

Full Length Research Paper

Use of the partograph among obstetric care providers in government healthcare facilities in Uyo Senatorial District, Akwa Ibom State, Nigeria

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Globally, Nigeria is one of the countries experiencing worst maternal mortality crisis. Despite its recognition as a major public health issue, the maternal mortality statistic is still on the increase and is not commensurate with the effort of the stakeholders. In developing countries, the use of the partograph for labor management is very low among nurses, midwives and doctors working in most of the primary and secondary levels of care compared to the tertiary level of care. A total population study of all practicing and consenting 306 obstetric care providers across selected 74 functional government healthcare facilities in the study area was conducted using a concurrent mixed-method study design over a period of six months. Validated semi-structured questionnaire and key informant interview guide were used for data collection. Data were analyzed using the SPSS version 22.0 and Nvivo version 9.0. Descriptive and inferential statistics were applied as appropriate at 95% confidence level and a p-value of ≤ 0.05 . Females were 87.9% of the participants and the mean age was 36.91 ± 9.06 years. The partograph was more utilized among nurse/midwives (51.4%), respondents working in tertiary healthcare facilities (100%), respondents with positive perception about its use (61.0%) and when readily available (62.8%). This study showed that obstetric care providers have positive perception and good general knowledge of the partograph, but lacked in-depth knowledge of it including confidence in its use. This study also showed that nurses/midwives utilizes this life-saving and inexpensive obstetric tool (partograph) more, and that it is mostly use at tertiary level of care but optimally utilized at the primary level of care where it is most needed.

Key words: Care providers, levels of care, obstetrics, partograph, utilization.

INTRODUCTION

About 34% of global maternal deaths occur in Nigeria and India (WHO, UNICEF, UNFPA, WORLD BANK GROUP, UNPD, 2015). The World Health Organization

(WHO) estimates Nigerian maternal mortality ratio (MMR) at 814/100,000 live births (WHO, UNICEF, UNFPA, WORLD BANK GROUP, UNPD, 2015). The lifetime

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risk of a Nigerian woman dying during pregnancy, childbirth, postpartum or post-abortion is 1 in 22, in contrast to the lifetime risk in developed countries which is estimated at 1 in 4900 (WHO, 2021). According to Nigerian National Demographic Health Survey (NDHS), MMR was estimated at 576/100,000 live births in the year 2013 (NDHS, 2013). Five years after (2018), this figure was put at 512/100,000 live births (NDHS, 2018). A disturbing and worrisome trend is that since the recognition of maternal mortality as a major public health challenge in Nigeria, there is no significant reduction in maternal wastages despite the support and commitment by stakeholders (WHO, UNICEF, UNFPA, WORLD BANK GROUP, UNPD, 2015, Opiah et al., 2016). Uyo Senatorial District where this study was conducted is adjudged to be facing a similar trend.

The partograph is one of the valuable appropriate technologies in use for improved monitoring of the progress of labor, maternal and fetal wellbeing. It helps predict deviation from normal progress of labor, and supports timely and proven intervention (Weerasekara, 2014; Mathibe-Neke et al., 2013). The benefits associated with its use led to the recommendation by the WHO that the partograph should have universal application (WHO, 2014). A notable fact in developing countries is that the use of the partograph for labor management is very low among nurses, midwives and doctors working in most of the Primary and Secondary levels of care compared to the Tertiary (Opiah et al., 2016, Weerasekara, 2014). According to some researchers factors affecting the utilization of the partograph in these settings include poor knowledge (Namwaya et al., 2017), non-availability of the partograph charts in the labor wards (Nwaneri et al., 2017), lack of adequate number of healthcare personnel (Sama et al., 2017; Zelellw and Tegegne, 2018), regarding the partograph use as an additional time-consuming task (Zelellw and Tegegne, 2018), and lack of understanding of the relevance of the partograph in detecting obstructed labor (Wakgari et al., 2015). Other factors include lack of standard institutional guidelines on the use of the partograph in labor (Gans-Lartey et al., 2013), lack of support from management in terms of providing essential supplies (Zelellw and Tegegne, 2018), and lack of motivation of the health workers (Opiah et al., 2016).

