Factors Influencing Position Choice among Women Attending Antaenatal Clinic in Specialist Hospital Sokoto

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Abstract

The study focuses on Factors Influencing Position Choice among Women Attending Antaenatal Clinic in Specialist Hospital Sokoto. The level of utilization of different positions in labour among pregnant women in antenatal clinic and the factors responsible for positions used by women during labour. The relevant literatures related to the topic under studied were used, also descriptive research design was used and simple random sampling was used to administer questionnaire to a sample size of 260. Analysis was done using frequency distribution table and percentages, responses were retrieved and used for the study. The study shows that the respondents have good knowledge of women on choice of position used during labour, the level of utilization of different positions in labour among pregnant women in antenatal clinic and the factors responsible for positions used by women during labour. In view of the above findings of the study; the following recommendations were made with the view of promoting the choice of position to be used by pregnant women during labour in order to avoid complications during labour. It is therefore recommended that there is need for public awareness on various types of position to be used during labour by pregnant women. It also recommended that Hospital delivery should be encouraged in order to educate the women about the various positions used during labour.

Keywords: *Factors; position Choice; Antenatal Clinic; Specialist Hospital*

Introduction

The term childbirth positions ("maternal birthing position" refer to the physical postures the pregnant mother will assume during the process of childbirth (Engelmann, 2017). They may also be referred to as delivery positions or labor positions. In addition to the lithotomy position, still commonly used by many obstetricians, other positions are successfully used by midwives and traditional birth-attendants around the world (Engelmann, 2017). Labor among primitive peoples" publicized the childbirth positions amongst primitive cultures to the Western World. They frequently use squatting, standing, kneeling and all fours positions, often in a sequence they are referred to as upright birth positions (Lawn, *et al.* 2016). Globally, approximately 140 million births occur every year (Lawn, *et al.* 2016). The majority of these are vaginal births among pregnant women with no special need for complications, either for themselves or their babies, at the onset of labour (Danilack, 2017).

However, in situations where complications arise during labour, the risk of serious morbidity and death increases for both the woman and baby (Danilack, 2017). Over third of maternal deaths and a substantial proportion of pregnancy-related life-threatening conditions are attributed to complications that arise during labour, childbirth or the immediate postpartum period, often as result of hemorrhage, obstructed labour or sepsis (Kassebaum,2017). Similarly, approximately half of all stillbirths and a quarter of neonatal deaths result from complications during labour and childbirth (Lawn, 2016). The burden of maternal and perinatal deaths is disproportionately higher in low- and middle-income countries (LMICs) compared to high-income countries (HICs) (Lawn, 2016). Therefore, improving the quality of care around the time of birth, especially in LMICs, has been identified as the most impactful strategy for reducing stillbirths, maternal and newborn deaths, compared with antenatal or postpartum care strategies (Bhutta, 2014).

Over the last two decades, women have been encouraged to give birth in health care facilities to ensure access to skilled health care professionals and timely referral should the need for additional care arise. However, accessing labour and childbirth care in health care facilities may not guarantee good quality care (Potts, 2017). Disrespectful and undignified care is prevalent in many facilities globally, particularly for underprivileged populations, and this not only violates their human rights but is also a significant barrier to accessing intrapartum care services (Bohren, 2015). In addition, the prevailing model of intrapartum care in many parts of the world, which enables the health care provider to control the birthing process, may expose apparently healthy pregnant women to unnecessary medical interventions that interfere with the physiological process. American College of Obstetricians and Gynecologists (ACOG) recommends that, for most people giving birth, "no one position needs to be mandated nor prescribed" (Pascucci, 2017).

In a Committee Opinion called "Approaches to Limit Intervention during Labor and Birth," ACOG states that it is normal for people in labor to assume many different positions and that no one position has been proven best (Pascucci, 2017). They cite the fact that many care providers encourage a supine position during labor even though it has known adverse effects, including low maternal blood pressure and more frequent abnormal fetal heart rates. They go on to say that continuous EFM has not improved outcomes for women with low-risk pregnancies, and those care providers should "consider training staff to monitor using a hand-held Doppler device (intermittent auscultation) which can facilitate freedom of movement and which some women

find more comfortable." The statement concludes with a general recommendation that care providers can support frequent position changes during labor to enhance maternal comfort and promote optimal positioning of the baby, as long as they do not hinder monitoring and there are no complications (Pascucci, 2017).

