

Columbia, Canada. The participants were 14 years of age or older, female including transgender women, and exchanged sex for money or resources within the last 30 days of the recruitment. WISH-Drop-In is a women-only and sex-work tailored service organization providing low threshold services such as hot meals, showers, harm reduction supplies and referrals to health services. After verbal and written informed consent, interview-administered questionnaires were completed and the results were stratified according to the use of WISH Drop-In Center. Descriptive, bivariate and multivariable logistic regression analyses using Generalized Estimating Equations identified correlates of WISH utilization over a 30-month period. The study holds ethical approval through Providence Health Care/University of British Columbia Research Ethics Board, and is conducted according to the principles of the Declaration of Helsinki and Canadian Tri-Council Policy guidelines.

Findings: Of 547 SWs, 60% (n=330) utilized WISH services over the 30-month period. In longitudinal multivariable GEE analysis, use of WISH was independently correlated with older age (AOR 1.04, 95% CI: 1.03-1.06), Aboriginal ancestry (AOR 2.18, 95% CI: 1.61-2.95), accessing SRH services (AOR 1.65, 95% CI: 1.35-2.02), injecting drugs (AOR 1.67, 95% CI: 1.29-2.17) and exchanging sex directly for drugs (AOR 1.40, 95% CI: 1.15-1.71).

Interpretation: Results demonstrate high uptake of a sex work specific drop-in space for marginalized SW and suggest that women-centred and low-threshold drop-in services can effectively link marginalized women to SRH services. Given the substantial gaps in sexual and reproductive care for SWs globally, these findings suggest a critical need for policy and program support so scale up low-threshold and SW-specific models for integrated SRH, alongside community and social support models. Limitation to the study is the challenge of achieving a representative sample due to the isolated and marginalized nature of SWs. However, we used time location sampling and community mapping to ensure broad representation of SWs from all street and off-street venues.

Funding: This research was supported by operating grants from the US National Institutes of Health (R01DA028648) and Canadian Institutes of Health Research (HHP98835).

Abstract #: 01SEDH017

Combining human and livestock vaccination days in pastoralist communities: A feasibility study

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Program/Project Purpose: Currently, an estimated 180 million people are members of pastoralist societies worldwide, moving with their herds irrespective of country borders. Their nomadic lifestyle makes it difficult to reach human and animal vaccination rates that create population resistance against disease. The One Health framework advocates for increased collaboration between veterinary and human medicine in order to solve a variety of public health dilemmas. Coordinating the immunization days of children and livestock advances this idea and may be able to improve childhood vaccination rates while at the same time controlling the spread of highly infectious livestock diseases.

Structure/Method/Design: In order to understand the potential of combined vaccination campaigns, we reviewed the few past attempts using qualitative analyses. Results from the limited availability of previous trials showed that combined vaccination days led to better attendance and decreased overall vaccination costs when compared to

child-specific vaccine days, however with inconsistent documentation of vaccine recipients. Additionally, we compiled and compared human and livestock vaccination rates, schedules and needs in the target pastoralist populations.

Outcomes & Evaluation: Using the two main tools outlines above, we aim to better define the need and refine effective strategies for future trials. Verbal support of combined vaccination days has been received from multiple organizations, indicating that tangible support may also be available with innovative collaboration between federal and nongovernmental agencies.

Going Forward: More efficient discussions are needed between veterinarians and doctors about aligning livestock and human vaccine schedules. Pooling these resources will increase the overall health of pastoralist populations.

Funding: None.

Abstract #: 01SEDH018

Maternal and household characteristics as determinants of maternal health seeking along the continuum of care in rural Tanzania

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Background: Four antenatal care (ANC) visits, delivery in a health facility, and three postnatal care (PNC) visits are the global recommendations for mothers to optimize maternal health outcomes. [i] While these are each vital to maternal health, most existing studies analyze health seeking behavior for each level separately (ANC, health facility delivery, and PNC), without assessing health seeking along the full continuum of care. This study aims to characterize what determines a mother's achievement of the recommended maternal health visits in three districts of rural Tanzania to illuminate strategic programmatic interventions to improve maternal health. [ii] WHO. (1998). Postpartum care of the mother and newborn: a practical guide. Geneva: World Health Organization, Maternal and Newborn Health/Safe Motherhood Unit.

Methods: Data for this study were extracted from a cross-sectional household survey conducted between May and July 2011 by the Connect Project—a randomized cluster trial implemented by Columbia University and Ifakara Health Institute in Rufiji, Ulanga, and Kilombero districts of Tanzania to test the impact of paid community health workers on maternal and child health. 2,183 households yielded 915 women who were eligible for analysis since they had given birth within two years preceding the survey. Univariate, bivariate, and multivariate multinomial logistic regression analyses were utilized to assess relationships between maternal and household-level characteristics and maternal health seeking behavior. The outcome of interest was defined into three categories: highest (recommended): 4+ ANC visits and delivery in health facility and 1+ PNC; lowest: 0-3 ANC and delivery outside of health facility and 0-1 PNC; middle: all other care patterns.

