

Psychiatric Disorders Among Young Male Adult Prisoners: A Cross Sectional Study in a Malaysian Prison

¹B Azlin*, ³MY Salina Akhtar, ¹NJ Nik Ruzyanei, ¹Z Hazli & ²I Normala

¹Department of Psychiatry, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Cheras, Kuala Lumpur.

²Department of Psychiatry, Faculty of Medicine and Health Sciences Universiti Putra, Malaysia, Serdang, Selangor

³Department of Psychiatry, Hospital Muar, Johor

ABSTRACT

Introduction: In recent years there has been an increase in the number of young people in prison. This study is the first to look at the proportion of psychiatric disorders among young adult prisoners. **Objective:** The main objective is to determine the percentage of psychiatric disorders among young adult male prisoners. **Method:** A cross sectional study of young adult male prisoners, with ages ranged between 18 and 21 years old, was conducted between September and December, 2008 at the Kajang Prison. A total of 225 inmates participated in the study which used the Mini International Neuropsychiatric Interview (M.I.N.I) as its instrument. **Results:** The percentage of psychiatric disorders was 60.0%. Alcohol and substance related disorders had the highest prevalence at 50.2%, followed by Major Depressive Disorders and Dysthymia at 16.9%. About 39.6% were observed to have antisocial personality disorder. Psychiatric disorders were found to have significant differences ($p < 0.05$) in connection with parental marriage and recidivism. **Conclusion:** This study shows that the percentage of psychiatric disorders, especially substance related disorders, is high among young male adult prisoners. It highlights the urgent need for early intervention for this group of young people.

Keywords: Young prisoners, substance abuse, psychiatric disorders.

INTRODUCTION

The transition from childhood to adulthood varies from one individual to another. It is an important process for an individual as he or she moves towards independence. This is the time when they need to learn to take responsibility for their own actions, achieve self sufficiency, master the art of self control and make the right decisions in order to be successful as adults. They are no longer protected by their parents in the eyes of law. According to psychosocial stages by Erik Erikson, from the ages of about 13 to 21, adolescents tend to become preoccupied with the issue of identity^[1]. Failure to deal with this stage would leave the adolescents without any solid identity, leaving them to suffer from identity diffusion or role confusion^[1]. Role confusion may demonstrate itself in behavioural abnormalities such as delinquency, criminality and psychiatric manifestation^[1].

“Young prisoners” according to the Home Affairs of the United Kingdom Parliament are those prisoners aged between 15 and 21, in which the group is further broken down into two sub-categories: juveniles (15-17) and adults (18-21)^[2]. In Malaysia, “young prisoners”, according to the Prisons Act 1995 (Act 537), are prisoners aged 21 years and below, and are undergoing a sentence in prison, while “Juvenile Offenders” refer to those who are aged between 14 and 18, sentenced under The Juvenile Act, and are confined to the Henry Gurney School here in Malaysia.

Literature has consistently reported on elevated rates of psychopathology and psychiatric disorders among offenders compared to general population^[3,4,5,6]. George & Hatta^[7] studied 101 male prisoners and found that 81 percent had psychiatric disorders, of which, 20.8 percent of the inmates had depression, 6.9 percent Dysthymia and 4 percent Schizophrenia. Meanwhile, Ruzanna who studied 80 female prisoners found that 62 percent had psychiatric disorders.^[8] She also reported that 16.3 percent met the criteria for Major Depression, 12.5 percent had Dysthymia and 1.3 percent had Schizophrenia. Azizul who studied suicidal ideation among adult male prisoners stated that the lifetime prevalence of psychiatric morbidity was 82 percent^[9]. A systematic review of 62 surveys of 12 western countries reported in 66 publications it was found that compared with general population, prisoners have about two fold to four fold excesses of psychotic illnesses and major depression, and about tenfold excesses of antisocial personality disorders^[10]. From this review, it was found that the overall prevalence of psychotic illness was about 4

*Corresponding author: jelin72@hotmail.com

percent; 10 percent had Major Depression while 65 percent had Personality Disorder. Substance related disorders were not included.

