

Knowledge and Challenges of Partograph Utilisation among Midwives in the Central Region of Ghana

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Abstract

Prolonged labour is one of the leading causes of death among mothers and newborns in the developing countries including Ghana. Delayed labour has the propensity to lead pregnant women experience serious complications such as obstructed labour, maternal dehydration, exhaustion, or rupture of the uterus. To protect women from death as a result of obstructed labour, WHO accepted partograph as means of information about the progress of labour while monitoring condition of the woman as well as the baby during labour. Midwives' religious application of this chart to monitor labour in midwifery practice and care cannot be overemphasized. This study assessed the level of knowledge, perception and challenges of partograph utilization among midwives in the Central Region of Ghana. Five public health facilities within the Cape Coast Metropolis were selected for the study. Cross sectional design was adopted to conveniently collect data from 150 midwives at the labour units in the health facilities. Frequencies and percentages were used to summarize data as well as Chi Square of association was used to describe the association between years of service and partograph utilisation. The findings of the study revealed 78% of midwives in the Cape Coast Metropolis have knowledge on partograph and why it is necessary to use it in the management of labour. With positive attitude of midwives towards partograph, the study revealed 97% utilisation of partograph to monitor mothers in labour in the metropolis. However, the use of the partograph during labour was affected by inadequate supplies of logistics, lack of commitment of midwives, inadequacy of qualified personnel and poor knowledge on partograph graphing. There was significant association between the years of service and utilisation of partograph [X^2 (df = 3) = 46.552, $p = 0.001$] with registered midwives more likely to utilize partograph than principal and enrolled midwives. Metropolitan health directorate should offer occasional orientation for all midwives on new concepts or newer versions of partograph and its use in ensuring its maximum utilisation.

Keywords: Partograph; Knowledge; Challenges Labour Monitoring; Midwives; Utilisation; Ghana

Introduction

Prolonged labour is a leading cause of death among mothers and newborns in the developing countries. It is a significant cause of maternal death in Africa [1]. Prolonged labour may also contribute to maternal infection, hemorrhage and neonatal infection [1]. Obstructed labour has resulted from a disproportion between the fetal presentation and the mother's pelvis. Statistics from WHO show that 8% or 42,000 of all maternal deaths are caused by obstructed labour [1].

Should women lose their lives during child birth? But over half a million woman lose their lives every year due to complications of pregnancy and childbirth. Obstructed labour is one of the five leading causes of maternal death in poor-resource countries. Eight percent of all maternal deaths or approximately 42,000 deaths a year are attributable to prolonged labour [1]. Prolonged or obstructed labour may result in maternal dehydration, ruptured uterus, vesicovaginal fistula and deaths among others. Many of those who survive these stressful moments, suffer long term disabilities, and often become outcast from society, especially with vesicovaginal fistula [1]. In infants, prolonged and obstructed labour may cause aphasia, brain damage, infection and death. Therefore, steps to recognizing prolonged labour are important ways to reduce maternal and perinatal mortality and morbidity worldwide.

Global report on maternal mortality (MM) shows that the rate continues to be a global burden since about 850 women die from pregnancy or childbirth related complications around the world every day particularly sub-Saharan Africa. Sustainable Development Goal (SDG) three has a target to reduce the Global MM Ratio to less than 70% per 100,000 live births between 2015 and 2030 [2]. According to Magon [3] majority of maternal deaths and complications attributable to obstructed and prolonged labour could be prevented by cost-effective and affordable health interventions like the use of partograph.