The Sustainable Development Goal 3 (SDG#3) proposed that by the end of 2030, there will be reduction in the global MMR to < 70/100,000 live births (SDG/UNDP, 2016). With effective and efficient use of the partograph in all delivery centers, this target can be met.

Systematic literature search has shown that there is paucity of information regarding this crucial area in the study arena. Assessment of partographic labor monitoring by frontline obstetric care providers will be an important step for designing appropriate training and retraining programmes that will further enhance their knowledge of safe motherhood. It is hoped that this research will

bridge the knowledge gap, generate baseline data for more robust studies and assist policymakers and programme managers in evaluating and designing appropriate interventions and strategies that will improve maternal health services in the study area and other resource-constrained regions of the world. This study seeks to assess the use of the partograph among Obstetric Care Providers (OCPs) working in government healthcare facilities in Uyo Senatorial District.

MATERIALS AND METHODS

Study setting

For ease of administration and resource allocation, Akwa Ibom, a State in southern Nigeria is divided into three (3) Senatorial Districts as follow; Uyo, Eket and Ikot Ekpene Senatorial Districts. Out of the three, Uyo Senatorial District was randomly selected for this study. A total of seventy-four functional Government healthcare facilities provides active delivery services in Uyo Senatorial District. They include: One (1) Tertiary healthcare facility, Five (5) Secondary healthcare facilities and sixty-eight Primary Healthcare facilities.

Study population

A total of 315 Obstetric Care Providers actively undertake delivery services in the 74 Government healthcare facilities in the study area. The study population consisted of the 315 OCPs across the 74 functional Government healthcare institutions in Uyo Senatorial District.

Those who were recruited into the study comprised all consenting Obstetric Care Provider working in any of the Government healthcare facility (Primary, Secondary or Tertiary) within the study area. In the context of this study, an Obstetric Care Provider (OCP) is a frontline obstetric healthcare facility staff (non-specialist) who is actively involved in delivery services. Specialist Obstetricians (non-frontline OCP), and critically ill OCPs with OCPs with cognitive dysfunction who were unable to provide accurate information were excluded from the study.

Study design

A concurrent mixed-method study design was used. This consisted of a cross-sectional descriptive study which was qualitatively complemented with Key Informant Interview (KII) assessment. The KII is a form of qualitative in-depth interview.

Sample size determination

The sample size was calculated by applying Leslie and Kish single proportion formula for a study of population less than 10,000 (Mathews and Farewell, 2017).

$$nf = \frac{n}{1 + (n - 1) / N}$$

Where: nf = the sample size when population is less than 10,000. n = the sample size when the population is more than 10,000. N = Estimated population size = 315.

For a study of population greater than 10,000. Cochran formula was applied to determine n as follow:

$$n = \frac{z^2 pq}{d^2}$$

Where: n = the desired sample size when population is greater than 10,000. Z_{α} = the standard normal deviate which is set at 1.96 and which corresponds to 95% confidence level. p = prevalence of outcome of interest = 50.6% (Opiah et al, 2016). q = variance = 1 - p = 0.494. d = degree of accuracy required which is set at 5%. Therefore:

$$n = \frac{(1.96)^2 \times 0.506 \times 0.494}{(0.05)^2} = 384$$

Substituting for nf:

$$nf = \frac{n}{1 + (n - 1) / N}$$

$$nf = \frac{384}{1 + 384 - 1 / 315} = 320$$

The calculated minimum sample size was 320. But since only a total of 315 OCPs undertake active delivery services in the study area, the minimum sample size required for this study was approximated to 315.

Total population sampling method was employed, where all practicing and designated OCPs in functional Government healthcare facilities within the study area were enrolled.

Data collection and analysis

Quantitative assessment was done using self-administered, semi-structured, validated questionnaire on knowledge and utilization of the partograph. The questionnaire was divided into four sections, to get information on: socio-demographic characteristics, knowledge of each OCP, OCPs willingness to use the Partograph in the management of labour and factors affecting the use of the Partograph in their labour wards, including perception of the OCPs about the use of the partograph.