Findings: Preliminary findings indicate that 19.1% of women achieved the highest level, 67.9% achieved the middle level, and 13.0% achieved the lowest level. Multivariate analysis revealed parity as a significant predictor of care-seeking with women in their first pregnancy being 5.73 times (95% CI: 1.99-15.96; $p < 0.001$) more likely to achieve the recommended level of care and 3.49 times (95% CI: 1.37-9.38; $p < 0.01$) more likely to achieve the middle level of care than the lowest level. Wealth Index was also a significant predictor of

health seeking behavior with those in the highest wealth index being 4.11 times (95% CI: 1.86-9.11; $p < 0.000$) more likely to achieve the recommended level of care and 3.13 times (95% CI: 1.57-6.25; $p < 0.001$) more likely to achieve the middle level than the lowest level.

Interpretation: By determining differences between mothers achieving the full recommended maternal health visits versus those achieving less optimal levels, we recommend that maternal health interventions target multigravida and low-income mothers to achieve the greatest impact in increasing achievement of all recommended maternal health visits along the continuum of care in rural Tanzania.

Funding: The study was funded by Doris Duke Charitable Foundation and Comic Relief.

Abstract #: 01SEDH019

Adolescent suicide among the Guarani-Kaiowá in Dourados, Mato Grosso do Sul, Brazil

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Background: Suicide is a major global public health problem, and the burden of suicide is unevenly distributed across societies and ethnic groups; high rates of suicide among indigenous populations and especially among indigenous young adults have been documented in many different societies. Previous studies have demonstrated a very high burden of adolescent suicide among the Guarani-Kaiowá in Mato Grosso do Sul Brazil. The purpose of this study was to establish the current suicide epidemiology, perform in-depth stratified analysis, and to conduct focus group interviews with different segments of the Guarani-Kaiowá community to learn more about possible risk and protective factors.

Methods: The study was conducted in indigenous reservations in Dourados and Itaporã, Mato Grosso do Sul. Two different approaches were taken to further investigate this phenomenon: (1) an epidemiological study of suicide rates in the local indigenous healthcare office catchment area that consisted of village and household-level risk stratification in this population for the first time and (2) a community-based qualitative study consisting of 15 focus group interviews with community health workers, community leaders, and young adults (aged 16-22) designed to develop an understanding of community perceptions of suicide as well as to identify possible risk and protective factors. Community participants were volunteers who fit the following criteria: (1) were identified as a community leader by the village chief; (2) work as a community health agent or health worker; or (3) is a Guarani-Kaiowá adolescent aged 16-22 years. The primary outcome for the epidemiological study was suicide mortality, and stratified analysis was performed based on important demographic variables including age, sex and village of residence. This study was approved by the Yale University IRB, the ethical review board at Universidade Federal da Grande Dourados, and the village chiefs. All participants signed a written consent form and for participants under 18, guardian consent as well as participant assent was required.

Findings: This study confirmed a high rate of overall and adolescent suicide among the Guarani-Kaiowá, and also provided new insight into differential suicide mortality rates among

different neighboring villages, differential age of peak risk between men and women, and a dramatically heightened risk among those living in households with a previous suicide case. Additionally, in the qualitative component, familial dysfunction, marginalization, lack of access to educational and employment opportunities, and alcohol use were identified as possible risk factors, whereas attending school and an intact family structure were identified as possible protective factors.

Interpretation: The results of the study have important public health implications and will be utilized by the local indigenous health care office (DSEI - Polo Base Dourados) to develop and improve targeted suicide intervention and prevention strategies.

Funding: Nones.

Abstract #: 01SEDH020

Sexual communication self-efficacy (SCSE) mediates relationship power and consistent condom use among heterosexual couples in Soweto, South Africa

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Background: Heterosexual couples in primary relationships are one of the most at-risk groups for HIV in South Africa. Evidence suggests that women with greater power in their sexual relationships are more likely to engage in HIV prevention behaviors such as consistent condom use. However, few studies examine the mechanisms through which this occurs. Drawing from the Social Cognitive Theory, we aimed to test the hypothesis that sexual communication self-efficacy (SCSE) mediates the association between relationship power and consistent condom use among couples in Soweto, South Africa.

Methods: Heterosexual couples (N=208) from Soweto, South Africa participated in a cross-sectional study on HIV risk behavior and relationship dynamics. Couples were recruited from community and clinic settings using non-probability, venue-based sampling. Couples were eligible if both partners were 18 years or older, and had been in the relationship for at least three months. Each partner was individually consented, and completed an interviewer-administered survey that assessed condom use, relationship power, and SCSE. The proportion of protected sex acts in the last 30 days was calculated for each partner, scores were averaged to obtain the outcome measure of couple-level consistent condom use. The SCSE scale assessed participants' confidence in their ability to communicate about sex. Partners' scores were averaged to obtain the couple-level SCSE score. The Sexual Relationship Power Scale (SRPS) assessed relationship power among female participants. SRPS scores were trichotomized (0=Low power, 1=Moderate power, 2=High power). Bivariate logistic regressions assessed whether SCSE and relationship power were each associated with consistent condom use (0= < 100% condom use; 1=100% condom use). Binary mediation analysis was conducted to assess whether SCSE mediated the association between relationship power and consistent condom use.

Findings: The average age was 34 years (men) and 31 years (women), and average relationship length was 5.5 years. The majority of couples were unmarried but in a committed relationship (86%). Overall, 37% of the couples reported consistent condom use in the