To address this problem, WHO accepted the partograph, a simple and reliable graph used in recording the progress of labour and monitoring the health of both the mother and the fetus. The partograph serves as the early warning system and assists in early decision-making on interventions in labour. These interventions may range from augmentation of labour or delivery by caesarian section to transfer of woman in labour to a referral center. The use of partograph also increases the quality and regularity of all observations on the woman in labour and her fetus and helps in early recognition of problems with them. The partograph has been used for more than 30 years [1]. It is inexpensive, effective and pragmatic. It can be effectively used in varied settings in developed and developing countries. It is effective in preventing prolonged labour and in improving perinatal outcomes. Floyd [4] is of the opinion that to avoid the risk of complications or maternal death, women should be assisted during delivery by personnel who have received training in normal child-birth and who are able, if needed, to diagnose, treat, and refer complications.

Midwives provide an essential role in ensuring safe maternity care and their presence at a birth is regarded as key to this. However, their skills and abilities are more important than their presence [5]. Global initiatives to strengthen policy intervention for maternal mortality started with the Safe Motherhood Initiative in 1987 by the World Health Organization [6]. The aim was to raise awareness about the numbers of women dying each year from complications of pregnancy and childbirth. The target was to reduce maternal morbidity and mortality by 50% by the year 2000 [3]. According to Horton [6] the initiative did not succeed although maternal health has always been a major focus of the World Health Organization's effort. In 1994, the International Conference on Population and Development intensified its commitment to reproductive health by establishing the Millennium Development Goals (MDGs) and the targets of MDG was to reduce maternal mortality by three-quarters (75%) from 1990 to 2015 [6]. In Ghana for instance, where skilled assistance is available, most maternity care is provided by registered midwives. Midwifery and nursing education is based on the British model where most midwifery education is now provided at diploma level.

The goal five of the SDG 3.1 is to reduce maternal mortality and have a skilled attendant at every birth by 2030. This is because maternal mortality represents the single greatest health disparity between high and low income countries especially in the sub-Saharan Africa and Southeast Asia [7]. The use of partograph is recommended by WHO [8] and in the Ghana Health Service Protocol [9] as significant step in curbing obstructed labour and preventing maternal and neonatal deaths.

Several studies have justified the use of the partograph as the best tool to establish prolonged and obstructed labour based on the outcome of controlled trials, clinical audits and systematic reviews of randomized trials [10-13]. Despite the WHO advocating and recommending that partograph be compulsorily used in monitoring the labour process, limited utilisation is still being reported to some extent in Africa or elsewhere in developing countries [14,15], especially in primary health care centres where most of the delivery takes place [16].

According to WHO [17] most parameters on the partograph are not monitored and most health care workers in Sub-Saharan Africa do not document their findings on the partograph after reviewing a woman in labour. Hence the progress of labour may not be closely monitored or labour monitoring may not translate into actions required when need arise. In addition, skilled providers often feel that completing the partograph is an additional time-consuming task, and they do not always understand how it can save women's lives.

Research by Yisma, Dessalegn, Astatkie and Fesseha [18] indicated that to effectively use the partograph, requires knowledge and skills. However, several recent studies in Kenya, Ethiopia and Nigeria among others have reported a significant gap between knowledge and practice. For instance, a study by Fantusi, *et al.* [19] showed that although the majority of the participants knew what partograph is and believe utilization of partograph would reduce maternal and newborn death; their knowledge about components of the partograph was poor. Similarly, Yisma, *et al.* [18] in a cross-sectional quantitative study to assess knowledge and utilization of partograph among obstetric care givers in public health institutions of Addis Ababa, affirms that knowledge of the function of both alert line and action lines on the partograph were poor. A study conducted at Ridge Hospital in Accra, Ghana by Floyd [4] revealed that midwives rarely or only partially used the partograph and that midwives never wrote in the patient's notes during labour.

