Stepping up the pace on demand generation and retention of prevention of mother-to-child transmission (PMTCT) services: a randomized control trial to evaluate the effect of a community-based peer facilitator intervention in a rural setting in Zimbabwe

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Background

The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) has been providing technical and financial support to the Ministry of Health and Child Care (MOHCC) in Zimbabwe to implement PMTCT and pediatric care and treatment programs since 2001. The adoption of WHO 2010 Option A PMTCT guidelines in Zimbabwe necessitated research to identify new strategies to increase demand for early first ANC attendance and increase retention of mothers and babies in HIV care. This study tested whether peer-facilitated community support groups for pregnant and postpartum women increased the number of pregnant women booking earlier for ANC and strengthened retention in ANC/PMTCT services.

Methods

A pair-matched community randomized control trial of 8 pairs in one rural district in Zimbabwe was conducted. The intervention health facility and its catchment area received the community based peer support group intervention for one year with a paired control community. The intervention involved training peer facilitators to form community based support groups for pregnant and post-partum women through which modules developed for the project were used to facilitate information sharing on maternal and child health and PMTCT specific topics. Participatory learning and problem-solving approaches were used. Baseline and end term aggregate data and longitudinal individual-level data were collected at all study health facilities to measure the effectiveness of the intervention. Matched pair data analysis was conducted using STATA.

Results

A total of 1206 women were recruited into 143 support groups during the 12 month intervention period. The intervention demonstrated significant improvements in the following outcomes: gestational age at booking was reduced by 1.7 weeks (p<0.001); percentage of women booking at <21 weeks increased by 11% (p=0.006); while percentage of women who had WHO recommended 4 or more ANC visits increased by 15% (p<0.001) Percentage of institutional deliveries increased by 10.5%, though this was not statistically significant. Compared to women in the control facilities 12.9% more women from intervention facilities complied with ANC visits as assessed by actual in relation to expected number of ANC visits, though again, this was not
statistically significant. There were no differences between intervention and control sites on AZT adherence and % of HIV exposed infants <2months with DNA PCR collected.

Conclusions

The community based peer facilitated support group intervention was effective in improving time at which women present for their initial ANC visit, completing the WHO-recommended four ANC visits, and facility deliveries. This intervention has the potential to increase demand and improve retention in MCH services in rural communities if scaled up.