

Birthing Positions and Their Utilization by Midwives in Tertiary Hospitals in Ogun State, Nigeria

Odoemene, Martha .I.¹, Sowunmi, Christiana .O.², Owopetu, Christiana .A.³

Department of Maternal and Child Health Nursing, Faculty of Nursing Science

Babcock University, Ilishan-Remo, Ogun State, Nigeria

Corresponding Author: Sowunmi C. O.

Abstract

Background: Different birthing positions categorized as upright and supine have been utilized during birthing processes. Contemporary midwives mainly use supine positions despite the more effective delivery outcomes associated with upright positions. This may be attributed to inadequate knowledge of midwives on different birthing positions. This study seeks to assess the knowledge of birthing positions among midwives in tertiary hospitals in Ogun state.

Materials and Methods: A quantitative descriptive design was used in the study. Quantitative data were obtained with a structured questionnaire among 119 midwives; all working in the obstetric departments of three tertiary institutions in Ogun State. Data were thereafter processed using the Statistical Package for Social Sciences version 23. Three research questions and three hypotheses were raised in the study. Hypotheses were tested at 0.05 level of significance. Three research questions were answered using descriptive statistics of frequencies and percentages and three hypotheses were answered using chi square at 0.05 level of significance.

Results: Findings revealed that, midwives have work experience of 5 - 10 years and (46%) of them have average knowledge of birthing positions because they identified 5-6 positions. Their knowledge about the advantages and disadvantages of upright birthing positions is below average: mean score = 46.3, compared with their knowledge about advantages and disadvantages of supine positions which is above average: mean score = 54.8. Findings also showed poor utilization of birthing positions among midwives as (74.10%) of midwives utilized less than five birthing positions. There were significant influence between institutional policies ($p = 0.00$), years of experience ($p = 0.00$), knowledge of midwives ($p = 0.00$) and utilization of different birthing positions.

Conclusion: In conclusion, knowledge of birthing positions among midwives was on the average, consequently different birthing positions especially the upright positions were under-utilized by midwives. The study recommended training of midwives on upright child birth positions based on the advantages of upright positions against supine positions.

Keywords: Birthing positions, Knowledge, Midwives, Utilization.

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I. Introduction

Birthing position is one of the practices that determine the successful outcome of pregnancy and delivery which is the wish of every pregnant woman. It refers to the physical posture the pregnant woman adopts in delivery. The different birthing positions that can be utilized, can be broadly categorized as being either supine or upright. In supine positions, a line connecting the center of a woman's third and fifth lumbar vertebrae is more horizontal than vertical (the body weight is on the sacrum) and it includes the following: recumbent or dorsal position (lying flat on back), semi-recumbent position (trunk tilted forward up to a 30° to the horizontal), lithotomy position (lying flat on back with both legs held up in stirrups) and trendelenburg's position (head lower than pelvis). The body weight is off the sacrum in upright positions, namely: lateral (sim's) position (lying on the side), sitting (with obstetric chair/stool), kneeling, squatting (unaided or using squatting bars/birth cushion), standing and hands and knees¹. The supine positions for birth is used sometimes to enhance the maintenance of asepsis, assessment of fetal heart rate, and performance of episiotomy and repair. It offers convenience for midwives and obstetricians to monitor progression of labor. In contrast, when the comfort and well-being of the woman and fetus are considered, the following disadvantages have been noted and documented².

1. There is decrease of as much as 30% in the blood pressure of 10% of women
2. Many women experience difficulty breathing because of pressure of the uterus on the diaphragm

3. The uterine axis is directed toward the symphysis pubis instead of the pelvic inlet, thus interfering with fetal alignment.
4. Aspiration of vomit is more likely
5. The woman may feel resentment at being forced to assume an 'embarrassing position'
6. Supine hypotension syndrome may occur
7. The labor may be prolonged and may lead to the use of medications to augment labor
8. The contractions may seem more uncomfortable, making coping more difficult
9. Tightening of the vagina and perineum as thighs are flexed may increase the likelihood of an episiotomy or lacerations
10. Stirrups cause excessive pressure on the legs
11. The woman works against gravity.

