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Key messages

- Sending text messages to health workers in order to reinforce training content is a feasible and acceptable alternative to providing classroom training only.
- Text messaging is logistically simple to implement, inexpensive and does not disrupt service provision. It also strengthens the cascading of information to health workers who did not attend the classroom training.
- Text messaging improved retention of knowledge of intermittent preventive treatment in pregnancy (IPTp) provision guidelines among health workers compared with classroom training only. Better knowledge appears to have led to better adherence to guidelines, with increased coverage of IPTp.



A midwife at a health facility in Moyo

Introduction

Malaria infection during pregnancy poses substantial risks to mother and child. The World Health Organization recommends IPTp, delivered as part of antenatal care (ANC), in areas of moderate or high transmission in Africa for the prevention and control of malaria in pregnancy (MIP). In many countries, IPTp coverage is low despite high ANC attendance. Formative research carried out in 2013-14 concluded that in Uganda, supply-side issues are likely to account for the majority of missed opportunities for the provision of IPTp during ANC. In particular, health worker knowledge of IPTp provision guidelines was found to be poor.

Intervention

A pilot intervention designed to improve health worker knowledge of and adherence to IPTp guidelines involved providing classroom training on MIP and IPTp to selected health workers from 16 health facilities in two districts of West Nile (n=24 per district, May 2015). Trainees were tasked with cascading information to colleagues who did not attend the training. In one district, all health workers with responsibility for ANC (n=49) subsequently received a series of text messages reinforcing the training content (June/July 2015).

Methods

The evaluation of the pilot intervention used a mixed-methods design, comparing classroom training plus text messaging ('intervention') with classroom training only ('control'):

Evaluation focus	Data source	Time of data collection
Health worker knowledge of MIP and IPTp	Multiple choice knowledge questionnaire administered to all relevant health workers	One month post-training (before sending of text messages, 'baseline', n=90) and six months post-training ('endline', n=89)
IPTp coverage	Extraction of IPTp data from health facilities' ANC registers	Endline (covering six months pre-training and six months post-training)
Feasibility and acceptability	Focus group discussions (health workers), interviews (district health staff)	Endline (four focus group discussions and three interviews)

Results

1. Health worker knowledge

- Average knowledge score (maximum score=40) was similar across the two districts at baseline, but significantly higher (p<0.05) in the intervention district at endline.

2. IPTp coverage

- Coverage rates were generally higher post-intervention.
- Post-intervention coverage was higher in intervention district, especially for three and four doses of IPTp, ensuring better protection from MIP.

3. Feasibility and acceptability

- Text messaging was perceived as a useful reminder of training content and source of information for those who did not attend the training.
- Messages were not considered disruptive, and the number and timing were considered appropriate.
- Cost of sending messages was minimal and the task did not add significantly to district staff's workload.

