Psychiatric Comorbidity Among Community-based, Treatment Seeking Opioid Dependents in Klang Valley
(Komorbiditi Penyakit Psikiatri dalam Kalangan Penagih yang Bergantung pada Opioid di Lembah Kelang)

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ABSTRACT

The main objectives in this study were to determine the percentage of psychiatric comorbidity among treatment seeking opioid dependents in Klang Valley. A cross sectional study of opioid dependence patients was conducted between December 2007 and May 2008 at ten community-based drug substitution therapy clinics in Klang Valley. A total of 204 opioid dependence patients participated in the study using the structured clinical interview for DSM-IV Axis I disorders (SCID-I) as its instruments. The percentage of psychiatric comorbidity among opioid dependents was 43.6%. Major depressive disorder had the highest prevalence at 32.6%, followed by dysthymia at 23.6% and Panic disorder at 14.6%. Psychiatric comorbidity were found to have significant differences ($p<0.05$) in connection with history of polysubstance abuse, previous history of court sentences (legal status) and family history of psychiatric illnesses. This study showed that the percentage of psychiatric comorbidity is high among the opioid dependents. It highlights the urgent need for the psychiatric comorbidity to be assessed and early intervention is important for this group of patients.

Keywords: Opioid dependents; psychiatry comorbidity

ABSTRAK

Objektif utama kajian ini adalah untuk melihat peratusan komorbiditi penyakit psikiatri dalam kalangan penagih yang bergantung pada opioid di Lembah Kelang. Kajian rentas ini dilakukan antara bulan Disember 2007 sehingga bulan Mei 2008 di sepuluh klinik swasta yang mempunyai program terapi gantian dadah sekitar Lembah Kelang. Sejumlah 204 penagih opioid menyertai kajian ini menggunakan temuduga klinikal berstruktur untuk disorder paksi 1 DSM-IV (SCID-I) untuk melihat sama ada mereka mempunyai komorbiditi. Dilihat 43.6% daripada kumpulan penagih opioid ini mempunyai komorbiditi psikiatri. Penyakit Kemurungan mempunyai peratusan tertinggi pada 32.6%, diikuti oleh penyakit disthiamia pada 23.6% dan penyakit Panik pada 14.6%. Komorbiditi psikiatri didapati mempunyai perbezaan siknifikan ($p<0.05$) pada sejarah penyalahgunaan pelbagai jenis dadah, sejarah dijatuhi hukuman mahkamah dan sejarah penyakit psikiatri dalam kalangan ahli keluarga. Kajian ini menunjukkan peratusan komorbiditi psikiatri adalah tinggi. Ini memperlihatkan bahawa amat penting komorbiditi psikiatri dikaji dan intervensi awal penting untuk kumpulan pesakit ini.

Kata kunci: Komorbiditi psikiatri; pergantungan pada opioid

INTRODUCTION

There is estimated to be 400000 to 800000 drug users in Malaysia and the number is estimated to increase to one million in the next few years (Hussain 2001). Statistics from NADA (2007) showed that 63% of drug abusers in Malaysia were opioid users. Currently there is a new paradigm shift in the management of heroin dependence in Malaysia. In the new policy the addicts were recognized as a patient and their rehabilitation were taken care by various government departments with specific emphasis towards the treatment with opiate substitution therapy. Recently, we found that there was an increased in the number of heroin dependents who sought treatment in community-based clinics. This is probably because it is more convenient and less stigmatized. However, relapses are still synonymous with heroin addiction. Thus, it is important to find factors that can contribute to the treatment retention and also relapse prevention. Psychiatry comorbidity is identified as among the factors that can influence the treatment's efficiency.

Rounsaville et al. (1982) revealed that 80% of opioid abusers had comorbid psychiatry diagnosis. However, Brooner et al. (1997) found only 47% and Rasidi (1992) found 49.3% of opioid abusers had co morbid psychiatry diagnosis. Hein et al. (1997) reported that 67% of patients who came for treatment of substance abuse also received lifetime diagnoses of serious psychiatric illness. Kaplan and Saddock (2003) found that about 90% of persons with

opioid dependence have comorbid psychiatric disorders. The most common diagnoses were major depressive disorder and anxiety disorder. A study by Lintzeris (2001) revealed that compared with general population, the opioid dependence individual tend to have 7 times greater incidence of a psychotic disorder, 9 times greater incidence of a diagnosis of depression and 3 times greater incidence of a diagnosis of anxiety.