Over the ages and across human cultures, positions during childbirth could be willingly altered according to the parturient desires, but supine position is more utilized in conventional midwifery and obstetric practice because of its access of the caregiver to the woman's abdomen to monitor fetal heart rate, administration of intravenous therapy, loco-regional anesthesia, performance of medical procedures, perineal support and birth assistance³. However, this is not evidenced based. Other birthing positions hasten the body's natural physiologic process, which uses gravity and the woman's urge to bear down to ease the delivery of the fetus and enhance the delivery experience for the woman and also reduce postpartum complications⁴.

Upright birth positions are associated with physical benefits like increased uterine pressure or contractions, more productive bearing down efforts, improved fetal positioning, reduced risk of aorto-caval compression and increased diameters of the pelvis when the woman is in squatting and kneeling positions⁵. Psychological benefits include less pain, high emotion of being in control, more communication with the delivery personnel and more active involvement of the parturient partner⁶. A study showed that childbirth positions such as standing, kneeling, sitting, squatting and hands and knees are known with reduced duration of second stage of labour, minimal report of severe pain, reduced rates of episiotomies and instrumental or assisted deliveries, a reduction in abnormal fetal heart rate patterns as well as improved neonatal outcome, unlike the supine positions⁷. Also, upright positions such as hands and knees is recommended by the American College of Obstetrics and Gynecologists in resolving shoulder dystocia because the widest pelvic outlet is noted in this position, hence the impacted shoulder is dislodged^{8,9}. In addition, a study noted rotation of an occiput posterior fetus in hands and knees position, the gravity of the fetus rotates the posterior shoulder forward over the sacral promontory. Another controversial area in birthing positions that need further investigation is the issue of blood loss.

Post-partum hemorrhage is the highest cause of maternal mortality worldwide^{11,12}. It is defined as blood loss greater than or equal to 1000mls or associated with signs or symptoms of hypovolemia within 24 hours of childbirth irrespective of the route of delivery⁸. However, upright positions were linked with blood loss greater than 500mls when compared with supine positions¹. In contrast, a study revealed that hands and knees and squatting positions has no difference in the amount of blood loss after delivery compared with supine positions^{13,14}. Also a study stated that blood loss under 1000mls can be considered normal in healthy population¹⁵. Therefore, further studies on blood loss in different birthing positions may be required.

This study was guided by Health Belief Model which focuses on the midwives' compliance on evidence based health care practices on birthing positions. The conceptual framework in this study explained why variable such as knowledge of childbirth positions and its utilization among midwives affect each other and why evidence based practices on childbirth positions are not upheld by midwives. The HBM also assisted in determining midwives' knowledge on different birthing positions and the factors that influence the utilization of various birthing positions.

The individual perception of midwives' on childbirth positions affect their utilization of these positions. Though conventional midwifery confine pregnant women to lie on their back during childbirth, perceived benefits of alternative birthing positions like lower rates of having a forceps or vacuum delivery, shorter labor due to efficient and stronger contractions and faster descent of the head, lower rates of episiotomy and abnormal fetal heart rate patterns are likely to motivate midwives to utilize other birthing positions.

However, barriers such as midwives training and skills on birthing positions, institutional policies, inadequate knowledge of childbirth positions, inadequate delivery equipment's to support birthing positions could influence utilization of childbirth positions by midwives. Nonetheless, understanding the benefits of alternative childbirth positions will boost their self-efficacy to opt for alternative childbirth positions and subsequent utilization of different childbirth positions by midwives.

The HBM could be used to encourage midwives to take positive evidence base health action thereby minimizing obstetric and/or health complications. Figure 1 illustrates the variables identified in this study to address knowledge which could influence the utilization of different child birth positions among midwives.

Even with intrapartum guidelines on child birth positions and evidence on benefits of upright birthing positions, more than 90% of pregnant women are encouraged to be on their back by midwives during birthing process even when they do not feel like it, suggesting a fundamental problem⁷. Similarly, midwives reported that they were trained to conduct deliveries solely in supine positions and encouraging pregnant women to adopt birthing positions according to the health providers' preference is described as obstetric violence¹⁷.

Likewise, the researcher through clinical experience in the tertiary hospitals in Ogun state observed that most women who try to adopt alternative positions like squatting, hands and knees during the delivery process were encouraged to be on their back because of medical/midwifery interventions like monitoring of fetal heart rates, administration of intravenous fluids, perineal support and birth assistance. This gap in knowledge gave impetus for this study in the tertiary institutions of Ogun State, Nigeria.

