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Partograph Utilization at Three Levels of Health Care Delivery Services in Ile-Ife, Nigeria

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Abstract

Background: The partograph is considered a valuable tool in the improvement of maternity care that allows for prompt identification of problems of labour but, disparities in its usage across health care facilities have been documented.

Objectives: The study was designed to identify the extent of use of partograph by obstetric staff, assess for correct partograph charting on case files of delivered mothers, and identify factors influencing the use of partograph

Methods: A retrospective design was adopted. Thirty-two health personnel comprising 22 midwives, 5 maternity unit leaders, and 5 community health extension workers (CHEWs) participated in the study, while 304 case files were examined for appropriate partograph charting. Data was also collected using questionnaire, interview schedule, and observation checklist. Data analysis was by descriptive and inferential statistical methods.

Results: Findings showed that only 30.9% and 53.9% of the 304 case files assessed had correct graphical charting of moulding and blood pressure respectively. Interview results showed that partograph charts were not being used at the primary and secondary health care maternity units. Absence of partograph charts (14%), and inadequate knowledge of obstetric staff (14%) were reported as factors militating against the use of the partograph.

Conclusion: The use of the partograph by obstetric staff is still at a low ebb in primary, secondary and tertiary health care institutions.

Key words: Attitude, Knowledge, Awareness, Partograph charting.

Background

The outcome of any pregnancy is dependent largely, among other causes, on intrapartum care. Poor intrapartum care remains the major cause of maternal morbidity and mortality worldwide (Fawole, et al. 2008). Every year, 536,000 women and girls die as a result of complications during pregnancy, childbirth or puerperium and this amount to one death of every woman, every minute of every day (United Nations, 2009). Dzadeyson (2007) reported that more than half of women who die every year from pregnancy-related causes are in the African region, which constitutes only 12% of the world's population and 17% of its births. It has also been estimated that 287,000 maternal deaths occurred worldwide in the year 2010 and 85% of this estimate occurred in Sub-Saharan Africa and Southern Asia (WHO, UNICEF, UNFPA and the World Bank, 2012). The 2008 Nigeria Demographic and Health Survey estimated the overall maternal mortality ratio (MMR) at 545:100,000 live births with wide variation across the geographical zones in the country (Bologoi, 2011).

Since 1987, global efforts have been focused on reducing maternal and neonatal mortality and morbidity associated with intrapartum care most especially in the developing countries. Many programs and tools have been developed to monitor and manage women in labour, one of which is the use of the partograph that was developed by Philpott in 1971 and was later modified by the World Health Organization (Mathibe-Neke et al, 2013). The partograph is considered a valuable tool in the improvement of maternity care that allows trained health personnel to record intrapartum details graphically such that, problems of labour are identified early for prompt intervention (World Health Organization, 2003). Studies have shown that, using the partograph can be highly effective in reducing complications from prolonged labour for the mother (postpartum hemorrhage, sepsis, uterine rupture and its sequelae) and for the newborn (death, asphyxia, infections, etc.) (Fawole et al, 2010; Oladapo et al, 2006). Implementation of the partograph also implies a functioning referral system with essential obstetric functions in place which will improve the efficiency and effectiveness of maternity services. Aside from the fact that the partograph is an

effective tool for monitoring labour, Walsh (2004) have documented that it could constitute a legal document and also an avenue for identifying accountability in midwifery practice. As a result of the belief that partograph usage was applicable in both the developed and developing settings to detect abnormal labour and monitor labour to a successful second stage, its use was then introduced worldwide by the World Health Organization (Lavender, 2006).

Despite the long introduction of the partograph to the health care industry and wide documentation of its effectiveness (Fahdhy and Chongsuvivatwong, 2005; Fawole and Fadare, 2008), some researchers in Nigeria have documented disparities in usage across health care facilities in Nigeria. In a study conducted by Opiah (2001) in two Nigerian tertiary health care institutions, findings revealed that majority of the midwives (84%) in the study had good knowledge of the partograph but an average of 35.1% partograph charts were properly filled. According to Opiah, some hindering factors to effective utilization of Partograph included non-availability of partograph charts (30.3%), and shortage of staff (19.4%). The studies of Fawole, *et al.*, 2010 and Oladapo, *et.al*, 2006 among different categories of maternity care providers across three levels of health care revealed poor knowledge and poor usage of the partograph. They also reported that prior training significantly influenced knowledge of the partograph ($\chi^2 = 49.2$; $p < 0.05$). Fawole, *et al.* 2010 and Oladapo, *et.a.*, 2006 further reported that partograph was used frequently by health workers in tertiary level compared with health workers from primary and secondary levels of care. In addition, the studies of Fawole & Fadare, 2007, 2008 showed that only 33.7% of 1, 319 deliveries had partographic monitoring, and that the use of the partograph significantly influenced decision-making, and is associated with positive labour outcome among low and high-risk parturient.

