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The syndemic of HIV, HIV-related risk and multiple co-morbidities among women who use drugs in Malaysia: Important targets for intervention

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ABSTRACT

Background: Substance use and HIV are syndemic public health problems in Malaysia. Harm reduction efforts to reduce HIV transmission have primarily focused on men with substance use disorders.
Objectives: To explore HIV risk behaviors, substance use, and social factors associated with poor health outcomes among women who use drugs in Malaysia.
Methods: A cross-sectional survey of 103 drug-using women in Kuala Lumpur, Malaysia were recruited to assess their medical, psychiatric and social comorbidity as well as their engagement in nationally recommended HIV testing and monitoring activities.
Results: One-third reported having ever injected drugs, with most (68.2%) having recently shared injection paraphernalia. Sex work (44.7%) and infrequent condom use (42.4%) were common as was underlying psychiatric illness and physical and sexual violence during childhood and adulthood. Most women (62.1%) had unstable living situations and suffered from an unmet need for social support and health services. HIV prevalence was high (20%) with only two thirds of women eligible for antiretroviral therapy having received it. Suboptimal HIV testing and/or monitoring was positively associated with interpersonal violence (AOR 2.73; 95% CI 1.04-7.14) and negatively associated with drug injection (AOR 0.28; 95% CI 0.10-0.77).
Conclusions/Importance: Women who use drugs in Malaysia demonstrate considerable medical, psychiatric and social co-morbidity, which negatively contributes to optimal and crucial engagement in HIV treatment-as-prevention strategies. Mental health and social support may be key targets for future public health interventions aimed at drug-using women in Malaysia.

1. Introduction

Substance-using women, including criminal justice-involved women and sex workers (SWs), have historically been neglected by research, prevention and treatment (El-Bassel & Strathdee, 2015; Springer et al., 2015). Recent comprehensive reviews document this deficit among women who use drugs (WWUDs), who are often socially marginalized and neglected from prevention and treatment efforts (El-Bassel & Strathdee, 2015; Springer et al., 2015; Malinowska-Sempruch, 2015). Consequently, it is crucial to fill this gap at the interface of treatment and prevention for women with underlying substance use disorders, especially those with or at risk for HIV, and to better understand their social and medical comorbidities. Globally, the pathways to addiction as well as the processes by which WWUDs engage in HIV prevention and treatment differ markedly from their male counterparts (Brecht et al., 2004; Cheng et al., 2009; Couture et al., 2012; El-Bassel et al., 2011; Greenfield et al., 2010; Hansen et al., 2004; Lorvick et al., 2006; McCoy et al., 2001; Nguyen et al., 2004; Shannon et al., 2008; Sordo et al., 2012; Tucker et al., 2011; Wang et al., 2009; Wechsberg, Luseno, & Ellerson, 2008; Wenzel et al., 2009; Wickersham et al., 2013; Aziz & Smith, 2012; Malaysian AIDS Council, 2014; Powelson et al., 2014; Roberts, Mathers, & Degenhardt, 2010). Specifically, women differ from men

Abbreviations: PWIDs, people who inject drugs; WWUDs, women who use drugs; SUD, substance use disorder; NGO, non-governmental organization; WHO, World Health Organization; MOH, Ministry of Health; NSEP, Needle Syringe Exchange Program; ATS, amphetamine-type stimulants; SW(s), sex work(ers); IPV, interpersonal violence; SAVA syndemic, syndemic of substance abuse, violence, and HIV/AIDS.

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in their motivations for and partnerships in initiating alcohol or drug use (Brady & Randall, 1999). They also have considerably more frequent and intense experiences with interpersonal violence (IPV), sexual abuse and trauma (Brecht et al., 2004; Meyer et al., 2013; Meyer, Springer, & Altice, 2011). Disparities in economic opportunities also differ, often with WWUDs engaging in SW, which adds additional stigma beyond substance use alone (Saggurti et al., 2011; Fielding-Miller et al., 2014). Conversely, substance use in SWs may start as a coping mechanism or be deployed as a "power drug" that allows them to service more customers (Maher et al., 2011; Strathdee et al., 2008). In the setting of relationship power dynamics, poverty, stigma, and unemployment, WWUDs frequently experience elevated HIV risk by engaging in unprotected sex and/or having a male sexual partner who injects drugs (Roberts et al., 2010; El-Bassel et al., 2014; Strathdee & Sherman, 2003; Ravi, Blankenship, & Altice, 2007). Despite awareness of these gender differences, research on HIV prevalence and risk and access to prevention and treatment among people who use drugs rarely disaggregates men from women (Roberts et al., 2010; Des Jarlais et al., 2013; Des Jarlais et al., 2012).

