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## Original Research Article

# Assessing aspects of better birth initiatives: a single centre experience

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## ABSTRACT

**Background:** Better birth initiative is a global initiative that promotes humane and evidence-based care for women during childbirth. This study was designed to assess compliance to aspects of better birth initiative and maternal satisfaction with a view to making recommendations.

**Methods:** This study was a descriptive cross-sectional study of 396 consenting post-partum women to assess maternity services at AEFUTHA. A sample size of 423 was determined at power of 90% and  $\alpha$ -error of 0.05. Data was analyzed using SPSS version 22. Chi-square was used to analyze categorical variables and odds ratios determined. Continuous variables were expressed as mean or standard deviation. P value of <0.05 was taken to be statistically significant.

**Results:** Out of a total of 423 questionnaires deployed, only 396 were completed and duly returned (giving a 93.6% response rate). Majority of the parturient were between the ages of 20 to 34 years (80.3%), multiparas (74.2%) and with tertiary education (74.2%). Although many (74.2%) were not allowed companions, free mobility (78.8%), food (70.7%) and position of choice in labour (100%), they were satisfied with the care. Factors that likely affected maternal satisfaction were the age of participants, having a companion in labour, having a dedicated midwife to each parturient, free mobility in labour, oral fluid intake in labour and good health worker attitude (p value: 0.002, 0.024, 0.002, 0.0002, 0.0001 and 0.00001 respectively).

**Conclusions:** There is need to continuously enlighten health professionals on aspects of better birth initiatives in order to improve client's satisfaction.

**Keywords:** Better birth initiatives, Childbirth, Obstetrics practice, Parturient

## INTRODUCTION

Labour and child birth should bring great joy and happiness to families but occasionally maternal and fetal outcomes may be suboptimal especially in developing countries where maternal death remains frequent because of the less developed healthcare system.<sup>1</sup> Supervision of births by skilled birth attendants is an important factor in reducing the number of deaths arising from the complications of pregnancy.<sup>2</sup> It is expected that when a complication arises during delivery, a skilled birth attendant can manage the complication or refer the mother promptly to the next level of care when necessary.<sup>2,3</sup> Sixty

two percent of Nigerian women give birth at home, without the support of a skilled birth attendant, thus increasing their risk of mortality due to delayed identification of the need for care.<sup>3</sup> Supervised delivery is therefore encouraged.<sup>4</sup> The high volume of home delivery has been blamed on health provider's negative attitude, lack of privacy in the hospital general labour ward, cultural beliefs and traditional views such as perception of danger in health facilities as well as problems of far distance from the health facility, cost of transportation and cost of hospital delivery.<sup>5-7</sup> Despite the obvious advantages of hospital delivery, there is a need to assess quality of care based on established best practices and in such a way as to

evaluate the negative perceptions by the end users.<sup>8</sup> Better birth initiative is a global initiative that promotes humane and evidence-based care for women during childbirth which was developed from observational study of Obstetric practices conducted in China, South Africa and Zimbabwe to ensure that obstetric practice is based on reliable research evidence in order to produce satisfactory outcomes.<sup>8</sup> Making clinical policies and practices more evidence-based and applying the principle of respectful maternity care will improve quality, and improve health outcomes in women and their babies. Labour is the most painful event most women will experience in their life time.<sup>9</sup> The better birth initiative encourages health workers to abandon practices that are painful, potentially harmful and have no evidence of benefit such as routine perineal shaving, enemas in labour, routine episiotomy as well as restrictive food and fluid intake and restrictive movement in labour.<sup>8</sup> This means women will have a better experience of childbirth.<sup>3,4,8,10</sup> Improved quality of care will help enhance the reputation of the provider, and encourage women to use such facilities, particularly disadvantaged women who are often frightened to attend health institution delivery.<sup>8</sup>

Every health care practice has benefits and harms. Evidence-based practices can help save lives and improve the quality of care, and practices that are harmful or unnecessary without evidence of efficacy are discouraged. Labour ward staff are encouraged to consider the potential benefits and harms of procedures used during childbirth; and to introduce a set of evidence-based changes that are achievable with existing resources. However, change is more likely if the needs of providers, consumers and communities are addressed.<sup>8</sup>

