

Outcome/Evaluation: Quantitative and qualitative methods were used to evaluate how well implementation followed the original protocol or program design and plans. Lot Quality Assurance Sampling was used to assess changes in health behaviors of direct beneficiaries across more than 37 MNCHN indicators in each study site. Methods used included key informant interviews, document review, direct observation of CHW visits, surveying direct beneficiaries about CHW visits, focus group discussions with community members. LQAS data was analyzed across study site as a whole, and in each of 4–8 supervision areas to identify high, low performance.

Going Forward: After basic analysis participatory data review workshops were held with 20–40 stakeholders to discuss results and performance of implementing staff, partners and community members. Multiple implementation areas including quality of delivery were identified for improvement, some intervention components were not being delivered. Following the workshops, actionable plans to accelerate improvements in implementation were created to maximize changes in MNCHN outcomes. The plans prioritize communities most pressing health needs within the bounds of project budget, time, and staff capacity.

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Abstract #: 2.022_MDG

Strategies for improving pediatric/adolescent HIV suppression rates for patients on HAART in Nigeria

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Background: Improving viral suppression rates for patients on highly active anti-retroviral therapy (HAART) is a key goal for HIV programs. Studies have consistently shown pediatric suppression rates to be lower than that of adults. In 2010, the pediatric suppression rate for patients on the AIDSRelief Nigeria program was 69.25% compared with 90% for adults. The aim of this study was to test the effectiveness of interventions to increase the viral suppression rate in pediatric HIV patients in Nigeria.

Methods: A cross sectional cohort study carried out as part of patient-level evaluation for quality improvement of service delivery at AIDSRelief clinical sites in Nigeria. Patients were randomly selected and reviewed to determine viral suppression rates. Measures consisted of plasma RNA HIV -1 levels and structured interviews for pediatric patients and their caregivers. Strategic goals put in place as interventions to improve suppression rate included: Identifying and documenting a primary and an alternate caregiver for 85% of pediatric patients, the caregivers completing a new session of treatment support classes, 60% of pediatric patients receiving at least one home visit in six months, and 80% of all pediatric charts were to be completed. All strategies were implemented and a reevaluation was conducted one year later.

Findings: Participants consisted of 354 HIV-positive children (< or = 15 years old) on HAART for nine months or longer.

Mean age was 6.62 years. 183(50.8%) were males, 49.2% females. 100% of caregivers were identified and documented, 63.3 % received and completed a treatment support class while 36.7% of pediatric patients received home visits. There was a decrease in incidence of new opportunistic infections from 76.5% in 2010 to 35.3% in 2011. McNemar test demonstrated the percentage of virally suppressed patients significantly differed by time. $\chi^2 = 9.470, df = 1$ $p < 0.005$. (CI: -15.03, - 3.66). Overall viral suppression rate increased from 69% in 2010 to 85% in 2011.

Interpretation: Findings suggest that multi-faceted interventions including identification of caregivers, remedial classes in treatment preparation for caregivers, and counseling and support in both clinical and community settings are required to improve suppression rates for pediatric patients.

Funding: PEPFAR.

Abstract #: 2.023_MDG

Tobacco use and secondhand smoke exposure among women in Aleta Wondo, Ethiopia: A cross-sectional study

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Background: In Ethiopia, female smoking rates are currently low (<1%). However, because male smoking rates are higher (up to 27% depending on region), women and children's risk of second hand smoke (SHS) exposure is a pressing concern. In order to develop effective public health interventions that prevent the uptake and exposure to smoking, thereby averting the projected increase in tobacco-induced disease, an understanding of Ethiopian women's practices regarding tobacco is needed. The purpose of this study was to describe Ethiopian women's tobacco use, prevalence of SHS exposure, and covariates associated with SHS exposure.

Methods: We conducted a cross-sectional study in Southern Ethiopia between August and October 2014, and systematically sampled households in Aleta Wondo town and surrounding districts. Interviewers verbally administered surveys to women (18–55 years old). Descriptive statistics and multiple logistic regression were performed.

Findings: None of the 353 participants reported current tobacco use, and only 0.8% reported that they had ever used tobacco. Twenty-seven women (7.6%) reported living with a tobacco user, however, twice that number (14.4%) reported that smoking occurred daily inside their home. Living with a tobacco user (OR = 9.68, 95% CI [3.31, 28.32]), absence of a home smoking ban (OR = 6.11, 95% CI [2.82, 13.25]), urbanicity (OR = 3.36, 95% CI [1.52, 7.44]), and exposure to point-of-sale advertising within the last 30 days (OR = 2.66, 95% CI [1.21, 5.83]) contributed significantly to a model predicting the likelihood of daily exposure to household SHS.

