

Postpartum Hemorrhage: Still a Big Issue in Maternity Care- What is Going Wrong?

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ABSTRACT

Postpartum haemorrhage remains one of the main leading causes of maternal mortality across the world. This is despite a wide-spread coverage of active third stage of labour care in many countries. Reflecting on emerging evidence in this context, a discussion of associated factors which should be considered in interpretation of the evidence and its implications is presented below.

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Use of Uterotonics & Maternal Mortality

A recent cross sectional study by the World Health Organization (1) including more than 300,000 women from 357 health facilities in 29 countries showed that postpartum hemorrhage was one of the top two factors contributing to overall maternal mortality and morbidity. They also reported that the coverage of prophylactic uterotonics as an indicator of active management of the third stage of labour was considerably high (90% in total) with no significant differences among countries with low or very high rates of maternal mortality.

It may be of particular interest to the readers of the Journal of Midwifery and Reproductive Health that the results from a survey of the third stage of labour care policies in Iran (2) which covered all 23 provinces, also indicated a widespread use of prophylactic uterotonic agents (79%) in prevention of postpartum hemorrhage (PPH). This is comparable with the rate of its use in many European countries (72-100%) reported by Winter et al (2007) who studied policies for the third stage of labour care and early PPH prevention in 14 European countries (3). Austria and Denmark were exceptions in that they reported a much lower rate of using prophylactic uterotonic policies

(55% and 57% respectively) in the aforementioned survey of European countries.

A comparison of the variation in the level of uterotonic use (as a surrogate marker of active management) with varied mortality incidences in the countries mentioned above (Iran Vs. Austria and Denmark: 20 Vs 4 and 12 maternal deaths per 100,000 live births respectively) (4) may raise the importance of considering other underlying factors in reducing maternal mortality on top of the process of active third stage management.

Taking the Iranian Survey of policies in PPH prevention (2), despite a high compliance with evidence in the use of active management of the third stage of labour, there seemed to be issues related to availability of facilities such as blood products, transfer and access to emergency care rather than the care package or its components.

Another important finding from this study was an absence or limitations in collecting routine accurate information regarding the number of women experiencing hemorrhage or its consequences. This was not likely to be due to a lack of willingness to share data but was mainly due to deficiencies in infrastructure in capturing and recording such information systematically. Establishing audit systems in maternity units and emphasizing the importance of gathering such routine information to

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allow reflective opportunities to improve practice should be promoted.

It is noteworthy that although the management of third stage of labour in Afshari et al study (2013) was generally in line with the robust evidence, the high rate of early cord clamping (71%) was inconsistent with international guideline recommendations (5). The timing of cord clamping has not shown to affect the risk of PPH or maternal mortality but it is important from the neonatal perspective. This practice can be easily modified by endorsing appropriate supporting policies and it requires urgent attention due to depriving newborns from a considerable amount of blood which would be naturally transferred to the baby through the placenta if cord clamping was deferred for at least two minutes (6).

Overall, there has been a great focus on exploring the effectiveness of the third stage of labour management package (7) or its components (8-11), however to make an impact, efforts should extend beyond this one element of care and give equal attention if not more to underpinning factors such as nutrition, anemia, and access to blood bank and effective emergency systems.

After all, there is a great deal more to the third stage of labour care than administration of a uterotonic agent (12) or application of various components of an active or expectant package of care.

Conclusion

Despite a great focus on the process of active management of the third stage of labour in the literature, little attention has been given to other important factors such as state of health and nutrition, pre-existing mild or severe anemia, or more importantly access to blood resources and timely transfer and transport issues.

Given the level of knowledge about the effectiveness of third stage of labour management and according to the findings from recent surveys of PPH prevention, in order to have a real impact on changing the pattern of maternal mortality and morbidity globally, it is time for researchers and policy makers to take holistic approaches and refocus efforts on surrounding factors such as cost-effectiveness of investing in health systems with better diagnosis and improved access to blood resources or transport systems.

Attention should also be given to establishing an accurate audit system and routine clinical data collection to allow reflection on practice in order to improve policy and practice. Promoting routine data collection,

practice and policy monitoring without a blame culture, and purely aiming at facilitating a watchful eye and regular reports, to explore where there are good practices and where there are rooms for improvement, are paramount to any successful health service program particularly in reducing maternal mortality and morbidity.

Conflict of Interest

The authors declare no conflicts of interest.

References

1. Souza JP, Gulmezogly AM, Vogel J, Carroli G, Lumbiganon P, Qureshi Z, et al. Moving beyond essential interventions for reduction of maternal mortality (the WHO Multicountry Survey on Maternal and Neonatal Health): a cross sectional study. *The Lancet* 2013; 381(9879):1747-55.
2. Afshari P, Medforth J, Aarabi M, Abedi P, Soltani H. Management of third stage labour following vaginal birth in Iran: A survey of current policies. *Midwifery* 2013 Mar 21. doi: 10.1016/j.midwifery.2013.02.002.
3. Winter C, Macfarlane A, Deneux-Tharaux C, Zhang WH, Alexander S, Brocklehurst P, et al. Variations in policies for management of the third stage of labour and the immediate management of postpartum haemorrhage in Europe. *BJOG: An International Journal of Obstetrics & Gynaecology* 2007; 114(7):845-854.
4. World Bank, 2010. Maternal Mortality Ratio available from <http://data.worldbank.org/indicator/SH.STA.MMRT> (Accessed 5 July 2013)
5. World Health Organisation, 2007. WHO Recommendations for Preventing Postpartum Haemorrhage. Available from: [/http://esa.un.org/unpd/wpp/index.htm](http://esa.un.org/unpd/wpp/index.htm)S (last accessed 05 July 2013).
6. Hutton EK, Hassan ES. Late versus early clamping of the umbilical cord in full term neonates: systematic review and meta-analysis of controlled trials. *Journal of the American Medical Association* 2007; 297(11):1241-12452.
7. Begley CM, Gyte GML, Murphy DJ, Devane D, McDonald SJ, McGuire W. Active versus expectant management for women in the third stage of labour. *Cochrane Database of Systematic Reviews* 2010 Jul. 7 ;(7):CD007412. DOI: 10.1002/14651858.CD007412.pub2.
8. McDonald SJ, Middleton P. Effect of timing of umbilical cord clamping of term infants on maternal and neonatal outcomes. *Cochrane Database of Systematic Reviews*. 2008 Apr. 16; (2):CD004074.
9. Soltani H, Hutchon DR, Poulouse TA. Timing of prophylactic uterotonics for the third stage of labour after vaginal birth. *Cochrane Database of Systematic Reviews*. 2010 Aug. 4;(8):CD006173.

10. Soltani H, Poulouse TA, Hutchon DR. Placental cord drainage after vaginal delivery as part of the management of the third stage of labour. Cochrane Database of Systematic Reviews. 2011 Sep. 7;(9):CD004665.
11. Gulmezoglu A, Lumbiganon P, Landoulsi S, Widmer M, Abdel-Aleem H, Festin M, et al. Active management of the third stage of labour with and without controlled cord traction: a randomised, controlled, non-inferiority trial. *The Lancet* 2012; 379:1721-1727.
12. Keirse, M.J., What does prevent postpartum haemorrhage? *The Lancet* 1998; 351:690-692.