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The Psychological Problems Among Injecting Drug Users (IDUs) in Bandung, West Java, Indonesia

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Abstract

Background

Until recently, the most common view was that drug addicts are weak and/ or bad people, unwilling to control their behavior and gratifications. However, the addictive drugs affect the brain circuitry controlling the motivated and learned behavior. Some of drug users start using drug to “cure” their psychological problems. This make psychiatric disorders and addiction are often dubbed ‘dual disorders’. This present study was conducted to explore the common psychological problems among injecting drug users (IDUs) in Bandung, West Java, Indonesia.

Methods

A cross-sectional, non-experimental study using respondent driven sampling was conducted from June to September 2008 at a primary health centre in Bandung, Indonesia. A total of 197 IDUs were interviewed using EuropASI to screen their psychological problems.

Results

The psychological problems, such as depression, anxiety, trouble in remembering, hallucination, and/or controlling violent, which were not a direct result of their drug use, were experienced by 50% of IDUs in the last 30 days and by 80% of IDUs in the life time. The psychological problems with the highest percentage in the last 30 days and also in the life time are trouble in remembering and anxiety. Thirty seven percent of all IDUs have ever had serious thought of committing suicide and more than 50% of them have attempted suicide. However, only 26 IDUs (13%) have ever sought for help for their psychological problems

Conclusion

This study suggests that providing information about psychological problems and their treatment is needed by IDUs. Furthermore, addressing psychological problems in the general community can reduce the chance to become a drug user. Last, those who deliver addiction care also have to be aware about the psychiatric comorbidity in order to have a better outcome.

Key words : Psychological Problems, Injecting Drug Users

The Psychological Problems Among

Injecting Drug Users (IDUs) in Bandung, West Java, Indonesia

Introduction

Until recently, the most common view was that drug addicts are weak and/ or bad people, unwilling to control their behavior and gratifications. However, the addictive drugs affect the brain circuitry controlling the motivated and learned behavior.

Addictive drugs have well-specified effects on the brain circuitry involved in the control of motivated and learned behavior. Anatomically, the brain circuitry involved in most of the actions of addictive drugs is the ventral tegmental area connecting the limbic cortex through the midbrain to the nucleus accumbens (De Vries and Shippenberg 2002; Chao and Nestler 2004; Nestler 2004). Neurochemically, alcohol, opiates, cocaine, and nicotine have significant effects on the dopamine system, although through different mechanisms. Cocaine increases synaptic dopamine by blocking reuptake into presynaptic neurons; amphetamine produces increased presynaptic release of dopamine, whereas opiates and alcohol inhibit dopamine neurons producing increased firing rates. Opiates and alcohol also have direct effects on the endogenous opioid and possibly the g-aminobutyric acid systems (Leshner 1997; McLellan, Lewis et al. 2000).

The ventral tegmental area and the dopamine system have been associated with feelings of euphoria. Animals that receive mild electrical stimulation of the dopamine system contingent on a lever press will rapidly start to press that lever again and again, ignoring normal needs for water, food, or rest. As such, cocaine, opiates, and several other addictive drugs produce supernormal stimulation of this reward circuitry (McLellan, Lewis et al. 2000).

In the cell level, all drugs of abuse share a common characteristic which underlies their abuse potential: initial use in the mode and pattern of abuse leads to rapid increase or decrease of receptor and/or transporter function, neurotransmitter/ neuropeptide activity, and secondary messenger signaling. Changes in the gene expression of target proteins follow frequent, repeated exposure. Cessation of drug use leads to similarly profound changes. Thus, recurrent "on-off" use of short-acting drugs produces long-term, perhaps permanent, alterations in these affected neuronal systems and underlies the development of tolerance, dependence, withdrawal, and relapse characteristic of the addictive diseases (Kalivas and Volkow 2005; Kreek, Bart et al. 2005; Kreek, Nielsen et al. 2005; Kreek and LaForge 2007).

Worldwide, an estimated 11 to 21 million people inject drugs (Mathers, Degenhardt et al. 2008; UNAIDS 2008) and HIV infection was reported in 120 (81%) of the 148 countries in which use of injecting drugs was documented. Psychiatric co-occurring disorders reduce the effectiveness of the drug treatment (Cacciola, Alterman et al. 2001; Carpentier, Krabbe et al. 2009). Furthermore, AIDS-related medical care, and psychiatric care have been found to be associated with improved drug treatment retention and lower relapse rates (Berkman and Wechsberg 2007). In addition, treatment for addictive and mental disorders will lead to increase adherence to medical regimes, thus reducing the risk of the early emergence of treatment-resistant AIDS and tuberculosis (Willenbring 2005). Lack of proper diagnosis and treatment of this co-occurring disorders can also be of influence on the overall treatment and it can cause serious side effects (Gruber and McCance-Katz ; Peles, Schreiber et al. 2008; Munoz-Moreno, Fumaz et al. 2009) (**figure 1**).

