

stakeholders in each country, an approach that has proved to be successful during the ongoing planning grant.

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**Abstract #:** 02SEDH002

### Assessing the contraceptive needs of female sex workers in Kigali, Rwanda

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**Program/Project Purpose:** FSWs are a high-risk group for HIV infection, yet few studies have examined the overall contraceptive needs of this group. Projet San Francisco (PSF), a branch of the Rwanda Zambia HIV Research Group, has been following a cohort of Kigali-based, HIV- FSW to track their HIV risk, reproductive health, and behavioral risks since September 2012. Within this cohort, low contraceptive prevalence has been observed. This project was conducted from May 2014-August 2014 to assess Kigali FSWs' knowledge, attitudes, and practices around contraception, as well as to identify any barriers or facilitators of obtaining and utilizing contraception.

**Structure/Method/Design:** PSF staff used a venue-based recruitment strategy to invite FSW for an eligibility screening for the overall cohort study. At three screening visits, FSW (n=19) were asked to return the next day to participate in a focus group discussion (FGD). Trained moderators facilitated discussion about contraceptive knowledge, attitudes, and practices, with a focus on long-acting, reversible contraceptive (LARC) methods. In addition to FGDs, a survey was designed to understand contraceptive decision-making. HIV+ FSW were recruited from screening visits. Enrolled HIV- FSW were surveyed at study visits. FSW who did not want to conceive within the next three years and who were not using a LARC method (n=40) were surveyed to assess knowledge and beliefs about LARC methods. LARC users (n=44) were surveyed on their satisfaction with the method. The non-LARC survey also served as a counseling intervention; it was based on a psychological model intended to encourage women to consider their contraceptive decision-making process.

**Outcomes & Evaluation:** FSW who participated in FGDs and surveys reported similar beliefs about LARC methods. Many were hesitant to use the implant because of side effects (spotting, headaches, weight gain). Misconceptions about the IUD were frequently reported, including that it is ineffective and may become dislodged during sex. Several FSW mentioned that they did not feel comfortable disclosing their FSW status to healthcare providers. After completing the Non-LARC user survey, 12.5% of FSW chose to uptake a LARC method that day. An additional 33% would consider using one in the future. LARC users reported that healthcare providers (52%) and friends (36%) influenced their decision to use this method.

**Going Forward:** In the future, family planning counseling will take into account the specific contraceptive needs of FSW. The decision-making model used in the survey will be adapted for use in counseling. Common misconceptions about the IUD will be specifically addressed. Further research should be done to explore how to best encourage FSW to discuss their profession with healthcare providers.

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**Abstract #:** 02SEDH003

### Applying a biopsychosocial perspective to address hand washing behaviors among young learners in Limpopo, South Africa

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**Background:** Despite its perceived simplicity, the promotion of hand washing for disease prevention remains a challenge particularly in resource-limited settings. This paper reports on a quasi-experimental study to measure the independent effect of contextual (resource modifications) and individual-level (education) factors on hand washing behaviors of learners attending two primary schools in Limpopo, South Africa.

**Methods:** Resource modifications were made at School A and included improvements in hygiene and sanitation facilities that increased access to soap and water. Subsequently, education programs, developed in collaboration with local educators and focused on hand washing for disease prevention, were delivered at both schools. Observations included total counts of hand washing and hand washing paired with toilet facility use.

**Findings:** At School A, significant increases in hand washing occurred following resource modifications (total counts: T0=359, T1=712;  $t=3.61$ ,  $p=0.018$ ). Additional increases in total hand washing behaviors occurred following education (T2=1095,  $t=3.88$ ;  $p=0.015$ ). In contrast, at School B, with education alone smaller increases in total hand washing were observed (T0=249; T1=324;  $t=2.08$ ,  $p=0.065$ ).

**Interpretation:** Resource improvements are necessary in order to promote disease prevention behaviors such as hand washing. However, education aids to both promote and sustain these behaviors at the individual level. Results confirm that coordinated interventions that address health promoting behaviors at multiple levels are likely to achieve more substantial change.

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### Social disparities: Household income in poverty stricken Ecuador affecting cognitive function in children

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**Program/Project Purpose:** Iron deficiency anemia (IDA) is one of the largest nutritional disorders in the world. Approximately 25% of the world's population has anemia with 50 % of those cases being IDA, according to the World Health Organization. The reduced oxygen carrying capacity associated with anemia can have many adverse effects. Many anemia studies have been done on infants but few have been done on school-aged children. A charity organization in Ecuador has been identifying anemia prevalence among children within a suburb of Guayaquil. To further identify possible risks resulting from anemia, a study comparing cognitive function with anemia rates was conducted in May 2014.

**Structure/Method/Design:** A cross-sectional descriptive correlation design was used to study the relationship between the level of anemia