The baseline criterion for assessing patient's satisfaction is surely the delivery of a healthy baby to a healthy mother, but there may be many components to this outcome.<sup>10,11</sup> Patient satisfaction is an objective means of assessing quality of obstetric practices.<sup>12</sup> There is evidence to suggest that good communication is as important as the mode of delivery or procedures carried out during labour or delivery.<sup>12</sup> To prioritize quality of care based on patient perception is a complex issue, and although general trends can be deduced, much would always be individualized.<sup>11</sup>

The health care utilization in a population is related to the availability, quality and cost of services, as well as to social-economic structure, and personal characteristics of the users.<sup>14</sup> Practices which are degrading and painful are discouraged, while practices which save lives and improve quality of care would encourage institutional delivery in Nigeria. Currently, emphasis is placed on the outcome rather than the means to achieving such outcome. This study assessed some aspects of better birth initiatives in the labour ward and factors affecting maternal satisfaction at the Alex Ekwueme Federal University Teaching Hospital, Abakaliki with the aim of highlighting its application and quality or its deficiency in patient care and patients'

satisfaction with the services at the facility in order to improve care and make recommendations.

## METHODS

### *Participants and procedure*

This was a descriptive cross-sectional study carried out in the labour, lying-in, and postnatal wards of the obstetrics and gynecology department of the Alex Ekwueme Federal University Teaching Hospital Abakaliki. Consenting clients who had vaginal delivery; spontaneous, induced or assisted were interviewed on their labour experience during the study period, covering from 2<sup>nd</sup> April, 2021 to 1<sup>st</sup> October, 2021 (6 months). The sample size was estimated to be 423, assuming a power of 90%,  $\alpha$ -error of 0.05 and 10% attrition rate. Pretesting of the questionnaire was done to ensure its validity. The participants were approached as they were admitted in the labour ward by the researcher and the details of the research, including the aims and objectives were explained to the participants in detail. They were re-approached after delivery in the lying-in and post-natal wards. Informed consent was then obtained. Consenting clients were interviewed using a self-administered questionnaire as an exit interview conducted at the bed side of the patient following discharge from the hospital. The questionnaire had three sections; the patients' socio-demographic data, their perception towards some obstetric practices and their satisfaction and preferences. This information was obtained from the patient.

### *Assessment of satisfaction*

Patients were assessed at the point of discharge using Likert multi-point order scale. This was done using a modified perception score.<sup>27</sup>

### *Statistical analysis*

Data were collated, tabulated and statistically analyzed using statistical package for social science (IBM SPSS) software (version 22, Chicago 11, USA). Continuous variables were presented as mean and standard deviation (mean $\pm$ 2SD), while categorical variables were presented as numbers and percentages. Chi-square test ( $\chi^2$ ) was used for comparison groups for qualitative variables. A five-point Likert multi-point order scale was used to evaluate patient satisfaction score in relation to obstetrics services. A difference with a p value <0.05 were considered statistically significant.

## RESULTS

Out of 423 questionnaires administered, only 396 were completed and duly returned, giving a 93.6% response rate. The continuous variables were presented as means and standard deviation, while categorical variables were presented as frequencies and percentages. Comparison

between categorical variables were made using chi-square and p value was set at <0.05.

**Table 1: socio-demographic characteristics of the participants.**

Parameters	Frequency	Percentage
<b>Age (years)</b>		
<20	15	3.8
20-34	318	80.3
≥35	62	15.9
<b>Parity</b>		
1	93	23.5
2-4	294	74.2
≥5	9	2.3
<b>Religion</b>		
Christianity	392	99
Muslim	4	1
African traditional	0	
<b>Education</b>		
Primary	10	2.6
Secondary	92	23.2
Tertiary	294	74.2

The mean age of parturients was 27 years ±2SD. Majority of the participants were between 20 to 34 years (80.3%). The respondents were mostly Christians (99%) and attained tertiary level of education (74.2%).

**Table 2: Aspects of better birth initiative.**

Parameters	Frequency	Percentage
<b>Companion in labour</b>		
Yes	85	21.5
No	301	78.5
<b>Dedicated midwife to your care</b>		
Yes	62	15.6
No	334	84.4
<b>Mobility in labour</b>		
Move freely	72	18.2
Stay in bed	324	81.8
<b>Oral fluids intake in labour</b>		
Yes	209	52.8
No	187	47.2
<b>Eat food in labour</b>		
Yes	8	2.0
No	388	98.0

Only 21.5% of the parturients were allowed companions in labour, 15.6% had a dedicated mid-wife, 18.2% were allowed free movement and 2.0% allowed to eat food.