Kessler et al. (1994) in national comorbidity survey replication (NCS-R) noted that major depression has had high comorbidity with other disorders particularly anxiety disorder and substance misuse disorder.

There is a lack of data locally on the proportion of psychiatric disorders among opioid dependents in Malaysian general practitioner setting. Therefore, the area studied is relevant to the clinical practice as it will increase mental health awareness among the doctors in order to give better services to the patients. It can also help the policy makers in making the appropriate and applicable policies. Preventive measures can be planned and better treatment programs can be set up for the benefit of these drug rehabilitated patients. This study aimed to investigate the demographic characteristics and estimate the proportion of psychiatric disorders among treatment seeking opioid dependents.

METHODS

A cross-sectional design was used in this study whereby a total of 204 opioid dependence patients from ten outpatient addiction clinics in Klang Valley were involved in this study over a six-month period. The respondents must fulfill the diagnosis of opioid dependence based on DSM-IV, legally registered with the clinic and must be at least more than two months on treatment with maintenance dose of methadone or buphrenorphine. Those who are in the withdrawal or intoxication state were excluded from the study. All the respondents were assessed using the demographic questionnaires and the structured clinical interview for DSM-IV Axis I disorders (SCID-I) to determine the diagnosis of mental disorders. Universiti Kebangsaan Malaysia Medical Centre Ethics Committee and the Director General National Anti-drugs Agency granted permission to conduct the study. The permission to interview the patients was obtained from the respective general practitioners who were involved. Informed written consent was taken prior to each interview and all the inmates were reassured of the confidentiality of the data collected. The data collected was analysed using the Statistical Package for Social Science (SPSS) version 13.0. Multivariate logistic regression analysis was used to examine the relationship between multiple significant variables with the psychiatric comorbidity of the treatment seeking opioid dependents. The p value for statistical analysis was set at 0.05 for level of significance.

RESULTS

DEMOGRAPHY OF THE RESPONDENTS

The mean age of the respondents was 36.5 (s.d ± 8.0) years. Majority of the respondents were male (94.6%), Malay (82.8%), Muslims (83.3%) and single (52.0%). About 48.5% of the respondents have upper secondary education level up to MCE/SPM. Nevertheless 5.9% had tertiary education up to Diploma/ Degree level. Majority (68.1%) of the respondents have full time jobs at time of interview, 21.1% doing part-time jobs and 5.4% doing odd jobs. Only 5.4% of respondents were unemployed. We also see that 50.5% of respondents had family history of alcohol use, 46.6% had family history of drug use and only 15.2% had family history of psychiatric illness. Most of respondents (72.1%) had history of polysubstance abuse. The most commonest and prominent substances other than opiate were amphetamine type stimulant (42.9%), psychotropic pills (38.8%), alcohol (10.9%) and cannabis (7.5%). Majority (77.0%) of respondents had history of court sentences prior to the interview meanwhile 49.6% of respondents had history of been detained in both prison and Pusat Serenti (government drug-rehabilitation centre), 38.9% to prison and 11.5% to Pusat Serenti only.

PSYCHIATRY COMORBIDITY OF THE RESPONDENTS

The results of this research showed 43.6% of respondents were diagnosed to have psychiatric Axis I diagnosis. 58.4% of respondents were diagnosed to have mood disorders, 26.9% were diagnosed to have anxiety disorder, 7.9% adjustment disorder and 6.8% psychotic disorder. Major depressive disorder (32.6%) is the most common diagnosis (Table 1).

Psychiatric comorbidity was found to have significant differences ($p<0.05$) in connection with history of polysubstance abuse, previous history of court sentences (legal status), family history of psychiatric illnesses (Table 2). However there were no significant association between age group ($p=0.141$), duration of treatment ($p=0.175$), sex of the respondents ($p=0.261$) and ethnic group ($p=0.960$) with the psychiatric comorbidity. Alongside that, we also found there were no statistically significant association between religion ($p=0.717$), marital status ($p=0.562$), educational level ($p=0.840$) and employment status ($p=0.694$) with psychiatric comorbidity (Table 3).

