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Knowledge and Practices of Midwives in Active Management of the Third Stage of Labour: A Study At Two Government Hospitals in Ho Municipality, Volta Region.

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ABSTRACT

The third stage of labour refers to the period between birth of the baby and the complete expulsion of the placenta. It has been noted that some degree of blood loss occurs after the birth of the baby due to separation of the placenta. This period is crucial and endangers the life of the woman who has delivered because the uterus may not contract well after birth and heavy blood loss (Postpartum haemorrhage) could endanger the life of the mother. Active management of the third stage of labour (AMTSL) reduces the occurrence of severe postpartum haemorrhage (PPH) by approximately 60–70%. Active management consists of several interventions packaged together. Controlled cord traction is one of those components that require training in manual skill for it to be performed appropriately. This study sought to assess the knowledge and practices of midwives' in active management of the third stage of labour in the Ho Municipal and the Volta Regional Hospitals in the Ho Municipality. A descriptive quantitative design was employed and a total of 50 midwives were selected using the quota and convenient sampling techniques. The revealed that, even though a higher percentage of the midwives were knowledgeable in AMTSL, their practice was poor. The midwives' common challenges shortage and erratic supply of materials and equipment, lack of in-service training and work overload. Recommendations made include training of midwives from the two institutions in AMTSL, supported with regular and close supervision, senior midwives to teach the younger ones to practice so as to provide safe delivery services, they should also be trained in ward management. Nursing Management to ensure that skilled staff evenly distributed through all three shifts in 24 hours. Findings of this study are limited to the two study institutions. That notwithstanding, the findings can be used as a guide to manage delivery service in other institutions in the region. Future study be conducted to look at the management of the entire midwifery service delivery system and its impact on quality of service.

Keywords*:* Labour, Third stage of labour, Active Management, Control Cord Traction, Postpartum Haemorrhage. Regional and Municipal Hospitals.

Aims Research Journal Reference Format:
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1. INTRODUCTION

Pregnancy and child birth, even though is a welcome news to every family it has its own problems which sometimes end up in death of either both mother and baby or the mother. Death of mother during labour and delivery is pathetic and a great loss to the baby, who becomes motherless and the family and the community as a whole. It is for this reason that management of labour entails a careful observation and skilful action through all the stages. Labour is defined as the process of spontaneous onset of consistent and effective uterine contractions that causes the expulsion of the foetus, the placenta and membranes at term. Normal labour is low risk throughout, spontaneous in onset with the foetus presenting by the vertex, culminating in the mother and infant in good condition (WHO, 1997).Traditionally, there are three stages of labour, these are First Stage, Second Stage and Third Stage. First Stage of Labour is assessed by the rate of cervical dilatation and has been subdivided into three phases as follows:
The Latent Phase is prior to the active first stage and it is said to last 6-8 hours in the primiparae when the cervical dilatation is from 0cm to 3 – 4cm (Stables, 1999). This is the effacement of the cervix which commences by shortening of the cervical canal from 3cm long to <0.5cm long, heralding the beginning of the first stage of labour (Arulkumaran, 1996). The Active Phase is when the cervix undergoes more rapid dilatation 3-4cm in the presence of rhythmic uterine contractions. This transits into the second stage of labour where the cervix is about 8cm dilated till it gets to 10cm dilatation with expulsive contractions ensue, ushering in the second stage of labour.

This is when the woman feels to bear down. There is however a lull in the intensity of uterine activity (Sherblom & Matteson, 2001). Second Stage of labour ends with expulsion of the foetus and birth of the baby. The third stage of labour is the stage of separation and expulsion of placenta and membranes and control of bleeding. However, the first two stages may impact on the third stage, hence some of the problems encountered during this stage. According to Smith (2015), this stage commences with the complete delivery of the foetus and ends with the complete delivery of placenta and its attached membranes. This stage is augmented by the use of uterotonic immediately following delivery of the foetus, application of controlled cord traction and fundal massage immediately after delivery of the placenta, followed by palpation of the uterus every 15 minutes for 2 hours to assess the continued need for massage (FIGO & ICM, 2003). This augmentation is referred to as the Active Management of The Third Stage of Labour (AMTSL).

1.1Background to the study

In a bid to prevent complications and ensure good outcomes of labour and delivery, each stage of labour is managed distinctly with care. The third stage of labour which is the critical stage for the mother, if not managed well may result in complications such as post-partum haemorrhage (PPH), hypovolaemic shock and death (G8, 2009). Based on these two main schools of thought emerged the following approaches to managing the third stage of labour; thus, physiological and active management of the third stage of labour (AMTSL). In physiological management of the third stage of labour, there is delay in clamping the umbilical cord until pulsation in the cord stops. This allows oxygenated blood to pulse from the placenta to the baby which increases baby's haemoglobin level at birth. The advent of HIV/AIDS with its mode of transmission from mother to baby at birth through the maternal blood in the cord made the physiological approach no more favourable. The active management of the third stage of labour (AMTSL) is therefore, the preferred choice. AMTSL is defined as the period between delivery of the infant and delivery of the placenta (Tan et al 2008). According to Smith (2015), the third stage of labour commences with the complete delivery of the foetus and ends with the complete delivery of placenta and its attached membranes.

Observing the risk involved in the completion of third stage of labour, Stanton et al. (2009), posited that due to the risk of complication after delivery of placenta, the fourth stage of labour has been advocated which begins with the delivery of placenta and it lasts for an arbitrary one hour after delivery. However, it is the management of the third stage that determines the outcome of the fourth stage. This notwithstanding, it was stated that the most common chosen jurisdictions are however periods as long as four hours may have been suggested. Meanwhile the length of third stage of labour itself is actually 5 - 15 minutes. The absolute time limit for delivery of the placenta, without evidence of significant bleeding, remains unclear. Periods ranging from 30-60 minutes have been suggested (Smith, 2015; Stanton et al., 2009). On the other hand, it was suggested that physiological approach advocated for no uterotonic medication until the delivery of the placenta, and that umbilical cord is not to be cut or clamped until cessation of pulsation. And also there should be separation without inversion, and placenta should be delivered by gravity or spontaneously by maternal effort and endogenous oxytocin stimulation and not facilitated by uterotonic drugs. This is termed non-medicalization of management of the third stage of labour (Su, Chong & Samuel, 2007; Fraser & Copper, 2003).

