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Title Drug and vaccine utilization among pregnant women in the Iganga-Mayuge Health and Demographic Surveillance Site (IMHDSS), Uganda

Background Knowledge of the utilization of vaccines, medications and traditional use of herbal medicines during pregnancy provides critical information to support systematic safety assessment in pregnant women and their offspring. Though widely characterized in developed countries, less information on utilization is available in low and middle income countries particularly in Uganda where population assessment have not been performed.

Objective To describe vaccine, drug, and herbal medicine utilization during pregnancy in the IMHDSS.

Methods The IMHDSS is located in Eastern Uganda and consists of 65 villages with a total population of 89,000 living in 16,000 households. Within the IMHDSS there are 15 government-accredited health centers and one public hospital that provide ante-natal care (ANC) services to pregnant women. From January 9-17, 2017, a convenience sample of pregnant women was recruited to complete an interview with local field researchers after the ANC visit at each of the 15 health centers and public hospital.

Results Three hundred and fifty one pregnant women completed the survey (230 recruited from health centers and 121 from the hospital). Among women who completed the survey, 50% were in the third trimester of pregnancy, 41% in the second trimester, and 5% in the first trimester. Seventy eight percent of women reported having received at least one dose of tetanus toxoid vaccine during the current
pregnancy. The most common reported pregnancy symptoms, infections, and chronic diseases including the proportion of women who used drugs to treat the condition were: pain (symptom = 77%; drug use = 41%), nausea (symptom = 71%; drug use = 61%), common cold (condition = 60%; drug use = 86%), urinary tract infection (condition = 28%, drug use = 64%), and cardiovascular disease (condition = 17%; drug use = 34%). Approximately 54% of women reported using herbal medications.

**Conclusions** Reported drug use throughout the duration of pregnancy is high in the IMHDSS and appropriate pharmacovigilance systems are needed to monitor potential adverse outcomes in the mother and child.