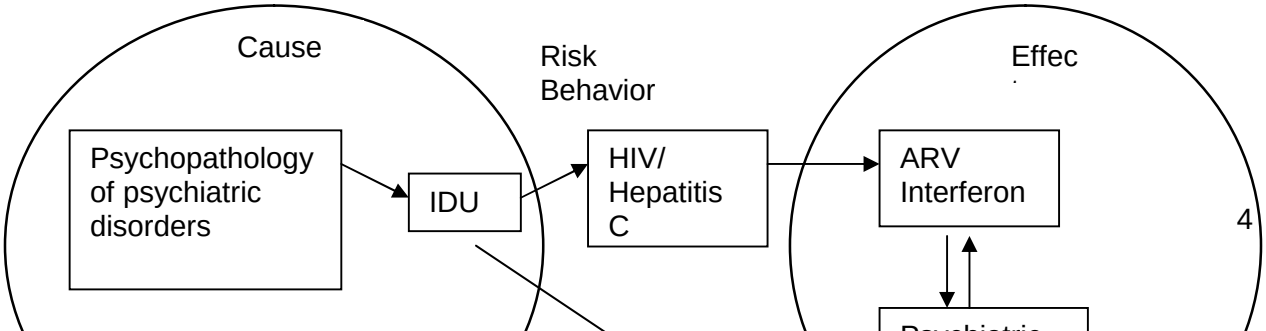

Figure 1 The development of psychiatric disorders in injecting drug users

It has been shown that the prevalence of psychiatric disorders in IDUs were more than 50% in several research. In addition, there was a significant correlation between psychiatric problems and the quality of life and there are some facts shown that alleviation of the psychiatric problems will improve the efficacy of drug treatment. These facts indicate the importance of targeting psychiatric disorders in IDUs (Carpentier, Krabbe et al. 2009).

This present study was conducted to explore the common psychological problems among injecting drug users (IDUs) in Bandung, West Java, Indonesia.

Methods

A cross-sectional, non-experimental study using respondent driven sampling was conducted from June to September 2008 at a primary health centre in Bandung, Indonesia. A total of 197 IDUs were interviewed using EuropASI to screen their psychological problems.

Respondent-driven sampling (RDS) was used to conduct our study among community IDUs. RDS is a form of peer recruitment in which IDUs are asked to recruit their peers. RDS starts with a limited number of IDUs, known as seeds. We started with six seeds from six

different parts of Bandung based on information provided from non-governmental harm reduction organizations. After participating in the study, the seeds were asked to recruit two of their peers and those who agreed were provided with two individually numbered coupons. These coupons were then passed from seed to other IDUs. The process of seed recruiting continued until the desired sample size was achieved. As a part of the RDS process, an incentive was offered for participating in the interview (Rp. 30.000,- (€2)) and for recruiting two injecting drug using peers (Rp. 20.000,- (€1.3)) per eligible peer recruited). After the initial seeds were recruited, only those people who presented coupons were permitted to participate in the study (Heckathorn, Semaan et al. 2002).

There was a possibility that the same participant could come to the center more than once, possibly to take advantage of the monetary incentive. To prevent duplication, anatomical marks such as tattoos, scars, or birth marks were recorded.

The EuropASI is an adaptation of the Addiction Severity Index (fifth version). It is a semi-structured interview designed to provide important information about aspects of the life of patients that may contribute to their substance-abuse problems such as medical status, employment/ support status, drug/ alcohol use, legal status, family social relationship, and psychological problems (McLellan, Luborsky et al. 1980; TRI 1990). Researchers have found that ASI has shown excellent reliability and validity across a range of types of patients and treatment settings in many countries (McLellan, Cacciola et al. 2006). For the translation into Bahasa Indonesia,WHO translation procedures were used (WHO 2003). EuropASI takes about an hour to gather the basic information.

Results and Discussion

The psychological problems, such as depression, anxiety, trouble in remembering, hallucination, and/or controlling violent, which were not a direct result of their drug use, were experienced by 50% of IDUs in the last 30 days and by 80% of IDUs in the life time. The psychological problems with the highest percentage in the last 30 days and also in the life time are trouble in remembering and anxiety. Thirty seven percent of all IDUs have ever had serious thought of committing suicide and more than 50% of them have attempted suicide. However, only 26 IDUs (13%) have ever sought for help for their psychological problems.

A study among methadone patients in The Netherlands reported a concurrent prevalence of co-morbidity of psychiatric disorders of 59.3% (Knapen, Van Gogh et al. 2007). Preliminary data in Bandung showed that more than one-third of methadone maintenance treatment (MMT) patients may have some kind of psychiatric problem (Hidayat, unpublished data). 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. Psychiatric disorders and addiction are often dubbed 'dual disorders', and in psychiatric patients, addiction should be actively looked for and vice versa.

The addictive behaviour in combination with other psychiatric disorders will have considerable individual and social consequences, such as unemployment, low health status, accidents, homelessness, violence, and other social problems (Leshner 1997; McLellan, Lewis et al. 2000; EMCDDA 2007). These social consequences are important in shaping the generally held view that drug dependence is primarily a social problem that requires interdiction and law enforcement rather than a health problem that requires prevention and treatment (McLellan, Lewis et al. 2000). The high drop-out, non-compliance, and relapse rates during and after treatment reaffirms the common view that drug dependence is not an acute medical illness. McLellan et al. (2000) have attributed the disappointing treatment results to the fact that current

treatment strategies and outcome expectations view drug dependence as a curable, acute condition and not like a chronic illness with other treatment and outcome expectations as a result (McLellan, Lewis et al. 2000).

One of the reasons for the limited psychiatric treatment use is clients with a history of treatment for psychiatric illness and/or self-harm are less likely to confirm drug treatment referral uptake (Kimber, Mattick et al. 2008). Interventions to increase referral from/ to mental treatment should be addressed (Kessler, Brown et al. 1981; Biddle, Gunnell et al. 2004).

Conclusion

This study suggests that providing information about psychological problems and their treatment is needed by IDUs. Furthermore, addressing psychological problems in the general community can reduce the chance to become a drug user. Last, those who deliver addiction care also have to be aware about the psychiatric comorbidity in order to have a better outcome.

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