Objective of the Study

The main objective is to identify the level of knowledge of birthing positions and their utilization by midwives in the identified tertiary institutions. The objective include the following:

1. assess the knowledge level of midwives on different birthing positions;
2. determine the level of knowledge of midwives on advantages and disadvantages of upright and supine positions;
3. establish the extent midwives utilize different birthing positions;
4. determine the influence of years of experience of midwives on utilization of birthing positions and
5. identify the influence of institutional policies on utilization of different childbirth positions among midwives;

Research Questions

The following research questions were answered:

1. What is the knowledge of midwives on different birthing positions?
2. What is the knowledge of midwives on the advantages and disadvantages of different birthing positions?
3. To what extent do midwives utilize different birthing positions?

Hypotheses

The following null hypothesis are tested:

1. There is no significant relationship between institutional policies and utilization of birthing positions by midwives
2. There is no significant relationship between years of experience of midwives and the utilization of different birthing positions in delivery.
3. There is no significant relationship between knowledge of midwives on birthing positions and their utilization. .

II. Methodology

2.1 Research Design

The research design utilized in this study was a descriptive design with quantitative approach. Quantitative descriptive design is applied in observation, description and documentation of a phenomenon. It is also efficient in collection of extensive information about people knowledge of health problems¹⁸. Quantitative data were obtained from the midwives through a structured questionnaire.

2.2 Research Setting

The study was conducted in the three tertiary hospitals in Ogun State designated as Hospitals A, B and C. The three hospitals are tertiary hospitals established by the state government (Hospital A), private agency (Hospital B) and the federal government (Hospital C).

2.3 Sampling Technique

Total enumeration method was used to select all midwives for the study as the midwives are of small number. Hospital A (35 midwives), Hospital B (16 midwives) and Hospital C (68 midwives) making a total of 119 midwives. But 11 midwives were on leave during the time of data collection and the remaining 108 midwives willingly participated in the study.

2.4 Instrument

A self-structured questionnaire with 5 sections was used to collect data. Section A: socio-demographic variables of participants (having 3 questions), Section B: Knowledge of midwives on different birthing positions (having 10 question), Knowledge of less than 5 birthing positions is regarded as poor, knowledge of 5 - 6

positions is regarded as average and knowledge of 7 – 10 positions is regarded as good. Section C: utilization of different birthing positions by midwives (having 10 questions), Utilization of less than 5 birthing positions is regarded as poor, utilization of 5 - 6 positions is regarded as average and utilization of 7 – 10 positions is regarded as good. Section D: Institutional policies on birthing positions (having 5 questions), and section E: Advantages and Disadvantages of Different Birthing Positions (having 12 questions). Reliability was assured using Cronbach's alpha.

2.5 Statistical Analysis

Data gathered from midwives were processed using Statistical Package for Social Sciences (SPSS), version 23. Research questions were answered using descriptive statistics of frequency and percentages. Inferential statistics of Chi-square test was used to test the three null hypotheses of the study at 0.05 level of significance.

III. Results

3.1 Socio-demographic distribution

The socio-demographic distribution of participants as shown in Table 1 below reveal that 35 (32.4%) of midwives had 5 – 10 years of experience while 25 (23.1%), 24 (22.2%), and 12 (11.1%) of respondents had more than 20 years of experience, less than 5 years of experience and 10 – 15 years and 15 – 20 years of experience respectively. The religion of respondents showed that 101 (93.5%) of the respondents were Christians while 7 (6.5%) were Islam's. The ethnicity of respondents as shown in Table 1 revealed that 49 (45.4%) were Yoruba while 44 (40.7%) and 15 (13.9%) were Igbo, and Hausa respectively.