Observations also made in some maternity units also showed that some clients were not monitored on partograph. In addition, there is limited literature highlighting nurses and midwives' knowledge of partograph in health facilities in Ghana. However, literature suggests the utilization of partograph to make a close follow-up of expectant mothers during labour and early postpartum. Partograph also offers health professionals with a pictorial overview of the labour to allow early identification and diagnosis of the pathological labour. WHO therefore recommends using the partograph to monitor labour and delivery, with the objective to improve health care and reduce maternal and fetal morbidity and death [3]. According to Soni [20], WHO advocates the use of partograph as a necessary tool in the management of labour and recommends its universal use, therefore, prevention of complications related to labour using the partograph is an important intervention towards reducing maternal and perinatal mortality and morbidity, and in achieving the Sustainable Development Goals 3.1. The tool was also appreciated in Ghana as an effective instrument to safely monitor expectant mothers during labour; however, skilled birth attendants have not consistently 'bought in' the partograph use [3]. According to Gans-Lartey, et al. [7] this tool was only completed adequately at 25.6%. This study specifically sought to assess level of knowledge, perception and challenges of partograph utilization among midwives in the Central Region of Ghana.

Methods

A cross sectional design was adopted for the study with a convenient sample of (n = 150) midwives recruited from public health facilities in the Cape Coast Metropolis of the Central Region of Ghana. The midwives were recruited from five maternity units of the public health facilities in the metropolis. A total number of 150 midwives willingly participated in the study; these were Cape Coast Teaching Hospital (84), Metropolitan Hospital (54), Ewim Polyclinic (5), Adisadel Urban Health (5) and Efutu Health Center (2). They were fully made aware that participating in the survey was completely voluntary and confidential. The University of Cape Coast Institutional Review Board approved the study. A researcher generated questionnaire was designed from literature and was self-administered. The survey instrument included demographic factors such as professional qualification, place of work, and unit/ward of practice. The knowledge items were measured true/false statements where participants indicated whether the statements were true or false concerning the partograph and its functions. Three items measured on two-point Likert questions of agree/disagree were also posed to examine midwives' perceptions towards partograph utilisation. The final aspect of nine dichotomize questions of agree and disagree were used to examine challenges of partograph utilization in the Central Region of Ghana. The items were all measured on nominal scale based on issues reviewed in literature. The study questionnaire was pretested and the result yielded Kuder Richardson reliability coefficient of 0.70. Data was collected at the convenient time of midwives for two months, coded and analyzed using the Statistical Package for Social Sciences software version 21.0. Descriptive statistics of frequencies and percentages were used to report on the knowledge, attitude and challenges questions. Chi-square test was used to identify associations between participants' professional rank and partograph utilisation among midwives in the Cape Coast Metropolis.

Results and Discussion

Demographic analysis revealed that out of the 150 participants who took part in the study, 26.7% (n = 40) were principal midwifery officers, 63.3% (n = 95) registered staff midwives and 10% (n = 15) were enrolled/community midwives. Majority of the respondents were Registered Staff Midwives. The results of the study harmonized with the findings from other studies that professional qualifications have a significant bearing on job performance. The higher the professional level, the more are the effects of training and skill on job performance. As such people's ability to understand and use advanced technology is determined by the level of their profession.

Examining the unit/wards of practice of the participants, table 1 shows that 74% (n = 111) of the respondents stationed at the labour ward while 15% (n = 22) worked at the antenatal clinic and 3% (n = 5) were working at other units. We also examined years of experience of the respondents, 34% (n = 51) of the participants had years of experience ranged 15 years and above while 56% (n = 84) had 10 to 14 years of experience as compared to 10% (n = 15) who had the minimum years of experience which was zero to four years.

Knowledge on partograph utilization

This research question was asked to ascertain the knowledge and understanding of midwives with regards to the use of partograph. In responding to this research question, respondents were subjected to test of their knowledge and understanding on the usage of partograph by responding either the statement is True or False. The level of knowledge was calculated by aggregating the response to indicate high or low knowledge. We did that by adding the total number of correct responses and dividing it by the total number of responses multiplied by 100. The result revealed that 78% (n = 1291) responses showed high knowledge on the use of partograph while 22% (n =

Ward	Frequency	Percent %
Antenatal Clinic	22	14.7
Family Planning	10	7
Labour Ward	111	74.0
Post-natal Ward	2	1
Other units	5	3
Total	150	100

Table 1: Unit/ward of practice.

