

# **Injecting Drug Users in Indonesia : Towards a Comprehensive Care**

## **Introduction**

The prevalence of HIV/AIDS and other viral blood/borne transmitted infections such as Hepatitis B and C has greatly increased in recent years in Indonesia [1, 2] whereby injecting drug use is mostly underlying this trend followed by heterosexual transmission [3]. Official publications reveal that the HIV prevalence rates among IDUs varied among Asian countries, ranging from 8-24% in Pakistan [4], 18-50% in China [5], 34% in Vietnam [4], and 38% in Thailand [6]. Indonesia has one of the highest HIV-prevalence rates among IDUs, wranging from 43 – 56% in official reports [7]. In order to reduce the spread of HIV, IDUs have to be targeted. However, IDUs is not a single entity. That is why there is no one response suitable for every condition of IDUs. Previous researches in various setting and experiences in Indonesia in comparison with other countries, will be outlined below.

## **1. Pattern of drug use**

Heroin was the most frequent used drug but not exclusively while most IDUs used different drugs at the same time. This pattern is also common among IDUs in other developing and transitional countries [8]. The commonly used substances by IDUs in Bandung (unpublished data, 2008) were cannabis, benzodiazepines, and alcohol, a pattern that is in line with reports from China, Thailand, Ukraine, Lithuania, and Poland [8]. The most substance injected by IDUs in West Java is heroin, followed by buprenorphine, shabu (methamphetamine), cocain, and benzodiazepine [9]. Since each kind of drug has its own characteristics, prevention efforts to control the spread of viral blood/borne infections among IDUs could benefit from tailoring interventions according to the type of drug used [10].

The differences among IDUs are not only in terms of the kind of drug being used. There is a considerable number of IDUs who change from injection to non-injection drug administration. These subjects are called former injecting drug users when no drugs have been injected in the previous 6 months [11, 12]. The ratio of former injectors to current injectors in Respondent Driven Sampling study in New York was 0.475 : 1, suggesting that there may be approximately half as many former injectors as current injectors [12].

The high HIV, Hepatitis B and C prevalence in former IDUs is important since these infections can be further transmitted to others through sexual risk behavior, sharing of non-injection drug-use implements such as straws and crack pipes and other practices such as tattooing [13-16]. Furthermore, compared with current IDUs, former IDUs may be more likely to have sexual contact with people who do not use drugs. As a result, former IDUs may function as a bridge whereby viral blood-borne infection may be transferred from high prevalence populations to the low prevalence non-drug-using general population [13, 17].

For former IDUs, methadone maintenance, which has proven very effective in reducing (risky) drug injection, may not be indicated or even harmful. Rather, IDUs in this group might benefit from relapse prevention. Similarly, in terms of prevention of further HIV-transmission to steady and casual sexual partners and bridging populations, promotion of condom use would be indicated, rather than needle exchange.

In contrast, for current injecting drug users, an abstinence programs such as drug treatment and/or drug substitution therapy, that transition users from injecting to non-injecting practice, have to be increased. Reverse transition (from injecting to non injecting) may represent as useful intermediate goal for IDUs who cannot achieve abstinence [18]. Transitioning from injecting to non-injecting use may be part of an attempt to control or reduce an individual's drug use and maybe more likely among injectors with greater individual and social resources [12, 18, 19]. However, not only reducing the injecting risk behaviour, it also can reduce the sexual risk behaviour since data from other studies showed that moderately strong associations exist between injecting drug use and sexual risk behaviors [20, 21].

Besides that, the goal of the treatment for IDUs should be differentiated based on the severity of the addiction. IDUs can be in different phases which can be defined as experimental users, recreational/ social users, dependence, addiction, chronic addiction, and former IDUs [12, 22]. Because of this complexity of addiction, the goals of the intervention program should be individualized and adjusted to the severity of addiction. Those goals of the treatment are crisis intervention, cure or recovery (detoxification, relapse prevention) and care or partial remission (stabilization and harm reduction) [23].