The conventional scoring method was used. All individual answers to questions were computed to obtain total mean scores and categorized as good (if participants scored \geq mean score) or poor (if participants scored $<$ mean score).

Perception was measured by four items in the questionnaire. All individual answers to perception questions were computed to obtain total mean scores and categorized as good perception (if participants scored \geq mean score) or negative perception (if participants scored $<$ mean score).

Overall knowledge regarding use of the partograph was measured by six items. All individual answers to overall knowledge questions were computed to obtain total mean scores and categorized as good overall knowledge (if participants scored \geq mean score) or poor overall knowledge (if participants scored $<$ mean score). In-depth knowledge was measured using 2 questions with three points Likert scale. The questions were selected based on detailed technical and practical content. All individual answers to practice questions were computed to obtain total mean scores

and categorized as good in-depth knowledge (if participants scored \geq mean score) or poor in-depth knowledge (if participants scored $<$ mean score).

The quantitative data were analyzed using the SPSS version 22.0. Descriptive and inferential statistics were applied as appropriate at 95% CI and at a P-value of \leq 0.05. Qualitative assessment was done using Key Informant Interview Guide (KII) among all the respondents. Qualitative data were analyzed using thematic analysis. Themes were organized using Nvivo version 9.0 software and presented on Z-Y table to compare responses from different levels of care. The study was conducted over a period of six months.

Ethical consideration

Approval for this study was obtained from the Research Ethical Committees of the University of Uyo Teaching Hospital and the Ministry of Health Uyo Akwa Ibom State. Participants signed the informed consent before participating in the study. Strict confidentiality was maintained during the entire study duration. All participants were assured of anonymity.

RESULTS

Out of 315 OCPs offering delivery services in the selected study facilities, a total of 306 respondents willingly participated in the study.

Participants' age ranged from 20 to 62 years with mean age of 36.89 ± 9.04 years. The majority 269(87.9%) were females. Most participant 135(44.1%) were in the 30-39 years age group, and over two-third 242(79.1%) of participants were from primary level of care.

Participants' factors with the use of partograph

Majority of the respondents 264 (86.3%) had good overall general knowledge of the meaning and use of partograph. Most of the participants 171 (55.9%) were not confident in the use of the partograph. Majority 254 (83%) of the study participants indicated desire for training on the use of the partograph (Table 1).

Respondents' detailed knowledge of the partograph

Concerning specific indebt knowledge on use of partograph, majority of the respondents 219(71.6%) did not know that 'in normal labor, the graph/plot should fall to the left of the alert line'. Again, majority 246(80.4%) did not also know that cervical dilatation is charted every 4 h (Table 2).

Barriers to the use of the partograph

Majority (52.3%) indicated that inadequate training was the major factor militating against optimal utilization of the partograph (Figure 1).

Table 1. Participants' factors with the use of partograph (N = 306).

Variable	Frequency (%)
General knowledge about function and use partograph	
Good knowledge	264(86.3%)
Poor knowledge	42(13.7%)
Level of confidence in the use of partograph	
Confident	135(44.1%)
Not confident	171(55.9%)
Desire for training in partograph use	
Yes	254(83.0%)
No	52(17.0%)

Source: Author

Table 2. Respondents' detailed knowledge of the partograph (N=306).

Variable	Frequency (%)
First place where use of the partograph was taught	
In midwifery training school	169 (55.2%)
In a health facility during service delivery	73 (23.9%)
Never received training	64 (20.9%)
Knowing the meaning of the partograph	
Correct response	269 (87.9%)
Incorrect response	37 (12.1%)
Information is entered into the partograph upon diagnosis of labour	
Yes	208 (68.0%)
No	98 (32.0%)
In normal progress of labour, graph/plot should fall on the left of the alert line	
Yes	87 (28.4%)
No	219 (71.6%)
During labour, 3 contractions in 10 min is normal	
Yes	207 (67.6%)
No	99 (32.4%)
Minimum duration of a strong contraction is 40 s	
Yes	191 (62.4%)
No	115 (37.6%)
You require 10 min to effectively assess adequacy of contractions	
Yes	172 (56.2%)
No	134 (43.8%)
Cervical dilatation is charted every 4 hours	
Yes	60 (19.6%)
No	246 (80.4%)
Progress of labour is assessed by the degree of cervical dilatation and descent of the presenting part	
Yes	246 (80.4%)
No	60 (19.6%)
Labour is prolonged when it last more than 12 hours	
Yes	201 (65.7%)
No	105 (34.3%)

