provided and patient views are the determining factors in planning and evaluating satisfaction.<sup>2</sup> Patient satisfaction is crucial for maintaining and monitoring the quality of health care and can inform service development and delivery.<sup>2,3</sup> Maternal satisfaction is determined by the physical environment of the health service, and the availability

and accessibility of medicines and supplies. It is also affected by interpersonal communication with the health care provider, competency of the health care provider and support, and the health status of the mother and new born.<sup>4</sup> The World Health Organization (WHO) emphasizes ensuring patient satisfaction as a means of secondary prevention of maternal mortality, since satisfied women are more likely to adhere to health providers' recommendations and utilization.<sup>5,6</sup> Women's experiences with health care providers and facilities influence their care seeking decisions.<sup>7</sup>

The aim of this study was to determine maternal satisfaction with intrapartum care and determine care in relation to interpersonal care, information and decision making and physical and birth environment.

**Materials and Methods****Study Design and Study setting**

A cross sectional design was used to recruit participants at the Family Health Clinic of Jos University Teaching Hospital, Plateau State, Nigeria between January to March 2015. The Clinic provides outpatient immunization to newborn and women that delivered both within and outside the Hospital and also serves as referral center from private, cottage, general and specialist Hospitals in Plateau State and neighboring states.

<sup>1</sup>Department of Obstetrics and Gynaecology college of Medicine University of Jos, Nigeria. <sup>2</sup>Department of Human Physiology college of Medicine University of Jos, Nigeria.

All correspondences to:

Maryam Jamila Ali

Email: maryamjamila08@gmail.com; alimj@unijos.edu.ng

### Labour ward

There are 12 delivery beds in the labour ward and a medical health records office attached to the labour ward. Admissions into labour ward are from referred, booked and unbooked cases. For patients who booked in JUTH, their antenatal cards are retrieved from the medical records department and all the details on the card are reviewed to give insight in further management. A detailed history is taken to ascertain the time of onset of labour; whether membranes have ruptured or not and whether or not there is vaginal bleeding. Physical examination is done and necessary investigations are requested. Spouses are allowed to support their wives during labour, deliveries are taken by doctors and midwives.

The labour ward is equipped with resuscitation facilities for resuscitating the newborn. All vaginal deliveries including operative vaginal deliveries like forceps and ventouse, not requiring general anaesthesia are carried out in the labour room.

### Study Population

Postnatal women who attended the clinic for childhood immunization and follow up during the study period and who were eligible were included in the study.

Inclusion criteria included women who are within 6 weeks postpartum, given birth to a live baby and delivered within the hospital. However, women who had home delivery, intrauterine foetal death or delivered outside the teaching Hospital were excluded from the study.

### Sample size and sampling procedure

Sample size was determined using single population proportion formula using the power of 80% and significance level  $\alpha$  at 0.05 with 95% confidence interval.

A non-response rate of 20% was added. Maternal satisfaction with intrapartum care of 90% from a study done in Sweden was used.<sup>8</sup> The final sample size was 166. But 173 participants were recruited to increase the power of the study.

Simple random sampling was used to recruit study participants. All postnatal women who registered their children were identified at the registration counter in the family health unit. Once identified, the researcher approached the respondents individually and screened for eligibility to ensure the respondents fulfill the inclusion and exclusion criteria. A list of eligible respondents was then created and from this eligible list, every third respondents in the list was included in the study. The list was continued every day until enough respondents were recruited.

### Data collection tools

An interviewer-administered questionnaire that consists

of 2 sections was used. The first section contained the socio-demographic characteristics. Whereas, the second section was a 14-items of Maternal Satisfaction with Hospital-based Intrapartum Care Scale that was sub-scaled into three domains, measuring maternal satisfaction with intrapartum care. This scale was developed and validated from Jordan study and had been used previously in several studies.<sup>9</sup> It has high Cronbach's alpha coefficient of 0.88 and the reliability coefficients for each domain ranged from 0.76 to 0.90. It was a five points Likert scale questionnaire from one, which was strongly disagree to five, which was strongly agree. The first domain measured women's satisfaction with five items related to interpersonal care (IPC) by the health care providers. They were asked if the staff were friendly and welcoming, if doctors and midwives were encouraging and reassuring, if midwives were very helpful, if doctors were very helpful and finally if the overall care was good. The second domain was related to information and decision making (IDM) process (four items). The questions included: Do midwives and doctors kept me informed, decisions were made without taking my wishes into account, felt pressured to have the baby quickly, felt labour was taken over by machines. The third domain was related to physical birth environment (PBE) (five items). The questions in this domain included: was the level of light adequate, was room spacious and adequate, was the level of noise appropriate, were trays and equipment clean and were supplies needed adequate?