In 2012, three U.S. midwifery organizations –American College of Nurse Midwives (ACNM), Midwives Alliance of North America (MANA), and National Association of Certified Professional Midwives (NACPM) came together to create a consensus statement on supporting healthy, physiologic childbirth (U.S. Midwives, 2017). They stated that freedom of movement in labor and the woman's choice of birth position are essential to this goal. The Royal College of Midwives (RCM) in the U.K. recommends the use of active and upright positions to assist with labor and delivery. In their guidelines, they urge midwives to be proactive in demonstrating and encouraging different positions in labor, since women often "choose" to do what is expected of them, and the most common image of the laboring woman is "on the bed." Since the environment is key to freedom of movement, RCM suggests that there should be a variety of furniture and props available in the room to encourage people to try different positions: bean bags, mattresses, chairs, and birth balls (Pascucci, 2017).

More so midwives should support mothers with suggestions on how to remain upright even if they're in a situation that might limit mobility such as with traditional EFM, intravenous (IV) fluids, and different medications for pain relief. In a publication by the World Health Organization (WHO) called "Care in Normal Birth," the WHO concludes that women in labour should adopt any position they like, while preferably avoiding long periods lying supine (WHO, 2016). Care for healthy pregnant women and their babies bring together new and existing WHO recommendations. Furthermore it was recommended that birth attendants need training in supporting births in other positions than supine, since much of the positive effect of upright birthing positions depends on the birth attendant's experience with the position and willingness to support the mother's choice of position. Child birth as highlighted in the World Health Organization (WHO) framework for improving quality of care for pregnant women during childbirth, experience of care is as important as clinical care provision in achieving the desired person-centered outcomes (WHO, 2016). This up-to-date, comprehensive and consolidated guideline on intrapartum that, when delivered as a package of care, will ensure good quality and evidence-based care in all country settings. In addition to establishing essential clinical and non-clinical practices that support a positive childbirth experience, the guideline highlights unnecessary, non-evidence-based and potentially harmful intrapartum care practices that weaken women's innate childbirth capabilities, waste resources and reduce equity. To ensure that each recommendation is correctly understood and applied in practice, the context of all context-specific recommendations is clearly stated within each recommendation, and the contributing experts provided additional remarks where needed (Tuncalp, 2015).

In accordance with WHO guideline development standards, these recommendations will be reviewed and updated following the identification of new evidence, with major reviews and updates at least every five years. For a long time, positions during labour could be freely changed or modified according to parturient desires. Unfortunately, in developed countries the hospital admission of labouring women leads obstetrical practice to restrain spontaneous and instinctive attitude and to focus strictly on intrapartum fetal wellbeing and maternal co morbidities (Danilack, 2017). This way, the parturient receives fewer opportunities to labour and deliver in a preferred position, assuming the recumbent one as standard because of its easier monitoring of fetal wellbeing, administration of intravenous therapy, loco-regional anesthesia, and performance

of medical procedures, Perineal support, and birth assistance (Kassebaum, 2017). The effects of different maternal positions during labour on maternal-fetal and neonatal outcomes are rarely in agreement and available evidences in this field are often controversial and fragmentary (Bohren, 2014). The vertical positions may benefit from "gravity effect" potentially able to reduce aorto-caval compression, to make uterine contractions effective and to favour a better fetus alignment in the birth canal and to increase pelvic outlet diameters, reducing intrapartum maternal and neonatal complications (Lawn, 2016).

However, counterparts evidences reported an increased hemorrhagic risk associated with upright positions (Grade, 2016) due to more Perineal damage than uterine atony (often requiring medical and surgical procedures and potentially impairing future pregnancy planning and chances) (Lawrence, 2016). At this point the research aim at identify the factors influencing the position of choice among the women attending antenatal clinic in Specialist Hospital Sokoto.

