

TRENDS IN MATERNAL, NEWBORN, AND CHILD HEALTH CARE PRACTICES IN 115 L10K WOREDAS



INTRODUCTION

Between 1990 and 2012, the under-5 mortality rate (U5MR) in Ethiopia declined by two-thirds, from 204 to 68 deaths per 1,000 live births. This dramatic reduction meant that Ethiopia reached its Millennium Development Goal (MDG) 4 (reduce under-five mortality by 2015) three years early. During the same period, the reduction in neonatal (first 28 days of life) mortality rate (NMR) and maternal mortality ratio (MMR) showed more modest change—NMR declined from 54 to 29 deaths per 1,000 live births, and MMR declined from 708 to 497 deaths per 100,000 live births.

Decreasing NMR further is critical if Ethiopia is to sustain its U5MR reduction beyond 2015. Meanwhile, meeting the country's MDG 5 target for MMR remains a challenge because of low utilization of skilled personnel and facility-based services during childbirth. To strengthen health-related MDG efforts, Ethiopia designated the primary health care unit (PHCU), comprising one health center and five satellite health posts for every 25,000 people, as the major platform for health service delivery at the community level.

Ethiopia's flagship Health Extension Program (HEP), which is an integral part of the PHCU, was launched in 2004.

The HEP established one health post and deployed two female health extension workers to provide basic promotive, preventive, and curative health services for every 5,000 rural community members. A network of health development armies (HDAs) was established to extend the reach of the HEP.

Each HDA member is assigned five households, which encourage each other to adopt and practice healthy behaviors.

JSI Research & Training Institute, Inc. (JSI)'s The Last Ten Kilometers: What it takes to Improve Health in Rural Ethiopia (L10K) project has been supporting HEP since 2008, reaching 17 million people in 115 woredas (districts) in the regions of Amhara, Oromia, Southern Nations, Nationalities and Peoples' (SNNP), and Tigray. L10K conducted three rounds of household and community surveys to measure the impact of project innovations on reproductive, maternal, newborn, and child health (RMNCH) care-seeking behavior and practices. The Round I (baseline) survey was conducted from December 2008–January 2009; Round II between December 2010 and January 2011; and Round III between December 2014 and January 2015. This summary report presents across-survey changes in: 1) the kebele (sub-district) health system's support of HEP; 2) access and exposure to RMNCH messages and services; and 3) RMNCH behavior and practices. The report discusses the adequacy of these changes and identifies gaps that need closing.

METHODOLOGY

The three rounds of cross-sectional surveys applied two-stage stratified cluster sampling to obtain: 1) family planning information from women of reproductive age (15-49 years); 2) MNH information on women with children 0-11 months; and 3) child health information from women with children 12-23 months in the L10K intervention areas. In Round I, 204 kebeles were visited, from which 203 community questionnaires were completed and 6,178 women, including 4,000 of reproductive age; 2,400 with children 0-11 months; and 2,000 with children 12-23 months were interviewed. In Round II, 330 kebeles were visited, from which 324 community questionnaires were completed and 9,781 women, including 3,888 of reproductive age; 3,887 with children 0-11 months; and 3,876 women with children 12-23 months were interviewed. In Round III, 324 kebeles were visited, from which 316 community questionnaires were completed and 9,449 women, including 3,988 of reproductive age; 3,883 with children 0-11 months; and 3,903 with children 12-23 months were interviewed.



To ensure better health care seeking practices by households, HEWs make regular house-to-house visits



RESULTS

HEP coverage: The coverage of the HEP improved during the project period, reaching almost universal in Round III; 99 percent of the kebeles had at least one health post (HP) and 97 percent of at least one HEW (Figure 1). The ratio of population to one HEW in a kebele was 3,278 in Round I; 2,942 in Round II; and 3,067 in Round III. The GOE target is one HEW for every 2,500 people.

Health development army: The average number of HDAs and HDA team leaders per kebele in the Round III survey was 139 and 25, respectively. The average number of households per HDA team leader was 46 in Round III, higher than the expected one HDA team leader for every 30 households.

Health post visits: The proportion of women visiting HPs in last 12 months increased from 52 percent in Round I, to 62 percent in Round II, and 67 percent in Round III. The three most commonly reported reasons (child immunization, family planning, and ANC) for visiting HPs was consistent across the three survey rounds.

Family health card: The proportion of households with a family health card increased from 6 percent in Round I, to 40 percent in Round II, to 56 percent in Round III.

Family planning: The proportion of women of reproductive age who were in a sexual union and using a contraceptive method

(i.e., the contraceptive prevalence rate) increased from 30 percent in Round I, to 41 percent in Round II, to 49 percent in Round III. The share of injectables among contraceptive users declined from 81 percent in Round II to 68 percent in Round III; while the share of Implanon increased from 10 to 25 percent during that period.

Household visits by an HEW during pregnancy: The proportion of women with children 0-11 months who were visited by an HEW during their last pregnancy increased from 12 percent in Round I, to 32 percent in Round II, to 39 percent in Round III.

Neonatal tetanus-protected childbirth: The proportion of women with children 0-11 months whose last childbirth was protected against neonatal tetanus increased moderately, from 58 percent in Round II to 63 percent in Round III.

Utilization of antenatal care (ANC): The coverage of four or more ANC visits increased substantially, from 17 percent in Round I, to 28 percent in Round II, to 51 percent in Round III. The coverage of complete ANC (i.e., blood pressure measured, blood and urine tests conducted) increased from 10 percent in Round II to 50 percent in Round III.