These results are presented in Tables 1-6. Table 1 showed the sociodemographic characteristics of the patients, Tables 2 and 3 showed assessment of the aspects of the better birth initiative. Table 4 assessed maternal

satisfaction and Tables 5 and 6 assessed factors affecting maternal satisfaction.

**Table 3: Aspects of better birth initiative continued.**

Parameters	Frequency	Percentage
<b>Adequate pain relief</b>		
Yes	108	27.3
No	288	72.7
<b>Allowed desired wear</b>		
Yes	281	71.0
No	115	29.0
<b>Comfortability of surrounding</b>		
Clean	350	88.3
Poorly kept	46	11.7
<b>Treated well in labour</b>		
Yes	365	92.2
No	31	7.8
<b>Health workers altitude</b>		
Compassionate	355	89.6
Not compassionate	41	10.4
<b>Option of choosing a position</b>		
Yes	5	1.3
No	391	98.7
<b>Prior information of episiotomy</b>		
Yes	2	0.5
No	394	99.5

Only 27.3% of parturients received adequate analgesia. The attitude of the health workers were generally good but poor in allowing the parturients choose their preferred birth position and giving them prior information on episiotomy.

**Table 4: Satisfaction.**

Parameters	Frequency	Percentage
<b>You were satisfied with the care you received</b>		
Strongly agree	77	19.4
Agree	263	66.4
Not sure	38	9.6
Disagree	11	2.8
Strongly disagree	7	1.8
<b>Want your next labour to be managed here</b>		
Yes	359	90.7
No	23	5.7
Indifference	7	1.8
Not sure	7	1.8

85.8% were satisfied with the care they received while 90.7% will want their subsequent labour to be managed at our facility.

Most of the parturients wanted a redesign of the labour room into delivery suites, followed by adequate pain relief and companionship in labour (Table 5).

**Table 5: Participants recommendation what needs to be change in the facility.**

Parameters	Frequency	Percentage
Private LW/delivery suite	222	56.1
Pain relief	196	49.5
Fluid intake	95	24.0
Cover my chest	53	13.4
Companion	204	51.5
Attitude of staff	73	18.4
Free movement in labour	175	44.2

**Table 6: Multivariate analysis of effect of sociodemographic data and aspects of better birth initiative on maternal satisfaction.**

Variables	Category	Satisfaction n (%)		$\chi^2$	P value	OR 95% CI
		Yes	No			
Age	<20	10 (2.5)	5 (1.3)	9.389	0.002*	1.19 (1-4.21)
	20-34	244 (61.6)	29 (7.3)			
	≥35	76 (19.2)	32 (8.1)			
Educational status	No	0 (0)	0 (0)	3.77	0.052	0.448 (0.413-1.00)
	Primary	57 (14.4)	7 (1.8)			
	Secondary	62 (15.7)	17 (4.3)			
	Tertiary	195 (49.2)	58 (14.6)			
Parity	1	68 (17.2)	24 (6.1)	0.325	0.569	1 (0.706-1.064)
	2-4	199 (50.3)	66 (16.7)			
	>4	26 (6.6)	13 (3.3)			
Companion in labour	Yes	65 (16.4)	3 (0.8)	3.49	0.024*	3.41 (1.01-11.52)
	No	197 (49.7)	131 (33.1)			
Dedicated midwife	Yes	54 (13.6)	8 (2.0)	6.82	0.002*	2.89 (1.32-6.28)
	No	234 (59.1)	100 (25.3)			
Mobility in labour	Yes	78 (19.7)	6 (1.5)	9.64	0.0002*	3.9 (1.63-9.32)
	No	240 (60.6)	72 (18.2)			
Oral fluid intake	Yes	259 (65.4)	5 (1.3)	99.9	0.0001*	34.75(13.43-89.94)
	No	79 (19.9)	53 (13.4)			
Eat food in labour	Yes	7 (1.8)	1 (0.3)	0.0074	0.503	1.76 (0.21-14.53)
	No	310 (78.3)	78 (19.7)			
Health workers attitude	Good	322 (81.3)	28 (7.1)	22.96	0.00001*	5.56 (2.69-11.5)
	Bad	31 (7.8)	15 (3.8)			

The age of the participants, having a companion in labour, having a dedicated midwife to each parturient, free mobility in labour, oral fluid intake in labour and good health worker attitude were factors that likely affected the level of satisfaction of the parturients in labour.

