

ORIGINAL ARTICLE

Practices of Skilled Birth Attendants about AMTSL in Prevention of Post-Partum Haemorrhage: Cross-sectional Study

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ABSTRACT

Aim: To assess the practices of SBAs about AMTSL working in labour room at tertiary level of care in-order to minimize the accidence of PPH.

Study Design: Cross-sectional descriptive study.

Methodology: This study with enrolled SBAs (n=120) was done following ethical review committee's (ERC) approval at Government tertiary care hospitals of the Lahore-Pakistan. For data collection a WHO standardized check list as a questionnaire was used to assess the practices of SBAs.

Results: Results showed that there were gaps in competencies of SBAs about AMTSL working in labour room. Most of the steps that are S1, S3, S4, S8, S12, S13, S14 and S15 were not done by the majority of the SBA working in labour room. Almost 12 (10%) out of 120 SBAs just got 60% and above marks, 100 (83.3%) out of 120 got marks between 40 to 59% and only 8 (6.7%) got less than 40% marks. **Conclusion:** We concluded that SBAs had unsatisfactory knowledge about standardized check list of AMTSL by WHO and their practices were not according to standard.

Keywords: Skilled Birth Attendants, Labour Stages, Post-partum Haemorrhage and Practices.

INTRODUCTION

Postpartum haemorrhage (PPH) is a major complication of 3rd stage labour thus causing high maternal mortality globally. Of all the stages of labour, its 3rd stage is the most critical part of childbirth due to the risk of PPH¹. PPH is an obstetrical emergency that leads to excessive blood loss (>500ml) after delivery including various sites such as uterus, cervix, vagina and perineum².

Primary PPH is blood loss within first 24 hours after delivery whereas late PPH includes blood loss from 24 hours to 6 weeks after delivery. Under both situations, the amount of blood loss is ≥ 500 ml in a vaginal birth.³ It can also occur in women who deliver after 20 weeks of gestation. Treatment of PPH involves maneuvers like massage and medications thus causing uterine contractions.

Serious complications may appear without warning. Even though the third stage lasts only for fifteen to twenty minutes in both primi and multi gravida mothers, it can be complicated due to mismanagement and result in maternal mortality⁴. It is difficult to predict which woman will develop PPH based on risk factors. However; all women are considered at risk and must be provided proper obstetric care by skilled birth attendants (SBAs)⁵.

Skilled birth attendant means health professionals (midwife, doctor or nurse) who has skills to manage normal pregnancy, childbirth and the immediate postnatal period. They identify, manage and refer patients having complications to better health facilities Unfortunately, the enabling environment is less clearly defined but equipment, drugs and policies are variably cited as components⁶. SBAs must have knowledge regarding risk factors for PPH. This knowledge helps SBAs to monitor patients vigilantly thus excessive bleeding can be estimated and minimized. As a competent participant in the management of severe postpartum hemorrhage, it is necessary to have basic knowledge of pelvic and gynecologic anatomy, the pathology and its management. Interventions to prevent PPH in developing countries are therefore, essential component to decrease the maternal mortality rate⁷.

Every year, 14 million women experience PPH, and at least 128000 of these women bleed to death⁸. Literature review revealed that these women can be saved with quality obstetric care. Skillful assistance during various stages of

labour, delivery and postpartum period is key factor in reducing maternal morbidity and mortality⁹.

The objective of the study was to assess the practices of SBAs about AMTSL working in labour room at tertiary level of care in order to minimize the accidence of PPH.

METHODOLOGY

Present study enrolled SBAs (n=120) following ethical review committee's (ERC) approval thus held at Government tertiary care hospitals of the Lahore-Pakistan. For data collection a WHO standardized check list as a questionnaire was used to assess the practices of SBAs. SBAs working in labour room (Doctors, Nurses, Midwives), spontaneous vaginal deliveries having duration of pregnancy at least 37+weeks were included while those who were unwilling to get enrolled and failed to fulfil inclusion criteria were excluded. Confidentiality of the SBAs was ensured to the administration of concerned tertiary care hospitals during data collection, analysis and interpretation. They were not bound to perform the AMTSL check list according to WHO standard. The SBAs were free for the presence or absence at the time of Third Stage of Labour and for their practices. Data analyzed by SPSS software, v.17. To summarize the results, mean \pm SD, (standard Deviation) was used.

RESULTS

Different questions were asked from enrolled subjects thus their results were compiled as frequency and percentage in table-1 as shown. Figure-1 showed that there were gaps in competencies of SBAs about AMTSL working in labour room. Most of the steps that are S1, S3, S4, S8, S12, S13, S14 and S15 were not done by the majority of the SBA working in labour room. So there is a need to improve or guide to SBAs regarding AMTSL. Almost 12 (10%) out of 120 SBAs just got 60% and above marks, 100 (83.3%) out of 120 got marks between 40 to 59% and only 8 (6.7%) got less than 40% marks as shown by figure-2.