In addition to that, many IDUs are incarcerated because of both the substance's problem and criminal behaviours. For example in Banceuy, one of the narcotics prisons in Indonesia, 17% ( $\pm$  80) from 456 inmates (from 950 totally number of inmates in Banceuy) have admitted having

IDU history. Among those, around 42% are HIV positive (and all inmates with IDU history are HIV+). In many places around the world, HIV prevalence among prisoners is much more higher compared to the general population [24, 25]. Because of this reason, preventive and harm reduction measures should be urgently introduce at least as pilot program. The implementation of such measures is not only a human right for prison inmates but can also provide important public health benefits for the general population [26].

## **2. Risk behavior**

The recent Integrated Biological-Behavioral Surveillance among Most-at-Risk Groups in 2007 showed that IDUs in 6 Indonesian cities still shared needles in the prior week, ranging from 9% in Semarang to 63% in Jakarta [27]. Not only increasing the risk of infection transmission among their peers, IDUs also potentially spread the infections to other populations. Pisani et al. (2003) reports that in 3 big cities in Indonesia, including Bandung, over two thirds of IDUs were sexually active, 48% reported multiple partners, and 40% had bought sex from a female sex worker in the preceding 12 months. Consistent condom use was reported by 10% [28]. The results from Behavioral Surveillance Survey 2004-2005 showed that 96-99% of IDUs in several cities in Indonesia have multiple sex partners in the past year. Most of them know that using condom can prevent the transmission of HIV/AIDS but only 25-38% of them who use condom in the last commercial sex and only 10-29% of IDUs who use condom consistently in the last year [29, 30]. As a result, the trend of sexual HIV transmission is increasing in the past few years. The risk of transmitting blood borne diseases is also increasing because of the sharing of non-injection drug-use implements such as straws and crack pipes; and other practices such as tattooing [13-16].

The comparison of the recent studies [28, 29] with the previous researches in Indonesia [8, 31] or in Australia [27] shows that the injecting risk behaviour is decreasing. Although the injecting risk behaviour is still a problem, this result indicates that the program such as bleaching program, sterile needle and syringe service (SNSS), drugs addiction recovering therapy service, and Methadone Maintenance Therapy (MMT) were successful in reducing the injecting risk behavior.

Dissimilar with injecting risk behaviour, the sexual risk behavior didn't have significant differences. There is only a small increase in the consistent condom use during sexual activities

in the last 30 days compare [7, 9]. This percentage is also the lowest among most at-risk populations [1]. This condition will lead to the spread of HIV/AIDS from IDUs community to the general community [1].

### 3. Somatic co-morbidity

Medical illnesses are common among drug users. Medical problems include viral hepatitis, liver disease, HIV-AIDS, bacterial infections including endocarditis, pneumonia and tuberculosis. Four principal factors contribute to drug users high the risk for many medical conditions. Most illicit drugs have direct toxicities, which are responsible for a wide variety of medical sequelae. Certain behaviors associated with drug use (injection, exchanging sex for money or drugs) place drug users at elevated risk for specific conditions (such as endocarditis and sexually transmitted diseases). As many drug users are socio-economically disadvantaged, life circumstances may confer increased environmental risk for infections such as tuberculosis. Finally, diminished access to an effective use of care, and disruption of daily routines by active drug use (thus impeding self-care behaviors such as medication adherence or appointment keeping), may adversely affect clinical outcomes. Another research showed that IDUs in ARV treatment and experiencing withdrawal symptoms had a fivefold increased risk of death with respect to the others. Early detection and increasing substitution dosages or switching to a more adequate treatment could prevent possible drug-related deaths [29].

Concurrent general medical conditions frequently complicate the treatment of substance use disorders. Many patients with these disorders do not seek or receive adequate general medical care for a variety of reasons, including the chaotic and disorganized lifestyles which often associated with substance abuse and lack of access to health care. Thus, the substance abuse treatment encounter may be the first opportunity to address the general medical care needs of these patients.

Drug use is illegal and highly stigmatized, factors that influence treatment entry among drug users may differ from factors that influence treatment utilization for other types of health needs. Based on the findings of the few studies of help-seeking behaviors among drug users, three broad inferences may be discerned. The first is that seeking help is a function of the severity of an individual's problem. The second is that help-seeking is influenced by individual characteristics, environmental circumstances, and sociocultural context. The third is that the availability and

characteristics of services and policies are in part responsible for determining patterns of help-seeking. However, empirical evidence supporting these assumptions is sparse [17]. Factors that relate to increasing help-seeking behavior are being a man, formerly married, using tobacco, depressive in past year, anxiety in past year, and suffer from >2 physical condition. Beals et al. stated that substance use disorders were related to help seeking in meaningful ways; participants who had more recent problems were most likely to seek help [18]. That is probably the reason why the data from Indonesia Ministry of Health shows that the finding of AIDS cases are much higher than HIV cases [2].