Very few researchers have focused on “young adult prisoners”. In the few studies done on young prisoners, the focus was on juvenile offenders and not on young adult offenders. In Sweden, a study on psychopathology in adolescents and young adult criminal offenders, aged between 15 and 21 years old, the researchers compared Diagnostic Statistical Manual Fourth Edition (DSM-IV) psychiatric diagnoses across different age bands; 15-17 years (n=60), 18-21 years (n=300), and 22 years and older (n=698). Results showed that those in the 15-17 years of age group and 18-21 years of age groups had higher rates of depression, childhood and developmental disorders, but lower rates of psychosis, bipolar disorder and substance use disorder compared to adults^[6]. A systematic review and meta-regression analysis of 5 surveys in Juvenile Detention and Correctional Facilities, involving those aged between 10 and 19, reported that adolescents in detention and correctional facilities were about ten times more likely to suffer from psychosis than adolescents in the general population^[6]. In the meta analysis, 3.3 percent were diagnosed with psychotic illness, 10.6 percent with major depression, 11.7 percent with ADHD and 52.8 percent with conduct disorders^[6]. Recidivism is generally defined as a relapse into previous criminal behaviour, and it is operationally defined as a repeat arrest or incarceration^[11]. Studies of criminal recidivism found mixed results with regard to the association between recidivism and psychiatric disorders. A meta analysis done by Bonta *et al.* found little or no relationship at all between recidivism and psychiatric disorders^[12]. However, more recent studies done among 7,878 inmates concluded that prison inmates with psychiatric disorders, especially bipolar disorder, are more likely to have had recidivism^[11].

There is lack of data locally on the proportion of psychiatric disorders among young adult prisoners. This study aimed to study the demographic characteristics and estimate the proportion of psychiatric disorders among young male prisoners. As such this research finding can be used as baseline data to serve as the basis for future, larger-scale studies, which encompass a wider scope of young people in prison, as well as provide a foundation for preventive and rehabilitation programmes to help this group of young prisoners.

METHODS

A cross-sectional design was used in this study whereby 225 inmates from the Kajang Integrity School and Juvenile Detention Centre at the Kajang Prison were involved in this study over a four-month period. Out of the 29 prisons in Malaysia, the Kajang Prison is one of the largest, and the first to provide an Integrity School for young prisoners. There are both remanded and sentenced young offenders within the Kajang Integrity School and Juvenile Detention Centre. Universiti Kebangsaan Malaysia Medical Centre Ethics Committee granted permission to conduct the study. The permission to interview the inmates was obtained from the Director of the Kajang Prison. Informed written consent was taken prior to each interview, and all the inmates were reassured of the confidentiality of the data collected.

The respondents were aged between 18 and 21. They were able to comprehend the national language (Bahasa Malaysia) and/or English. The exclusion criteria included young prisoners who refused to give consent, who could not read or write and who were denied participation by the prison authorities. All the respondents were assessed using the demographic questionnaires and Mini – International Neuropsychiatric Interview (M.I.N.I) to determine the diagnosis of mental disorders.

The data collected was analysed using the Statistical Package for Social Science (SPSS) version 12.0 and Epi info computer programmes. The relationships between the variables were analysed using appropriate statistical tests.

RESULTS

Demography of the young prisoners

The mean age of the respondents was 19.37 (s.d ± 0.0923) years. Majority of the young prisoners were Malay (71.6%), Muslims (76.4%) and single (97.3%). Eleven inmates (4.9%) did not receive any formal education and 40.0% of the young offenders only had education level up to lower secondary school. Majority (76.9%) of the young prisoners were employed prior to their imprisonment. All those employed were in non-professional jobs or positions. Factory operator was the most common job held by the respondents, followed by construction worker, waiter and lorry assistant. A small percentage of the respondents have a family history of mental illness at 4.0%, while the majority of them at 96.0% did not have any family history of mental illness. Table 1 shows the demographic characteristics of the respondents.

