Maternity Waiting homes as an Intervention to Increase Facility Delivery in Rural Zambia

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BACKGROUND & SIGNIFICANCE

- The delay in reaching a skilled birth attendant has been identified as a primary cause of maternal mortality, influenced by the far distances women live from health facilities (Campbell, et al., 2016; Thaddeus & Maine, 1994).
- Every year, 591 per 100,000 pregnant women & girls die in Zambia due to preventable pregnancy and childbirth related complications (Central Statistical Office[Zambia] et al., 2014).
- Although Zambian women express high (94%) interest in having a facility delivery, in reality many mothers deliver at home (54%) (Stekelenburg et al., 2004).
- Maternity waiting homes (MWHs) are part of the solution to the problem of geographical distance, yet there is a paucity of outcome data on the efficacy of MWH (Campbell et al., 2016).

PURPOSE

The purpose of this study was to determine the potential for MWHs to increase facility-based deliveries in three rural districts in Zambia. For the purposes of this study, the MWHs are known as Zambian Mothers Shelters (ZaMS).

METHODS

- Using a matched cohort design in rural Zambia, six primary healthcare facilities with new MWHs were matched to six facilities without MWHs (comparison sites).
- Sites were matched for population demographics, size, and location.
- Monthly data collected from each site included number of facility deliveries and home deliveries.
- The percentage of deliveries taking place in a facility each month was calculated as the number of facility-based deliveries divided by the total number of deliveries taking place in each community (equation 1).

Equation 1.

$$\textit{Percent Facility Delivery} = \left(\frac{\textit{Facility Deliveries}}{\textit{Facility Deliveries} + \textit{Home Deliveries}} \right) \times 100$$

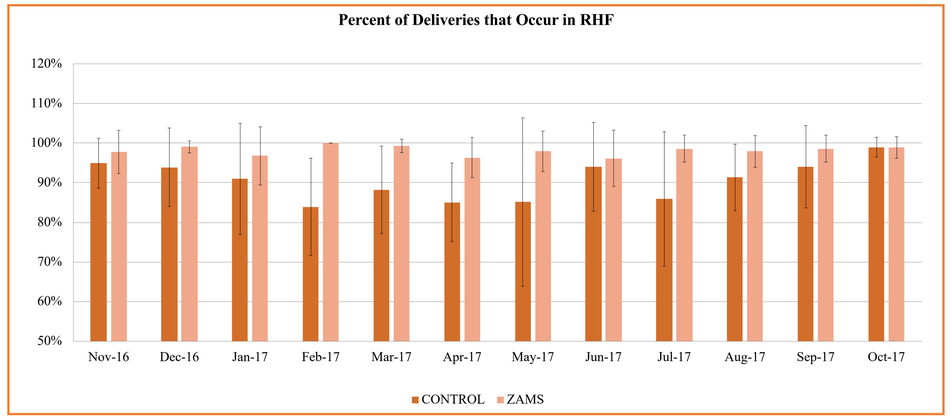
MWH, Lukola, Zambia

MWH governance committee members. Mutiti, Zambia.

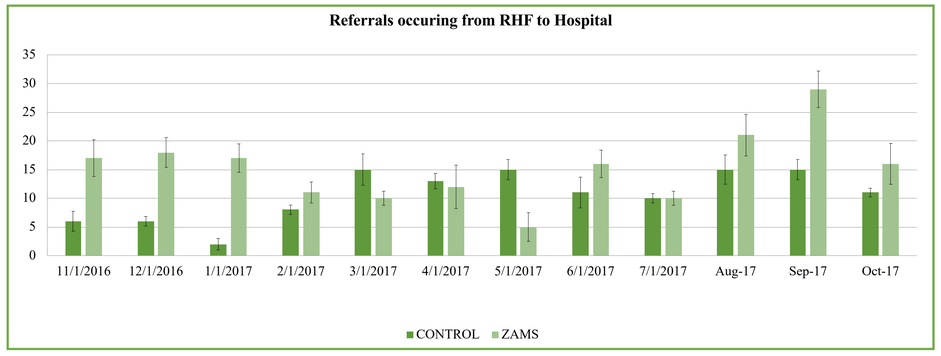
Electric hammermill, income generating activity to support MWH. Manager in Lubende, Zambia.

MWH garden, Lukola, Zambia.

RESULTS



- From November 2016- October 2017 there was a 7.57 percent increase (p=.002) in the proportion of deliveries occurring in a healthcare facility with the MWH intervention group in contrast to the comparison facilities.
- During this time period, there were 182 referrals from healthcare facilities with a MWH compared to 127 referrals from comparison facilities, although the difference was not statistically significant (p=.421).



CONCLUSIONS

- Maternity waiting homes are one important strategy to increase facility delivery for women living the furthest distances from healthcare facilities (Moyer et al., 2013)
- An additional benefit of the MWH is close monitoring of pregnant women and the ability for prompt referral in the event of complications.
- Women in the three districts in Zambia where this study occurred have received messages about the importance of facility delivery and are seeking care within the health system structures.
- As the quality of both the MWH structures and clinical care continue to improve, MWHs have the potential to serve many more women and contribute to the improvement of maternal and newborn outcomes in Zambia.

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