Consequently, premium has been placed on the active management of the third stage of labour and it became the mode of practice (Su, Chong & Samuel, 2009). Later on, the Federation of Gynaecologists and Obstetricians (FIGO) and International Confederation of Midwives (ICM) by definition, indicated that active management of third stage of labour should include use of uterotonic immediately following delivery of the foetus, controlled cord traction and fundal massage immediately after delivery of the placenta. This should be followed by palpation of the uterus every 15 minutes for 2 hours to assess the continued need for massage. Cord clamping was however excluded with the view to improving the haemoglobin level of the infant; especially, the preterm baby. Nonetheless, there has been little research into the effects of the individual components of active management of the third stage of labour (WHO, 2009).

The steps involved in the active management of the third stage of labour have therefore been spelt out thus: giving uterotonic medication within one minute after delivery of baby after ruling out presence of another foetus, controlled umbilical cord traction and counter traction to support the uterus until separation and delivery of the placenta, uterine massage after delivery of the placenta by the use of Brandt-Andrews manoeuvre (Su, Chong & Samuel, 2007). The third stage of labour is the unforgiving stage in case of any omission; for, this stage is more risky than the first two stages combined. According to Donald (2014), normal labour can become abnormal within a twinkle of an eye and successful delivery can turn swiftly into disaster. It had been estimated that everyday approximately 800 women around the world die from preventable complications such as postpartum haemorrhage (WHO, 2009; 2012).

In sub-Saharan Africa, where maternal mortality reaches its peak, the lifetime risk of dying during pregnancy or childbirth is 1in13, as compared to an average of 1 in 400 in high-income countries (WHO, 2012). Immediate severe postpartum haemorrhage has been attributed to uterine atony. Others include retained placenta, vaginal or cervical lacerations, and uterine rupture or inversion (Brucker, 2001; Prendiville, Elbourne & McDonald, 2000). In Ghana, postpartum haemorrhage accounts for 24% of all maternal deaths, and being the single largest cause in Ghana. The maternal mortality ratio in Ghana is 350/100.000 live births 210/100,000 live births in the Volta Region within the same period (GSS, 2009; 2011; VRHD, 2010).

1.2 Problem statement

According WHO (2006), postpartum haemorrhage remains the most common cause of maternal mortality worldwide, accounting for one-fourth of the maternal deaths. The management of the third stage of labour is a very crucial moment for the mother, baby and midwife, at the same time it is a period where major complications such as postpartum haemorrhage occur. Blood loss more than 500 mls in the first 24 hours after delivery might occur as a sign of postpartum (Prendiville, Elbourne & McDonald, 2000). The active management of third stage of labour (AMTSL) is highly effective at preventing postpartum haemorrhage (PPH) among facility-based deliveries and also more effective than physiological management in preventing PPH. It was therefore, recommended that routine AMTSL could avert maternal morbidity and mortality, and it is cost effective (WHO, FIGO & ICM, 2003), it takes about 15 - 30 minutes and helps to prevent PPH. Although the management of the entire process of labour requires expert supervision and care, management of the third stage is an art which calls for active hands on management coupled with swift concurrent decision-making. Therefore, in the event of any poor judgement at this critical stage could cost the lives of the mother and baby, and consequent emotional disturbance to the midwife (RCM, 2015). Personal observation with regard to the active management of the third stage of labour among midwives at the two Government Hospitals in Ho, revealed that increased workload on the part of the midwives compromised effective management of this stage of labour as well as lack of regular update of the midwives on changing trends and current innovations in midwifery practice brought about by research findings. The question is “are midwives abreast with the current knowledge and practices in the active management of the third stage of labour?” Hence this study was undertaken to investigate the knowledge and practices of AMTSL among midwives in the Municipal and Volta Regional Hospitals in the Ho Municipality.

1.3 Purpose of the study

The purpose of the study is to assess the knowledge and practices of midwives’ in the active management of the third stage of labour in the Volta Regional and Ho Municipal Hospitals, which are the two major public health facilities in the Ho Municipality of the Volta Region.

1.4 Objectives of the study

The main objective of the study was to assess midwives’ knowledge and practices in active management of the third stage of labour (AMTSL) in the two major public Hospitals in Ho.

1.4.1 Specific objectives

The specific objectives of the study were to:

1. assess the knowledge of midwives about the active management of third stage of labour (AMTSL).
2. assess the practices of midwives with regard to the active management of the third stage of labour.
3. determine the challenges midwives face in the active management of the third stage of labour.

Due to the fact that the two hospitals are the main public health facilities in Ho and with increasing numbers of deliveries there was the need to give quality midwifery care to women in labour. However, no known studies had been carried out to assess the knowledge of midwives and their practices with regard to the active management of third stage of labour, which has been recommended by the world bodies concerned with maternal and infant health (WHO, FIGO & ICM, 2003). This study therefore assessed midwives’ knowledge and practices in the active management of the third stage of labour at the two government hospitals in Ho. This study provided information on what midwives' knowledge in the management of the third stage of labour is in the two major health care facilities in the Ho Municipality. The findings of the study would provide evidence-based information which would inform midwives’ efforts to:

1. improve upon the knowledge and practices of AMTSL thereby reducing maternal morbidity and mortality.
2. serve as knowledge and practices for midwives in monitoring of AMTSL
3. provide evidence for reviewing existing policies to guide midwives’ practice which would contribute to the reduction of maternal morbidity and mortality in the two major government hospitals in the Ho Municipality.
4. provide evidence for improvement in AMTSL practices of midwives in the prevention of maternal morbidity and mortality due to PPH.

