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**Background:** Worldwide, over 3.6 million neonatal infants die, often due to maternal health complications. Preconception care is defined as biomedical, behavioral and social health interventions before conception occurs. Recent research has established linkages of preconception interventions with improved maternal and child outcomes. A Reproductive Life Plan is shown to be an effective communication tool with patients regarding overall reproductive goals. Maternal and neonatal mortality rates in the Dominican Republic (DR) remain high. There are no studies presently published examining the association between preconception risk factors and attitudes regarding reproductive planning in the DR.

**Methods:** In this cross-sectional, descriptive study, a reproductive health survey was administered to women age 18-49, excluding women with hysterectomy or bilateral tubal ligation, in 4 outpatient public clinics in Santiago, DR. Survey questions included age, education level, self reporting of preconception risk factors, and calculation of BMI. Women were asked if they had thought about a reproductive plan: planning for or preventing pregnancy. Greater thought of reproductive planning was defined as women who answered somewhat, moderately and a lot on a 5-point likert scale. Logistic regression was used to assess significant associations between variables.

**Findings:** A total of 381 women of reproductive age participated, with a median age of 24 (IQR, 20–29) years. In a univariable analysis, hypertensive women (OR, 0.36; 95% CI, 0.17–0.78; p=0.009) and women who had a short-interval pregnancy (OR, 0.51; 95% CI, 0.27–0.94; p=0.03) had lower odds of thinking about reproductive planning. Women aged >25 years (OR, 1.84; 95% CI, 1.29–2.64; p=0.001) and women with at least a high-school education (OR, 2.01; 95% CI, 1.21–3.36; p=0.007) had greater odds of thinking about reproductive planning.

**Interpretation:** Women with preconception risks such as hypertension and short interval pregnancies are at lower odd of thinking about reproductive planning and may be at higher risks for maternal and fetal complications during pregnancies. Further assessment of preconception risks may provide a framework for targeted counseling interventions in women of reproductive age and possibly improve maternal and child health outcomes.

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## Sexual risk behavior and HIV testing and status among male and transgender women sex workers and their clients in Lima, Peru

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**Introduction:** Male and transwomen sex workers (MTSWs) are among the most at-risk populations for HIV, but there is little research globally with these groups, and even less with their clients. These populations are crucial since they may contribute to transmission of HIV among key and general populations.

**Methods:** Following ethnographic mapping of sex work venues, we revisited randomly selected venues to survey MTSWs and their male clients. We surveyed 100 MSWs, 181 TSWs and 95 clients from 24 venues. We used smartphones to ask participants about their sociodemographics, recent sexual practices (last 3 months), and HIV testing history and status. We present descriptive analyses where SW figures are weighted for the proportion of SWs surveyed at each venue.

Findings: Clients are about 10 years older than MTSWs. MSWs are slightly more educated than their clients, while TSW clients are much more educated than TSWs. While 72-84% of MTSWs and MSW clients have ever been tested for HIV, only 50% of TSW clients have been tested. Self-reported HIV positivity is highest among MSW clients (18%) and TSWs (19%), compared to MSWs (3%) and TSW clients (4%). All participants had at least one recent male or transwoman partner both overall and within a transactional sex context. Fewer (17-42%) reported recent non-transactional sex with a man or transwoman. Clients of MSWs reported more receptive anal intercourse during transactional (75%) versus non-transactional sex (32%) and a significant minority reported no anal intercourse with both types of partners. TSWs have more insertive anal intercourse inside (45%) versus outside (24%) of transactions. TSWs are more likely than MSWs to have condomless anal sex with transactional partners, both insertive (36% vs 9%) and receptive (31% vs 3%). At least one recent female partner was reported by most MSWs (62%) and TSW clients (76%), but few TSWs (2%) or MSW clients

**Interpretation:** This is one of the first studies to collect data directly from clients of sex workers. There are noteworthy differences between MTSWs and their male clients that can affect the health, including HIV and other sexually transmitted infections, of these groups and their sex partners.

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## Global burden of disease: diabetes burden and its relation to socioeconomic, environmental, behavioral, and health risk factors in low- to middle-income Southeast Asia

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**Background:** Diabetes is a global health concern affecting 382 million people. Around 80% live in developing economies, stressing