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Background: In addition to the economic benefits of asset transfer programs evidence suggests that it is an effective vehicle for improving health; however, evidence is mixed on the impact of economc programs on gender equity outcomes, as measured here by male violence against their intimate female partner.

Methods: The team evaluated the effectiveness of a livestock asset transfer intervention—Pigs for Peace (PFP)—on economic, health and intimate partner violence (IPV) outcomes with participants in households in 10 villages in Eastern Democratic Republic of Congo (DRC). Residual change analysis was used to examine the amount of change from baseline to 18 months between intervention and delayed control groups, controlling for baseline scores.

Findings: The majority of the 833 household participants were women (84%), 25 years of age or older, married, had on average three children, and had never attended school. At 18 months post-baseline, participants in the PFP households were significantly less likely to have outstanding credit/loans compared to households in the control group (p=·028), and reported significantly improved general health (p=·026), reduced symptoms of anxiety (p=·020), and post-traumatic stress disorder (p<-·001). Further, the intervention group had a significantly greater decline in the frequency of IPV (p=·028).

Interpretation: The findings support evidence about the importance of livestock as productive assets to households but expand on previous research by demonstrating improved general and mental health and reduction of IPV among participants living in a conflict-affected setting.

Source of Funding: NIH/National Institute of Minority Health and Health Disparities (NIMHD).

Abstract #: *1.019_WOM*

Communities Care: Evaluation of a community led intervention to change social norms that sustain violence against women and girls in Somalia

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Background: The goal of Communities Care is to create safer communities for women and girls by transforming harmful social norms that contribute to gender based violence (GBV) into social norms that uphold equality, safety and dignity. The prevention intervention provides information, resources and materials to achieve the local community engagement and action for prevention and response for social norms change in humanitarian settings.

Methods: Our evaluation of Communities Care compared changes in community behavior and social norms between the intervention and matched control sites in Mogadishu, Somalia. To evaluated change in behavior and norms, 200 men and women were randomly sampled from each of the intervention and control sites and followed by skilled research assistants from baseline to 24 months.

Findings: Participants in the intervention site had significantly greater improvement than the control site in response to GBV (p<.001, e.g. less blaming woman/girl for rape), protecting women safety over family dignity/honor (p<.001), and husbands not using violence against their wives (p<.001). There was also a positive shift in social norms (e.g. what a person thinks influential others expect them to do) with the intervention sites displaying more positive norms than the control sites in response to GBV (p=.007, for example, less likely to agree with blaming survivor), protecting family dignity/honor (p<.001, less likely to agree with protecting family dignity over safety), gender equality (p=.023, more likely to agree with girls and boys going to school), and husbands' use of violence against his wife (p<.001, less likely to agree with use of violence against wife.

Interpretation: Evidence suggests that UNICEF's Communities Care intervention is a successful model for community engagement in a complex humanitarian setting (Somalia). In Somalia, social norms support a husband's right to use violence to discipline wife, prioritizing the dignity/honor of the family over the safety of the woman/girl, and men's control of women's behaviors. The intervention initiates a process of positive change in existing social norms that leads to improvement in community's behavior.

Source of Funding: UNICEF.

Abstract #: *1.020_WOM*

Characterization of Emergency Care-seeking Patterns for Nontraumatic Conditions in Pregnant Women in the East African Setting, a Pilot Study

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Background: Many of the conditions contributing to maternal morbidity and mortality present as emergency conditions during and directly after pregnancy. The emergency care seeking patterns of pregnant women in low-resource settings, such as Uganda, are not well-characterized but could provide insight into opportunities to reduce maternal morbidity and mortality. We aimed to identify the most common emergency conditions among pregnant and postpartum women who present at the Obstetrics and Gynaecology Ward at Mulago National Referral Hospital (MNRH) in Kampala, Uganda.

Methods: We conducted a retrospective chart review at MNRH, which is the main referral hospital for Uganda and also serves the Kampala metropolitan area. Records were eligible if the patient was a pregnant or postpartum women, 18 years or older, who presented with an emergency condition between January and June of 2016. We used descriptive statistics to compare common health conditions that required emergency medical care during pregnancy.

Findings: A total of 1,172 women sought emergency care within the 6-month time period (7.4% of all Obstetrics and Gynecology-related visits). A preliminary analysis of data abstracted from the first 100 records suggests that the leading medically-attended emergency

was abortion/miscarriage (78%, 95% CI [0.65, 0.82]), followed by malaria (12%, 95% CI [0.06, 0.18]), and anemia (10%, 95% CI [0.4, 0.16]). Other emergencies include sepsis (4%, 95% CI [0.001, 0.08]) hypertension (4%, 95% CI [0.001, 0.08]) hemorrhage (4%, 95% CI [0.001, 0.08]) and obstructed labor (3%, 95% CI [-0.004, 0.06]). In this preliminary analysis, 2% (95% CI [-0.01, 0.5]) of women had an HIV-related emergency, and 28% (95% CI [0.19, 0.36]) of records included more than one emergency. 3% (95% CI [-0.004, 0.06]) of emergencies resulted in death.