While there are almost no data specifically addressing WWUDs in Southeast Asia, some regional reports focus on SWs and their substance use, unmet addiction treatment needs, psychosocial vulnerabilities, and related health risk behaviors (Couture et al., 2012; Tran et al., 2005). For example, a 2012 Malaysian study found HIV prevalence to be several-fold higher in SWs (10.7%) compared to the general female population (0.15%) (Baral et al., 2012), with similar reports in Thailand (Manopaiboon et al., 2013), China (Wang et al., 2009), and Cambodia (Couture et al., 2012; Couture et al., 2011). Lower income and engagement in SW increases the likelihood of WWUDs experiencing IPV (El-Bassel et al., 2011; Shannon et al., 2008; Wechsberg et al., 2008; El-Bassel et al., 2001; Meyer, Springer, & Altice, 2011; Singer, 2009), which in turn elevates HIV risk through traumatic and risky sexual encounters, extradyadic relationships, and fear and powerlessness to negotiate condom use (El-Bassel et al., 2011; El-Bassel et al., 2001; Meyer et al., 2011). Psychiatric disorders are also highly prevalent in WWUDs (Brecht et al., 2004; Sordo et al., 2012; Vik, 2007) and exacerbate medical, behavioral, and social complications associated with substance use (Greenfield et al., 2010; Sordo et al., 2012). These complications also interfere with a woman's ability to seek supportive addiction treatment and health services (Pinkham & Malinowska-Sempruch, 2008; Malinowska-Sempruch, 2015).

Although 78.5% of cumulative HIV infections in Malaysia in 2013 were among males, the majority of whom were people who inject drugs (PWIDs), the number of cases occurring among females and being attributed to sexual transmission has been increasing since 2000 (United Nations Programme on HIV/AIDS (UNAIDS), 2014). Addiction research in Malaysia, however, has remained primarily focused on male opioid injectors, with harm reduction efforts initiated in 2006 to reduce HIV transmission among PWIDs. Consequently, little is known about WWUDs, their medical and social comorbidity, and their engagement in harm reduction and nationally recommended HIV testing and monitoring activities. WWUDs remain under-represented and "hidden" from HIV outreach and prevention programs (United Nations Programme on HIV/AIDS (UNAIDS), 2014).

In the complex and constrained environment in Malaysia where the HIV epidemic among women is expanding and almost nothing is known about WWUDs (United Nations Programme on HIV/AIDS (UNAIDS), 2014; Joint United Nations Programme on HIV/AIDS (UNAIDS), 2014), we explored HIV risk behaviors, co-morbidities, and barriers to care among 103 WWUDs, including their engagement in nationally recommended HIV testing and monitoring.

2. Methods

2.1. Setting

The city of Kuala Lumpur is home to approximately 1.6 million people, with an additional 5.6 million living in the greater Kuala Lumpur metropolitan area (Malaysia Department of Statistics, 2014; World Capital Institute, 2013; World Population Review, 2014). Despite harshly imposed criminal penalties, Kuala Lumpur is home to a growing drug trade (World Population Review, 2014; Tanguay, 2011; U.N. Department of State, 2013). By 2006 in Malaysia, there were over 300,000 people who use drugs (1.1% of the total population) (Nazar & Ahlam, 2007), including an estimated 170,000 PWIDs (United Nations Programme on HIV/AIDS (UNAIDS), 2014). With an HIV prevalence of 15–45% in PWIDs (Kamarulzaman, 2009; Bazazi, Crawford et al., 2015), harm reduction services with methadone and needle and syringe exchange programs (NSEP) began in 2006 (Kamarulzaman, 2009; Reid, Kamarulzaman, & Sran, 2007). Methadone is available through formal government-sponsored programs and from primary providers who are paid by the milligram of dose dispensed. Of note, the latter approach is often perceived as treatment even if not continuous. The Malaysian AIDS Council and its partner NGOs with their affiliated community outreach drop-in centers are the primary sources of outreach and support for people with substance use disorders (SUD), including healthcare, education and HIV prevention services such as NSEP.

2.2. Sample and recruitment

Eligible participants were women aged ≥18 years who self-reported any substance use, including alcohol, in the previous year. Participants were recruited using convenience sampling from three types of facilities identified as key sites for interacting with WWUDs: one community drop-in center (n = 55), two women's shelters (n = 27), and two National Anti-Drug Agency (NADA/AADK) voluntary drug treatment centers (n = 21). Information sessions and posted fliers describing the study were used for recruitment at each site. After meeting with a trained research assistant to determine eligibility, participants provided written informed consent and were given a description of study risks, benefits, and the voluntary nature of participation. All 103 women who came to learn more about the survey were interviewed during July–August 2011.

2.3. Survey administration

Administered in Bahasa Malaysia by trained research assistants, a 60-minute questionnaire assessed demographics, criminal justice history, substance use history, addiction treatment needs, HIV risk behaviors, physical health, mental health, social support, history of violence or victimization, and access to medical and social services. Interviews were conducted in private rooms, with no staff members present to ensure privacy and reduce perceived coercion. After completing the interview, participants were paid 50 Malaysian Ringget (~US$16) for their time.

2.4. Survey measures and data analysis

"Injection drug use" was defined as having ever injected any drug in one's lifetime. Housing status and injection frequency corresponded to the 30 days prior to the last time the participant used and/or entry into treatment. Primary source of income and frequency of unprotected sex and transactional sex, defined as exchanging sex for money, drugs, a place to stay, food, or clothes, were assessed over the 6-month period prior to the interview date. "Criminal justice involvement" included both jail and prison while "ever incarcerated" included any imprisonment in one's lifetime. Childhood physical abuse was defined as having been "hit, slapped, punched, or kicked" by an adult before the age of 18