Table 1: Midwives Socio-demographic Data

Variable	Midwives (n = 108)	Frequency (%)
Years of experience	<5 years	24 (22.2)
	5 – 10 years	35 (32.4)
	10 – 15 years	12 (11.1)
	15 – 20 years	12 (11.1)
	< 20 years	25 (23.1)
Religion	Christianity	101 (93.5)
	Islam	7 (6.5)
Ethnicity	Hausa	15 (13.9)
	Yoruba	49 (45.4)
	Igbo	44 (40.7)

3.2 Knowledge of Midwives on Birthing Positions

Table 2 reveals that 108 (100%) of midwives know recumbent, semi-recumbent, lithotomy as a birthing position, 80 (74.1%) know trendelenburg as a birthing position, 70 (64.8%) know squatting as a birthing position, 54 (50%) are familiar with sitting, while 48 (44.4%), 30 (27.8%), 25 (23.1%) and 20 (18.5%) know of kneeling, standing, side lying and hands and knees as a birthing position. The mean score of midwives that identified these positions as birthing position is 65.1 and 42.1 did not identify these birthing positions.

Table 2: Knowledge of Midwives on Birthing Positions

Variable	Items on birthing positions	Frequency (%)	
		Yes	No
	Kneeling	48 (44.4)	60 (55.6)
	Standing	30 (27.8)	70 (64.8)
	Sitting/birth stool	54 (50)	54 (50)
	Side lying	25 (23.1)	83 (76.9)
	Hands and knees	20 (18.5)	88 (81.5)
	Squatting	70 (64.8)	38 (35.2)
	Recumbent/dorsal	108 (100)	
	Semi-recumbent	108 (100)	
	Lithotomy	108 (100)	
	Trendelenburg	80 (74.1)	28 (25.9)
	Mean score	65.1	42.1

Table 3: Rating of Knowledge of Midwives on Birthing Positions

Knowledge of birthing positions among midwives	Category of scores	Frequency	Percentage (%)
Less than 5 birthing positions	Poor	20	18.5
Knowledge of 5 – 6 birthing positions	Average	50	46.3
Knowledge of 7- 10 birthing positions	Good	38	35.2
Total		108	100

Knowledge of birthing positions among midwives as shown in Table 3 is average, 50 (46.3%) know of 5 – 6 positions, 38 (35.2%) know of 7 – 10 positions while 20 (18.5%) have knowledge of less than 5 birthing positions.

3.3 Knowledge of midwives on the advantages and disadvantages of different birthing positions

In Table 4, the mean score of midwives that correctly identified the advantages and disadvantages of upright birthing positions is 46.3 and 61.8 answered incorrectly.

Table 4: Knowledge of Midwives on the Advantages and Disadvantages of Upright Birthing Positions

Variables		Frequency (%) N = 108 Upright Positions	
		Correct	Incorrect
1.	Convenience to midwives in assisting birth	86 (79.6)	22 (20.9)
2.	Feeling of pain and discomfort		
3.	Reduced duration of delivery	58 (53.7)	50 (46.3)
4.	Reduction in assisted deliveries (e.g. forceps)	28 (25.9)	80 (74.1)
5.	Increased rates of episiotomy	22 (20.4)	86 (79.6)
6.	Decreased rate of episiotomy		
7.	Increased perineal damage	67 (62.0)	41 (37.9)
8.	Decreased perineal damage	58 (53.7)	50 (46.3)
9.	Increased blood loss	48 (44.4)	60 (55.6)
10.	Decreased blood loss	42 (38.9)	66 (61.1)
11.	Need for augmentation	30 (27.8)	78 (72.2)
12.	Irregular fetal heart rates	52 (48.1)	56 (51.9)
	Mean score	36 (33.3)	72 (66.7)
		28 (25.9)	80 (74.1)
		46.3	61.8

3.4 Knowledge of Midwives on the Advantages and Disadvantages of Supine Birthing Positions

In Table 5, the mean score of midwives that correctly identified the advantages and disadvantages associated with supine birthing positions is 54.8 and 53.2 responded incorrectly

Table 5: Knowledge of Midwives on the Advantages and Disadvantages of Supine Birthing Positions

Variable	Frequency (%), N = 108 Supine Positions	
	Correct	Incorrect
(1) Convenience to midwives in assisting birth	84 (77.8)	24 (22.2)
(2) Feeling of pain and discomfort		
(3) Reduced duration of delivery	90 (83.3)	18 (16.7)
(4) Reduction in assisted deliveries (e.g. forceps)	37 (34.3)	71 (65.8)
5. Increased rates of episiotomy	48 (44.4)	60 (55.6)
2. Decreased rate of episiotomy		
3. Increased perineal damage	83 (76.9)	25 (23.1)
4. Decreased perineal damage	56 (51.9)	52 (48.1)
5. Increased blood loss	49 (45.4)	59 (54.6)
6. Decreased blood loss	20 (18.5)	88 (81.5)
7. Need for augmentation	50 (46.3)	58 (53.7)
8. Irregular fetal heart rates	41 (37.9)	67 (62.0)
	Mean score	84 (77.8)
		16 (14.8)
		54.8
		53.2