A pretest study was then conducted on 17 postnatal women (10% of the sample size calculated) from the target population. The pretest was done before the data collection period of the main study and was done at the postnatal clinic. This was to assess the feasibility of the study design and to assess the face validity of the study instrument based on the clarity, simplicity and readability to complete the instrument. The respondents for pretest study were labelled to ensure that they would not be included in the main study. From the pretest study, it showed that the instrument was generally easy to administer and understand. Respondents required on average of 10 minutes to complete it.

### Data processing and analysis

Data was entered and analysed using SPSS version 23. Results were presented using means, frequencies and percentages.

For each satisfaction items, the level of satisfaction was dichotomized, thus, those who answered very satisfied and satisfied were categorized as satisfied. While, those that answered very dissatisfied, dissatisfied and neutral were categorized as not satisfied.

**Ethical considerations**

Ethical approval was obtained from the ethical committee of Jos University teaching hospital. A written informed consent was obtained from each participant prior to recruitment into the study.

**Results**

Sociodemographic and obstetric characteristics of study participants

A total of 173 women participated in the study. Majority (70%) were within the age of 20-34 years, 38 (12%) were less than 20 years and 14 (8%) were between 35-49 years and all the participants were married. The mean age of the women was 27.3 years. Greater than half of the participants had secondary level of education. Almost twenty five percent had tertiary level of education.

Table 1. Socio-demographic and obstetric characteristics of study participants at Jos University Teaching Hospital, Nigeria.

Variable	Frequency	Percentage
<b>Age</b>		
<20	38	12.0
20-34	121	70.0
35-49	14	8.0
<b>Level of education</b>		
Primary	29	16.8
Secondary	88	50.9
Tertiary	43	24.8
Informal	13	7.5
<b>Marital status</b>		
Single	0	0
Married	173	100
Divorced	0	0
<b>Parity</b>		
Primiparous	57	32.9
Multiparous	116	67.1
<b>Mode of delivery</b>		
Vaginal delivery	117	68.0
Caesarean section	40	16.0
Ventouse	16	9.0
<b>Length of hospital stay</b>		
1 day	90	52.0
2 days	20	11.5
3 days	30	17.4
4 days	29	16.8
≥5 days	4	2.3

About two third of the women (67.1%) were multiparous, while 32.9% were delivering for the first time. Vaginal delivery was the most common mode of

delivery, and 9% had assisted vaginal delivery using ventouse. Most of the patients were discharged within 24hours after delivery. About 2.3% of the participants were discharged after 5days of delivery (Table 1)

Table 2: Respondents Satisfaction With Intrapartum Care At Jos University Teaching Hospital Nigeria

	Satisfied n(%)	Not satisfied n(%)
<b>Interpersonal care</b>		
1. Staff friendly and welcoming	149(86.2)	24(13.8)
2. Doctors and midwives encouraging and reassuring	165(95.4)	8(4.6)
3. Midwives were very helpful	150(86.7)	23(13.3)
4. Doctors were very helpful	166(96.0)	7(4.1)
5. Overall care was good	150(86.7)	23(13.3)
<b>Information and decision making</b>		
1. Midwives and doctors kept me informed	173(100)	0
2. Decisions were made without taken my wishes into account	0	173(100)
3. Felt pressured to have the baby quickly	0	173(100)
4. Felt labour was taken over by machines	0	173(100)
<b>Physical and birth environment</b>		
1. Level of light was adequate	173(100)	0
2. Room spacious and adequate	173(100)	0
3. Level of noise was appropriate	136(78.6)	37(21.4)
4. Trays and equipment were clean	173(100)	0
5. Was able to find supplies needed	159(91.9)	14(8.1)

**Level of satisfaction**

Among the respondents 150(86.7%) were satisfied with the overall quality of care they received while, 23(13.3%) were not satisfied. The participants expressed the lowest rate of satisfaction with the level of noise in the delivery suite.