Institutional delivery: The proportion of women with children 0-11 months whose most-recent childbirth took place at an HC or hospital increased sharply, from 9 percent in Round II to 53 percent in Round III.

Postnatal care (PNC): The proportion of women with children 0-11 months receiving PNC within 48 hours following their last childbirth did not increase after Round II; but PNC within 7 days increased from 5 percent in Round I, to 20 percent in Round II, to 29 percent in Round III.

Newborn health practices: Several components of newborn care improved between Rounds II and III. Baby dried and wrapped after delivery improved from 74 to 81 percent; skin-to-skin care from 75 to 81 percent; delayed bathing of newborn improved from 44 to 81 percent; thermal care from 26 to 55 percent; fed colostrum from 57 to 74 percent; early initiation of breastfeeding from 55 to 76 percent; and exclusive breastfeeding improved from 83 to 93 percent.

Childhood immunization: Measles vaccination coverage increased from 69 percent in Round I, to 77 percent in Round II, to 83 percent in Round III. The coverage of fully vaccinated children increased from 45 percent in Round I, to 55 percent in Round II, and to 62 percent in Round III. The dropout rate between PENTA 1 and PENTA 3 declined from 26 percent in 2008-9 to 15 percent in 2014-15.

Childhood illnesses and care-seeking behavior: The prevalence of childhood illnesses showed a declining trend over time. The prevalence of acute respiratory infection (ARI) declined from 10 percent in Round I to 6 percent in Round III; the prevalence of diarrhea declined from 23 in Round I to 13 percent in Round III; and the prevalence of fever declined from 22 percent in Round I to 10 percent in Round III. Although there was no change in the management of sick children between Round I and Round II; there was significant improvements between Rounds II and III. ARI case management increased from 35 percent in Round II to 69 percent in Round III; diarrhea management with oral rehydration therapy improved from 44 percent in Round II to 51 percent in Round III; and management of fever increased from 41 percent in Round II to 66 percent in Round III.

CONCLUSIONS AND RECOMMENDATIONS

This situation analysis of health services in kebeles indicates major improvement in HEP infrastructure and coverage. The availability of any health facility is almost universal, with population-to-HEW ratio approaching its target 1:2,500. However, to achieve the optimum 30 households per HDA team leader (current average is 46) as planned by the HDA strategy, more HDAs must be selected and trained. Efforts to increase HDA knowledge

on RMNCH best care practices, involvement in RMNCH-related activities, and the community should be prioritized. A functioning HDA body would likely contribute to a reduction in HEW household visits.

Now that CPR is nearly 50 percent; reaching non-users—especially those who are married young adults and not educated—should be a major focus of family planning initiatives. Long-term method implants are replacing use of injectables, which reflects the GOE's effort to popularize implants as a cost-effective method. However, as long-acting family planning methods increase, the quality of methods and service delivery should be monitored and ensured.

An unprecedented surge in ANC coverage and institutional deliveries and a reasonable increase in newborn health care practices were observed between Rounds II and III. Strategies that affect results must be monitored if the quality of the services is to improve and the trend sustained.

There was no change in PNC in 48 hours between the last two survey rounds. Thus, the major gap in the current strategy is to ensure early PNC, when the bulk of maternal and newborn mortalities take place. Strategies, perhaps through the use of mHealth, to remind HEWs to follow-up with women for PNC, especially those delivering at the HC, are recommended. Strategies to ensure early PNC among those delivering at home (because women may be ostracized for delivering at home and thus reluctant to inform the HEW) are also needed. Meanwhile, coverage of L10K 'birth notification' strategy to improve PNC is suboptimum. The reasons for this must be researched and addressed.

Improving women's knowledge on maternal and newborn health-related danger signs, currently low for sustainable practice, should be prioritized.

Child immunization coverage has increased, but nearly 40 percent of children are not fully immunized and dropout rates are concerning. Strategies to improve vaccination coverage and reduce dropout rates must be implemented.

The prevalence of four major childhood illnesses (ARI, diarrhea, bloody diarrhea, and fever) declined in Round III, and care-seeking behaviors for these illnesses improved significantly, likely due to the effect of integrated community case management strategies adopted by the HEP. However, utilization of these services at the HPs is still low. Strategies should focus on informing mothers/caretakers about HEWs' roles in clinical services for common childhood illnesses. Efforts to build community trust and confidence in HEWs' clinical services must be ongoing and improved.

Mulu, a volunteer community health worker, and her child from the Hoya Medeb kebele (community) in Ahferom, Tigray region, Ethiopia.



WAY FORWARD

The HEP has evolved since 2005 and has supported the achievement of impressive milestones in RMNCH outcomes in Ethiopia. In the last three years, an unprecedented higher percentage of women are seeking antenatal care, choosing institutional deliveries, and choosing long-term family planning methods like implants. Service utilization for common childhood illnesses, including use of antibiotics, has also improved substantially. Having met MDG 4, and on-track for reaching MDG 5 with emerging demand for institution-based deliveries, priorities need to focus on monitoring and ensuring quality of services provided at the PHCUs. Next-

generation priorities should address transforming the PHCU to ensure timely and high-quality care. Stronger links and better communication between the community (including HDAs), HPs, and HCs will be required to ensure timely referral and continuity of care. This will be critical to elevate Ethiopia's health sector from the current level to a community-sensitive health system that provides preventive and curative services. L10K has been a key supporter of the HEP and will contribute processes to Ethiopia's achievement of the Sustainable Development Goals.

Trends in reproductive, maternal, newborn and child health indicators along the continuum of care | 2008-9 to 2014-15