2. METHODOLOGY

Research design used for the study was a cross-sectional descriptive quantitative. The study was conducted at the Ho Municipal and the Volta Regional Hospitals, both located in the Ho Municipality. The Ho Municipal Hospital is a referral facility in the Ho Municipality. The foundation stone for construction of the Hospital was laid in 1925 by Mrs G.W Gush and completed in 1927. The Hospital, before February 1999, was designated as the Regional Hospital for the Volta Region and later changed the same year to District Hospital after the completion and commissioning of the new Regional Hospital. The Ho Municipal Hospital is located in the middle belt of Ho Township, surrounded by the Regional Co-ordinating Council Offices and decentralized departments such as the Regional Post Office, District Police Headquarters, and Regional Museum and separated from Ho Prisons by the major street. It is a-140 bed capacity hospital with 32 beds for maternity and labour wards. Average weekly delivery was 18. The hospital provides 24-hour service and serves about 80 towns and villages in clinical and preventive services such as Out Patient Department services, obstetrics and gynaecology, medicine, surgery and Public Health. Additionally, the hospital offers special services such as diabetic clinic (Source: Hospital Administration, 2016).

2.1 The Volta Regional Hospital

The hospital's architectural structure was designed and constructed by Kvaerne International of the United Kingdom, popularly called Trafalga in 1998 and commissioned by the former President Flt. Lt. Jerry John Rawlings in December 2000. The hospital is located along the Ho Denu/Aflao highway (Source; Volta Regional Hospital, 2016).
The Volta Regional Hospital is a-240 bed modern hospital. Apart from the general health care services, the hospital offers specialised services such as eye, dental, psychiatric care as well as physiotherapy, medical and surgical emergency care and neonatal intensive care. The maternity department has 30 beds with 10 cots. The labour ward has 4 delivery suits with 2 cots each and one suit for monitoring of active stage of labour. There is in-built obstetric theatre which is fully equipped but not in use for lack of staff as reported. The maternity and labour wards have staff strength of 26 midwives. The hospital has average weekly deliveries of 35. The Volta Regional Hospital is a referral facility for the Volta Region and beyond. It serves adjoining Eastern Region and even Western Togo.

2.2 Study population

The target population comprised of midwives working at the maternity units of the Ho Municipal and the Volta Regional Hospitals.

2.3 Inclusion and Exclusive Criteria

Only midwives who have had at least one year working experience at the maternity units of the Ho Municipal and Volta Regional Hospitals and were willing to participate in the study qualified and participated in the study. Student midwives and rotation nurses were excluded from the study.

2.4 Sample size and Sampling technique

A total of 50 midwives were conveniently selected for the study. Convenience sampling, a form of non-probability sampling techniques entails the use of most conveniently available people or objects as subjects in the study (Denise & Hungler, 1987.p.281). Participants (midwives) of the study were selected based on their availability on duty and willingness to participate in the study.

2.5 Data collection Tool

A structured questionnaire and checklist were used for the data collection. The questionnaire covered the following areas: demographic data of the respondents; knowledge of midwives in the active management of third stage of labour; practices of midwives with regard to the active management of third stage of labour, and challenges faced by midwives in the active management of third stage of labour. A checklist was also developed and used for observation of participants' practice of AMTSL (Source: A Safer Motherhood Knowledge Transfer Program: Leaflet and Wall Chart by Engelbrecht and Ambruster).

2.6 Data collection procedure

Permission was sought from the ward in-charge on each visit. Then each respondent was given consent form to fill after explanation of the purpose of the study to her. Questionnaire was administered to those willing to participate in the study. This was done during their break time. This was done through all three shifts in the 24-hour period. This was followed by observation of participants during service delivery; that is, conduct of delivery of the women. This was carried out during night shift which was the time that most deliveries take place. Privacy and anonymity were ensured during each interview and observation sessions. The observations were done on individual basis with checklist on strictly individual basis without interference during the conduct of delivery.

2.7 Data analysis
Data analysis was done with Microsoft excel and the SPSS (version 16.0) software. Thereafter, the results of the study were presented in the form of frequency distribution tables, pie charts and bar graphs.

2.8 Validity and Reliability
Validity is the extent to which a test measures what it is intended to measure and reliability is the extent to which a test or measurement result is reproducible (Leedy & Ormrod, 2005). The questionnaire and checklist were subjected to peer review and then to the supervisor for proof-reading and for approval before administration. A pre-test of the questionnaire and checklist was carried out on 5 midwives at the Shai- Osudoku District Hospital, Dodowa in the Greater Accra Region. The result was used to review the questionnaire and the checklist.

2.9 Limitations of the study
The sample size of this study was small, fifty midwives from the two major government hospitals in the Ho Municipality participated in the study as a result, findings from the study cannot be generalised to all midwives in the Volta Region. However, the findings can be used as a guide in managing midwifery service delivery in the region to improve quality of care.

2.10 Ethical consideration
The proposal was submitted to the Ghana Health Service Ethical Review Committee (GHS-ERC) through the School of Nursing and Midwifery, University of Health and Allied Sciences for ethical approval before the research was conducted. Permission was sought from the managements of Ho Municipal Hospital and Volta Regional Hospital, and the Volta Regional Health Directorate was duly informed by the School. Written consent was sought from each participant before administering the questionnaire to them. They were informed that taking part in such a study would cause no physical, psychological or social harm to them and were assured of anonymity as well. To ensure anonymity, the questionnaire did not provide space for name of participants. And observation was done on strictly individual basis without interference and it was done during the conduct of delivery; which was mainly done by one midwife at a time. The participants were also informed that they were free to opt out from the study anytime they felt they could not continue. All pieces of information provided were treated as private and confidential. Only the principal investigator and the supervisor of the research had access to the data.

