

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.

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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.

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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.