3.5 Utilization of Birthing Positions among Midwives

A hundred percent of midwives utilize semi-recumbent and lithotomy birthing positions respectively as shown in Table 6, 98 (90.7%) utilize recumbent position, while 12 (11.1%), 6 (5.6%), 14 (12.9%), 2 (1.9%), 6 (5.6%), and 15(13.9%) utilize kneeling, standing, sitting, side lying, hands and knees, squatting birthing

positions. The mean score of midwives that utilize the listed birthing positions is 42.2 and 50.3 do not utilize these birthing positions.

Table 6: Utilization of Birthing Positions among Midwives

Variable	Items on birthing positions	Frequency (%)	
		Yes	No
	Kneeling	12 (11.1)	96 (88.9)
	Standing	6 (5.6)	102 (94.4)
	Sitting	14 (12.9)	94 (87.0)
	Side lying	2 (1.9)	106 (98.1)
	Hands and knees	6 (5.6)	102 (94.4)
	Squatting	15 (13.9)	93 (86.1)
	Recumbent/dorsal	98 (90.7)	10 (9.3)
	Semi-recumbent	108 (100)	
	Lithotomy	108 (100)	
	Trendelenburg	53 (49.1)	55 (50.9)
	Mean score	42.2	50.3

Table 7: Rating of Utilization of Midwives among Midwives

Utilization of birthing positions among midwives	Category of scores	Frequency	Percentage (%)
Utilization of Less than 5 birthing positions	Poor	80	74.1
Utilization of 5 – 6 birthing positions	Average	20	18.5
Utilization of 7- 10 birthing positions	Good	8	7.4
Total		108	100

From Table 7, 80 (74.1%) midwives utilize less than 5 birthing positions, 20 (18.5%) midwives utilize 5 – 6 birthing positions while 8 (7.4%) utilize 7 – 10 birthing positions.

3.6 Test of Hypotheses

Hypothesis 1: There is no significant influence between institutional policies and utilization of birthing positions by midwives.

Table 8: Cross Tabulation of Institutional Policy and Utilization of Birthing Positions

		Utilization of Birthing Positions								Total	
		11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0		
Institutional Policy	4.00	Count	2	4	0	0	0	0	0	0	6
		Expected Count	.1	.2	.3	.1	.1	3.8	.8	.6	6.0
	5.00	Count	0	0	2	0	0	0	0	0	2
		Expected Count	.0	.1	.1	.0	.0	1.3	.3	.2	2.0
	6.00	Count	0	0	2	0	0	0	0	0	2
		Expected Count	.0	.1	.1	.0	.0	1.3	.3	.2	2.0
	7.00	Count	0	0	2	2	1	1	0	0	6
		Expected Count	.1	.2	.3	.1	.1	3.8	.8	.6	6.0
	8.00	Count	0	0	0	0	0	68	14	10	92
		Expected Count	1.7	3.4	5.1	1.7	.9	58.8	11.9	8.5	92.0
		Count	2	4	6	2	1	69	14	10	108
		Expected Count	2.0	4.0	6.0	2.0	1.0	69.0	14.0	10.0	108.0
	Total										

Table 9: Influence of Institutional Policy and Utilization of Birthing Positions

	Value	Df	P-Value	
			Asymp. Sig. (2-sided)	Tabulated Value
Pearson Chi-Square	245.104 ^a	28	.000	
Likelihood Ratio	107.147	28	.000	41.3
Linear-by-Linear Association	80.301	1	.000	
N of Valid Cases	108			

In Tables 8 and 9, the computed chi-square (X^2) 245.104 is greater than the tabulated (X^2) 41.3 at 0.05 level of significance and 28 degree of freedom. With $p = .00$, hence the H_0 was not accepted. There is significant influence between institutional policy and utilization of birthing positions.