3. RESULTS

3.1 Demographic background of respondents
Table 1: Demographic data

Variable		Frequency (n)	Percent (%)
Hospital:	Ho Municipal Hospital	36	72
	Volta Regional Hospital	14	28
	Total	**50**	**100**
Age:	21-29 years	13	26
	30-39 years	14	28
	40-49 years	20	40
	50-60 years	3	6
	Total	**50**	**100**
Years of experience:	1-2 years	14	28
	3-4 years	24	48
	5-11 years	11	22
	16-19 years	1	2
	Total	**50**	**100**
Level of education:	Secondary	2	4
	Diploma	38	76
	Degree	10	20
	Total	**50**	**100**
Religion:	Christian	33	66
	Muslim	15	30
	Traditionalsit	2	4
.	**Total**	**50**	**100**

As shown in Table 1 36 (72%) of the respondents were from the Ho Municipal Hospital and 14 (28%) were from the Volta Regional Hospital. Less than half; 20 (40%) of the respondents were 40-49 years. The rest were 30-39 years 14 (28%), 21-29 years 13 (26%) and a few were 50-60 years 3 (6%). About half 24 (48%) of the respondents have had 2-4 years' work experience. The rest have had 1-2 years' work experience 14 (28%), 5-11 years' work experience 11 (22%) and one (2%) had 16-19 years' work experience. Majority 38 (76%) of the respondents had diploma, 10 (20%) had degree and 2 (4%) had secondary education. Most of the respondents, 33 (66%) of them were Christians and 15 (30%) were Muslims. Only 2 (4%) were traditionalists.

3.2 Knowledge on active management of third stage of labour

Table 2: What one thinks is active management of third stage of labour (AMTSL)

Idea about AMTSL	Frequency	Percent
Control cord traction delivery of placenta	2	4.0
Delivery of placenta and control of bleeding	3	6.0
Delivery of the placenta by increasing uterine contraction	3	6.0
Management of third stage labour in order to prevent postpartum haemorrhage	26	52.0
Placenta delivery to prevent postpartum haemorrhage	15	30.0
Removal of placenta and membranes	1	2.0
Total	**50**	**100.0**

A liitle over half, 26 (52%) of the respondents described AMTSL as management of third stage of labour in order to prevent postpartum haemorrhage and 15 (30%) described it as placenta delivery to prevent postpartum haemorrhage. However, 3 (6%) described AMTSL as delivery of placenta and control of bleeding and another 3 (6%) described it as delivery of the placenta by increasing uterine contraction.

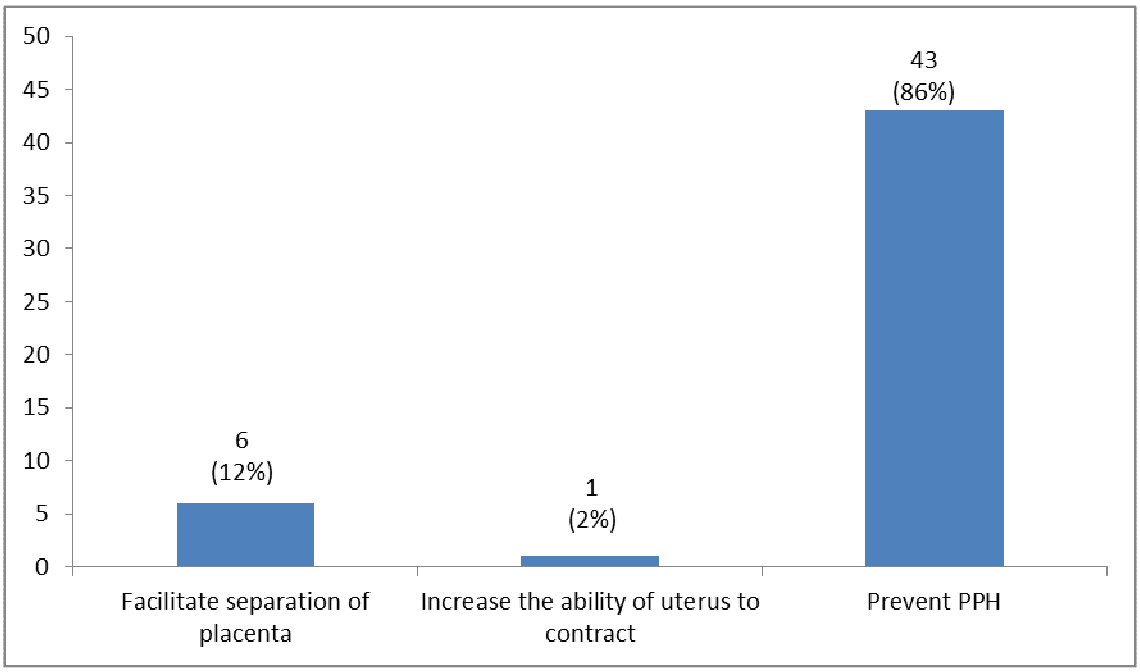

Figure 1: Main goal of AMTSL

As shown in figure 1, the main goal of AMTSL known by the respondents was to prevent postpartum haemorrhage. However 6 (12%) said it was to facilitate placental separation and one (2%) said it was to increase uterine ability to contract.

Table 3: Knowledge about Post-Partum Haemorrhage (PPH)

PPH	Frequency	Percent
Maternal loss of blood more than 1000 ml	2	4.0
Maternal loss of blood more than 800ml	2	4.0
Maternal loss of blood more than 500ml	44	88.0
Maternal loss of blood more than 400ml	2	4.0
Total	**50**	**100.0**

Majority 44 (88%) of the respondents described PPH as maternal blood loss more than 500mls. All 50 (100%) of the respondents indicated that AMTSL reduces risk of postpartum haemorrhage?