Majority of the studies on partograph in Nigeria which have only made use of quantitative methods have identified different professionals that are involved in the management of women in labour. The identified obstetric workers are; auxiliary nurses, auxiliary midwives, community health extension workers (CHEWS), midwives, nurses/midwives, and medical doctors (Fawole et

al, 2010; Oladapo et al, 2006; Fawole and Fadare, 2008; Opiah, 2001). However, the extent to which midwives and CHEWS make use of partograph is still vague in literatures. Also, attitude of midwives as a factor for effective or non-utilization of the partograph is scarcely addressed in literatures. Therefore, it is essential to conduct a study that will explore the use of the partograph using quantitative and qualitative methods across primary, secondary and tertiary health care facilities.

This study was then designed firstly, to identify the extent of use of partograph by obstetric staff in maternity units of primary, secondary and tertiary health care facilities.

Secondly, to observe for correct partograph charting on case files of delivered mothers at the three levels of health care, and thirdly, to identify the factors influencing the use of partograph in maternity units of primary, secondary and tertiary health care facilities.

Methods

Design and Setting

This study employed retrospective study design and was conducted in Ile-Ife, Osun State, Nigeria. Ile-Ife is a university town that is popularly known for presence of various health care experts, who work in the teaching hospital that is situated in the town.

The teaching hospital in the town greatly positions other health facilities within Ile-Ife at a greater advantage of being able to recruit qualified health personnel to work in their facilities. Usually, clients are drawn from nearby villages, towns and cities to Ile-Ife for health care services. With this background it is assumed that quality maternal care using partograph for monitoring progress of labour will be highly encouraged in many health care facilities in Ile-Ife.

The study was conducted in 5 maternity units comprising a tertiary facility, a secondary facility and three primary health care facilities. Purposive sampling technique was used to select the maternity units for this study. The criteria for selection were that the facilities were government owned, and were used as training centres for nursing and medical students.

Sample and sampling

There were two categories of samples for this study. The first category was all case files of mothers who delivered through spontaneous vaginal delivery (SVD) between July 2007 and June 2008. A total of 304 case files out of 315 from the tertiary facility were sampled using purposive sampling methods. The selection of these case files was based on the criterion that the partograph charts in the mothers' case files were used to monitor the progress of labour for the mothers. Only case files from tertiary facilities were sampled because, it was discovered that partograph was not being used at the primary and secondary facilities as at the time of study.

The second category was 22 midwives from a target population of 32, 5 CHEWs from a target population of 18, and 5 ward leaders from 5 maternity units under study. The whole of the 32 midwives were initially planned to participate in the study; but as a result of non-availability of some of them as at the time of the study, convenient sampling method was then used to select the 22 midwives.

The ward leader in each health facility nominated a senior CHEW to be interviewed for the study thereby making the total number of the CHEWS who participated in the study to be five.

Instruments

Qualitative and quantitative data were collected with the use of three instruments. The instruments were semi-structured questionnaire, observation check-list, and Key Informant Interview Guide. The questionnaire was used to assess midwives' knowledge and their attitude to the use of partograph, and factors militating against its effectiveness. The interview guide was used to collect data from the ward leaders and the CHEWS on the use of the partograph in their units. The observation check-list was used to assess the case files of delivered mothers for correct partograph charting. Correct partograph charting was determined by the use of internationally approved standard signs in charting the variables on the partograph (WHO, 1994).

Face and content validity of the instruments were confirmed by three nursing scholars who had been involved in the training of midwives for not less

than ten years while test-retest reliability method of the questionnaire at two-week interval was carried out giving a correlation of 0.6

Ethics and Data Collection Process

Permission to collect data was sought from authorities of the various institutions involved in the study and informed consent was received from the individual participants. Data collection was for a period of two weeks. The first week was used to observe the 304 case files for correct partographic charting. The second week was used to collect data using the questionnaires and the interview guide.

Data Analysis

Quantitative data collected were analyzed descriptively with the aid of Statistical Package for Social Sciences (SPSS) version 16. Seven questions were used to assess knowledge and each correct response was awarded 1 point while 0 point was awarded for incorrect response giving a total obtainable score of 7. The five-point Likert scale of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree for assessing attitude of midwives were scored as 4, 3, 0, 2, 1 respectively for positive responses. These scores were reversed for negative responses and a total obtainable score of 24 was recorded for attitude. The median scores of 3 and 20 were used as the cut point for knowledge and attitude respectively. Hence, those who scored between 0 (minimum score) and 3 were termed to have poor knowledge while those who scored between 4 and 6 (maximum score) were termed to have good knowledge. For the attitude, those who scored between 7 (minimum score) and 20 (maximum score) were termed to have negative attitude while those who scored between 21 and 24 (maximum score) were termed to have positive attitude. Fisher's Exact test was carried out to determine the significant difference between designation and knowledge, and; designation and attitude at a significant level of $p \leq 0.05$. Content analysis was carried out for qualitative data, and reports were presented in narratives.