#### 4. Psychiatric co-morbidity

Intravenous drug use is often accompanied by psychiatric or medical problems. Psychiatric comorbidity includes mood disorders, anxiety and personality disorders. The severity of this morbidity also varies between these specialist settings: severe psychiatric disorder is associated with non-dependent use of substances (problematic substance misuse), whereas severe addiction is associated with personality disorder with or without minor psychiatric disorder. The pattern and severity of this comorbidity are therefore related to the clinical setting in which it presents, which may not be representative of comorbidity occurring in the community.

Current services may also be inadequate in terms of dealing with somatic, psychiatric and psycho-social problems. Preliminary data show that up to 75% of Indonesian methadone maintenance therapy (MMT)-clients may be HIV-positive, and more than one-third may have some kind of psychiatric problem (Hidayat, unpublished). The inability to deal with these issues may be one of the reasons for the high drop-out rates (~50%) reported by MMT-programs in Indonesia.

#### 5. Support (employment, legal aspect, social/ family support)

HIV can have a major impact on patients and their families. The level of impact depends on its nature, social and/or culture connotation. Especially, an uncertain and/or fatal outcome can be expected as the severe impact by these diseases. In contrast, the situation is different for patients with HIV and their families, and even more so when patients with HIV are injecting drug users (IDUs). Unfortunately, for patients living with HIV with or without IDU, and their families, stigmatization and discrimination attitudes by the community, families and even health professionals are common. In Indonesia, due to the cultural norms which emphasized avoidance of conflict and more respect to people with higher status make patients mostly have to conquer

the psychosocial barriers to participate their family actively during their medical health care and health consultations which resulted in socially inappropriate participation of the family. Due to these cultural norms, strengthens the conventional model of medical health care, which doctors and nurses play an authoritarian role and being assume as the total controller of the consultation while in this case, patients are claimed more to be in passive role. Established collaboration with relevant stakeholders will ensure that these guidelines will be implemented nation-wide for the benefit of patient service.

### Conclusion

The biopsychosocial approach does not consider one intervention superior above other ones, as a combination of biological, psychological, sociocultural interventions has to be implemented according to the individual needs and problems of the patients.