Table 1. Demographic characteristics of the young prisoners

	Frequency (n)	Percentage (%)
Age		
18	47	20.8
19	69	30.7
20	87	38.7
21	22	9.8
Race		
Malay	161	71.6
Chinese	10	4.4
Indian	37	16.4
Others	17	7.6
Religion		
Islam	172	76.4
Buddhism	9	4.0
Hinduism	29	12.9
Christianity	15	6.7
Marital Status		
Single	219	97.3
Married	6	2.7
Education		
No formal education	11	4.9
Primary	51	22.7
Lower Secondary	90	40.0
Upper Secondary	61	27.1
Tertiary	12	5.3
Employment status		
Employed	173	76.9
Unemployed	52	23.1
Parental marriage		
Still married	132	58.7
Divorced	43	19.1
Separated	18	8
One or both have died	32	14.2
Medical illness		
Present	11	6.7
Absent	214	93.3

Characteristics of young prisoners

The majority of the young prisoners were remand inmates (64.0%) and only 35.0% were sentenced inmates. 72.4% of offences committed by respondents were penal code offences such as murder, theft, robbery, possession of stolen items, rape or molestation. Meanwhile for offences such as selling of drugs, using or possessing drugs it was only 19.1%. The majority of the young prisoners, at 76%, had stayed in prison less than 6 months during the interview period. Analysis shows that the mean for the duration of imprisonment was 28.04 weeks (s.d. \pm 53.96). Only 19.6% of the young prisoners had had recidivism. Twenty five of the 44 young prisoners had one history of imprisonment in

the past, while 13 inmates had 2 recidivisms, and 3 inmates had 3 recidivisms. Only 2 inmates were imprisoned for the fourth time, and one for the fifth time.

Psychiatry disorders of the young prisoners

Thirty eight or 16.9% of the young prisoners had depression, in which 32 fulfilled the criteria for Major Depressive Disorder, while 6 met the criteria for Dysthymia. Out of the 32 inmates, 2 had Major Depressive Disorder, with Melancholic features, while 2 had Atypical features. Seven inmates had suicidal thoughts, in which 6 had mild suicidal thoughts and 1 had moderate severity of suicidal thoughts. 71.0% of the respondents had alcohol or drug related disorders and 39.6% of the young adult male prisoners were diagnosed with antisocial personality disorder.

Table 2. Psychiatric disorders of the young prisoners

	Frequency (n)	Percentage (%)
Depression		
Major depressive disorder	32	14.2
Melancholic	2	0.9
Atypical	2	0.9
Dysthymia	6	2.7
Bipolar mood disorder	2	0.9
Bipolar 1	1	
Bipolar 2	1	
Anxiety disorders	7	3.1
Panic disorder	3	
Social phobia	0	
Obsessive Compulsive Disorder	1	
PTSD	0	
Generalised Anxiety Disorder	3	
Psychotic illness	4	1.8
Current episode	1	
Lifetime	3	
Alcohol	76	33.8
Abuse	72	32.0
Dependent	4	1.8
Drugs	83	36.9
Abuse	60	26.7
Dependent	23	10.2
Antisocial personality	89	39.6

There was a significant association between the type of parental marriage and psychiatric disorders among the respondents ($p < 0.05$). However for the other demographic factors there was no significant association found. This study also showed there was no significant association between age of first offence, the status of young prisoners (remand/sentenced) and duration of imprisonment with psychiatric disorders. However, there was a significant association between the status of prisoners and the duration of imprisonment with the presence of psychiatric disorders when substance related disorders cases were excluded. There was a significant association between recidivism and the presence of psychiatric disorders. (OR=3.15; 95%CI: 1.431-6.930). The results showed that the offenders who have had a history of recidivism were three times more likely to have psychiatric disorders compared to those without any history of recidivism.