Source: Author

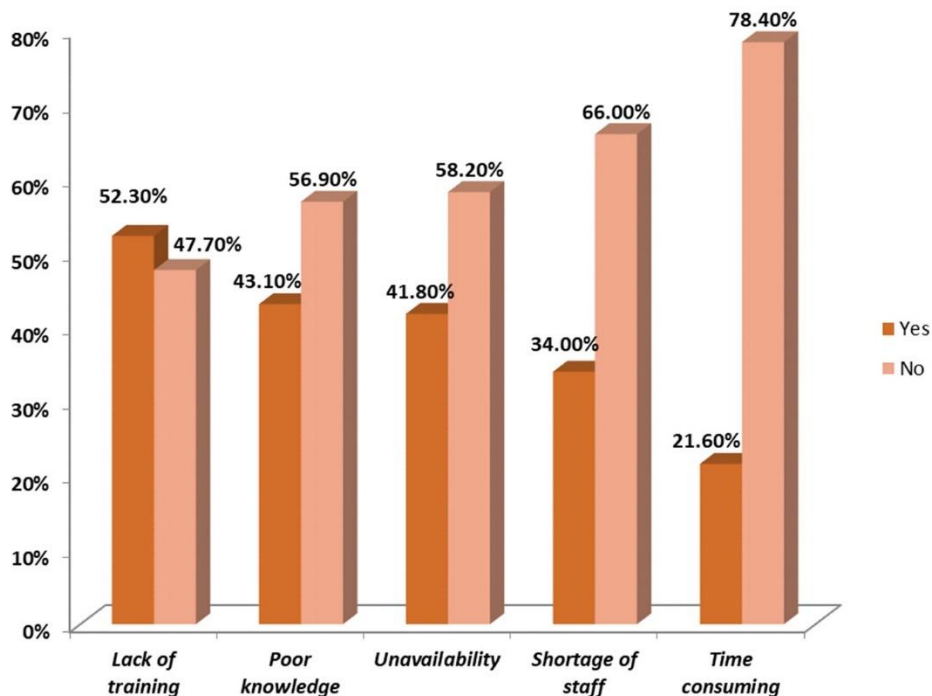


Figure 1. Barriers to the use of the partograph. N = 306.
Source: Author

Table 3. Key Informants’ position about factors that hinder the use of partograph (N=306).

Parameter	Primary care level	Secondary care level	Tertiary care level
Shortage of staff	++	+	++
Late presentation of clients to the health facility during labour	++	+++	--
Lack of training	++++	+	+

++++ = Opinion expressed by all, +++ = Opinion expressed by most people, ++ = Opinion expressed by about half of informant, + = Opinion expressed by few informants, --- = Opinion expressed by no informant.
Source: Author

Key informants’ position about factors that hinder the use of partograph

Lack of training on the use of partograph was identified at the primary level as a major hindrance to optimal utilization of the partograph (Table 3).

Relationship between perception and utilization of the partograph

Around 97 (46%) of respondents who thought that non-use of the partograph contributes to substandard care significantly utilize the partograph more than those 23 (23.7%) who did not reason that way, and the difference was statistically significant (FET 14.322, p<0.0001). Those 103 (48.4%) who believed that non-availability is a problem utilize the partograph more than those 17

(18.3%) who did not believe that way, and there was a statistically significant difference (X^2 24.568, p<0.0001). Participants 116 (44.8%) who thought that the partograph is of value in detection of abnormal progress of labour utilize the partograph more than subjects 4 (8.5%) who thought otherwise. This difference was also statistically significant (FET 26.268, p<0.0001). Also, use of the partograph was also better among participants 100 (44.1%) who felt that managerial guidelines/protocols will enhance the use of the partograph compared with those 20 (25.3%) who did not reason that way. This was also statistically significant (X^2 24.568, p<0.0001) (Table 4).

