A process evaluation in Manicaland province assessed the capabilities of Village Health Workers (VHWs) and identified challenges and best practices in support of community-based vitamin A supplementation by VHWs. The study determined that VHWs were capable of safely providing vitamin A without reducing their ability to provide other services. Some challenges with documentation and reporting were identified. Results are being used to inform the optimal way to operationalize the national scale-up of this intervention.

INTRODUCTION

Vitamin A is critical for infants and children to promote rapid growth, prevent infections, and improve recovery from childhood illnesses. Inadequate intake of vitamin A can lead to vitamin A deficiency, which when severe may cause visual impairment and increased risk of illnesses from common childhood illnesses including diarrhea and measles [1]. The World Health Organization (WHO) 2011 guidelines strongly recommend that, in countries where vitamin A deficiency is a concern, supplements are given orally every six months to children aged 6 to 59 months to reduce childhood morbidity and mortality [1]. In Zimbabwe, estimates of the proportion of children aged 6-59 months who received supplements within the past 6 months is low between 33 percent [2] and 67 percent [3]. Previously, supplements were only administered in facilities by professional healthcare workers (HCWs). In 2015 with funding from Johanniter and additional support from Maternal and Child Health Integrated Project (MCHIP), the Ministry of Health and Child Care in Zimbabwe piloted a strategy in Manicaland Province in which vitamin A supplements were administered in the community by VHWs in addition to continuing facility-based administration. The pilot was expanded to include all districts in Manicaland Province in June 2017. The objective of this study was to assess the process of the community-based administration of the vitamin A supplementation strategy within Manicaland Province to inform the optimal way to scale-up of this intervention nationally. This study assessed VHWs’ capabilities, identified challenges, mitigation measures, and best practices in community-based vitamin A administration.

STUDY APPROACH

We conducted a cross-sectional, retrospective assessment of the Manicaland vitamin A pilot project. Outcomes of interest included: training and knowledge; VHW workload; supplement documentation; facility-level stock outs; and scope of the implementation. Using a mixed methods approach, data sources included: 1) district- and facility-level program records; 2) surveys with VHWs and HCWs; and 3) qualitative focus group discussions with VHWs and caregivers of children who had recently received supplements through VHWs.

For all quantitative outcomes, basic descriptive statistics (means or proportions) were used to describe the distribution of the outcomes. Qualitative data from focus group transcripts were analyzed thematically to explore caregiver and VHW perspectives on implementation and better understand community-based administration.

RESULTS

A total of 25 facilities, 43 facility HCWs, 19 district HCWs and 156 VHWs were surveyed. For the focus groups, the average size was 9 caregivers and 8 VHWs for their respective groups; there were a total of 9 focus group discussions for VHWs and 9 for caregivers. By January 2017, 88 percent of eligible facilities in Manicaland had launched the vitamin A supplement pilot program.

Overall, facility HCWs (77 percent) and VWHs (89 percent) felt their training was adequate. Among the VWHs who did not report “adequate”, 53 percent reported that they wanted refresher trainings and 29 percent reported that the trainings themselves needed to be longer. We found that the majority of VWHs demonstrated competency on each of the technical areas assessed (Figure 1): importance of vitamin A supplementation; knowing at least one source of vitamin A; knowing what to do if half-doses were not available; knowing how to store the capsules; knowing aspects of hygienic practice; knowing at least one of the ways to dispose of capsules; and knowing all components of the full screening process.

There was a high level of confidence in VWHs’ ability to administer supplements. Nearly all of VWHs reported being very confident (94 percent) while the proportion of district HCWs (89 percent) and facility HCWs (77 percent) who felt similarly was lower but still the majority of those sampled. Overall, there did not appear to be an increase in workload hours from the quantitative data review, but a few VWHs reported that their workload during the initial launch of the program was extended due to compiling the Zimbabwe Expanded Program on Immunisations (ZEPI) register for all children in their community at the beginning of the intervention. Finally, program recommendations from VWHs and caregivers included expanding the mechanisms for vitamin A demand generation (e.g. radio programs and including village leaders in the process of demand generation) and increasing resources for the program to train more VWHs.

CONCLUSIONS

Overall, the evaluation demonstrated that community-based vitamin A supplement provision by VWHs is feasible and could be a promising way to improve coverage. Following the presentation of results from the first phase of the evaluation in July 2017, a decision was made to adopt this as a national strategy in Zimbabwe. Scale-up is on-going.

ABOUT THE 3DE PROGRAM

The Demand-Driven Evaluations for Decisions (3DE) program is a pioneering approach to support ministries active in the health sector with evidence-based decision-making by using rigorous evaluations in a demand-driven, rapid and efficient way. It seeks to generate reliable impact evidence that meets the ministries' needs and is used to catalyze implementation of cost-effective action.