Interpretation: Emergencies in pregnancy are caused by conditions directly related (such as loss of pregnancy) and indirectly related to pregnancy (such as malaria, which is typically more severe among pregnant women). Future efforts should be undertaken to address modifiable risk factors that could reduce or prevent the most common causes of medical emergencies in pregnancy and, ultimately, reduce maternal morbidity and mortality.

Source of Funding: University of Minnesota School of Public Health, Epidemiology Division Hawley Research Award.

Abstract #: *1.021_WOM*

Malaria Control Methods and Healthcare Access among Pregnant Women in Democratic Republic of the Congo

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Background: Malaria is a major public health problem and life-threatening disease. In the Democratic Republic of the Congo (DRC), 400 children die every day and almost half of these deaths are attributable to malaria. Malaria is the leading cause of morbidity and mortality in children under-5 in the DRC, accounting for an estimated 40% of outpatient visits and 40% of childhood mortality.

Methods: The purpose of this study was to examine whether malarial control methods (i.e., insecticide bed net use and taking SP/fansidar or chloroquine) differed based on perceived problems preventing pregnant women from seeking medical advice or treatment (big problem, not a big problem), receipt of prenatal care (no, yes) and source of prenatal care (e.g., doctor), and sociodemographic characteristics. A secondary data analysis of pregnant women (n = 2,404) who completed the Demographic and Health Survey in the DRC (DHS-DRC7) was conducted.

Findings: Results indicated that use of a bed net, SP/fansidar, and chloroquine significantly differed among pregnant women based on educational attainment, ethnicity, and wealth index. Pregnant women who slept under a bed net were more likely to receive prenatal care ($p = .002$), including 1.95 times more likely ($p = .002$) to receive care from a doctor, than pregnant women who did not sleep under a mosquito net. Pregnant women who took SP/fansidar were more likely to perceive that distance to a health facility ($p < .001$) and not wanting to go alone ($p = .009$) were not big problems for getting medical help for themselves. Pregnant women who took SP/fansidar were more likely to receive care from a doctor ($p = .01$), nurse ($p = .002$) or birth attendant ($p < .001$). Pregnant women who took chloroquine while pregnant were 3.6 times more likely ($p = .04$) to receive care from a doctor.

Interpretation: Awareness of malarial control methods is critical in shaping the necessary interventions and policies to control diseases and addressing this global health disparity. The study found several healthcare utilization factors related to malarial control methods among pregnant women in the DRC. Next steps include enhancement of education among pregnant women about malarial control methods and access to care.

Source of Funding: None.

Abstract #: *1.022_WOM*

Perceived Social Support and Depression amongst Pregnant and Postnatal Women with HIV in Nyanza, Kenya

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Background: In order for prevention of mother-to-child HIV transmission (PMTCT) programs to be effective, they must identify pregnant women living with HIV, provide them with antiretroviral treatment (ART), support medication adherence, and retain patients to ensure that infants receive the appropriate care including final determination of HIV status. Previous research has demonstrated that depression is a barrier to retention in PMTCT programs and that perceived social support is a key facilitator.

Methods: Between September 2013 and August 2015, 340 HIV positive, pregnant women seeking PMTCT services enrolled in the MIR4Health study, a randomized trial conducted at ten health facilities within the Nyanza region of Kenya. Women were assigned to either the standard of care or intervention, the latter involving a lay worker administered package of services including individualized health education, adherence and psychosocial support during clinic visits and at home, peer support, and text and phone call appointment reminders intended to improve retention. Clinical data and patient interviews were collected longitudinally from enrollment through six months postpartum. Perceived social support was assessed as a 12-item self-reported survey, including emotional and instrumental support items, at two time points; depression was assessed via a 10-item survey at 3 time points. We used first-differences regression models to explore the relationships between perceived instrumental support, perceived emotional support, and depression amongst patients in the intervention and control arms of the study.

Findings: Analyses found that the intervention had an impact on perceived availability of emotional support ($p < .05$), but did not have any effect on instrumental support ($p > .05$). Using the Edinburgh Postnatal Depression Scale (EPDS), we found that instrumental support was predictive of depression ($p < .05$) but emotional support was not ($p > .05$).

Interpretation: This research demonstrates that the package may have had an impact on emotional social support which has been associated with positive health outcomes. Further research may be necessary to unpack which components of the package were most or least beneficial to the effects found and therein how the intervention should be modified before wide scale implementation.