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Abstract #: 2.043_MDG

Mentoring birth attendants to improve skills with neonatal resuscitation in Gambia

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Program/Project Purpose: Misidentified stillbirths, unattended deliveries, and few trained birth attendants contribute to the slow decrease of neonatal mortality in resource-limited countries. Gambia, West Africa, ranks amongst the highest in the world for neonatal deaths before the first day life.

Structure/Method/Design: In July 2015, in partnering with the Gambia Ministry of Health (MOH) and SJ General Hospital, public health students from Drexel University School of Public Health conducted a Helping Babies Breathe (HBB) training workshop targeting 25 community outreach team members and midwives. The HBB 'train the trainer model' tasks these birth attendants to in turn train other providers in their communities with their newly acquired skills, utilizing a simulator mannequin, bulb suction, and bag/mask.

A pre and post course survey was administered to participants to assess comfort level with neonatal resuscitation. All participants described feeling 'completely comfortable' with resuscitation as a direct result of the training session.

Monitoring/Evaluation: We will return to Gambia in 6 months to meet with the same providers, and conduct resuscitation skills refresher stations, follow up provider comfort level, and identify barriers faced while training other providers in the community. Future training workshops will be provided for Essential Care for Every Newborn (ECEB) and Essential Care for Every Preemie (ECEP) with similar follow up in 6 months. Through this ongoing mentorship model, we are striving to provide rural Gambian villages serviced by SJ General Hospital with the necessary tools to improve the health of their communities by decreasing neonatal deaths due to unattended deliveries and unskilled providers.

Funding: None.

Abstract #: 2.044_MDG

Transitioning from the MDGs to the SDGs: a practical decision-making tool for leaders

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Project Purpose: While the Sustainable Development Goals represent ideals for the future and offer countries flexibility, they do not provide practical guidance on where and how to invest. Leaders need guidance on how to prioritize, manage, run, and deliver programs to achieve the SDGs. Since 2007, the Global Health Delivery Project at Harvard has been working to learn from leaders who have successfully implemented health care delivery efforts and to transform this knowledge into guidance and management tools.

Methods: We have interviewed over 700 informants—including high-level government officials, organizational leaders, health administrators, frontline providers, and community members—across 32 low- to middle-income settings on how decisions were made. We reviewed relevant quantitative data on health, demographics, and finances. We documented real-life situations, including the ambiguous information at hand and the politics, economics, and geography at play, as well as the role of the MDGs in informing the decisions, in over 35 teaching case studies.

Cases are published through Harvard Business Publishing, and accompanying analytical teaching notes show how value—or social benefit per cost—can guide decisions to attain maximum impact with limited resources. Working with business school colleagues, we synthesized findings from the cases into a widely applicable Global Health Delivery Framework.

Outcome: The Framework can aid leaders in mapping and prioritizing activities. It includes four principles: using a care delivery value chain to identify system gaps along the care continuum; integrating vertical interventions into a shared delivery infrastructure that utilizes personnel and facilities efficiently; aligning care delivery with the local context; and ensuring investments in care delivery promote economic development.

Going Forward: A focus on value can guide decision-making and strategy management as countries shift from the MDGs to the SDGs. The principles we have developed through our research give leaders a greater understanding of value and how it can be applied to achieve better, more sustainable health programs and outcomes.

Funding: The Abundance Foundation.

Abstract #: 2.045_MDG

Maternal chlamydia infection, preterm birth, and travel time to clinic associated with increased infant mortality: a nested case-control study in Kenya

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Background: Decreasing infant mortality was a key aim of Millennium Development Goal (MDG) 4. While many regions worldwide made substantial progress, not all attained MDG4. Defining determinants of infant mortality in settings with high rates of infant mortality can inform strategies to further decrease mortality.

Methods: Data were analyzed from the Mama Salama Study (MSS), a prospective peripartum cohort study in Western Kenya examining HIV acquisition in pregnancy to 9 months postpartum between 2011 and 2014. Cases of infant death were compared to control infants who survived to 9 months postpartum. Sub-analyses compared neonatal and perinatal mortality cases to controls. Logistic regression was used to identify determinants of infant, neonatal, and perinatal mortality using Stata® 13 software.

Findings: In multivariate case-control comparison of 34 infant deaths and 1053 control infants, independent correlates of infant mortality were preterm delivery (aOR=3.49, 95% CI 1.68–7.26), twin delivery (aOR=4.63, 95% CI 1.22–17.55), travel time to clinic greater than 1 hour (aOR=2.66, 95% CI 1.04–6.84), maternal malaria during pregnancy (aOR=3.52, 95% CI 1.40–8.86), and maternal chlamydia infection during pregnancy (aOR=3.76, 95% CI 1.37–10.30). Maternal chlamydia infection was also an independent determinant of neonatal mortality (aOR=9.56, 95% CI 2.49–36.64).

Interpretation: Improved services to detect, treat and prevent maternal and infant chlamydia and malaria, and vigilance in the care of preterm and twin deliveries may decrease infant mortality in high mortality regions.

Funding: Medical Student Research Training Program, University of Washington School of Medicine.

Abstract #: 2.046_MDG

Determining the barriers to male voluntary HIV testing in southern rural Malawi: A qualitative study

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Program/Project Purpose: Far fewer men than women within southern Malawi utilize voluntary HIV testing services despite a high HIV burden. Global AIDS Interfaith Alliance (GAIA) uses mobile clinics to bring HIV testing to rural communities yet,

in 2012, only 1 man was tested for every 5 women. Understanding why men fail to come for HIV testing is important for improving programmatic targeting and implementation and is crucial to ending the AIDS epidemic.

Structure/Method/Design: This study explored the physical and social barriers hindering men's use of these services in rural southern Malawi. In partnership with GAIA, the research conducted 30 in-depth qualitative interviews with a convenience sample of village men in Mulanje district, Malawi.

Outcome & Evaluation: This study identified cultural constructs that drive the HIV epidemic and four themes around barriers and facilitators of male HIV testing. Using the 4Ps of marketing (price, place, promotion, product), these themes suggest that male HIV testing suffers from a poor marketing strategy. Current testing programs inadequately address 3 of the P's. Despite encouragement from the government and non-governmental organizations, there is a lack of HIV awareness among men as to its importance. Interventions to encourage testing within the community have failed to successfully target men (promotion). Concerns over confidentiality and the location of testing services interact, making testing inconvenient (place). Testing is associated with a high social capital cost due to stigma and gender norms (price). Male participation rates within the region could be improved by modifying existing programs to specifically target men and their concerns about testing.

Going Forward: Despite the knowledge of the high burden of HIV and high risk of transmission within this community, there is infrequent testing among males. Modifying existing programs to better target men and overcome the male-specific barriers – awareness, convenience, stigma – could improve male testing rates and reduce HIV incidence and morbidity, impacting the epidemic across the region.

Funding: None.

Abstract #: 2.047_MDG

The effects of short post-delivery hospital stay on infant health outcomes at a small urban maternal and child health hospital in Kumasi, Ghana

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Background: The World Health Organization recommends that all women remain in a health facility for at least 24 hours following an uncomplicated vaginal delivery. However, in Ghana, many women are discharged sooner than recommended due to insufficient resources including bed space and staff. The objective of this study was to determine if infant mortality, infant weight gain, time to first fever or illness, number of acute hospital visits, and completion of immunizations are affected by discharge within 8 hours of delivery.

Methods: Two hundred fifty-six women with low-risk pregnancies and uncomplicated deliveries at Maternal and Child Health