**Discussion**

Majority of the participants interviewed were satisfied with the services they received at Jos University teaching Hospital. The overall proportion of mothers who were satisfied with the delivery care in this study was 86.7%. This percentage is comparable to studies done Ethiopia (81.7%)<sup>10</sup> and cote Ivoire (92.5%)<sup>11</sup> and Sweden (90%),<sup>8</sup> but higher than studies done in Kenya (56%),<sup>12</sup> Sri Lanka(48%).<sup>13</sup> This variation may be because of a difference in quality of services provided, expectation of mothers or the type of health facilities. The difference might also be attributed to the different satisfaction measurement tools used in different studies and the fact

that this study was conducted in a referral teaching hospital where there are relatively adequate number of health professionals and better diagnostic facilities. A qualitative study by Okonofua et al reported that most women were dissatisfied with quality of care received. Reasons included poor staff attitude, long waiting times, poor attention to women in labour and substandard facilities.

In this study we found that a high proportion of participants were satisfied with care provided by the doctors and nurses, with little more participants being more satisfied with the doctors. This is similar to findings in Kano where about 90% and 86% of participants were found to be satisfied with care provided by doctors and nurses respectively.<sup>15</sup> Participants were particularly satisfied with the doctors' explanation and their listening abilities, good communication between patients and caregivers have been described as the single most important component of a good medical care practice, not only because it identifies problems quickly and clearly but it also defines expectation and help establish trust between the clinician and the patient. In contrast bad communication, particularly when the doctors appear indifferent, unsympathetic or short of time make most patients dissatisfied. Good doctor patient relationship is in itself therapeutic and successful consultation with a trusted and respected practitioner will therefore have beneficial effect irrespective of any other therapy given. A systematic review has shown that allowing women to actively participate in decision making about their care was an important dimension of satisfaction with health facility delivery.<sup>16</sup>

The main goal of care providers during labour and birth is to ensure a safe and positive labour experience with minimal pain and discomfort. Even though this was not directly assessed in this study. However, there is strong evidence from high income countries that women who have continuity of midwifery care, continuous support during labour, a good relationship with their caregiver, and good support during labour and birth are more likely to require less pain relief, have intervention free labour and birth, higher perception of control, and be more satisfied with their intrapartum care.<sup>17</sup> In this center the husband is allowed to stay with the wife to provide continuous emotional support during labour. A lack of continuity of care and a lack of professional and social support may well increase the pain experienced by labouring women and increase their need for pharmacological methods to decrease pain during labour and birth.

Some of the factors that attract patients to a health facility are the availability of facilities, qualified personnel and cleanliness of the hospital environment. It may also be responsible for recommending the hospitals to friends and relatives. In the present study greater than

90% of the participants were satisfied with above factors, this is similar to findings in Kano,<sup>15</sup> Nigeria where 87% of the respondents were satisfied with the neatness and cleanliness of the hospital and labour ward. Previous studies in Jos by Chirdan et al also showed a high level of satisfaction with maternal health in both private and public hospitals in Jos Nigeria.<sup>18</sup> It is also comparable with reports in some developing countries.<sup>19</sup>

The limitations of the study include the fact that it is a hospital based cross sectional study and so does not show cause and effect relationship, it was also conducted in a tertiary health center where adequate staff and facilities are available. Another limitation is that of recall bias as some of the participants were interviewed up to six weeks of postpartum period. However, this is one of the few studies in this environment that has assessed maternal satisfaction with intrapartum care and hence forms a background for future research.

### Conclusion

Overall, the study showed high level of satisfaction of patients with intrapartum care. There is a need to sustain and improve the current level of patient provider relationship, patient provider communication in the hospital environment. There is also a need to look further into the cause of dissatisfaction of the few patients that were not satisfied. Periodic patient satisfaction survey should be institutionalized to provide feedback for continuous quality improvement.

### Acknowledgement

The authors would like to thank all the participants, supervisors, and staff of family health clinic of Jos university Teaching Hospital for their valuable contributions.

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