359) had low knowledge on the use of partograph. The result in table 2 showed that the participants generally have adequate knowledge on partograph utilisation.

Responds	Correct		Wrong	
	N	%	N	%
The partograph is one of the tools for implementing Safe motherhood	140	93.3	10	6.7
Partograph will reduce not new born deaths	135	90	15	10
You require 7 minutes to effectively assess adequacy of contractions	134	89.3	16	10.7
In a normal progress of labour, cervical dilatation should fall on the action line	132	88	18	12
The partograph is a chart that shows the salient information on labour	129	86	21	14
Progress of labour is assessed by the degree of cervical dilatation, uterine contractions and descent of the presenting part	120	80	30	20
The partograph will not reduce maternal death	119	79.4	31	20.6
In a normal progress of labour, cervical dilatation should fall on or left of the alert line	105	70	45	30
In the active phase of labour, minimum duration of a strong contraction is 40- 45 seconds	101	67.3	49	32.7
In the active phase labour, a woman should have more than 2 contractions in ten minutes	91	60.6	59	39.4
In a normal progress of labour, cervical dilatation should fall on right of the action line	85	56.7	65	44.3

Table 2: Understanding of Midwives about the use of partograph.

The findings from the research showed that midwives in the Cape Coast Metropolis demonstrated a high knowledge on utilisation of partograph which indicated they are equipped with skills for providing quality obstetric care during the intrapartum period. This high knowledge implies that maternal and infant health can be improved within the Cape Coast Metropolis to reduce mortality and morbidity rates. Good knowledge of midwives on partograph ensures effective labour monitoring in hospitals, health centres and CHPS compounds which will further prevent maternal and infant mortality and morbidity. This is in accordance with the SDG- 3 that seeks to reduce maternal and infant mortality rates. The partograph chart makes it easier for the obstetric care givers to interpret the data collected on a woman’s labour such as abnormal uterine contractions or alterations in fetal and maternal conditions. In such situations, a clinical decision is taken for prompt intervention to save lives. The good knowledge exhibited by the midwives in the Cape Coast Metropolis on the use of partograph may also indicate that they render quality care to individual client since the chart provides a means that enhances timely medical intervention and indicates when augmentation of labour is required. The partograph further increases quality and regularity of the observations made on the mother and fetus during labour and can therefore point to possible cause of prolonged and obstructed labour. Studies conducted by WHO [21], Oladapo., *et al.* [22] and Yismin., *et al.* [18] in Addis Ababa and Nigeria respectively on knowledge of the partograph also revealed that midwives generally had fair and good knowledge on partograph usage.

Furthermore, the plausible reason for the high knowledge of midwives in the Cape Coast Metropolis could mean they have received adequate training on partograph utilization through pre-service or on the job training for obstetric care givers on partograph usage. Again, since midwives provide essential care for women during labour, there is the need for them to acquire the requisite skills and knowledge to work with to save maternal and infant lives. Fawole., *et al.* [23], Nyamtema., *et al.* [24] and Ogwanget., *et al.* [25] confirm poor use of the partograph during labour and recommend training of health workers on its use, provision of guidelines and adequate

resources. The findings from the research conducted in Nigeria inferred that despite midwives' good knowledge of the partograph there was poor utilisation. This finding is in contrast to the findings revealed from this research as the results revealed that the participants had in-depth knowledge and are using the charts.