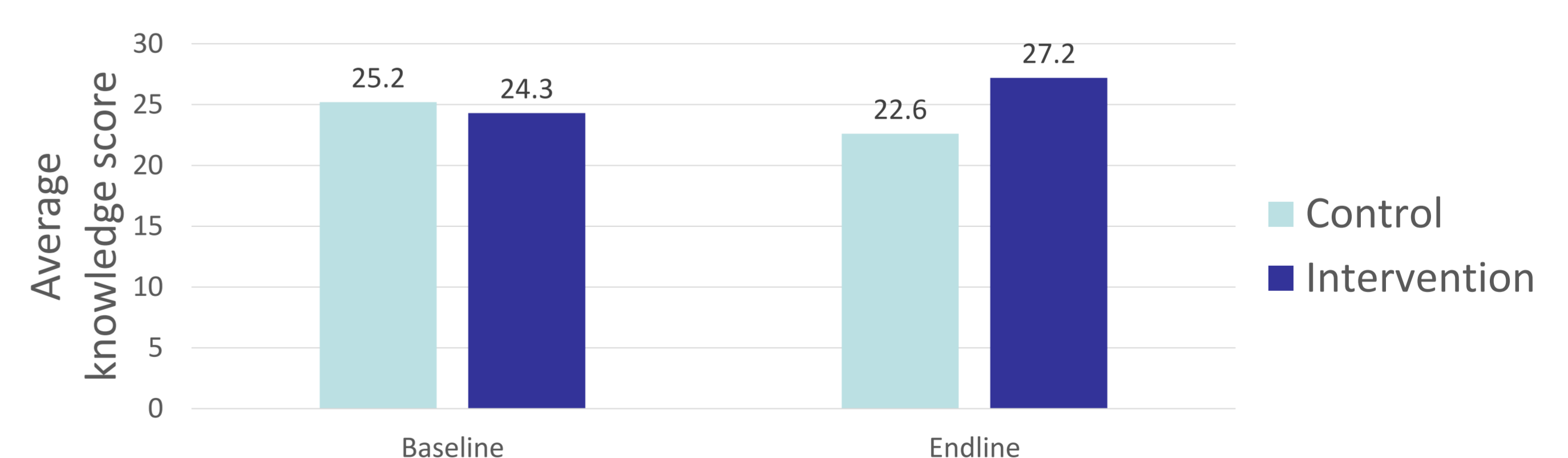


Figure 1: Average knowledge score baseline/endline in intervention and control districts

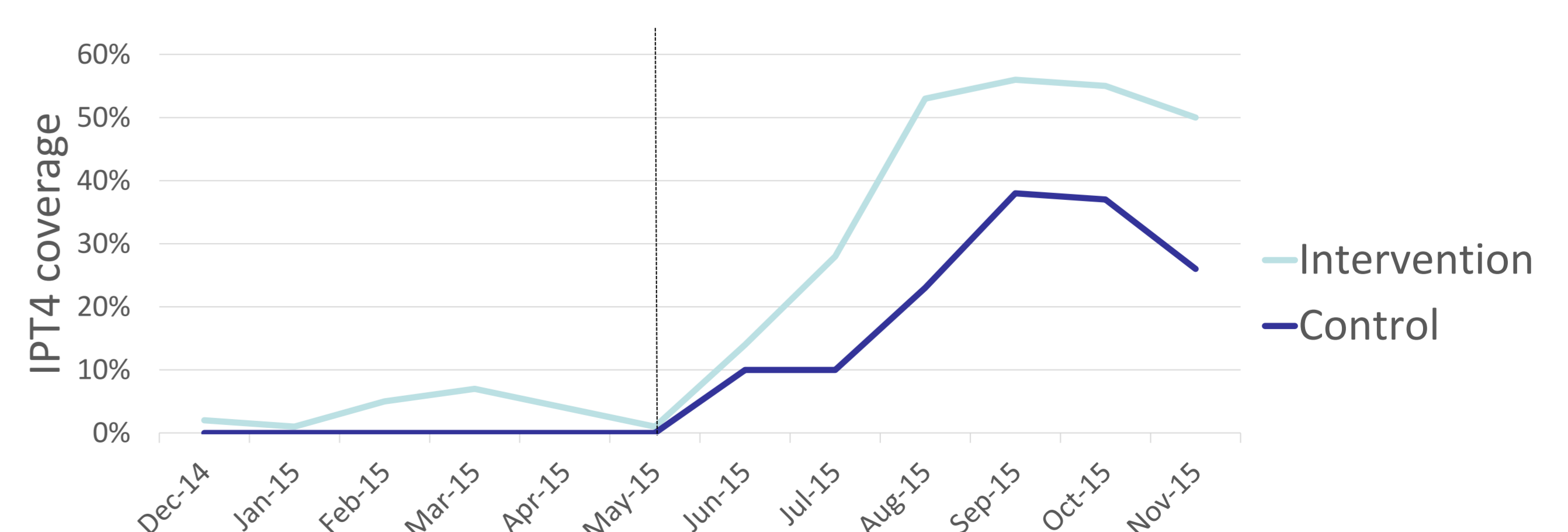


Figure 2: Coverage of 4 doses of IPTp pre/post-training in intervention and control districts