Predictors of partograph utilization

The determinants of partograph utilization were cadre of OCPs, level of practice, availability of the partograph and

Table 4. Relationship between perception and utilization of the partograph.

Variable	Partograph use			Statistics	p-value
	Yes(n=120)	No (n=186)	Total (N=306)		
Thinking that nonuse of the partograph contributes to substandard care					
Yes	97(46.4%)	112(53.6%)	209 (100%)	FET 14.322	0.0001*
No	23(23.7%)	74(76.3%)	97(100%)		
Thinking that non-availability is a problem					
Yes	103(48.4%)	110(51.6%)	213(100%)	X ² 24.568	0.0001*
No	17(18.3%)	76(81.7%)	93(100%)		
Thinking that the partograph is of value in detection of abnormal progress of labour					
Yes	116(44.8%)	143(55.2%)	259(100%)	FET 26.268	0.0001*
No	4(8.5%)	43(91.5%)	47(100%)		
Thinking that managerial guidelines/protocols will enhance the use of the partograph					
Yes	100(44.1%)	127(55.9%)	227(100%)	X ² 8.631	0.003*
No	20(25.3%)	59(74.7%)	79(100%)		

* Significant value, (X²) - Pearson Chi-square, FET - Fisher's Exact test.

Source: Author

perception about the use of the partograph. Age group and overall knowledge of the partograph lost their significance on bivariate logistic regression model. Nurse and Midwife (OR: 0.062, 95% CI: 0.017 to 0.226, P value: 0.000) were significantly more likely to use the partograph than Nurse aide/JCHEW (OR: 0.163, 95% CI: 0.035 to 0.757, p-value: 0.021) and the Doctors (p-value: 0.000). Participants in the tertiary level of care (OR: 4.057, 95% CI: 1.131 to 14.553, p-value: 0.032) were 4 times significantly more likely to use the partograph compared to those at the secondary level of care (OR: 3.929, 95% CI: 1.003 to 15.386, p value: 0.049) and those at the primary level of care. Details are shown in Table 5.

Availability of the partograph was 19 times significantly related to rate of utilization (OR: 18.841, 95% CI: 7.682 to 46.210, p-value: 0.000). Positive perception such as thinking that non-availability of the partograph is a problem (OR: 2.631, 95% CI: 1.322 to 5.233, p-value: 0.006) was 3 times significantly more likely associated with optimal utilization of the partograph (Table 5).

DISCUSSION

In Nigeria, and many other resource constrained countries of the world, Obstetric Care Providers (OCPs) constitute the majority (80%) of those who undertake delivery services (Opiah et al., 2016). Evidence have shown that if partograph is optimally utilized by this group

in the Low-and-Middle Income Countries (LMIC) of the world, this instrument remain an essential tool in maternity centers for the prevention of prolonged and obstructed labor as well as maternal and neonatal morbidity and mortality (Sama et al., 2017; SOGON, 2010).

In this study, respondents with good knowledge of the partograph (86.3%) were more than those with poor knowledge of the partograph (13%). But surprisingly, a large proportion of the respondents (71.6%) did not know that in normal labor, the graph (plot) of the partograph should fall to the left of the alert line, also 84.4% of the respondents did not know that cervical dilatation is charted every 4 h. These findings are altogether comparable to an Ethiopian study (Abebe et al., 2013), where it was found that although the majority (99%) of participants knew what the partograph is and believed utilization of the partograph would reduce maternal and newborn deaths. However, their knowledge about some components of the partograph was very poor (26.6%). Use of the partograph needs complete knowledge on the functions of the component parts of the partograph and how to identify abnormalities of labor, so respondents who had fair knowledge mean they do not have adequate or sufficient knowledge to use it. Training on proper use of the partograph may be effective in reducing perinatal death rates particularly in resourced-constrained countries.

In this study, 83% of the study participants indicated desire for training in the use of the partograph. This

Table 5. Logistic regression model showing predictors of partograph utilization.