Results

Demographics of the Midwives

Fifty-nine percent of the midwives were young adults and were spread across the various cadres of

nursing hierarchy (Table 1). Their mean age was 38.5 ± 11.4 years with minimum and maximum ages of 25 and 57 years respectively. Assessing their sources of information on the partograph, a higher percentage (40.9%) got information from classroom teaching and seminars while very few (9.1%) got information from maternity wards. Other sources of information are listed in Table 2. Exploring frequency of use of partograph, 54.5% reported they always used the partograph while 27.3% reported they never used it (Table 2).

Partograph Usage

Qualitative data from the interview of key informants gave insight into the extent of use of partograph in the selected health care facilities most especially at the primary and secondary health care facility. Reports of the interview showed that partograph was only being used at the tertiary facilities. The ward leaders in both the secondary and the primary health facilities reported that they were not using partograph, and that some of them that had been trained on the use of partograph had forgotten the charting method. The CHEWs claimed they were usually those that monitor women in labour and reported back to midwives, but they never received training on the use of the partograph.

The Chief Medical Officer who was in charge of a maternity unit responded to the question on the use of the partograph in his unit. This is an excerpt from his statement.

Sorry, you cannot get any information from us because we don't practice it here. The last time I used it was when I was at ---- (*name of institution withheld*) before coming here.

This statement was corroborated by a head midwife:

It's being long we used it, may be you need to come and teach us before we can answer your questions

At one of the primary health care centres, the story was a bit different because, the ward leader reported they were taught the use of the partograph in the past but the charts were not made available for use. According to her:

We are not using it again, it was used about five years ago when a doctor from the

teaching hospital was carrying out a research and he supplied the charts, but immediately after the study, nobody supplied and the government refused to supply us. Even, we nurses are not many, it is only I and my assistant with many community health extension workers (CHEWs) that are working here, and these CHEWs don't have the knowledge but we nurses do, but the charts are not available.

In the response of a ward leader, she responded that they were going to the local government office to request for partograph charts in the past but after several visits without any result, they stopped. According to her:

We don't use partograph here because the government did not provide them. In fact, there was a time we were going to local government requesting for it but after several visits, there was no result and up till now nothing has been done. Most of us that went for the training that time have forgotten some of these things about the partograph

However, in one of the PHC Centres, partograph charts were found in all case files of delivered mothers but were not charted. The ward leader reported that in spite of the presence of the charts in antenatal case files, the charts were not being used to monitor progress of labour. The ward leader reported thus:

We have not been using partograph here except for the last 2 weeks when a lecture was organized and the staff that were available attended the lecture. We have just started using the charts, and there is nothing you can get from the case files, although we have it on the case file of every patient.

The report of the ward leader of the maternity unit of the tertiary facility confirmed that partograph was being used in the facility.

We cannot do without the partograph in this unit because, we are used to it,
It is part of us.

However, all the CHEWs that were interviewed reported that CHEWs were those that usually cover shift duties and usually managed women in labour

even in the absence of the midwives yet, they never had training on the use of the partograph.

We don't have the knowledge, they don't teach us. The nurses normally go for workshops and seminars but they will not teach us, we are the one that run shifts and report to them when they come back the next day. I don't know anything about it, may be when you want to organize workshop it should be here in this unit so that we can be part of it.

Partograph charting

Findings from the case files assessed showed that variables indicating progress of labour (cervical dilatation, descent of the head and contractions) were correctly charted in over 50% of the case files. However, indicators of fetal condition (fetal heart rate, liquor, and moulding) were incorrectly or not charted in over 50% of the case files (table 3).