## DISCUSSION

The hallmark of better birth initiative is ensuring that obstetric practices are evidence based. Some of these services are yet to be fully implemented and therefore, need review and improvement. Companionship in labour was rather poor in this study despite the fact that it helps to reduce need for pain relief and assisted delivery. Out of 396 parturients that were interviewed after delivery at the facility, only 21.5% were allowed a companion during labour. This is lower than the 50% spousal companionship

in labour in a study by Umeora et al in south-east Nigeria.<sup>1</sup> The difference noted may be attributed to method used while Umeora et al assessed the accompaniment of spouses of women to the hospital during labour, our study assessed the policy of allowing a companion of choice (not necessarily spouse) into the labour room by the doctor or midwife. Dubey et al in their study to determine the impact of companionship in labour on the fetomaternal outcome, showed that parturients who were allowed companions in labour, had a shorter duration of labour, high rates of spontaneous vaginal delivery, less need for augmentation of labour and better maternal satisfaction.<sup>15</sup> The poor companionship in labour noted in our study could be linked to the design of our labour room which did not afford privacy to the women, as they were built as an open ward, rather than delivery suites. Those that were allowed companions were possibly those who presented when no

one else was in the labour ward at that time. Majority of the parturients (84%) did not have dedicated midwives to their care which may be as a result of busy shifts where a midwife may have to care for two or more patients at the same time. Despite the numerous benefits of mobility in the first stage and upright position in the second stage of labour in reducing the duration of labour, risks of caesarean section and the need for epidural analgesia without adverse effects on the baby and mother, health providers still prefer nursing in bed for convenience.<sup>16-19</sup> Up to 78.8% of the participants stayed in bed till delivery which was the routine at the labour ward. All of them delivered their babies in dorsal position and none was given the opportunity to choose preferred positions of birth. A study in south-west Nigeria by Badejoko et al showed poor knowledge of antenatal women on birthing position.<sup>20</sup> This could explain why none of the parturients requested for their preferred position of birth.

Less restrictive food intake reduces the duration of labour and maternal exhaustion. It does not increase the risk of vomiting or increased operative delivery.<sup>18</sup> In our study, 52.8% of the women were allowed to take oral fluid but only 2.0% were allowed to take food. This could be because the parturients that were refused food and drink were high risk and caesarean section was possibly anticipated. It is the policy of the facility to give every parturient analgesic in labour. However, 66.7% of the parturients reported that the pain relief they received was not sufficient. Pain relief in labour is the right of every parturient and all efforts must be put in place to ensure adequate analgesia in labour. Epidural analgesia which is the gold standard is not readily available in our facility due to inadequate Anesthetic staff, the extra cost of the agents and maintenance of the epidural analgesia. In spite of the foregoing, 27.3% of women reported receiving sufficient analgesia, as pain is a subject assessment and perception can vary from person to person.

Majority of the women were treated well in labour by the labour ward staff, appropriate information was always given to them and the environment was always clean. This is contrary to reports from other studies that the commonest reason for home delivery is attitude of health workers. This is possibly due to training and retraining of the departmental staff on respectful maternity care. Episiotomy is no longer routine in modern practice. It is still important in instances to widen the birth canal and allow for easy passage of the fetal head. However, only two out of the parturients that received it were counselled prior to having it administered. Most respondents would prefer a private labour ward or delivery suite, adequate analgesia, companionship and mobility in labour. Others (24%) wished they were allowed to drink water in labour; 18% wished the health workers would improve on their attitude for better while 13% of respondents would want to be allowed to wear their clothing of choice in labour.

High level of satisfaction in this study was expected as up to 88% of parturient reported that health workers were

passionate to them. This explains why up to 90.7% of the women would want their labour to be managed at this facility next time. Factors that likely affected maternal satisfaction were the age of participants (the predominant age group being 20-34 years), having a companion in labour, having a dedicated midwife to each parturient, free mobility in labour, oral fluid intake in labour and good health worker attitude.

This study has some limitations. The assessment of maternal satisfaction is subjective as there are many factors contributing to it, especially for a parturient. The exit interview was conducted at the point of discharge. It may have been more appropriate to do so at the end of the labour process to avoid bias.

## CONCLUSION

Better birth initiative is now advocated in all the health facilities that offer maternity services since it is evidence-based care. However, some aspects still need improvement especially in our facility. There is need for continual education of health professionals on the principles of better birth initiatives in order to improve obstetrics outcome.

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