Variable	Odds ratio	95% Confidence interval		p-value
		Lower	Upper	
Age group				
20-29				0.251
30-39	1.849	0.875	3.908	0.108
40-49	1.677	0.648	4.338	0.287
>50	2.941	0.902	9.588	0.074
Cadre of OCPs				
Doctors				0.081
Nurse/Midwife	0.062	0.017	0.226	0.000*
CHO/CHEW	0.250	0.056	1.120	0.070
Nurse aide/JCHEW	0.163	0.035	0.757	0.021
Level of practice				
Primary				0.092
Secondary	3.929	1.003	15.386	0.049
Tertiary	4.057	1.131	14.553	0.032*
Overall knowledge				
Availability	2.646	0.776	9.027	0.120
	18.841	7.682	46.210	0.000*
Perception				
Thinking that nonuse of the partograph contributes to substandard care	1.223	0.658	2.271	0.525
Thinking that non-availability is a problem	2.631	1.322	5.233	0.006*
Thinking that the partograph is of value in detection of abnormal progress of labor	5.328	1.757	16.164	0.013
Thinking that managerial guidelines/protocols will enhance the use of the partograph	1.040	0.552	1.959	0.905

* = Statistical significance at 95% CI and $p < 0.05$, OR = Odds ratio.
Source: Author

observation points to the need that, OCPs should get periodic on-the-job refresher trainings on partography. Some authors stated that lack of training made the care provider not to know the benefits of using the partograph, and consequently lose interest on its use (Zelellw and Tegegne, 2018).

Majority 171 (55.9%) of the study participants were not confident in the use of the partograph. A study in East Gojjam Zone in the Northwest Ethiopia also reported lack of confidence in the use of the partograph as a hindrance to optimal utilization of the partograph (Zelellw and Tegegne, 2018). Studies have shown that obstetric care providers who received on the job-training on partograph were about three (3) times more confident to utilize the partograph than those who had not received on-job training (Yisma et al., 2013; Abebe et al., 2013; Fawole and Fadare, 2007).

Respondents (52.3%) in this study identified lack of training as the only factor hindering the use of the partograph. Qualitative assessment (Key Informants Interview), done in this study also identify lack of training as a factor hindering the use of the partograph.

Additionally, the qualitative assessment also identified shortage of staff and late presentation of clients to the health facility during labor. The findings in this study is consistent with the observation of Zelellw and Tegegne (2018) who identified lack of training and shortage of staff as constrains leading to inability to use the partograph (Zelellw and Tegegne, 2018). Another study also reported that, utilization of the partograph was significantly related to staff strength (Opiah et al., 2016). In the present study, number of staff per shift was estimated at 1 to 2, 2 and 4 in primary, secondary and tertiary levels of care respectively. This is grossly inadequate considering WHO recommendation of 1:2 patients to a nurse ration (WHO, UNICEF, UNFPA, WORLD BANK GROUP, UNPD, 2015). It is probably as a result of staff shortages that some midwives perceive the use of the partograph as a waste of valuable time. These observations point to the fact that OCPs, need periodic on-job and in-service trainings, supportive supervision and employment of adequate staff. Women coming for antenatal clinic care (ANC) should be educated on timely presentation for labour management.

This study also found statistically significant relationships between partograph utilization and perception about the use of the partograph. Respondents with positive perception about the use of the partograph actually utilized the partograph more than those with negative perception. A study in Central Ethiopia reported that partograph utilization was significantly higher among obstetric care providers who had a favorable perception as compared to those who had an unfavorable or negative perception. The researchers alluded to the fact that, having a positive perception towards partograph utilization might come after having robust knowledge about the partograph (Wakgari et al., 2015). A study in Northwest Ethiopia also reported statistically significant association between respondents' perception and utilization of the partograph within the study setting (Zelellw et al., 2018). At variant to the above submissions, a study conducted in Shewa Zone of Ethiopia reported that most obstetric care providers believed that partograph chart misleads decision of obstetric care givers as it puts a laboring woman's status at alert line while the woman's and the fetal condition is stable (Willi and Molla, 2017). Another study view completion of the partograph as complex and time-consuming venture rather than assisting good practice (Nwaneri et al., 2017). The negative perception towards the use of the partograph may perhaps be due to poor straining on the use of the partograph, low knowledge about gainful use of the partograph and shortage of staff.