Factors influencing utilization of the partograph

The factors that were reported by the midwives as militating against effective use of the partograph include; absence of partograph charts in the labour ward (14%), and inadequate knowledge on the part of the midwives (14%), among others (Figure1). As regards the knowledge of the midwives, 72.7% of them had poor knowledge while 27.3% had good knowledge of the partograph. The mean value for their knowledge was 2.4 ± 1.7 (95% CI = 1.7, 3.1). The grouping of the midwives' attitude showed that 54.5% of them had negative attitude while 45.5% had positive attitude to the use of partograph. The mean value for their attitude was found to be 19.7 ± 4.2 (95% CI = 17.8, 21.5). Using the designation of the midwives to categorize their knowledge and attitude, all the Assistant Directors of Nursing services (ADNS) (100%) and 80% Chief Nursing Officers (CNO) had poor knowledge while 66.7% ADNS and 60% CNO had positive attitude to the use of partograph. The breakdown of their knowledge and attitude scores according to their designation is presented in Figure 2 and 3 respectively. No significant difference was found between: designation and attitude (Fisher's Exact probability = 0.23); and designation and knowledge (Fisher's Exact probability = 1.0)

Table 1: Professional ranking and age characteristics of the midwives

Designation	Age group	
	f (%)	f(%)
	20-40years	41-60 years
NOII	6(27.3)	--
NOI	4(18.2)	--
SNO	2(9.1)	1(4.5)
PNO	--	1(4.5)
CNO	1(4.5)	4(18.2)
ADNS	1(4.5)	2(9.1)
TOTAL	14(63.6)	8(36.4)

NOII – Nursing Officer II; NOI – Nursing Officer I; SNO – Senior Nursing Officer;
 PNO- Principal Nursing Officer; CNO – Chief Nursing Officer;
 ADNS – Assistant Director of Nursing Services

Table 2: Midwives' awareness of partograph and their frequency of utilization

Source of information	Awareness of Partograph		Total
	Yes	No	
	f(%)	f(%)	
Classroom	9 (40.9)	--	9 (40.9)
Seminar/symposium	9 (40.9)	--	9 (40/9)
Textbooks	1(9.1)	--	1(9.1)
On the ward	2(9.1)	--	2(9.1)
No response	--	1(4.5)	1(4.5)
Total	21(95.5)	1(4.5)	22(100)
Frequency of utilization	Utilization of partograph		Total
	Yes	no	
	f(%)	f(%)	
Always	12 (54.5)	--	12 (54.5)
Sometimes	4 (18.2)	--	4(18.2)
Never	--	6(27.3)	6(27.3)
Total	16(72.7)	6(27.3)	22(100)

Table 3: Parameters that were documented on the partograph charts of case files of delivered mothers (N = 304)

Variables	Correct Graphical Charting	Incorrect /No graphical Charting
	f (%)	f (%)
Fetal heart rate	133 (43.8)	171(56.3)
Liquor	127(41.8)	177 (58.2)
Moulding	94 (30.9)	212 (69.7)
Cervical dilatation	174 (57.3)	130 (42.8)
Descent of the head	154 (50.7)	150 (49.3)
Contractions	170 (55.9)	134 (44.1)
Oxytocin drops	80 (26.3)	224 (73.7)
Drug given	135 (44.4)	169 (55.6)
Pulse	160 (52.6)	144 (47.4)
Blood pressure	164(53.9)	140 (46.1)
Temperature	133 (43.8)	171 (56.3)
Urine (protein)	77 (25.3)	227 (74.7)
Urine (acetone)	43 (14.1)	261 (85.9)
Urine (volume)	57 (18.8)	247 (81.3)