However, 22% of the participants had low knowledge on utilisation of partograph. This low knowledge could be due to inadequate information with regards to interpretation of findings on the partograph or probably they might not have been using the partograph regularly in monitoring labour. Low knowledge on partograph utilisation can adversely affect maternal health leading to increased mortality. This could defeat the purpose of implementing the partograph as the main objective for its implementation was to aid in preventing prolonged or obstructed labour and its associated complications like postpartum haemorrhage and asphyxia in the newborn. Research conducted by Opia, *et al.* [26] and WHO [8] to assess the improvement in knowledge and skills among partograph users also confirmed insufficient skills among obstetric care givers. It is therefore necessary for all midwives to receive training on the use of partograph to improve their knowledge in intrapartum care. Qualified healthcare providers who have knowledge, skills and attitude are required to be at every birth to work effectively towards accomplishing the goals of Safe motherhood, GHS, and MOH to curb maternal and infant mortality and morbidity.

Midwives perception towards partograph utilization

The study also sought to assess the perception of participants about the utilisation of partograph. All participants 100% (n = 150) perceived that the use of partograph should be used and obstetric care givers must be encouraged to use it to monitor women in labour. Also, all the participants 100% (n = 150) disagreed with the statement that the use of partograph should be stopped. Similarly, all the respondents perceived that there is the need to improve on the knowledge of partograph users in Cape Coast Metropolis.

Findings from the study showed that all the participants were of the opinion that the use of partograph to monitor labour should be continued and encouraged. It is believed that there is the need to improve the knowledge and skills of the partograph users in order to enhance its usage in monitoring labour. This finding means that midwives in the Cape Coast Metropolis appreciate the effectiveness of the utilisation of partograph in labour monitoring and would like to continue using it. WHO [21], Soni [20] and Konlan [27] all advocate the use of partograph to monitor labour and recommend its universal use during labour. This is because it helps prevent complications related to labour such as prolonged and obstructed labour. Likewise the midwives are able to intervene promptly since they identify early signs of complication associated with labour, thereby reducing perinatal mortality and morbidity. This will contribute to the achievement of sustainable Development Goal 3 which seeks to prevent maternal and child mortality. The partograph serve as a warning system of arising complications during labour as it assists with intervention, decisions and ongoing evaluation of the effect of implemented interventions during labour. In addition, the partograph is widely accepted as one of the measures that assist in reducing maternal and infant mortality and morbidity. The introduction of the partograph enhances the work of the midwives as it points to deviations from normal progress of labour early for timely medical intervention to be done.

Challenges midwives face when using the partograph

The research also assessed the challenges midwives face when using the partograph. Descriptive statistics of frequencies and percentages were used to analyse the data. Participants were asked to indicate in order of importance the most worrying challenge they faced as far as the use of partograph is concerned. The responses were ranked in order of the most worrying challenges. The results indicated shortage of equipment (63%; n = 89) and commitment level of the midwives (62%; n = 89) respectively as the most worrying challenges faced by midwives in partograph utilisation. Furthermore, the least worrying challenge faced 22% (n = 29) was introduction of new versions of partograph. Nine out of the total population did not respond at all indicating they did not face any challenge when using the partograph. The results showed that midwives normally face various challenges when using the partograph. Also, the challenges participants encounter during utilisation of partograph were not the same.

The findings from the research as presented in table 3 indicate five major challenges with the use of partograph. The five major challenges faced when using the partograph as indicated by the participants were shortage of equipment, clinical supplies and medicines, commitment level of midwives, understaffing, late admission of patients and negative attitude of midwives towards its usage. The findings revealed from this research confirms studies conducted on challenges and factors militating against the use of partograph by WHO, UNICEF/UNFPA [28] in Ghana, Bazirete [1] and Kolan, Aarah Bapuah [27] Tamale, Ghana. They also confirmed lack of resources such as staff,

Challenges with the use of partograph	Agree		Disagree	
	f	%	f	%
Shortage of equipment, clinical supplies and medicines	89	63	52	40
Commitment level of midwives	89	62	53	38
Understaffing at the hospital	86	61	55	39
Late Admission of patients	81	57	60	43
Negative attitude of midwives	74	52	67	48
Frequent staff rotation	66	47	75	53
Poor graphing skills	55	39	86	61
Lack of confidence in midwives	45	32	96	68
Introduction of many paragraphs versions	29	22	112	79

Table 3: Challenges midwives face when using the partograph.

and support when using the partograph. It may be inferred from the findings that these challenges could lead to inadequate provision of care during the time of childbirth which may adversely affect maternal and neonatal health leading to morbidity and mortality.