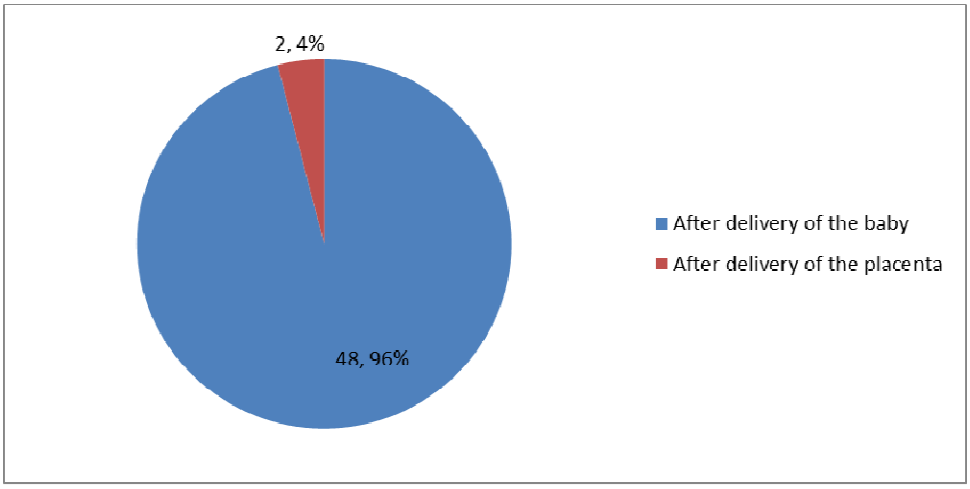

Figure 2: Time of administering injection oxytocin during the AMTSL

Figure 2 shows that majority 48 (96%) of the respondents indicated that the time for administering injection oxytocin during the AMTSL was after delivery of the baby. However, a few of them 2 (4%) said it was after delivery of the placenta.

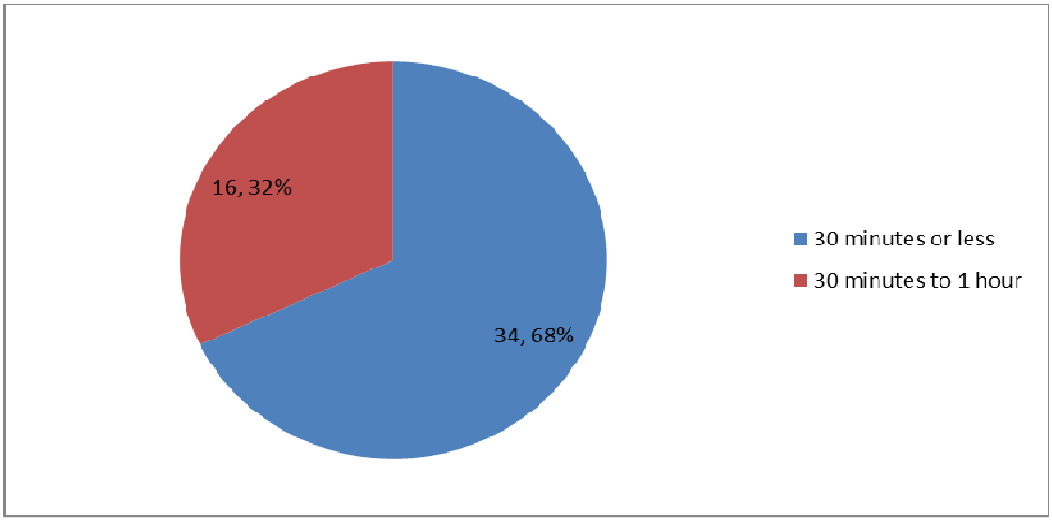

Figure 3: Duration of third stage labour

Most 34 (68%) of the respondents indicated that third stage of labour lasts not more than 30 minutes. The rest 16 (32%) said it lasts 30 minutes to 1 hour.

Table 4: Number of components for Active Management of the Third Stage of Labour (AMTSL)

Number of components	Frequency	Percent
One component	1	2.0
Three components	36	72.0
Four components	8	16.0
Five components	5	10.0
Total	**50**	**100.0**

As shown in table 4, majority 36 (72%) of the respondents indicated that the components for AMTSL were 3. The rest indicated that the components were four 8 (16%), five 5 (10%) and one 1 (2%) respectively.

Twenty six (52%) of the respondents were able to correctly state the components of AMTSL in order of sequence, but 24 (48%) of respondents could not state it sequentially.

Table 5: Time for giving injection oxytocin to the mother during AMTSL

Time	Frequency	Percent
Less than one minute after delivery of baby	48	96.0
5 minutes after delivery of baby	2	4.0
Total	50	100.0

Table 5 shows that, majority 48 (96%) of the respondents indicated that injection oxytocin to the mother less than one minute after delivery of baby during AMTSL. However, 2 (4%) of the respondents indicated that the injection is given 5 minutes after delivery of baby during AMTSL

3.3 Active management of third stage of labour

Table 6: Active management of third stage labour

Activity	Always n (%)	Sometimes n (%)	Never n (%)
I use active management of the third stage of labour on all my patients	47 (94%)	3 (6%)	
When I use active management for the third stage of labour, I use all the components	41 (82%)	9 (18%)	
Use early cord clamping, before pulsation stops	32 (64%)	17 (34%)	1 (2%)
Use controlled cord traction to deliver placenta	50 (100%)	0	0
Use uterine massage immediately after the expulsion of the placenta	46 (92%)	2 (4%)	2 (4%)
Wait for signs of placental separation	**35 (70%)**	**3 (6%)**	**12 (24%)**
Wait for cessation of cord pulsation prior to clamping and cutting the cord	13 (26%)	31 (62%)	6 (12%)

As shown in table 6, majority 47 (94%) of the respondents always use active management of the third of labour, whilst 3 (6%) sometimes use it on their patients. Majority 41 (82%) of the respondents always employ all the components of AMTSL, but 9 (18%) sometimes employ all the components of AMTSL. Most 32 (64%) of the respondents always use early cord clamping, before pulsation stops, and 17 (34%) sometimes apply early cord clamping, before pulsation stops. All 50 (100%) of participants always use controlled cord traction to deliver placenta. Furthermore, majority 46 (92%) of the respondents always use uterine massage immediately after the expulsion of the placenta. Most 35 (70%) of the respondents said they always wait for signs of placental separation. However, 12 (24%) of the respondents said they do not wait for signs of placental separation. Most 31 (62%) of the respondents sometimes, and a little over a quarter 13 (26%) of them said they always wait for cessation of cord pulsation prior to clamping and cutting of the cord. However, 6 (12%) of them said they never wait for cessation of cord pulsation prior to clamping and cutting the cord.