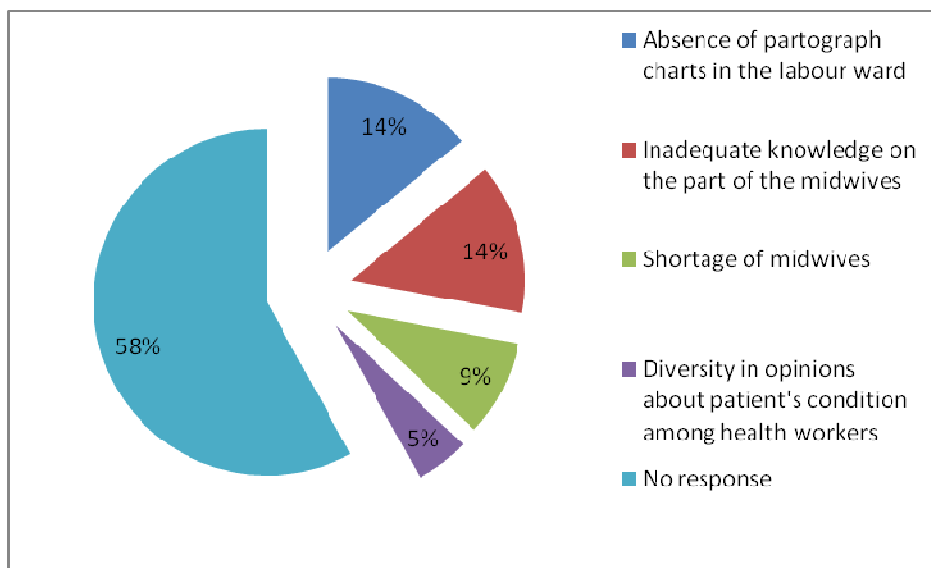


Figure 1: Factors militating against utilization of partograph

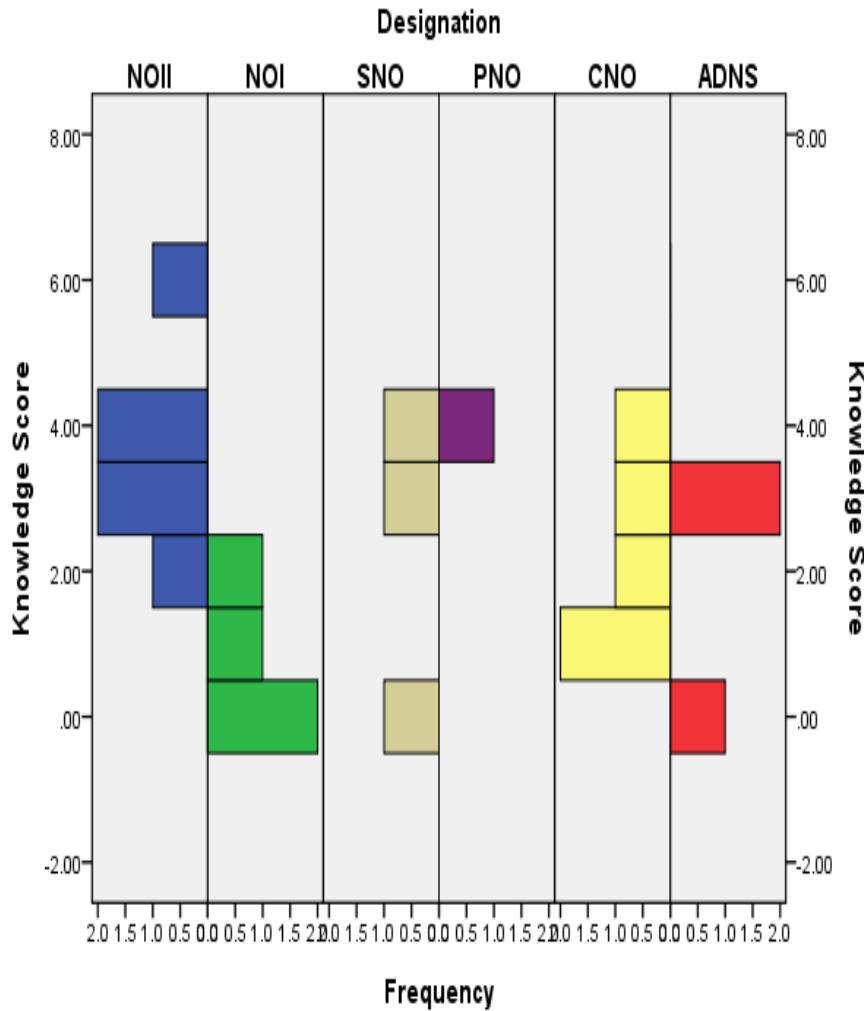


Figure 2: Knowledge scores of the midwives in relation to their designation.

KEY: NOII- Nursing Officer II, NOI- Nursing Officer I, SNO- Senior Nursing Officer, PNO- Principal Nursing Officer, CNO- Chief Nursing Officer, ADNS- Assistant Director of Nursing Services