When using the partograph, it gives a pictorial overview of an ongoing labour which helps to alert the midwives and obstetricians to deviations in fetal and maternal wellbeing as well as the progress of labour and prompt medical intervention is carried out. Therefore, shortage of medicines that are needed to augment abnormal progress of labour for instance as well as commitment level of midwives can lead to prolonged labour and its associated complications such as postpartum bleeding which is one of the leading causes of maternal deaths in the country. Again, irregular supplies of logistics such medicines could lead to poor commitment to the use of the partograph. The lack of commitment level of midwives will further lead to low utilisation of the partograph and consequently lead to maternal mortality. The partograph is a critical tool for labour monitoring therefore its users must have understanding and appreciate its usage. This will help raise their commitment level to the use of the partograph.

Monitoring labour with the partograph demands enough competent health professionals who have the knowledge and are willing to use the charts well. Therefore, fewer numbers of midwives on duty taking care of many clients is sometimes stressful since every labouring woman needs to be given a comprehensive obstetric care. Inadequate staff will then reduce the midwives’ interest in the utilisation of the partograph and some will develop negative attitude towards its use since its usage demands a lot of time. This negative attitude will further lead to provision of inadequate care to clients which will further have adverse effects on their health and subsequently lead to labour complications and in the worst situations still birth or maternal death.

Also, a significant number of the participants indicated poor graphing skills as a challenge. Though all the observations made on the woman have to be recorded on the partograph. Users of the partograph charts must be conversant with the symbols and each should be plotted correctly. This gives a pictorial view of the salient information of labour from the active phase till full cervical dilatation. The graph normally alerts the obstetric caregiver on what to do at any given time or points to an action if deviation is detected. For instance in a normal progress of labour, plotting of cervical dilatation is expected to fall on, or left of the alert line and if the plottings move to the right or towards the action line, it indicates that a decision should be taken to save the lives of the mother and baby.

The various challenges that the midwives face therefore need to be properly addressed through programmes such as provision of logistics needed in providing care in all the health facilities within the Cape Coast Metropolis. This will help prevent complications that may arise during the perinatal period to avoid maternal and infant mortality rates. The management of health facilities and policy makers must come together to find means of ensuring that the labour wards are always equipped with logistics for providing quality care.

Professional ranks of midwives and partograph utilization

The purpose of this research question was to determine whether there was an association between professional rank/years of experience and use of partograph. The analysis was done using Chi-square test of association to find whether there was an association between the professional ranks and utilization of partograph. The Chi-Square analysis results as presented in table 4 showed that there was statis-

tically significant association between years of experience and partograph usage [χ^2 (df = 2) = 46.552, p = 0.001]. The results showed that the years of working experience of midwives does have significant influence on the use of partograph in the Cape Coast Metropolis with registered midwives 66% (n = 95) more likely to use partograph than principal staff midwives 24% (n = 35) and community midwives 10% (n = 15).

Professional Level	Partograph Utilisation		X ²	df	p-value
	Yes % (n)	No % (n)			
Principal Midwife	24 (35)	3 (5)			
Registered Midwife	66 (95)	0 (0)	46.552	2	0.001
Community midwife	10 (10)	3 (5)			
Total	93 (140)	7 (10)			

Table 4: Chi square test of association between years of working experience and utilisation of partograph.