Table-1: The Practices Of SBAs About AMTSL In Labour Room

	Not done	Done incorrectly	Done correctly
Palpation of uterus to rule out other baby	119(99.2%)	1 (0.8%)	-
Absence of other baby, administers uterotonic drug within one minute of delivery	-	19 (15.8%)	101 (84.2%)
Clamping & cutting of cord 2-3 minutes after birth.	16 (13.3%)	92 (76.7%)	12 (10.0%)
Placement of on the lower abdomen above her pubic bone.	76 (63.3%)	1 (0.8%)	43 (35.8%)
Keeping slight tension while awaiting strong uterine contraction.	1 (0.8%)	1 (0.8%)	118 (98.4%)
Applying gentle but firm traction to the cord during a contraction.	3 (2.5%)	-	117 (97.5%)
Waiting for the next contraction while repeating action if the maneuver is unsuccessful.	24 (20.0%)	4 (4.3%)	92 (76.7%)
As the placenta delivers, holds it in both hands.	97 (80.0%)	7 (5.8%)	16 (13.4%)
Maneuver to deliver the membranes.	21 (17.5%)	34 (28.3%)	65 (54.3%)
Examination of upper vagina and cervix with teared membranes.	-	-	120 (100%)
Placement the placenta in kidney basin.	-	-	120 (100%)
Immediate massages the fundus of the uterus until the uterus is contracted.	105(87.5%)	-	15 (12.5%)
Ensuring the uterus does not become soft after stopping uterine massage.	116(96.7%)	-	4 (3.3%)
Repetition of uterine massage if soft uterus.	118(98.3%)	-	2 (1.7%)
Teaching about self massage of uterus.	120 (100%)	-	-

Figure-1: Depicting frequency distribution correctly at each step

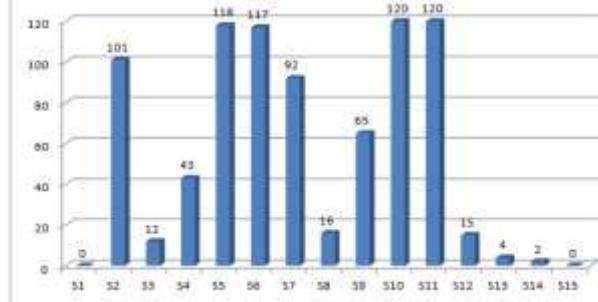
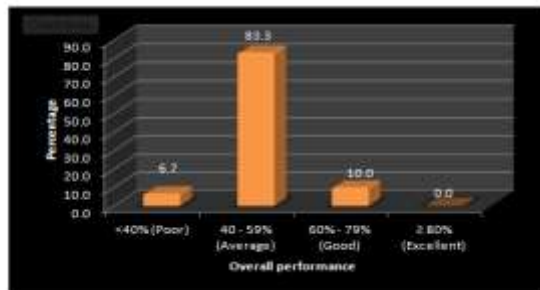


Figure-2: Depicting Overall performance as percentage



DISCUSSION

In Pakistan increase in the number of maternal mortality rate due to PPH also shows lack of management interest regarding the prevention of PPH¹⁰. This needs special attention of hospital management because by paying special attention to this, so they can reduce the risk of PPH as well as hospital stay of the patients. Till now many research studies conducted by doctors and nurses in this respect but PPH is still an alarming situation for all health care personnel's and even for child bearing women¹¹.

A study was conducted by Ndola Prata et al in Bangladesh in (2014) to determine whether the attendant at delivery is associated with the use of interventions to prevent PPH at home births¹². Findings indicated that trained TBAs can have a significant impact on utilization of interventions to prevent PPH in home births. As observed by the researcher during her stay in labour room that Practices of SBAs about AMTSL were not according to the standard practice check list by WHO. There were lots of gap in practices of SBAs about steps of AMTSL working in labour room.

An international survey on variation in practices of the management of Third Stage of labour conducted by researcher who found that there was significant difference in intracountry and intercountry in practices of AMTSL which confirmed that there was existence of a large gap between knowledge and practice¹³. So there is strong need to improve the practices of SBAs regarding AMTSL. Another main point was also noted the absence of any protocol/guideline of AMTSL in labour room. Hence, there is a strong need to develop the protocol/guideline for SBAs to advance the SBAs practice that support the objective of the study¹⁴.

Results of current study highlights that most of steps were not done by majority of SBAs only small number of steps was done correctly by SBAs so conclude that SBAs have unsatisfactory knowledge about AMTSL and their skills are also not according to the standard due to many factors, one of them is their over work load. This study was also done to observe the SBAs skills to find out the shortcomings for further implications of another research, observation showed that most of the SBAs practicing the standardized check list but neglecting the important components. Another factor was divert attention due to delivery of the baby and handed over the baby that may create a hindrance in practicing standardized check list for the prevention of PPH this was observed by the researcher during stay in labour room. Result also showed that SBAs were not paying attention to this critical issue because of not having any guideline /protocol

in labour room displayed regarding the prevention of PPH. The above discussed study also supported that the need for delegating certain steps of AMTSL to other health care staff, i.e. task shifting consider crucial part during AMTSL practices.