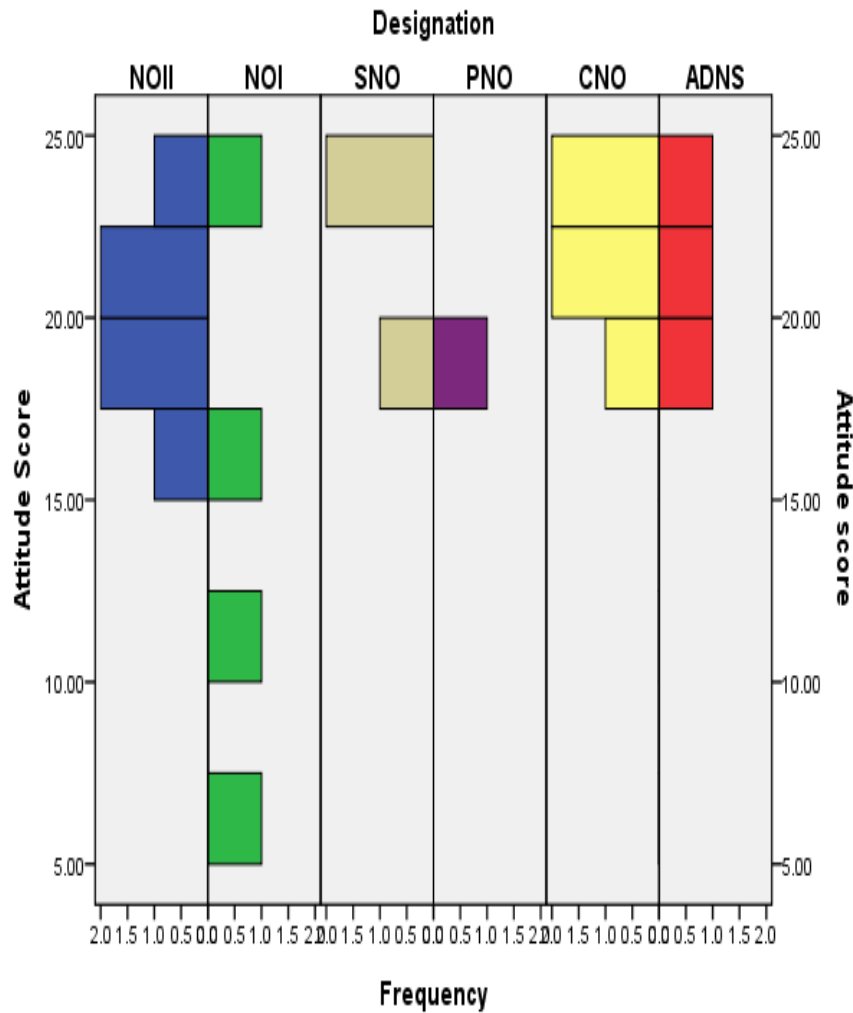


Figure 2: Attitudinal scores of the midwives in relation to their designation

KEY: NOII- Nursing Officer II, NOI- Nursing Officer I, SNO- Senior Nursing Officer, PNO- Principal Nursing Officer, CNO- Chief Nursing Officer, ADNS- Assistant Director of Nursing Services

The mean value for their knowledge was 2.4 ± 1.7 (95% CI = 1.7, 3.1). The grouping of the midwives' attitude showed that 54.5% of them had negative attitude while 45.5% had positive attitude to the use of partograph. The mean value for their attitude was found to be 19.7 ± 4.2 (95% CI = 17.8, 21.5). Using the designation of the midwives to categorize their knowledge and attitude, all the Assistant Directors of Nursing services (ADNS) (100%) and 80% Chief Nursing Officers (CNO) had poor knowledge while 66.7% ADNS and 60% CNO had positive attitude to the use of partograph. The breakdown of their knowledge and attitude scores according to their designation is presented in Figure 2 and 3 respectively. No significant difference was found between: designation and attitude (Fisher's Exact probability = 0.23); and designation and knowledge (Fisher's Exact probability = 1.0)

Discussion

The clarion call for reduction of maternal and neonatal mortality has been on for decades and in the recent time, it has become part of the components of the Millennium Development Goals (United Nations, 2009). Effective use of the partograph according to World Health Organization (2003)⁶, has been noted to effectively reduce maternal morbidity and mortality. Obstetric professionals all over the world have been encouraged to take the responsibility of ensuring effective use of the partograph to combat the menace of maternal and neonatal morbidity and mortality.

The source of information of partograph as revealed in this study showed that this tool is hardly discussed on the ward as only 9.1 % of the midwives heard about it from the ward. It is expected that more information about the partograph and its use should occur at the maternity unit as a product of mentoring and supervision. The WHO (1994) also indicated the need for mentoring and supervision for effective utilization of the partograph. The 54.5% of the midwives who responded that they always used the partograph to monitor progress of labour were likely to be those in the tertiary health facility and this supported the findings of Opiah (2001) that

midwives in tertiary institutions routinely use the partograph.

This study provided additional evidence that partograph charts are not being used or used effectively to monitor progress of labour as required in health care settings in Nigeria. Observation of the case files in this study corroborated the report of Opiah (2001) that partograph charts are not properly filled by midwives in tertiary health care facilities and this confirms the many studies that reported poor utilization of the partograph in various maternity units (Fawole et al, 2010; Oladapo et al, 2006; Fawole and Fadare, 2008; Opiah, 2001). In addition, the interview reports of the PHC unit leaders have strong support for these findings and it is an evidence that there are still many grounds to cover by every stakeholder interested in the reduction of maternal and neonatal mortality, and morbidity with respect to partograph usage.

