Figure 1. Conceptual framework and study indicators

Box 1: Measures of alcohol use
- AUDIT categories (alcohol abstinence; low-risk drinking; hazardous drinking; harmful drinking or dependence)
- Heavy episodic drinking pattern
- Frequency of drinking
- Alcohol-related inability to recall events
- Sex while drunk

Box 2: Unsafe sex
- Five or more sexual partners
- Unprotected sex, separated by casual clients, regular clients, and boyfriend or husband
- Condom accidents

Box 3: Violence
- Sexual violence
- Physical violence

Box 4: HIV incidence

Box 5: Sexually transmitted infection
- Infection with Syphilis or Trichomonas vaginalis

Box 6: Pregnancy incidence

Alcohol-related harms, drinking patterns, frequency of use and drinking contexts

Proximal outcomes (sexual behaviours and vulnerabilities)

Distal outcomes (biological consequences of behaviour and vulnerability)