3.4 Challenges faced with Active Management of Third Stage Labour

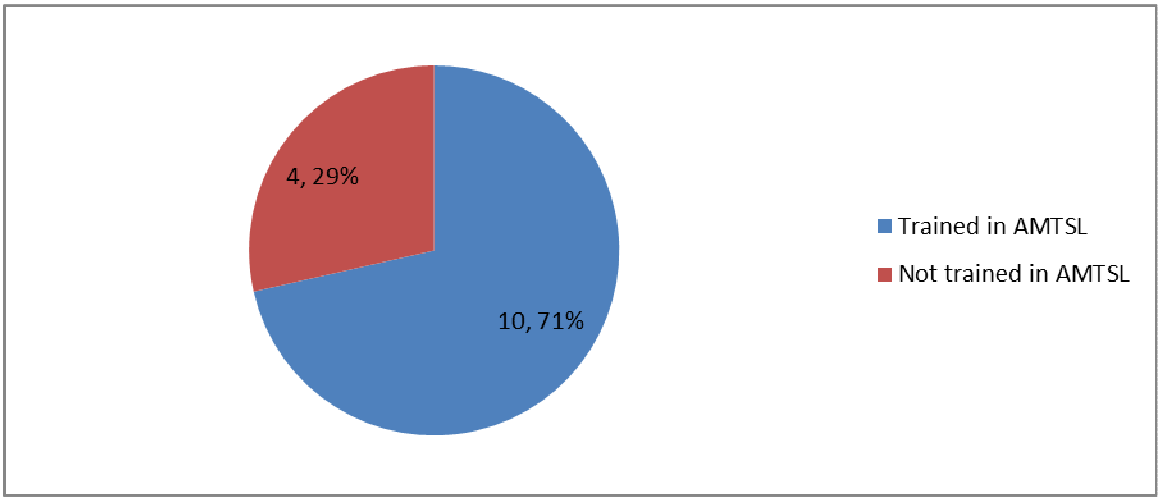

Figure 4: Training in AMTSL at Volta Regional Hospital

As shown in figure 4, majority 10 (71%) of the respondents at the Volta Regional Hospital have received training in AMTSL. However, 4 (29%) of them have not had any training on AMTSL as at time of the study.

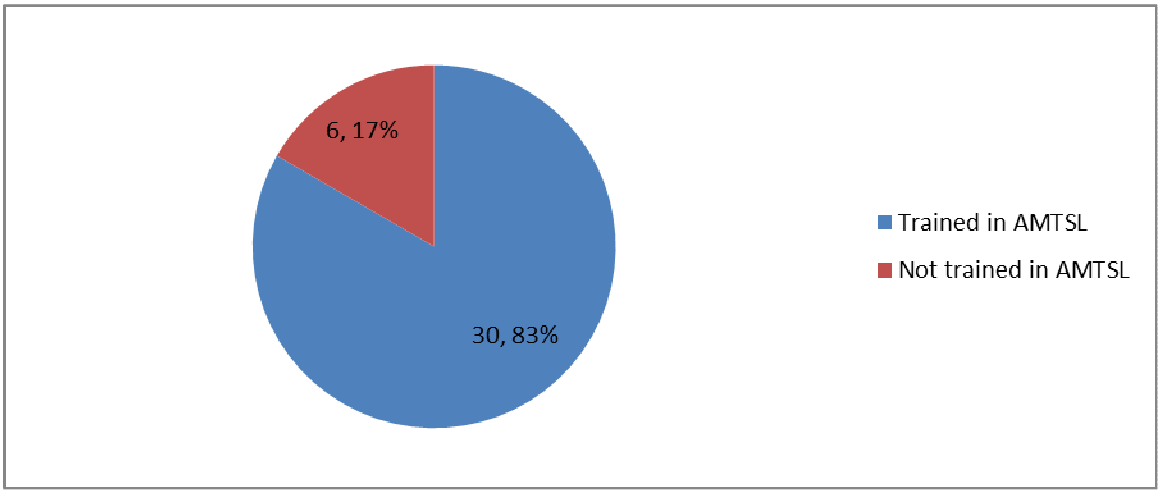

Figure 5: Training in AMTSL at Ho Municipal Hospital

As shown in figure 5, majority 30 (83%) of the respondents at the Ho Municipal Hospital have received training in AMTSL. However, 6 (17%) of them have not had any training on AMTSL as at time of this study.

Table 7: Challenges you face in the active management of third stage of labour with regard to supplies

Challenges	Ho Municipal Hospital n (%)	Volta Regional Hospital n (%)
Drug shortage	24 (66.7 %)	10 (71%)
Drugs locked in locker	1(2.8%)	0 (0%)
Shortage of logistics	11 (30.5%)	4 (29%)
Total	36 (100%)	14 (100%)

Common challenges faced in the use of active management of third stage of labour at the Ho Municipal Hospital include drug shortage 24 (66.7%), followed by shortage of logistics 11 (30.5%). Similarly in the Volta Regional Hospital, challenges faced were drug shortage 10 (71%) and then shortage of logistics 4 (29%).