The reports of the CHEWs that were interviewed in this study supported the findings of Oladapo, *et al.* 2006 who reported that these sets of health workers are not knowledgeable about the use of partograph. In many PHC settings in Nigeria, CHEWS perform in the capacity of midwives without adequate preparation and competence. From observation, there are few midwives working at the study sites and this poses major challenge to achieving reduction in maternal and neonatal morbidity and mortality. Beyond using an indicator, (in this study, the partograph) or mortality rate as indicator for determining the health status of mothers and neonates, there is a major challenge of not determining the degree of morbidity and mortality that may also accompany the use of care givers not appropriately trained for quality care delivery. Reliance on use of untrained service providers in maternity care especially at the primary health care level underscores the consistent high maternal mortality resulting from pregnancy and childbirth still prevalent in the Third World countries.

The report of Fawole, *et al.* 2008 that partograph use was recorded frequently by obstetric staff in tertiary level compared with obstetric staff in primary and secondary levels of care, supports the findings from this study. However, in Addis

Ababa, Ethiopia, utilization of the partograph was significantly higher among obstetric care givers working in health centres (67.9%) compared to those working in hospitals (34.4%) (Yisma et al. 2013). The assessment of case files for correct charting of variables on the partograph showed that even at the tertiary level of care, there is still inappropriate use of the partograph (Table 1). The midwives in this unit cannot claim ignorant of the use of the partograph as the interviewed ward leader had reported:

We cannot do without the partograph in this unit because we are used to it, it is part of us.

Inappropriate charting of the partograph by midwives in the tertiary institutions showed that there is need for continuous mobilization and training on the use of the partograph with follow-up supervision and monitoring as suggested by the World Health Organization, 2003.

Poor knowledge, shortage of midwives and lack of partograph charts have been re-occurring in literatures (Abebe, et al, 2013; Yisma, et al, 2013; Mathibe-Neke et al, 2013; Fawole and Fadare, 2008) as factors responsible for ineffective use of the partograph by obstetric staff. These factors have been supported in this study (Figure 1). The poor knowledge of the ADNS and majority of the CNO in this study is an important indicator in the use of the partograph. It is expected that midwives of higher ranks should be in a position to give leadership examples by using the partograph, train younger practitioners and encourage them to appropriately use the partograph. But, with poor knowledge, it becomes difficult for the midwives of higher cadre to perform in the role of training and supervision. The problem of lack of partograph charts in the maternity units can be solved by having the chart on every case file of antenatal clients so that on admission at the labour ward, the chart can readily be used to monitor progress of labour.

Beyond cognition, many studies on the use of partograph in Nigeria did not look at the attitude of obstetric care givers to its use which could also be a factor influencing its effectiveness. Attitude has

been described in literatures to significantly influence behavior (Ward, 1995). The positive attitude of the midwives of higher professional cadres (ADNS and CNO) to the use of the partograph shows that these sets of midwives see the partograph as a useful tool in midwifery practice. It can be readily inferred from this result that if the knowledge of obstetric staff is updated regularly, staff strength is increased, and partograph charts are available then, there will be effective use of the partograph at every level of maternity care. Although, the findings from this study has shown that there is no significant difference between midwife's designation and knowledge, and designation and attitude (Fisher's Exact probability of 0.23 and 1.0 respectively). Nevertheless, these variables can still be viewed independently and testing of these variables can be confirmed in a larger population study.

Non-utilization and inappropriate utilization of the partograph in maternity units to monitor progress of labour has implications for increased maternal and neonatal morbidity and mortality in Nigeria. The settings for this study are used for training of medical and nursing students, and these sets of students might graduate from schools without adequate preparation in recognizing complications of labour using the partograph. Hence, there will be cycle of poor knowledge on the use of the partograph.

This study has been able to confirm some of the findings in literatures that partograph is not being used or used effectively in many obstetric care settings in Nigeria. However, a strong limitation in this study is the small sample size of the obstetric staff. This small sample size also limits the generalization of the findings from this study. Therefore, a large sample size for the CHEWS, midwives and unit leaders is desirable in subsequent study to confirm some of the findings from this study.

Conclusion

The use of the partograph by health workers to monitor women in labour is still at a low ebb in primary, secondary and tertiary health care institutions. In addition, untrained health personnel were involved in the management of women in labour and poor knowledge coupled with lack of

partograph charts hinder its use in some maternity units.

Recommendations

The following recommendations are made from the findings of this study:

- All health care providers involved in obstetric care should be given adequate training to function in this capacity. While midwives have undergone rigorous training, it is still important that updating their knowledge and skills at intervals, and efficient monitoring of practices through quality assurance protocol are necessary for optimal service delivery.
- Unit leaders/hospital administrators have essential roles to play in ensuring that partograph chart is a component of case files of antenatal clients so that obstetric care givers can readily have access to it during intrapartum care.
- Stakeholders in obstetric care must ensure that both primary and secondary health care settings have adequate number of qualified midwives in their maternity units and assisted by CHEWS who are well prepared in the use of partograph to monitor progress of labour.
- Monitoring and supervision of obstetric staff to ensure appropriate use of the partograph should be given utmost priority by every hospital administrator and maternity unit leader.