The finding indicated that there was significant difference between the years of experience and utilisation of partograph. This finding implies that registered midwives in the Cape Coast Metropolis fresh from training probably were equipped with the requisite knowledge and skills on utilization of partograph prior to commencement of their work as the years of experience ranged, however, fizzle out as the midwives progress in the profession. The findings in this study disagrees with previous studies done by Opiah., *et al.* [26], Yismal., *et al.* [18] and WHO [1], on knowledge and utilization of partograph among obstetric care givers which revealed there was no significant relationship between the years of experience and partograph utilisation among participants in this study. The finding supports the propositions of Yismal., *et al.* that there is need for periodic on job refresher trainings on the use of partograph.

Contrary to this finding, Benner [29] revealed that the knowledge and skills of midwives is expected to improve as the years of experience increases. She further indicated in her five stage model that the midwife at the beginning of her career is normally at the novice stage. As the years go by, she progresses through the advanced beginner, competency and, proficiency stages and then becomes an expert in her work. She further stated that the midwife is expected to reach the competency stage of clinical practice within two to three years of working. However, the midwives in the current study were rather equipped with skills and knowledge couple with enthusiasm to start of their work. The registered midwives seem to have competency in using the partograph to monitor labour in the public health facilities in the Cape Coast Metropolis because they are fresh in the profession with youthful exuberance to follow the ideals to the later. But non usage of the partograph by principal midwives could be cultural influence of experience that entangle most professionals when they think they had experience and do not adhere to protocols any longer. This means that there is the need for administrators to insist that all midwives follow protocols irrespective of the number of years of experience they might have acquired in the profession in achieving the SDG 3.

The reason for the competency in using the partograph among these midwives even at the early stages of their career could be attributed to the fact that they acquired the knowledge whiles in training and also at their various facilities; they are given regular training on the partograph. They are also encouraged to use it as a vital tool in monitoring labour by their superiors. This implies that with the regular refresher courses and encouragement and supervision they will be committed to its usage. This will enable them to effectively monitor women in labour so that complications associated with labour can be identified early and managed. Likewise, this will reduce maternal and neonatal mortality rate in the Cape Coast Metropolis and the country at large. Hence there is still the need for policy makers to put in measures such as regular in-service training and supervision that will sustain proper use of the partograph in all health facilities where perinatal care is rendered.

Conclusion

Based on the findings it could be concluded that more than 87.8% of midwives in the Cape Coast Metropolis have fair knowledge of partograph and why it is necessary to use it in the management of labour. A significant percentage of the respondents thought that using the partograph would improve the maternal and neonatal morbidity and mortality situation in the metropolis. Also, all the respondents perceived that the partograph usage should be continue and be encouraged, meaning the midwives in the Cape Coast Metropolis appreciate the effectiveness of the utilisation of partograph in labour monitoring and would like to continue its usage. They also believed that there is the need to improve the knowledge and skills of midwives on the use of the partograph. This concludes the fact that the introduction of partograph enhances the work of midwives as it points to deviation from normal progress of labour early for timely medical intervention

to be done to save maternal and neonatal lives. The various challenges that the midwives face therefore need to be properly addressed through programmes such as provision of logistics needed in providing care in all the health facilities within the Cape Coast Metropolis. This will help to prevent complications that may arise during the perinatal period to avoid maternal and infant mortality rates. The management of health facilities and policy makers must come together to find means of ensuring that the labour wards are always equipped with logistics for providing quality obstetric care. Refresher workshops to continually update nurses and midwives should be part of regular routine training of midwives working in the maternity ward.

Authors' Contributions

The research was initiated by APA supported by TH and CD. APA, TH and NIE contributed to the literature review. TH and APA led the data collection and analysis. The manuscript was drafted by TH, APA and NIE. All authors have read and approved the final manuscript.

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Ethics Approval

Approval to conduct this study was obtained from University of Cape Coast Institutional Review Board, Cape Coast. Ethical clearance was also obtained from the Metropolitan Health Directorate. Permission and consent were sought from matrons and hospital administrators. The study details were explained to the individual participants; participation in this study were volunteers and signed a written informed consent form before participating in the study.

Conflict of Interest

Authors have declared that there is no conflict of interests.

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