



A Qualitative Assessment of the Impact of a Uterine Balloon Tamponade Package on Decisions Regarding the Role of Emergency Hysterectomy in Women With Uncontrolled Postpartum Hemorrhage in Kenya and Senegal

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**Scholarly Report submitted in partial fulfillment of the MD Degree at
Harvard Medical School**

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Student Name: Anna Alaska Pendleton, BS

Scholarly Report Title: A qualitative assessment of the impact of a uterine balloon tamponade package on decisions regarding the role of emergency hysterectomy in women with uncontrolled postpartum hemorrhage in Kenya and Senegal

Mentor Name: Thomas F Burke, MD, FACEP, FRSM

Authors, with Affiliations: Anna Alaska Pendleton,^{1,2} Abirami Natarajan,^{1,2} Roy Ahn,^{1,2} Brett D Nelson,^{1,2} Melody J Eckardt,¹ Thomas F Burke^{1,2}

¹Division of Global Health and Human Rights, Department of Emergency Medicine,
Massachusetts General Hospital, Boston, Massachusetts, USA

²Harvard Medical School, Boston, Massachusetts, USA

Title: A qualitative assessment of the impact of a uterine balloon tamponade package on decisions regarding the role of emergency hysterectomy in women with uncontrolled postpartum hemorrhage in Kenya and Senegal

Anna Alaska Pendleton, BS; Abirami Natarajan, BS; Roy Ahn, ScD, MPH; Brett D Nelson, MD, MPH, DTM&H; Melody J Eckardt, MD, MPH; Thomas F Burke, MD

Purpose: To assess the impact of a every second matters for mothers and babies uterine balloon tamponade package (ESM-UBT) on provider decisions regarding emergency hysterectomy in cases of uncontrolled postpartum hemorrhage (PPH).

Methods: This study was performed as a qualitative assessment of a subgroup extracted from a database containing all UBT device uses among ESM-UBT trained health providers. The database was analyzed for all medical doctors in Kenya and Senegal who had placed a UBT for uncontrolled PPH subsequent to implementation of ESM-UBT at their facility, and who also had the capabilities of performing emergency hysterectomies. Semi-structured interviews were conducted with providers using a standardized guide. Interview transcripts were analyzed independently by two researchers.

Results: 30 of the 31 medical doctors (97%) who fulfilled the inclusion criteria were independently interviewed. Collectively the interviewed medical doctors had placed over 80 UBT devices for uncontrolled PPH since ESM-UBT implementation. All 30 responded that UBT devices immediately controlled hemorrhage and prevented women from being taken to emergency hysterectomy. All 30 would continue to use UBT devices in future cases of uncontrolled PPH.

Conclusions: These preliminary data suggest that following ESM-UBT implementation, emergency hysterectomy for uncontrolled PPH may be averted by use of uterine balloon tamponade.

Student Contribution

This research was accomplished while working under the guidance and mentorship of Dr. Thomas Burke and the Massachusetts General Hospital Division of Global Health and Human Rights. The MGH team had previously designed and implemented through local partners a condom-balloon uterine balloon tamponade (UBT) kit and training package for uncontrolled PPH called Every Second Matters for Mothers and Babies UBT (ESM-UBT). As of September 2015, ESM-UBT has been implemented in eight resource-limited countries over the preceding 3 years. Although prior studies demonstrated that UBT may be effectively employed in cases of severe PPH to avert maternal mortality, no prior studies had examined the impact of UBT on provider decisions regarding surgical management of PPH. Working with the MGH team, I developed and implemented a study to assess the impact of the ESM-UBT package on provider decisions regarding emergency hysterectomy in cases of uncontrolled PPH.

Under the guidance of Dr. Burke and the MGH team, I personally developed the primary research question, the study design, and the standardized questionnaire to be used during provider interviews. I identified from the multinational ESM-UBT the study participants, and individually interviewed each provider. To accomplish this, I spent over four months on-site in Kenya and Senegal interviewing providers at rural clinics across western Kenya, at hospitals in Nairobi, and at 15 health-care facilities in Dakar, Senegal. I was responsible for obtaining informed consent from study participants, and for conducting and transcribing all interviews. Using NVivo V.10 software (QSR International, Doncaster, Victoria, Australia), I used an iterative process of code identification and revision to develop domains and themes. I analyzed and organized all data, and compiled all findings for publication. I was responsible for the writing of manuscripts relating to this data, and am first author on two publications stemming from this study. I personally presented results from this study at the World Congress of the International Federation of Gynecology and Obstetrics in October 2015.

Link to Publication and Citation

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