Hypothesis 2: There is no significant influence between years of experience of midwives and the utilization of different birthing positions in delivery

Table 10: Cross Tabulation of Years of Experience of Midwives and Utilization of Birthing Positions

		Utilization of Birthing Positions								Total	
		11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0		
Years of Experience	Less Than 5 Years	Count	2	4	6	2	1	9	0	0	24
		Expected Count	.4	.9	1.3	.4	.2	15.3	3.1	2.2	24.0
	5-10 Years	Count	0	0	0	0	0	35	0	0	35
		Expected Count	.6	1.3	1.9	.6	.3	22.4	4.5	3.2	35.0
	10-15 Years	Count	0	0	0	0	0	12	0	0	12
		Expected Count	.2	.4	.7	.2	.1	7.7	1.6	1.1	12.0
	15-20 Years	Count	0	0	0	0	0	12	0	0	12
		Expected Count	.2	.4	.7	.2	.1	7.7	1.6	1.1	12.0
	Above 20 Years	Count	0	0	0	0	0	1	14	10	25
		Expected Count	.5	.9	1.4	.5	.2	16.0	3.2	2.3	25.0
	Total	Count	2	4	6	2	1	69	14	10	108
		Expected Count	2.0	4.0	6.0	2.0	1.0	69.0	14.0	10.0	108.0

Table 11: Years of Experience of Midwives and Utilization of Birthing Positions

	Value	Df	P-Value	
			Asymp. Sig. (2-sided)	Tabulated Value
Pearson Chi-Square	160.873 ^a	28	.000	
Likelihood Ratio	153.093	28	.000	41.3
Linear-by-Linear Association	52.033	1	.000	
N of Valid Cases	108			

Tables 10 and 11 reveal that the computed chi-square (X^2) 160.873 is greater than the tabulated (X^2) 41.3 at 0.05 level of significance and 28 degree of freedom. With $p = .000$, hence, the H_0 is was not accepted. There is significant influence between years of experience of midwives and utilization of birthing positions.

Hypothesis 3: There is no significant influence between knowledge of midwives and utilization of different birthing positions

Table 12: Cross Tabulation of Influence of Knowledge of Midwives and Utilization of Birthing Positions

		Utilization of Birthing Positions								Total	
		11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0		
Knowledge of Midwives	10.00	Count	2	4	6	2	1	5	0	0	20
		Expected Count	.4	.7	1.1	.4	.2	12.8	2.6	1.9	20.0
	11.00	Count	0	0	0	0	0	5	0	0	5
		Expected Count	.1	.2	.3	.1	.0	3.2	.6	.5	5.0
	12.00	Count	0	0	0	0	0	5	0	0	5
		Expected Count	.1	.2	.3	.1	.0	3.2	.6	.5	5.0
	13.00	Count	0	0	0	0	0	18	0	0	18
		Expected Count	.3	.7	1.0	.3	.2	11.5	2.3	1.7	18.0
	14.00	Count	0	0	0	0	0	6	0	0	6
		Expected Count	.1	.2	.3	.1	.1	3.8	.8	.6	6.0
	15.00	Count	0	0	0	0	0	16	0	0	16
		Expected Count	.3	.6	.9	.3	.1	10.2	2.1	1.5	16.0
	16.00	Count	0	0	0	0	0	10	0	0	10
		Expected Count	.2	.4	.6	.2	.1	6.4	1.3	.9	10.0
	17.00	Count	0	0	0	0	0	4	14	9	27
		Expected Count	.5	1.0	1.5	.5	.3	17.3	3.5	2.5	27.0
	37.00	Count	0	0	0	0	0	0	0	1	1
		Expected Count	.0	.0	.1	.0	.0	.6	.1	.1	1.0
	Total	Count	2	4	6	2	1	69	14	10	108
		Expected Count	2.0	4.0	6.0	2.0	1.0	69.0	14.0	10.0	108.0

Table 13: Influence of Knowledge of Midwives and Utilization of Birthing Positions

	Value	Df	P-Value	
			Asymp. Sig. (2-sided)	Tabulated Value
Pearson Chi-Square	168.997 ^a	56	.000	
Likelihood Ratio	149.912	56	.000	74.5
Linear-by-Linear Association	44.083	1	.000	
N of Valid Cases	108			

Tables 12 and 13 reveal that the computed chi-square (X^2) 168.997 is greater than the tabulated (X^2) 74.5 at 0.05 level of significance and 56 degree of freedom. With $p = .000$, the H_0 was not accepted. There is significant influence knowledge of midwives and utilization of birthing positions.