Table 8 Showing Demonstration of AMTSL skills by Participants

No	Stage	Done to Standard n=%	Not to Standard n= %
1	Assessment for presence of another baby	36 (72%)	14 (28%)
2	Administration of uterotonic	30 (60%) 1 to 3 minutes	20 (40%) 5 to 10 minutes
3	Cutting the Cord	26 (52%)	24 (48%)
	Avoid splash of blood	44 (88%)	6 (12%)
4	Wait for signs of uterine contraction	38 (76%)	12 (24%)
5	Controlled Cord Traction (CCT) – Assessment of uterine contraction	44 (88%)	6 (12%)
	Deliver placenta with downward direction with firm grip on the cord	48 (96%)	2 (4%)
6	Massage of uterus every 15 minutes for 2 hours	0	50 (100%)
7	Emptying of bladder and inspection of perineum	50 (100%)	0
8	Checking for perineal, vaginal and cervical lacerations	40 (80%)	10 (20%)

3.5 AMTSL

As shown in Table 8, most 36 (72%) of the participants assessed to rule out the presence of another baby, but remaining 28% did not. Most 60% of the participants administered a uterotonic at the right time and at right site, but a substantial percentage of them (40%) did administer a uterotonic even though at the right site but not at right time, they gave it between 5 minutes to 10 minutes. AMSTL chart (Appendix). More than half 26 (52%) of the participants did clump and cut the cord within the specified 2-3 minutes after birth of the baby, 48% did not, it took them 4 minutes to 5 minutes to cut. Majority (88%) of the participants prevented splashing of blood during cord cutting. Most (80%) participants checked for perineal, vaginal and cervical lacerations, whereas 20% of them did not.

4. DISCUSSION OF FINDINGS

This study was carried out to assess the knowledge and practices of midwives' in the active management of third stage of labour (AMSTL) at the Volta Regional Hospital and the Municipal Hospital, both government hospitals located in Ho, the Capital of the Volta Region. Fifty midwives took part in the study. Most of the respondents were within the middle age and young ones (21 - 39) formed 54%. This was favourable for the work because the older ones who were to mentor the younger ones are also (40%). With work experience, quite a sizeable percent (48%) had two to three years' experience. This was not favourable for quality service as it might put more pressure on the older and more experienced ones leading to omission of steps in the process, which could be dangerous to the health of both mother and baby at that critical moment. The third stage of labour is the most hazardous stage for the birthing woman due to the risk of profuse haemorrhage. In order to reduce this hazard is to manage effectively the third the stage of the labour with the view to reducing postpartum haemorrhage, hence the AMTSL (Jangsten et al, 2009; Schuumans et al, 2000). From the results of this study, the midwives' knowledge on active management of third stage labour (AMTSL) was high as 82% were able to describe AMTSL as actions taken in the third stage of labour to prevent postpartum haemorrhage.

This finding confirmed the findings of other studies (Jansen et al, 2009; Yaekob et al, 2015), where majority (86%) of the respondents thus: 86% and 76.4% respectively were knowledgeable about AMTSL. About practice of AMTSL, majority (96%) of the respondents indicated that the time for administering a uterotonic (injection oxytocin) during the AMTSL was after delivery of the baby. This finding is similar to that of Naamala (2007) in Uganda, who found that midwives generally had good knowledge about AMTSL. But the actual practice of the midwives did not correspond with their knowledge level as indicated; 28% did not assess the presence of another baby before the administration of the uterotonic, 40% of them did not administer the uterotonic to standard, and quite a significant percentage (20%) did not examine the woman for perineal, vaginal and cervical lacerations which are some of the causes for postpartum haemorrhage. The midwives never massage the uterus every 15 minutes for 2 hours as stipulated in the protocol for AMTSL. These omissions indicated that the midwives were not practising the AMTSL effectively as these are the recipe for postpartum haemorrhage. Postpartum is known as the most cause of the maternal deaths in our part of the world (Brucker, 2001, GSS, 2009; GHS-VRDH, 2010; 2015; Prendiville, Elbourne & McDonald, 2000; WHO, 2012).

However, only 68% of the respondents indicated that third stage of labour lasts not more than 30 minutes, and only 52% were able to correctly state the components of AMTSL in order of sequence. This suggests that even though majority (82%) of the midwives did know about AMTSL as series of actions taken to prevent postpartum haemorrhage in the third stage, quite a significant percentage of them 32% and 48% respectively, did not know the details such as duration of the third stage of labour and components and steps involved in AMTSL. This could be a source of threat to the effective use of AMTSL to the benefit of clients and the institutions as well. Seventy-two percent of the midwives knew that the components for AMTSL. Even though the midwives had a high level of knowledge about the aim of AMTSL, they were not too sure about the details of it, as against 82% of them knowing about the objective of AMTSL. This situation might contribute to the irregular use of the AMTSL by some of the midwives as shown in the level of their practice; that is, 20% of them not assessing for presence of another baby before administering a uterotonic and some of those who did (40%) administer did not do it at the right time.

Findings from the study showed that majority (94%) of the midwives reported always practicing AMTSL, but (82%) of them always employed all the components of AMTSL. This suggests that majority of the midwives were knowledgeable about AMTSL. It also showed that they appreciated the importance of AMTSL (Su et al., 2009). However, it gives the indication that not all the midwives actually do AMTSL which might be due to lack of knowledge or simply their own decision to allow the natural process of labour and delivery to take place. Meanwhile, the physiological approach to managing the third stage of labour is no more encouraged due to the advent of HIV/AIDS which is known to be passed on to the infant at that critical moment by an infected mother. This finding confirmed the assertion of Smith (2015), that management strategies of third stage of labour are often controversial as a clear division exists between authorities who advocate the physiological approach and those who advocate the active approach of management.