Interpretation: Few women reported having ever used tobacco. However, one in seven women in this study were exposed to household air pollution from SHS; this is a health concern for women and children in this rural community. A low level of social acceptability of female tobacco use and high levels of tobacco-related stigma may have led to underreporting of tobacco use and SHS exposure.

Findings from this study provide baseline data for monitoring tobacco control policies in Ethiopia, particularly in relation to the promotion of smoke-free homes, and could be used to inform program development.

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Abstract #: 2.025_MDG

Linkage to care, early infant diagnosis and perinatal transmission among infants born to HIV-infected mothers: Evidence from the baby shower trial

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Background: Nigeria accounted for 25% of all new childhood HIV infections that occurred among the twenty-one priority countries in 2013. Additionally, Nigeria has one of the lowest rates of early infant diagnosis (EID) for HIV at only 4%, and only 12% of children living with HIV received antiretroviral therapy (ART). Alternative and complimentary interventions are needed to realize the Nigerian government's goals of: at least 80% of all HIV-exposed infants having access to ART prophylaxis and EID services by 2015. Healthy Beginning Initiative (HBI), a culturally-adapted, family-centered congregation-based approach to HIV testing and linkage to care was developed as an intervention to reduce MTCT of HIV. The purpose of this study is to report the impact of HBI on ARV prophylaxis, EID, HIV status and linkage to care (ART) among infants born to HIV-infected mothers in Southeastern Nigeria. Additionally, we will report our thoughts on how using components of implementation science (IS) throughout the process impacted the intervention.

Results: Seventy-three babies were born to the 72 HIV-infected mothers. Sixty-nine percent of the infants received ARV prophylaxis and 72% completed EID. Six of the infants who did not complete EID had a rapid HIV test. Seven percent of the infants were HIV-infected. Seventy-five percent of the HIV-infected infants were on ART. We believe involving the church community in the implementation process and as implementers, was critical to the success of HBI.

Interpretation: By utilizing the components of IS as characterized by The Alliance, HBI was able to increase participation along the

continuum of care for PMTCT of HIV with increased ART prophylaxis and EID for exposed infants and ART therapy of HIV-infected infants.

Funding: The research was co-funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), the National Institute of Mental Health (NIMH), the President's Emergency Plan for AIDS Relief (PEPFAR) under award number R01HD075050 to E. E. Ezeanolue.

Abstract #: 2.026_MDG

What are the factors effecting utilisation of antenatal and postnatal care services according to mothers and health care workers in the Pwani region, Tanzania?

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Background: In 2014, 289,000 women died in developing countries from causes related to pregnancy and childbirth. Over 60% of these deaths occurred in sub-Saharan Africa, most commonly due to treatable causes such as haemorrhage, hypertensive disorders and obstructed labour. Antenatal care (ANC) and postnatal care (PNC) have been identified as important measures to combat maternal mortality. In Tanzania, only 43% of women attend the four recommended ANC-visits and less than half attend a PNC-visit within two days of birth. As there is a shift from the Millennium Development Goals (MDG), the Tanzanian government have encouraged research in this area.

Methods: The research was done in Pwani across three districts to explore mothers' and health care workers (HCW's) views. A qualitative and deductive design was adopted. Focus group discussions (n=16) and semi-structured interviews were undertaken with mothers (n=14, all females) and HCW's (n=10). Non-probability purposive and convenience sampling was used. The District Medical Officers alongside the research team recruited participants until saturation was achieved. The interviews were translated and transcribed before manual thematic analysis and coding was done. Ethical approval was given by Tanzania and UK.

Findings: No participants attended visits at the recommended time as a result of being uneducated by HCW's on the correct timing or in an attempt to limit the number of visits to avoid travel-expenses. The visits are free of charge however costs for transport, equipment, drugs and bribery rendered the services unaffordable to some women, mothers reported. The most recurrent factor leading to non-utilisation of care was resource-scarcity, making it difficult for HCW's to perform even simple tasks effectively. The facilities would also suffer staff-shortage and lack further training opportunities resulting in demotivation and negative attitudes in HCW's.

Interpretation: The results may be attributed to the government being unable to cope with the demands that come with a free maternal healthcare policy. In order to address these problems and achieve the MDGs of universal reproductive care and lower maternal mortality, the Tanzanian government need to consider