Using Community Health (CHWs) to increase access to maternal health services—preliminary findings from Neno, Malawi

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Program/Project Purpose: Access to maternal health services during pregnancy is very low in many low and middle income countries including Malawi, and Community Health Workers (CHWs) are increasingly used to enhance utilization of antenatal care (ANC), delivery, and postnatal care services. In March 2015, Partners In Health in collaboration with the Ministry of Health started the Healthy Mothers, Healthy Communities project which uses CHWs to identify and accompany pregnant women throughout the cascade of perinatal services. We report preliminary findings on the impact of CHWs on utilization of maternal health services in Chifunga Health Center in Neno, Malawi from March to September 2015.

Structure/Method/Design: We identified, trained, and supervised 109 CHWs in Chifunga, a rural primary health facility with a catchment area of 10,685 people. CHWs were chosen through a process involving community leaders and members and underwent an 5 day training focusing on maternal health and their role as the link between the community and health system. CHWs were then deployed to households to identify pregnant women, accompany them to health facilities during all antenatal care, labor and delivery, and postnatal care visits. We analyzed the data from the CHW reporting tools and facility registers from March to September 2015.

Outcome & Evaluation: In the first 6 months of the project, 1,600 women of childbearing age were screened for pregnancy each month. In total, 201 new pregnancies were identified, of whom 84% were accompanied to their first ANC visit by a CHW. One-hundred sixty pregnant women, both previously and newly pregnant, received at least one home visit per month.

At the health facility, 94 women attended ANC each month after the intervention, representing a 53% increase compared to the 3 months preceding the CHW program . The proportion of women starting ANC in their first trimester increased from a baseline of 23% in 2014-2015 to 38% for the first cohort of women that were accompanied to care in March 2015.

Going Forward: CHWs in Neno has Played a key role in linking women to perinatal health services . As the program continues we will explore the effect of CHWs on attending a complete package of care for pregnant mothers including all ANC visits, delivery, and postnatal care.

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A community-based intervention to reduce tooth decay and malnutrition in Mumbai, India

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Background: India Smiles is a community-based preventative intervention to evaluate the contribution of poor oral health to child malnutrition, and prevent tooth decay and malnutrition in young children. Early childhood caries (ECC), the decay of primary teeth in children under age 6, is increasing in prevalence and affects 60-90% of children worldwide. It is exacerbated by consumption of junk foods and limited access to dental care. The consequences of ECC include mouth pain, problems eating, sleeping, and concentrating in school.

Methods: The study reports data from baseline to 1-year follow-up on the oral health and nutrition of 455 children from 6 months to 6 years of age in Mumbai, India. Baseline and follow-up data was collected by interviewing mothers about oral health and nutrition knowledge and practices and their child's complaints of mouth pain; examining for decayed, missing and filled teeth, and measuring height and weight for nutritional status. The intervention included community health worker education for mothers and children on oral health and nutrition, toothbrushes and fluoride toothpaste distribution, and biannual applications of fluoride varnish to children's teeth. Univariate and bivariate statistical analyses were completed with SPSS, version 22.

Findings: From baseline to 1-year follow-up, some risk factors (increased consumption of milk, decreased consumption of soda, increased tooth brushing) reduced, while others (consumption of junk food and sweets) increased. Prevalence of tooth decay decreased from 64% in year 1 to 52% in year 2, and the average number of decayed teeth decreased from 6.1 to 4.6. Additionally, the percentage of children reporting of mouth pain decreased from 77% to 50% for children age 6. Regarding nutritional status, there was a 5.9% decrease in number of severely underweight children, and 6.3% decrease of extreme stunting primarily due to reduction in prevalence of severe malnutrition ($Z < -3$).

Interpretation: India Smiles intervention was associated with a decrease in the prevalence and severity of tooth decay, mouth pain, and malnutrition after 1 year. The program is completing the 4th year follow-up data collection in collaboration with our Indian partner organizations and developing strategies to ensure sustainability.

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Quality of local healthcare facilities and deciding on in-facility delivery: identifying contributors to healthcare-seeking behavior among pregnant Malawian women

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Background: Millennium Development Goal (MDG) 5 seeks to reduce maternal mortality in Malawi from 620 /100,000 live-births in 1990 to 155 by 2015. 2013 maternal mortality remained high at 510, indicating this goal will likely not be met.

Thadeus and Maine (1994) propose maternal healthcare is hindered by three delays: in 1) decision to seek care, 2) reaching health facility; and 3) receiving adequate care once at facility. Our research explores the first, asking: what factors contribute to Malawian women deciding to not seek in-facility deliveries? Known