Statement of the Problem

Giving birth in the supine position may have been adopted to make it more convenient for midwives and obstetricians to assist the labour and birth (Downe, 2018).. However, many women report that giving birth on their backs feels painful, uncomfortable and difficult (Downe, 2018). The staying in a recumbent position is more convenient than (50%) of women in labour than assuming alternative position in terms of intrapartum, maternal/fetal, and neonatal outcomes. According to midwives, certainly, recumbent position makes it easier to palpate the mother's abdomen in order to monitor contractions, to perform vaginal examinations and invasive maneuvers, to check the fetal head position, and to assess the fetal heart rate. Conversely, because of increased risk of maternal abdominal blood vessels compression, less effectiveness of uterine contractions, less perineal muscle relaxation. The staying in recumbent position is more convenient in more than (5%) of women in labour than assuming alternative position in terms of intrapartum, high rate of analgesia request, and long labour length, recumbent position seems associated with more operative deliveries and severe pain (Elvender, 2015), abnormal fetal heart rate, and greater episiotomy rate (Downe, 2018). Since intrapartum complications are frequently reported when fetal occiput is in posterior position (OP), some authors investigated if maternal labouring position may have a role in facilitating spontaneous rotation to occiput anterior position (OA) without conclusive evidences (Gupta, 2017). .Thus the researcher intends to explore more on the factors influencing the position of choice among women attending antenatal clinic in Specialist Hospital Sokoto.

Purpose of the Study

1. To assess the knowledge of women on choice of position during labour in specialist Hospital Sokoto
2. To ascertain the utilization of different position among during labour pregnant women in antenatal clinic in specialist Hospital Sokoto
3. To identify the factors responsible for positions used by pregnant women during labour in specialist Hospital Sokoto

Research Questions

1. What is the knowledge of women on choice of positions used during labour in specialist Hospital Sokoto?
2. What is the level of utilization of different positions in labour among pregnant women in antenatal clinic of specialist Hospital Sokoto?
3. What are the factors responsible for positions used by women during labour in specialist Hospital Sokoto?

Significance of the Study

This research will be of great benefits to the pregnant women by enabling them to know the various positions of choice to be use during child birth. Also the research will enable the midwives to utilize the model of respect full maternity as stated by the world health organization thus proving quality care during labour. Similarly the health professional will also appreciate the choice of positions use by woman when conducting delivery which enable them provides effective and efficient individualize services thus increase customer satisfaction.

Method

The research was carried out using descriptive design in order to investigate the factors influencing the position choice among the women attending antenatal clinic in specialist Hospital Sokoto. A descriptive research approach was adopted because it enables the researcher to presents the result the way it is.

.The research was conducted at Specialist Hospital Sokoto, sokoto south local government area; the hospital was situated along Sultan Abubakar Road just opposite Nagarta College Sokoto. The Hospital has a bed capacity of 500 beds with 25 wards/unit that accumulates Medical, Surgical, Pediatric, and Obstetric cases. The Hospital also has about 7 clinics which include the ANC clinic. The maternity wing of the hospital has a total of 150 beds that accumulate obstetric and Gynaecological cases. The researcher tends to choose the antenatal clinic because it is a place where pregnant women are cared for and been educated (prepared) towards the deliveries including the position to assume while in labour, immunization, health talk on danger sign of pregnancy the clinic run from Monday, Tuesday, Thursday and Friday for revisit client while on Wednesday they seeing new cases and booked for it.

The target population for the study was made of pregnant women attending antenatal clinic in specialist hospital Sokoto and the data was collected from women regardless of their marital status or ethnic groups. The flow of women to the clinic per week is 200 due to the issue of COVID - 19 Pandemic diseases. Average inflow of women per month is 800.

The sample size for this study was determined by the use of research Advisors table (2016) since the target population is 800 the sampling size was 260, based on a confidence level of 95% and margin error of 5%. A convenience sampling is a type of non-probability sampling method where the sample is taken from a group of people easy to contact or reach. There are no other criteria to the method except that people are available and willing to participate .in addition, this type of sampling method does not require that a simple random sample is generated, and since the only criteria is whether the participants agree to participate (Saunders *et al*, 2012). First 26 clients that attended ANC on each day were selected 4 times a week consecutively for 4 weeks.