Multiple logistic regressions were performed to look into the relationship among the significant variables. The analysis showed that family history of psychiatric illness (OR= 13.85, 95% CI 4.36-43.99, $p<0.001$) has shown strongest association with psychiatry comorbidity among the treatment seeking opioid dependents. Besides that, history of polysubstance abuse also has shown significant association with psychiatry comorbidity. (OR = 3.15, 95% CI 1.42- 7.01, $p=0.005$). Thus, family history of psychiatric illness and history of polysubstance abuse are predictive

TABLE 1. Description of respondents according to specific psychiatric diagnoses (*n*=89)

Psychiatric diagnosis	Frequency (*n*)	Percent (%)
Adjustment disorders	7	7.9
Mood disorders		
Major depressive disorder	29	32.6
Dysthymia	21	23.6
Double depression	2	2.2
Anxiety disorders		
Generalized anxiety disorder	8	9.0
Panic disorder	13	14.6
Obsessive-compulsive disorder	1	1.1
Specific phobia	1	1.1
Simple phobia	1	1.1
Psychotic disorders		
Schizophrenia	3	3.4
Brief psychotic disorder	3	3.4
Total	89	100.0

TABLE 2. Association between psychiatric morbidity with polysubstance abuse,
legal status and family history of psychiatric illnesses

	n	Psychiatric comorbidity		df	Chi-square	*p*-value	OR (95% Confidence interval)
		Present	Absent				
Polysubstance abuse							
Present	147	73(49.7%)	74(50.3%)	1	7.784	0.005*	2.53(1.30-4.90)
Absent	57	16(28.1%)	41(71.9%)				
Legal status							
Court sentences	157	75(47.8%)	82(52.2%)	1	4.756	0.029*	2.16(1.07-4.34)
No court sentences	47	14(29.8%)	33(70.2%)				
Family history of psychiatric illness							
Present	31	27(87.1%)	4(12.9%)	1	28.086	<0.001*	12.09(4.04-36.13)
Absent	173	62(35.8%)	111(64%)				

TABLE 3. Multivariate analysis of significant socio demographic variables and psychiatric
Comorbidity of treatment seeking opioid dependents

Variable	*p* value	Adjusted odd ratio	95% Confidence interval	
			Lower	Upper
Family history of psychiatric illness	<0.001*	13.847	4.359	43.986
Polysubstance abuse	0.005*	3.154	1.42	7.009
Legal status	0.211	0.598	0.268	1.338

R^2=0.060
*Denotes significant level at alpha=0.05

factors for psychiatric comorbidity. On the contrary, legal status is a potential cofounding factor in this study.

DISCUSSION

This was the first study conducted at ten general practitioner's clinics which practicing drug substituition therapy in the State of Selangor and Kuala Lumpur. The respondents were free to live, move and work in their community. In other words they were taking the treatment or drug substitution therapy at or near their home. There was a local study done before by Rasidi (1992) but it was done in the closed government detention centre where the patient lived in a secured and controlled community with strict supervision.

The association between opioid dependence and psychiatric comorbidity was usually described as dual diagnosis. It has become increasing source of clinical

and research interest in addiction and general psychiatric specialty. In this study we found that 43.6% of respondents were diagnosed to have psychiatric comorbidity. The percentage of psychiatry disorder is comparable with other studies by Brooner et al. (1997) who found 47% have psychiatry disorders by using structured clinical interview for DSM-III-R and local study by Rasidi found the percentage of psychiatry diagnosis was 49.3% by using clinical interview schedule based on ICD 9. In comparison, the National Comorbidity Study (NCS) revealed that 72% of individuals with a drug use disorder had at least one co-occurring psychiatric disorder (Kessler et al. 1994). Two studies on opioid abusers described that 80% patients met the criteria for at least one psychiatry disorders during their lifetime while current disorders have been reported in 30%-70% of the patients (Kessler et al. 1996; Limbeek et al. 1992; Robins et al.1985).