The present integrative review revealed that nursing professionals with other professionals tried to implement the AMTSL while elaborating protocols, conducting trainings with assessments of results of their practices. Unfortunately, despite of all such efforts, practices about AMTSL are not broadly developed and implemented, even in the reference hospitals in Brazil and many other countries¹⁵.

Limitations: Financial constraints with limited resources were the limitations.

CONCLUSION

We concluded that SBAs had unsatisfactory knowledge about standardized check list of AMTSL by WHO and their practices were not according to standard. This is may be due to many factors such as SBAs' work load, divert attention due to delivery of the baby towards mother and baby, handed over to baby.

Authors' Contribution: TZ&YS: Conceptualized the study, analyzed the data, and formulated the initial draft, Z&TP: Contributed to the histomorphological evaluation, SR&TL: Contributed to the analysis of data and proofread the draft.

Conflict of Interest: None to declare

Financial Disclosure: None

REFERENCES

1. A Metin Gülmezoglu, Pisake Lumbiganon, Sihem Landoulsi, Mariana Widmer, Hany Abdel-Aleem, Mario Festin, Guillermo Carroli,(2012). Active management of the Third Stage of labour with and without controlled cord traction: a randomised, controlled,non-inferiority trial;140-6736(12)6o2o6-2
2. Adenifuja, K.O., Adepiti, C .A., Ogunniyi, S.O., (2010). Postpartum Haemorrhage in a teaching hospital in Nigeria
3. Afaifel, N. and Weeks, A.D., 2012. Active management of the third stage of labour.
4. Anderson, J.M. and Etches, D., (2009). Prevention and management of postpartum haemorrhage. *American Family Physician*; 75 (6):875-82.
5. Andersson, O., Hellström-Westas, L., Andersson, D., Clausen, J. and Domellöf, M., 2013. Effects of delayed compared with early umbilical cord clamping on maternal postpartum hemorrhage and cord blood gas sampling: a randomized trial. *Acta obstetrica et gynecologica Scandinavica*, 92(5), pp.567-574.
6. Anwar, I., Sami, M., Akhtar, N., Chowdhury, M.E., Salma, U., Rahman, M. and Koblinsky, M., 2008. Inequity in maternal health-care services: evidence from home-based skilled-birth-attendant programmes in Bangladesh. *Bulletin of the World Health Organization*, 86(4), pp.252-259.
7. Armbruster, D.Tackling the Biggest Maternal Killer. (2009).How the Prevention of Postpartum Hemorrhage Initiative Strengthened Effort around the World Washington DC: Nov.
8. Audureau; E,Tharoux D. Leferre; P, Drucato, S. Morell;o R, Dreyfus M et al. (2009).Practices for Prevention, Diagnosis and Management of Postpartum Hemorrhage: Impact of A Regional Multifactor Intervention. *An International Journal of Obstetrics and Gynaecology*. Sep; 116(10): p. 1325-33.
9. Bateman, BT., Mitchell, F.B., Riley, L.E., Leffert, L.R.,(2010) The epidemiology of Postpartum Hemorrhage in a Large, Nationwide sample of deliveries. *Society for Obstetric Anesthesia and Perinatology*. 110: p. 1268-73.
10. Blasi, I., D'amico, R., Fenu, V., Volpe, A., Fuchs, I., Henrich, W. and Mazza, V., 2010. Sonographic assessment of fetal spine and head position during the first and second stages of labor for the diagnosis of persistent occiput posterior position: a pilot study. *Ultrasound in Obstetrics & Gynecology*. 35(2), pp.210-215.
11. Carlough, M. and McCall, M., 2005. Skilled birth attendance: what does it mean and how can it be measured? A clinical skills assessment of maternal and child health workers in Nepal. *International journal of gynecology & obstetrics*, 89(2), pp.200-208.
12. Collings-Wells, J.A., 1962. Controlled Cord Traction. *British medical journal*, 2(5297), p.120.
13. de Kock, J., 2004. Second and third stages of labour. *Maternal and Newborn Care: A Complete Guide for Midwives and Other Health Professionals*, 14, p.3.
14. Dumont, A., Fournier, P., Abrahamowicz, M., Traoré, M., Haddad, S., Fraser, W.D. and QUARITE research group, 2013. Quality of care, risk management, and technology in obstetrics to reduce hospital-based maternal mortality in Senegal and Mali (QUARITE): a cluster-randomised trial. *The Lancet*, 382(9887), pp.146-157.
15. Dyer, R.A., Van Dyk, D. and Dresner, A., 2010. The use of uterotonic drugs during caesarean section. *International journal of obstetric anesthesia*, 19(3), pp.313-319.