A structured questionnaire was used to obtained data from respondents: the questionnaire has four sections (A, B, C and D). Section A: Socio-demographic data of the respondents, Section B: The knowledge of women on choice of position during labour. Section C: The level of utilization of different position in labour among pregnant women attending antenatal clinic and Section D: The factors responsible for positions used by pregnant women during labour.

Refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure (Campbell and Stanley, 2010). The items in the questionnaire were carefully prepared to reflect the research objectives. Appropriate correction made by the supervisor was effected in order to ensure its face and content validity.

A pilot study was conducted in women and children welfare Hospital using 26 pregnant women to ensure the reliability of the instrument. They were given time to answer the questions and at the end the questionnaire was collected, checked and corrections were made.

Data was obtained by the use of well-structured questionnaire which was distributed to the respondents by the researcher and a trained research assistant, 260 questionnaires were distributed over a period of four working days (Monday, Tuesday, Thursday and Friday) and was subsequently retrieved after the respondents have answered the questions. The data collected was manually analyzed and interpreted statistically, using percentage on a frequency distribution table. A letter of introduction was obtained from the school and presented to the ethical committee of Specialist Hospital; approval was given from ethical committee and permission to conduct the study using the Hospital setting was granted. The details information of the research was explained to the respondents and verbal informed consent was obtained before issuing the questionnaires. Respondent's confidentiality was ensured.

Results

The result of the data from 260 respondents were analysed and presented in the frequency tables

Table 1

Socio-Demographic Characteristics of the Respondents

Variable	**Frequency**	**Percentage**
Age Group		
16-20	21	8.1 %
21-25	129	49.6 %
26-30	88	33.8 %
31-35	0	0.0 %
36-40	22	8.5 %
Total	260	100 %
Parity		
Primigravida	80	30.8 %
Multigravida	130	50.0 %
Multiparous	40	15.4 %
Grand multiparous	10	3.8 %
Total	260	100 %
Place of Previous Delivery		
Hospital	100	38.5 %
Home	50	19.2 %
Market	30	11.5 %
Others places specify	80	30.8
Total	260	100 %
Gestational Age of Index Pregnancy		
12-20 weeks	70	26.9 %
21-30 weeks	139	53.5 %
31-40 weeks	52	19.6 %
Total	260	100 %

Table 4.1 The above table shows that majority of respondents are young adult (within the child bearing age) 21-25 years with the cumulative of 129 (49.6 %). Parity, Multigravida has frequency

of 130 (50.0 %). Place of previous delivery shows that Hospital delivery has the highest percentage of 100 (38.5 %). Gestational age of index pregnancy shows that a woman within 21-30 30 week (53.5 %) has the highest frequency.

Table 2

Knowledge on Position of Choice during Labour		
Variable	**Frequency**	**Percentage**
Adequate information on positions of choice in antenatal clinic		
Well informed.	140	53.5 %
Partially informed	25	9.6 %
Not inform	44	16.9 %
Not understood	51	20.0 %
Total	260	100 %
Number of position used while delivery		
2	59	22.7 %
5	106	40.8 %
3	62	23.8 %
6	33	12.7 %
Total	260	100 %
The position most preferred during labour?		
Walking	85	32.7 %
Leaning forward	84	32.7 %
Gentle lunging	45	17.3 %
Four point kneeling	26	10. 0 %
Rocking	20	7.7 %
Total	260	100 %
The different stages of labour has position that is of added advantage to it		
Yes	133	51.2 %
No	127	48.8 %
Total	260	100 %
The most known position for child birth		
Supine position	147	56.5 %
Walking	43	16.5 %
Squatting	22	8.5 %
Kneeling	48	18.5 %
Total	260	100 %

Table 2 The above table shows that majority of respondents have good knowledge on position of choice during labour. Adequate information on positions of choice shows that the respondents are well informed with the frequency of 140 (53.5 %). Positions mostly used for delivery was 5 which shows the highest frequency of 106 (40.8 %). The position most preferred during labour was the Walking which shows the highest frequency of 85 (32.7 %). The different stages of labour has position that is of added advantage to it shows that respondents that answered Yes has

the highest frequency of 133 (51.2 %). The most known position for child birth during labour shows that Supine was the highest position with frequency of 147 (56.5 %).