In this study, Nurse and Midwife (OR: 0.062, 95% CI: 0.017 to 0.226, $P=0.000$) were significantly more likely to use the partograph than Nurse aide/JCHEW (OR: 0.163, 95% CI: 0.035-0.757, $p=0.021$), CHO/CHEW (OR: 0.250, 95% CI: 0.056-1.120, $P=0.000$) and the doctors. A study in Central Ethiopia, reported that, "being a midwife by profession was significantly associated with utilization of the partograph during labor" (Wakgari et al., 2015). Many others have reasoned that midwives were more likely to have good knowledge of the components of the partograph than other cadre of healthcare workers (Opiah et al., 2016; Oladapo et al., 2006; Fawole et al., 2008; Hagos et al., 2020). The explanation could be that, midwives are frequently assigned to delivery units where they use the partograph daily, they have better chance of getting in-service obstetric training on partograph use and as obstetric care is their major subject in the pre-service midwifery education, they might have better understanding than other study participants. Technically speaking, the number of doctors (3.9%) in this study was very negligible, compared to nurse/midwives (60.5%). As such, comparing nurse/midwife with doctors may give spurious or misleading impression that nurse/midwives understand and utilize the partograph more than the doctors. The interpretation of this particular finding should be done with caution.

However, more studies need to be done in this regard. This study also showed that participants in the tertiary

level of care (OR: 4.057, 95% CI: 1.131 to 14.553, $p=0.032$) and to some extent, the secondary level of care (OR: 3.929, 95% CI: 1.003-15.386, $p=0.049$) were significantly more likely to use the partograph compared to those at the primary care level.

A study in Southwestern Nigeria also confirmed that partograph was mainly used at the tertiary level of care when compared to secondary and primary (Fawole et al., 2010). Audit of partograph use in Nigeria Hospitals showed that this tool is not uniformly utilized in setting where it is most needed eg the peripheral health and maternity centers, secondary health facilities and private health institutions, where most skilled birth attendant are lacking (Fawole and Fadare, 2007). A study in Addis Ababa found that the utilization of the partograph was significantly higher among OCPs working in Health Centres (67.9%) compared to those working in the Hospitals (34.4%) (Yisma et al., 2013). This may be due to mandatory policy for the Health Centers on the use of the partograph regularly to identify abnormal labor patterns early. Abebe et al. in an Ethiopian study found no statistical significant difference between the type of facility (whether hospital or health center) and the use of the partograph.

This study found that availability of the partograph was 19 times significantly more likely related to rate of utilization (OR: 18.841, 95% CI: 7.682-46.210, $p=0.000$). Numerous scientists have cited unavailability as a strong reason for sub-optimal utilization of the partograph (Nwaneri et al., 2017).

Maternal mortality is a serious public health problem in Nigeria. It is therefore imperative that greater attention should be given to the use of this simple tool in labor monitoring according to WHO recommendation and in line with Sustainable Development Goal #3 (SDG/UNDP, 2016). Policy must be put in place to enforce routine and mandatory use of the partograph in all delivery units within the study area and other resource-constrained regions of the world. Availability of the partograph should not be an issue even in the resource-constrained regions of the world. The partograph is design on only one page of paper.

It is an inexpensive resource as it can easily be photocopied or reprinted and made available especially in the Primary Care delivery Centres.

Conclusion

This study highlights that majority of the participants had desire for training on the use of the partograph. They also have positive perception about the partograph as well as good general knowledge of the partograph. These participants lacked in-depth knowledge of the partograph as well as confidence in the use of the partograph. The sad outcome is that this inexpensive obstetric tool is not available and optimally utilized in the setting where it is most needed.

Recommendation

The authors recommend provision of partograph in all delivery units, supportive supervision and mandatory policy on the use of the partograph especially at the primary healthcare level. Training should focus more on the primary healthcare workers as it can improve status of existing knowledge, build confidence and encourage optimal utilization of the partograph.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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