Analysis of the data showed that mood disorders constituted the highest percentage at 58.4%, followed by anxiety disorder (26.9%), adjustment disorder (7.9%) and psychotic disorder (6.8%). It is comparable with other studies on psychiatric diagnosis (Brooner et al. 1997, Rasidi 1992, Rounsaville et al. 1982, Rusdi 2006). Western studies showed that the lifetime mood disorder in previous studies were ranged from 19% (Brooner et al. 1997) to more than 53.9% (Rousaville et al. 1982). Local study by Rasidi (1992) showed that neurotic depression was accounted for 46.5% of the sample population. Rusdi (2006) reported the lifetime rate of major depressive disorder in his sample population was 34%. Brooner et al. (1997) revealed that the lifetime prevalence of anxiety disorder was 8.2%. Rasidi (1992) reported that anxiety neurosis as the second most common diagnosis in his population and accounted for 5.8% the sample population and Rusdi (2006) measure the lifetime prevalence of anxiety disorder as 28%. As for psychotic disorder, Brooner et al. (1997) revealed that the life time prevalence as 0.1% and Rasidi (1992) measured the prevalence of residual schizophrenia as 0.7%. In this study both schizophrenia and brief psychotic disorder were accounted for 1.5% each per total sample population. A study at Peshawar, Pakistan showed that the major co-morbid psychiatric conditions were major depression 30%, generalized anxiety disorder 4%, phobic disorder 4%, panic disorder 2% and dysthymic disorder 2%. (Ahmad et al. 2001). The mixed results might be due to the differences in methodological and socio-cultural factors.

The result showed that those who had a history of polysubstance abuse had 2.53 times higher risk to get psychiatric comorbidity compared with those without history of polysubstance abuse. A few studies supported the association of polysubstance abuse and prevalence of psychiatric comorbidity. One of them was the Swiss study done by Breslau et al. (1998) who found that heroin addicts who smoke have had increase on risk of depression. Trosi et al. (1998) also found an increased risk of psychiatric disorder with an increased level of cannabis usage among Italian army.

In this reseach we also found that respondents who had a history of court sentences had 2.16 times higher risk to get psychiatric comorbidity compare with those without history of court sentence. This could be due to 68.1% of them had history of sentenced to prison. Prison is a place for people who had committed offence and even though the degree of offence might varies they were still being placed together. It is possible that the non-conducive environment could affect individual's mental health (Norliza 2004). Non-condusive environment could also lead to lack of confiding relationship, low self-esteem and psychological stress which would predisposed to depression. Severe form of noncondusive environment also could be seen among prisoners in solitary confinement where they exibited the 'sensory deprivation state' which manifested with severe anxiety, tension, disorganized thought, increased suggestibility, body illusion and vivid sensory imagery, usually visual and sometimes reaching the proportion of hallucinations with a delusional quality (Kaplan & Saddock 2003).

Respondents who had family history of psychiatric illness had 12.09 times higher risk to get psychiatric comorbidity compared with those without family history of psychiatric illness. Study about the psychiatric disorders among relatives of opiate dependents by Rounsaville et al. (1991) also noted that there were higher rates of depression among them than relatives of normal subjects.

A binary logistic regression analysis performed to adjust for co-variate and confounder, it was found that only family history of psychiatric illness and history of polysubstance abuse were have significant associations. Legal status as measured by presence of past history of court sentence on the other hand might reacted as a confounding factors in this study.

Nevertheless, this study has its own limitations. First, this is a cross sectional study and therefore the findings could only be limited to understanding the associations between heroin dependence and the variables studied. We suggested that a longitudinal and prospective study to be done in the future in order to investigate any causal relationship, onset, course and treatment outcome. Second, the sample population may not represent the opioid dependents patients due to small sample size and limited to 10 private clinics in Klang Valley. Finally, few variables in this study such as duration of substances used, family histories and previous legal status were based on retrospective self report which gives rise to potential recall bias.

CONCLUSION

Dual diagnosis is often associated with severe illness course, poor treatment outcome, poor compliance, frequent relapses and high service utilisation. Thus, it is important for the treating doctors to recognise the psychiatry comorbidity in managing their opioid dependents patients. Hein et al. (1997) suggested that clinician working with patients with substance used disorder should assume that most patients

have comorbid psychiatric illness. Therefore, screening for psychiatric comorbidity should be done regularly among this group of population. Other authors (Dansky et al. 1995; Lehman et al. 1994) also emphasized the need for routine screening and sophisticated understanding of psychiatric symptoms in relation to addictive disorders in order to provide accurate assessment and appropriate services.

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