Table 3
Level of Utilization toward a Choice of Positions during Labour)

Statement	A	Sa	D	Sd	**Total**
16. Mobility during labour is not widely practiced in the hospitals	196 (75.4 %)	42 (16.2 %)	12 (4.6 %)	10 (3.8 %)	260 (100 %)
17. Most women chose to rest with little movement	72 (27.7 %)	158 (60.8 %)	30 (11.5 %)	0 (0.0 %)	260 (100 %)
18. Dislike the position on the labour bed during vaginal delivery	110 (42.3 %)	100 (38.5 %)	50 (19.2 %)	0 (0.0 %)	260 (!00 %)
19. Most women chose to rest with little movement	146 (56.2 %)	62 (23.8 %)	32 (12.3 %)	20 (7.7 %)	260 (100 %)
20. Supine position is routinely used in all hospital	40 (15.4 %)	155 (59.6 %)	65 (25.0 %)	0 (0.0 %)	260 (100 %)
21. Upright positions, are used very in frequently	40 (15.4 %)	160 (61.5 %)	60 (23.1 %)	0 (0.0 %)	260 (100 %)
22. Choose to deliver in a sitting position	90 (34.6 %)	50 (19.2 %)	100 (38.5 %)	20 (7.7 %)	260 (100 %)
23. Proper squatting would be the choice for delivery	100 (38.5 %)	130 (50.0 %)	10 (3.8 %)	20 (7.7 %)	260 (100 %)
24. Those women could be a self-selecting population who choose a particular care giver according to their pre-existing attitudes.	130 (50.0 %)	80 (30.8 %)	40 (15.4 %)	10 (3.8 %)	260 (100 %)
25. Certain labor positions are causing changes to your baby's heart rate.	90 (34.6 %)	150 (57.7 %)	20 (7.7 %)	0 (0.0 %)	260 (100 %)
26. To protect the woman's right to assume the position of her choice during labour and birth, were trained to create more client-centered Maternity services.	100 (38.5)	60 (23.1 %)	70(26.9 %)	30 (11.5 %)	260 (100 %)
27. Have you switch from one side to the other, which can decrease pressure on the umbilical cord.	**146 (56.2 %)**	**90 (34.6 %)**	**24 (9.2 %)**	**0 (0.0 %)**	**260 (100 %)**

Table 3 above, shows that majority of respondents for the level of utilization toward a choice of positions during labour cumulatively the respondents agree with mobility during labour is not widely practiced in the hospitals with 196 (75.4 %) While 12 (4.6 %) disagree with the statement. Respondents agree with the most women chose to rest with little movement with146 (56.2 %) While 32 (12.3 %) disagree. similarly some respondents agree with to have switch from one side to the other, which can decrease pressure on the umbilical cord which was 146 (56.2 %) While 24 (9.2 %) disagreed.

Table 4
Factors Responsible For Positions Used By Pregnant Women During Labour)

Statement	**A**	SA	D	SD	**Total**
28. Factor influencing choice of birthing positions was advice given by midwives even more so than the woman's personal preference	72 (27.7 %)	136 (52.3 %)	52 (20.0 %)	0 (0.0 %)	260 (100 %)
29. Cultures are the most important factor influencing choice of birthing positions.	90 (34.6 %)	80 (30.8 %)	70 (26.9 %)	20 (7.7 %)	260 (100 %)
30. Skilled personnel to supervise delivery and be in a position of women choice to promptly deal with possible complications	70 (26.9 %)	98 (37.7 %)	60 (23.1 %)	32 (12.3 %)	260 (100 %)
31. Gestational age of the pregnancy was another significant determinant of the decision to use position for birth.	106 (40.8 %)	92 (35.4 %)	32 (12.3 %)	30 (11.5 %)	260 (100 %)

Table 4 The table above shows that majority of respondents for the factors responsible for positions used by pregnant women during labour. Many respondents agree the advice given by midwives even more so than the woman's personal preference with 72 (27.7 %) while 52 (20.0 %) disagree with that. Also some respondents agree with the cultures are the most important factor influencing choice of birthing positions. 90 (34.6 %) while 70 (26.9 %) disagree with the statement. Similarly most of the respondents agree with the gestational age of the pregnancy was another significant determinant of the decision to use position for birth. Which was 106 (40.6 %) while 32 (12.3 %) disagree with such statement.