References

- Abebe, F. Birhanu, D., Awoke, W. and Ejigu, T. (2013) Assessment of Knowledge and Utilization of the Partograph among Health Professionals in Amhara Region, Ethiopia. *Science Journal of Clinical Medicine*, 2 (2), pp. 26-42.
- Bologoi, M. U. (2011). Midwives service scheme: An appraisal. *Peoples Daily*.; Available from <http://www.peoplesdaily-online.com/news/healthy-living/9152-midwives-service-scheme-an-appraisal> (Accessed 21/12/2011)
- Dzadeyson, E. (2007). *Study on maternal mortality and neonatal morbidity in Africa. Rural Integrated Relief Service-Ghana*. Available from http://www.who.int/pmnch/topics/health_systems/rirs_ghana/en/index.html (Accessed 08/12/ 2011)
- Fahdhy, M. Chongsuvivatwong, V. (2005) Evaluation of World Health Organization partograph implementation by midwives for maternity home birth in Medan, Indonesia. *Midwifery*, 21(4), pp301-10
- Fawole, A.O., Adekanle, D.A. and Hunyinbo, K.I . (2010) Utilization of the Partograph in Primary Health Care Facilities in Southwestern Nigeria. *Nigerian Journal of Clinical Practice*, 13(2), pp 200-4.
- Fawole, A. O. and Fadare, O. (2007) Audit of use of the partograph at the University College Hospital, Ibadan. *African Journal of Medicine and Medical Sciences*, 36(3), pp 273-8.
- Fawole, A. O. and Fadare, O. (2008) Influence of parity on the partographic management of labour in a Nigerian tertiary hospital. *Niger Postgrad Med J.*, 15(4), pp 234-7.
- Fawole, A. O., Hunyinbo, K. I. and Adekanle, A. A. (2008) Knowledge and utilization of the partograph among obstetric care givers in South West, Nigeria. *African Journal of Reproductive Health*, 12(1), pp 22-9.
- Lavender, T., Alfirevic, Z. and Walkinshaw S. (2006) Effect of Different Partogram Action Lines on Birth Outcomes: A Randomized Controlled Trial. *Obstetrics and Gynecology*, 108(2), pp 243-469.
- Mathibe-Neke, J. M., Lebeko F. L. and Motupa B. (2013) The partograph: A labour management tool or a midwifery record? *International Journal of Nursing and Midwifery*, 5(8), pp 145-153
- Oladapo, O. T., Daniel, O. J., and Olatunji, A. O. (2006) Knowledge and use of the Partograph among Health Care Personnel at the Peripheral Maternity Centres in Nigeria. *J. Obstet Gynecol*, 26 (6), pp 538-41.
- Opiah, M. M. (2001) Factors Affecting Utilization of the Partograph in Monitoring Labour in Selected Hospitals in Bayelsa State. *African Journal of Primary Health Care and Primary Nursing*. Available from <http://www/phcfm.org.index.php/phcfm/thesis/view/22>.
- United Nations, (2009). The Millennium Development Goals Report. United Nations. New York.2009; Available from http://www.unfpa.org/webdav/site/global/shared/documents/publications/2009/mdg_report_09.pdf (Accessed 06/01/2012)
- Walsh, D. (2004). Care in the First Stage Labour. In: Mayes' Midwifery, eds. Henderson C, MacDonald S, (13th ed), Philadelphia: Elsevier Limited, pp 428-457.
- Ward, C. A. (1995) Attitude towards Rape: Feminist and Social Psychological Perspectives (1st ed). London: Sage Publications. Pp 39-66; 139-153

- World Health Organization, (2003) *Managing Complications in Pregnancy and Childbirth: A Guide for Midwives and Doctors*, WHO/RHR/00.7 Geneva: WHO.
- WHO, UNICEF, UNFPA and the World Bank, (2012) *Trends in Maternal Mortality: 1990 to 2010: Estimates Developed by WHO, UNICEF, UNFPA and the World Bank*. Geneva: World Health Organization; 2012.
- Yisma, E., Dessalegn, B., Astatkie, A. and Fesseha, N (2013) Knowledge and utilization of partograph among obstetric care givers in public health institutions of Addis Ababa, Ethiopia. *BMC Pregnancy and Childbirth*, 13(17).