## References

1. NAC, *Country Report on The Follow Up to The Declaration of Commitment on HIV/AIDS: UNGASS Reporting Period 2006-2007*, N.A. Committee, Editor. 2006-2007.
2. UNAIDS, WHO, and UNICEF, *Epidemiological Fact Sheet on HIV and AIDS, 2008 Update: Core data on epidemiology and response Indonesia*. 2008.
3. Directorate General CDC & EH, M.o.H., Republic of Indonesia *Cases of HIV/AIDS in Indonesia*. 2008.
4. UNAIDS and WHO, *AIDS epidemic update: December 2007*. 2007, Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO): Geneva.
5. UNAIDS and WHO, *AIDS epidemic update: December 2006*. 2006, Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO): Geneva.
6. UNAIDS, *2006 Report on the global AIDS epidemic: a UNAIDS 10th anniversary special edition*. 2006, Joint United Nations Programme on HIV/AIDS (UNAIDS): Geneva.
7. Depkes RI and KPA, *Laporan Nasional: Kegiatan estimasi populasi dewasa rawan terinfeksi HIV tahun 2006 [National Report on Estimating HIV Infected Adult Populations 2006]*. 2006, Departemen Kesehatan RI (Ministry of Health, Republic of Indonesia/MOH) and Komisi Penanggulangan AIDS Nasional (National AIDS Commission/NAC): Jakarta.
8. Lawrinson, P., et al., *Key findings from the WHO collaborative study on substitution therapy for opioid dependence and HIV/AIDS*. *Addiction*, 2008. **103**(9): p. 1484-92.
9. SKEPO, *Rapid Situations and Responses Assessment Penyebaran HIV/AIDS pada Kalangan Pengguna Narkoba Suntik di 10 Wilayah Jawa Barat*. 2006.
10. De, P., et al., *Rethinking approaches to risk reduction for injection drug users: differences in drug type affect risk for HIV and hepatitis C virus infection through drug-injecting networks*. *J Acquir Immune Defic Syndr*, 2007. **46**(3): p. 355-61.
11. Neaigus, A., et al., *Potential risk factors for the transition to injecting among non-injecting heroin users: a comparison of former injectors and never injectors*. *Addiction*, 2001. **96**(6): p. 847-60.
12. Des Jarlais, D.C., et al., *The transition from injection to non-injection drug use: long-term outcomes among heroin and cocaine users in New York City*. *Addiction*, 2007. **102**(5): p. 778-85.
13. Gyarmathy, V.A., et al., *Risk correlates of prevalent HIV, hepatitis B virus, and hepatitis C virus infections among noninjecting heroin users*. *J Acquir Immune Defic Syndr*, 2002. **30**(4): p. 448-56.
14. Neaigus, A., et al., *Sexual and other noninjection risks for HBV and HCV seroconversions among noninjecting heroin users*. *J Infect Dis*, 2007. **195**(7): p. 1052-61.
15. Tortu, S., et al., *Sharing of noninjection drug-use implements as a risk factor for hepatitis C*. *Subst Use Misuse*, 2004. **39**(2): p. 211-24.
16. Des Jarlais, D.C., et al., *Convergence of HIV seroprevalence among injecting and non-injecting drug users in New York City*. *AIDS*, 2007. **21**(2): p. 231-5.
17. Neaigus, A., et al., *Sexual transmission risk among noninjecting heroin users infected with human immunodeficiency virus or hepatitis C virus*. *J Infect Dis*, 2001. **184**(3): p. 359-63.
18. Gossop, M., et al., *Changes in route of drug administration among continuing heroin users: outcomes 1 year after intake to treatment*. *Addict Behav*, 2004. **29**(6): p. 1085-94.
19. Pizzev, R. and N. Hunt, *Distributing foil from needle and syringe programmes (NSPs) to promote transitions from heroin injecting to chasing: An evaluation*. *Harm Reduct J*, 2008. **5**: p. 24.
20. Des Jarlais, D.C., *Preventing HIV transmission among injecting drug users (IDUs) and from IDUs to noninjecting sexual partners in Sichuan, China*. *Sex Transm Dis*, 2007. **34**(8): p. 583-5.
21. Gossop, M., et al., *Reduction or cessation of injecting risk behaviours? Treatment outcomes at 1-year follow-up*. *Addict Behav*, 2003. **28**(4): p. 785-93.

22. Kurniadi, H., *Napza dan Tubuh Kita*. 2000, Jakarta: Jendela.
23. van den Brink, W. and J.M. van Ree, *Pharmacological treatments for heroin and cocaine addiction*. *Eur Neuropsychopharmacol*, 2003. **13**(6): p. 476-87.
24. Dolan, K., et al., *HIV in prison in low-income and middle-income countries*. *Lancet Infect Dis*, 2007. **7**(1): p. 32-41.
25. Jurgens, R., A. Ball, and A. Verster, *Interventions to reduce HIV transmission related to injecting drug use in prison*. *Lancet Infect Dis*, 2009. **9**(1): p. 57-66.
26. Michel, L., M.P. Carrieri, and A. Wodak, *Harm reduction and equity of access to care for French prisoners: a review*. *Harm Reduct J*, 2008. **5**: p. 17.
27. Ministry of Health, Statistics Indonesia, and National AIDS Commission, *Integrated biological-behavioral surveillance among most-at-risk-groups (MARG) in Indonesia 2007. Surveillance highlights: injecting drug users*. 2008: Jakarta.
28. Badan Pusat Statistik (BPS) and Departemen Kesehatan RI, *Behavioral surveillance survey (BSS) results in Indonesia 2004-2005*. 2005, Badan Pusat Statistik (BPS)[Central Bureau of Statistics] and Departemen Kesehatan RI [Ministry of Health, Republic of Indonesia]: Jakarta.
29. Michel, L., et al., *Withdrawal symptoms as a predictor of mortality in patients HIV-infected through drug use and receiving highly active antiretroviral therapy (HAART)*. *Drug Alcohol Depend*, 2009. **99**(1-3): p. 96-104.