IV. Discussion

Observing the socio-demographic distribution of respondents, findings from the study revealed that more of the respondents have between 5 – 10 years working experience. This distribution is due to the fact that they were more midwives with working experience between 5 – 10 years in the obstetric units of the study locations during the period of data collection. The religion of majority of the respondents was Christianity, this distribution is because the study locations are mostly Christian dominated areas. This also suggest that more of the respondents are of Yoruba tribe.

The commonly known birthing positions among midwives are recumbent, semi-recumbent and lithotomy 108 (100%), Trendelenburg 80 (74.1%), squatting 70 (64.8%), and sitting 54 (50%) while other birthing positions like kneeling 48 (44.4%), standing 30 (27.8%), side-lying 25 (23.1%), and hands and knees 20 (18.5%) are not well known by midwives. The overall knowledge of midwives about birthing positions is average since majority of them 50 (46.3%) identified 5 – 6 birthing positions and these are majorly supine positions. This corroborates with what women reported during the focused group discussion that they only knew of supine positions. This finding is similar to a study that reported that 100% of midwives restrict women to deliver in supine positions because of inadequate knowledge and skills in other birthing positions¹⁹. Also this finding supports previous study that stated that Nigerian midwives will need more training on alternative birthing positions⁷. In contrast, midwives play a major role in managing different maternal positions and about 65% to 75% of births are handled by midwives²⁰.

Table 6 revealed that the birthing position mostly utilized by midwives are semi-recumbent, lithotomy (100%) and recumbent 98 (90.7%) and Trendelenburg 53 (49.1%) are commonly utilized by midwives and majority 80 (74.1%) utilize less than 5 birthing positions which is poor. This may be attributed to inadequate skill in attending to births in different positions among midwives and institutional policies on birthing positions. This finding is similar to a study which revealed that majority of midwives 87.6% prefer dorsal position which include lithotomy due to its convenience²¹. This might be the reason why majority of women are not willing to adopt alternative birthing positions. If they feel their midwives are not skilled in attending to birth in upright positions or has never seen anyone adopt this positions, they are unlikely to make a change or adopt evidenced based practices on birthing positions. Therefore re-orientation and training of midwives in different birthing positions is essential. Also pregnant women should be educated on both supine and upright positions and they should be allowed to decide on which position is best for them.

The findings as statistically proven indicates that there is significant influence between institutional policies and utilization of birthing positions by midwives. The result attest with the findings of a study that institutional policies limit utilization of birthing positions by midwives²². For instance significant others like the woman's husband or family members are not allowed into the birthing room to support the woman during delivery. This limits the utilization of different birthing positions. Similar study reported that lack of institutional policies (written guidelines) supporting birthing positions affect midwives decision to offer evidence based practices on birthing positions²³. Similarly, it was statistically proven that there is significant association between years of working experience of midwives and utilization of birthing positions. This finding is in agreement with WHO recommendation on birthing position, that supporting birth in different positions depends on the birth attendants experience with the position and that midwives are trained and experienced in attending births in different positions and even urged physicians who might feel incompetent in some birthing positions to reach out to their midwifery colleagues. This finding was in contrast to a study that reported that midwives were trained to manage deliveries solely in supine positions. Also in this study, it was statistically proven that there is significant association between knowledge of midwives and utilization of birthing positions. Similar finding was reported that midwives are trained and experienced in different birthing positions¹⁷. Also, other studies supported this finding and stated that management of different birthing positions is the primary responsibility of midwives^{25, 26}. In contrast to this finding, a study stated that Nigerian midwives needs training on mostly upright birthing positions⁷.

V. Conclusion

Midwives were found to have average knowledge of birthing positions. There is also poor utilization of different birthing positions among midwives. Result from this study has proven that there is significant influence between knowledge and utilization of birthing positions. Therefore, midwives have a crucial responsibility to promote comfort during birth and should endeavor to uphold evidence based practices on birthing positions for a positive maternal and perinatal outcome of delivery.

Ethical Approval

Ethical approval was obtained from Babcock University Health Research and Ethical Committee and the Health and Research Ethical Committee of the three study locations.

Conflicts of Interest

No conflict of interest was declared by authors.

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