

Effectiveness of ALARM International Program Training in Malawi

Anifa Kalay,¹ John Smith,¹ Richard Sims,¹ Megan Williams,¹ Hillary Lawson,¹ Janet Northcott,¹ Russell Kellett,¹ Chisale Mhango,² Doris Kayambo,² Lameck Chinula²

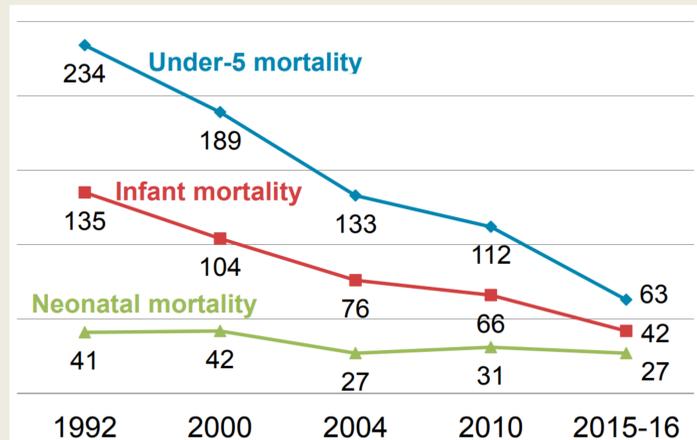
1. The Society of Obstetricians and Gynaecologists of Canada
2. Association of Obstetricians and Gynaecologists of Malawi

Introduction

- Malawi is one of the few countries that has achieved MDG 4 for child survival (reduce the under-five mortality rate by 2/3 between 1990 and 2015).
- However, neonatal mortality rates are still high. They have not reduced significantly since 1990.
- Maternal mortality rates have also improved in the last decades but are still among the highest in Sub-Saharan Africa.
- Thus the “Integrated Pathways for Improving Maternal, Newborn and Child Health”(InPATH) in Malawi project focuses on the reduction of maternal and child mortality.
- InPATH is a 4-year intervention (2016-2020) funded by Global Affairs Canada and implemented by a consortium of organizations: Cowater-Sogema, Plan International Canada, Plan International Malawi, the Society of Obstetricians and Gynaecologists of Canada, One Drop foundation and JCM Solar.
- InPATH is implemented in in three districts: Kasungu, Chitipa and Salima.
- SOGC's role in InPATH is to deliver Basic Emergency Obstetric and Neonatal Care (BEmONC) using an adapted version of the ALARM International Program (AIP) as well as clinical mentoring training to health professionals and district officials in the targeted districts.
- Quality BEmONC can significantly improve maternal and newborn outcomes.

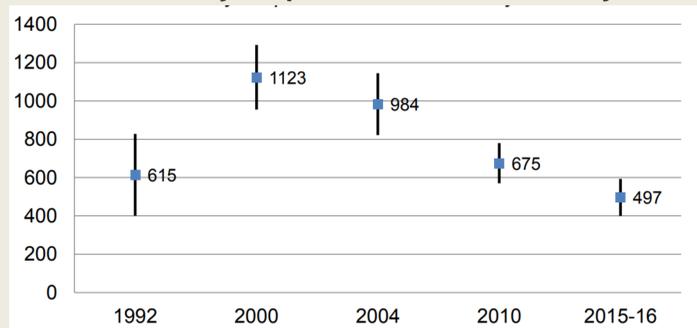


Figure 1: Deaths per 1,000 live births in the 5-year period before the survey



Source: Malawi Demographic and Health Survey 2015-16

Figure 2: Pregnancy-related deaths per 100,000 live births in the 7-year period before the survey



Source: Malawi Demographic and Health Survey 2015-16

Purpose

The main objective of this study is to describe the effectiveness of an adapted version of the AIP for BEmONC training training in Malawi with a focus on level 1 (reaction) and 2 (learning) of the Kirkpatrick training evaluation model.

Figure 3: Kirkpatrick’s four levels of education evaluation



Source: Weller JM, Nestel D, Marshall SD, Brooks PM, Conn JJ. 2012. Simulation in clinical teaching and learning. Med J Austra 196(9):594

Methods

- Between November 2017 and April 2018, four 5-day AIP courses were organised in Mzuzu, Malawi to train health professionals from Kasungu and Chitipa districts in BEmONC using a version of the AIP adapted to Malawi needs and including contents from the Malawi National BEmONC training manual.
- A written knowledge assessment test was administered before and after the training.
- Practical skills were assessed after training through Objective Structured Clinical Examinations (OSCE).
- Participants’ satisfaction with the course was also assessed through an course evaluation questionnaire.
- Descriptive statistics were performed for test and OSCE’s scores.
- Content analysis was applied to the answer to the question “Why would you recommend (or not) the AIP” to assess participants’ satisfaction with the course.



Results

Table 1: Participants profile

Cadres	Numbers
Clinical officers (CO)	25
Medical assistants (MA)	8
Registered nurse midwives (RNM)	23
Nurse midwife technicians (NMT)	45
TOTAL	101

Figure 4: Knowledge change per cadre in percentage

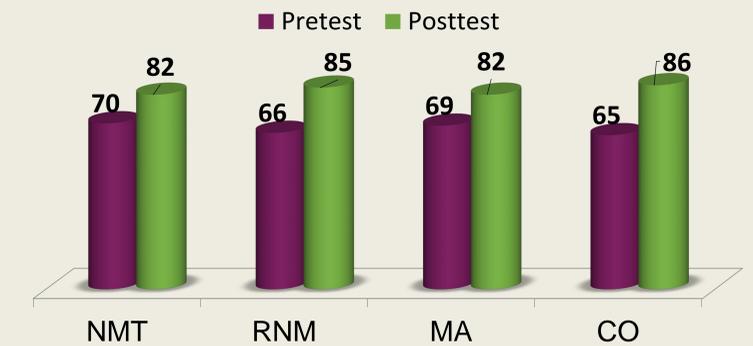
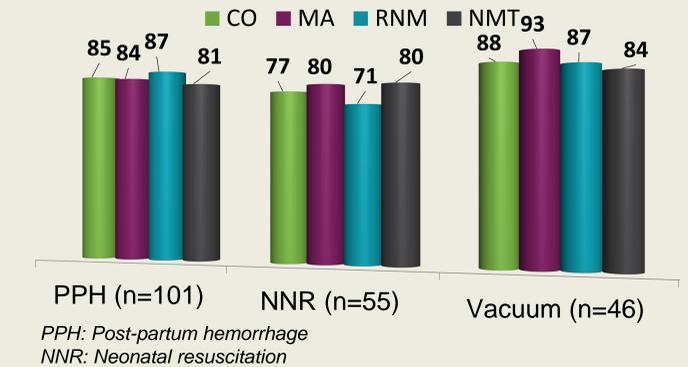


Figure 5: OSCE results



Satisfaction

All participants responded that they would recommend the AIP course to their colleagues.

Reasons to recommend the AIP course
Excerpts from participants comments

“It will improve their attitudes towards women seeking care”

“To improve quality care more health workers need to be trained of this course”

“ALARM program assists us to have new knowledge and skills to save lives”

Conclusions

- This study demonstrates that the AIP is an effective course to improve BEmONC knowledge and skills.
- All cadres improved their knowledge and gained essential BEmONC skills after a 5-day course.
- All participants were satisfied with the course. This was reflected in the results observed in terms of immediate learning.
- There is, however, a need for further follow-up after the training to evaluate long-term retention of knowledge and skills and provide updates as needed through clinical mentoring visits.
- The SOGC will work in collaboration with Malawi Ministry of Health in the delivery of clinical mentoring training.