Most (64%) of the respondents reported that they always used controlled cord traction to deliver placenta after early cord clamping before pulsation stops; whilst 36% of respondents did not use controlled cord traction to deliver the placenta. Seventy percent of midwives always wait for signs of placental separation before delivery, and majority (92%) of them indicated that they always do uterine massage immediately after the expulsion of the placenta. This finding is consistent with Schuurmans et al. (2000). This suggests that not all the steps of AMTSL were carried out by all the midwives. According to Schuurmans et al (2000), the administration of an oxytocic drug within one minute of birth, clamping and cutting the cord with delay for 1 to 3 minutes to help prevent anaemia of the newborn, and use of controlled cord traction to deliver placenta, followed by fundal massage. However, in this study nearly a quarter (24%) of the midwives did not wait for signs of placental separation which is significant in this case. This might be dangerous since this can lead to tear of the lobes and membranes leading to retention of some placental tissues in the uterus which can lead to postpartum haemorrhage (Brucker, 2001).

As the saying goes “it is easier said than done.” Even though the knowledge level of midwives was high, but in actual practice, there were gaps as shown in Table 8. Twenty-eight percent of the midwives did not assess for the presence of another baby before administering a uterotonic, a significant percentage (40%) did administer a uterotonic even though at the right site, it was not at right time, they gave it between 5 minutes to 10 minutes after birth of the baby. This does not correspond with the standard time of administration as indicated by the AMTSL chart (Appendix). Administration of a uterotonic is said to facilitate detachment of the placenta, boosts the functions of oblique uterine muscles and also promotes the maternal blood clotting mechanisms, in effect, reducing the incidence of postpartum haemorrhage. Any delay in administration of uterotonic heightens the incidence of postpartum haemorrhage (Magann, 2006).

From the observation made during the skill demonstration by the midwives, it could be deduced that quite a significant number of clients being handled by them might be experiencing some degree of postpartum haemorrhage, if not fatal. As much as 40% of them delayed in administering uterotonic after delivery of the baby. This state of affairs does not augur well with quality midwifery practice in the institutions studied.

More than half 26 (52%) of the midwives did clamp and cut the cord within the stipulated 2-3 minutes after birth of the baby, 48% did not, it took them 4 minutes to 5 minutes to cut. This practice has the tendency of allowing transmission of a disease such as HIV to the baby from the maternal blood. This confirms the findings of Naamala (2007), in Uganda where the practices of midwives were found to be very poor as regards AMTSL use. All the midwives assessed uterine contractions before applying the controlled cord traction to deliver the placenta. This indicates that majority of the midwives were aware and appreciate the dangers associated with mishandling the delivery of the placenta. However, all the midwives did not massage the uterus for every 15 minutes for two hours after the initial massage. This situation is not favourable for preventing PPH which is the thrust of AMTSL. What was deduced from the foregoing was that even though the midwives were knowledgeable about AMTSL, a gap exists between their knowledge and actual practice of AMTSL. They are also not consistent with the practice of AMTSL, the element of the physiological method of managing the third stage of labour still persists. This practice could be a defeat in the efforts to preventing mother-to- child transmission (PMTCT) of HIV and invariably increase the incidence of the condition in infants.

5. THE COMMON CHALLENGES FACED BY MIDWIVES IN THE IMPLEMENTATION OF AMTSL

Most (68%) of the respondents reported of shortage of and erratic supply of drugs, and 30% of them indicated shortage of logistics, and 10% also reported of lack of in-service training as a challenge. As a result, the midwives might not be able to actually carry out AMTSL to the full coupled with lack of knowledge and skills due to lack of in-service training. This situation poses a direct threat to the successful implementation of AMTSL. It might also lead to increase in the incidence of postpartum haemorrhage and resultant increase in maternal morbidity and mortality. This is a variation in a study conducted in Accra which revealed that workload, poor communication and poor preparation were the main challenges faced in the implementation of AMTSL, even though lack of in-service training in the Accra study has been confirmed by this study (Schack et al, 2014).

To provide quality midwifery service to prospective clients, it calls for good management of human resource; that is, the required numbers and constant updates through in-service training through supervision, good and timely material resource planning, mobilization, distribution and monitoring of their use at the right time and place. Without this quality midwifery service provision would be a mirage and incessant maternal and infant morbidity and mortality would be the lot of the community and the institutions.

6. SUMMARY AND CONCLUSION AND RECOMMENDATION

In summary, the findings of the study revealed that majority of the midwives were satisfactorily knowledgeable about AMTSL. Majority of them were able to explain what AMTSL is and the purpose for which it is carried out. Furthermore, majority of the midwives reported employing AMTSL in the delivery of their clients with majority of them saying they apply all the components of third stage of labour. However, not all of them wait for signs of placental separation and for cessation of cord pulsation prior to clamping and cutting the cord. Shortage of drugs and logistics as well as lack of in-service training were said to be the main challenges faced in the AMTSL which are likely to affect its effective implementation with the resultant increase in the maternal death as a result of postpartum haemorrhage.

6.1 Findings

1. Lack of knowledge as a result of no in-service training in the AMTSL
2. Some are still practising the physiological process to manage the third stage of labour
3. Some midwives did not for signs of placental separation before applying fundal pressure for delivery of the placenta
4. Gaps in what is said by the midwives and their actual practice
5. An element of inconsistency in their practice

7. RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. Midwives of the two institutions be trained in AMTSL, backed with regular close supervision.
2. Senior midwives should endeavour to teach and encourage their junior colleagues to practice AMTSL always so as to ensure safe childbirth to mothers.
3. Hospital management including nurse managers should ensure that midwives are supplied with the necessary drugs and equipment to aid in the practice of AMTSL so as to help provide safe delivery services through good planning and budgeting regime, mobilization, distribution and monitoring of their use. This would contribute to prevention of maternal morbidity and mortality.
4. Nurse-managers should also ensure that duty rosters are prepared to ensure enough skilled hands on duty at every shift.

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