Discussions

This research study in the Table 2 shows that majority of respondents have good knowledge on position of choice during labour with the Adequate information on positions of choice in antenatal clinic shows that well informed has the frequency of 140 (53.5 %). Positions mostly used for delivery was 5 which shows the highest frequency of 106 (40.8 %). The position most preferred during labour was the Walking which shows the highest frequency of 85 (32.7 %). The different stages of labour has position that is of added advantage to it shows that respondents that answered Yes has the highest frequency of 133 (51.2 %). The most known position for child birth during labour shows that Supine was the highest position with frequency of 147 (56.5 %). The information about different options for labour relatives at Home delivery has the highest frequency of 80 (30.8 %). The above research findings are in line with research findings reported by Salvatore *et al.* (2014). showed that more than 90% of women were aware of the supine or semi recumbent positions for labour and childbirth but less than 5% were aware of alternative positions (e.g. squatting, kneeling, and on hands and knees).

Also the findings from this research study in the Table 3 shows that majority of respondents responses for the level of utilization toward a choice of positions during labour cumulatively the respondents agree with mobility during labour is not widely practiced in the hospitals to be 196

(75.4 %) while 12 (4.6 %) while some respondents disagree with the statement. Also some respondents agree with the most women chose to rest with little movement to be146 (56.2 %) while 32 (12.3 %) disagree with the statement. Similarly some respondents agree with to have switch from one side to the other, which can decrease pressure on the umbilical cord which was 146 (56.2 %) while 24 (9.2 %) disagree with that. This finding is in agreement with the research finding reported by Lugin (2018). most women chose to rest with little movement when at home (51.6%), and just 15% said they were mobile at home. 58% still prefer to be in bed when laboring Semi-sitting 28% lying on your side can reduce any risk while still keeping you comfortable and your baby safe.

The findings from this study in the Table 4 shows that majority of respondents for the factors responsible for positions used by pregnant women during labour. Many respondents agree with the factor influencing choice of birthing positions was advice given by midwives even more so than the woman's personal preference to be72 (27.7 %) while 52 (20.0 %) disagree with that. Also some respondents agree with the cultures are the most important factor influencing choice of birthing positions. 90 (34.6 %) while 70 (26.9 %) disagree with the statement. Similarly most of the respondents are agree with the gestational age of the pregnancy was another significant determinant of the decision to use position for birth. Which was 106 (40.6 %) while 32 (12.3 %) disagree with such statement. The findings are in line with the findings reported by Basheer (2018). Gestational age of the pregnancy was another significant determinant of the decision to use position for birth. Women in their 13–24 weeks of pregnancy (OR=13.645, 95% CI=1.758–105.893) and those above 25 weeks (OR=6.065, 95% CI=1.723–21.351) had higher odds of using the position of choice during delivery.

Implication of Nursing Practice

Good knowledge of women on choice of positions used during labour, the level of utilization of different positions in labour among pregnant women in antenatal clinic and the factors responsible for positions used by women during labour will help them to provide good services to women with no special needs and increase its patronage thus, help in curbing the problem of morbidity and mortality in the nation and world at large.

Conclusion

Conclusively, the findings from this study revealed that there is need to work on factors responsible for positions used by pregnant women during labour. Also lack of good knowledge about the proper position to be used during delivery by pregnant women. Skilled personnel to supervise delivery and be in a position of women choice to promptly deal with possible complications

Recommendations

In view of the above findings of the study; the following recommendations were made with the view of promoting the choice of position to be used by pregnant women during labour in order to avoid complications during labour

1. It is therefore recommended that there is need for public awareness on various types of position to be used during labour by pregnant women.
2. It is also recommended that Hospital delivery should be encouraged in order to educate the women about the various positions used during labour.
3. Special efforts are needed to encourage more deliveries in women's choice of position.
4. It is recommended that government should provide more facilities and modern equipment that ease position of choice during delivery in the Hospital.

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