DISCUSSION

The percentage of psychiatric disorders was found to be high (60.0%). Alcohol and drug related disorders constituted the highest percentage at 50.2%. A total of 16.9% of the young offenders had depression, anxiety disorders (3.1%),

psychotic disorders (1.8%), bipolar mood disorders (0.9%) and 39.6% had antisocial personality disorders. The percentage of psychiatric disorders among this group of prisoners was found to be lower compared to previous local studies done among male adult prisoners, but almost similar to the prevalence of psychiatric disorders among female prisoners. The results here also are quite similar to a study done among youths at a juvenile detention centre in Cook County in the United States, in which 60.0% had psychiatric disorders with 50.7% were reported to have substance related disorders, 18.7% had affective disorders and 1.0% had psychotic disorders^[13]. As for anxiety disorders the study reported a much higher percentage at 21.3%. However in a study done among adolescents and young adult criminal offenders in Sweden, in the respondents' age group between 18 and 21 years-old, they reported that 11.3% had psychotic disorders, 6.3% had mood disorders, 8.3% had anxiety disorders, 12.0% had substance related disorders and 27.7% were reported to have type B personality disorders^[6]. The mixed results might be due to the differences in methodological and socio-cultural factors.

The relationship between various demographic characteristics and the presence of psychiatric disorders was measured in this study. However, no relationship was found except for parental marriage. This study revealed that 41.3% of the respondents have parent/s that separated, divorced or had died. Papageorgiou & Vostanis found that the majority of the young offenders came from a broken family^[14]. Marital conflicts and divorce increase parents' depression, anxiety, stress which in turn decrease parents' ability to bring up the children well, thus negatively affecting the young and disrupting their mental health. This study revealed that there was a significant association between the status of prisoners and the duration of imprisonment with the presence of psychiatric disorders (excluding substance related disorders). Remand prisoners and a short period of imprisonment posed greater risks for mental illness. Hence, a good orientation and induction programme need to be designed to help the inmates familiarise themselves with the new environment and, if possible, an effective screening procedure should be introduced to assess the mental and physical health status of the inmates upon their arrival at the prison.

The rate of recidivism in this study was 19.6%. This figure was lower compared to the overall statistics of the Malaysian Prisons, which stood at 29.2%^[15] and in a local study among female prisoners reported that the rate of recidivism was 27.5%^[8]. Lower rate of recidivism in this study could be due to under reporting by the respondents, thus contributing to information bias. The most frequent age of first offence was 19, as by the time this group of young prisoners got involved in a subsequent offence, they would have been placed in the adult prison. Thus, if they had been followed up the figures of recidivism might be comparable with other studies. Analysis of the data showed that recidivism had a significant association with the presence of psychiatric disorders among the young offenders. In this current study, the author included substance related disorders as part of psychiatric disorders. After analysing the data, results showed that almost half that were diagnosed with psychiatric disorders suffered from substance related disorders. This might have contributed to the significant association between recidivism and psychiatric disorders as many previous studies reported that substance abuse was one of the predictors of recidivism^[16,17]. There were conflicting results in several reviews regarding this association, which could be explained by the methodological differences including small sample size and the selection procedure^[11,12]. The significant association indicates the urgency to intervene and treat psychiatric disorders among young prisoners as early as possible in order to curb recidivism. It is also important to follow up the prisoners who have been released in order to prevent recidivism. We can adopt mentoring programme done in Western countries to assist young offenders to make a successful transition into their communities through the provision of a relevant and vocationally oriented education programme, as well as assist them in their personal and social development.

One of the limitations in this study was the restricted generalisation of the findings, contributing to the lack of randomisation as only one prison was involved in the study. Another limitation was the type of sampling. In this study, simple or systemic randomisation was not possible due to the prison's rules and regulations. The sample size of this study was rather small for a prevalence study thus prompting the authors to study the proportion of psychiatric disorders instead.

CONCLUSION

We need to consider new ways of addressing the mental health needs of prisoners. This study can serve as the basis for a more detailed study involving young prisoners in the future. Apart from this, further research is required to determine the extent of the prison environment's influence on a person's mental health, and help identify the much needed solutions for this problem. This study has established the importance of identifying young prisoners with psychiatric disorders, and so the role of psychiatrists in helping this group of people should be explored further for early intervention.

REFERENCES

- [1] Benjamin JS, Virginia AS. Synopsis of Psychiatry. Behavioural Sciences and Clinical Psychiatry, 2007. 10th Edition. Pg 210.

- [2] Home of Commons – Home Affairs – First Report: Young Prisoners. <http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhaff/193/19302.htm>
- [3] Birmingham L. Mental Disorders And Prisons. *Psychiatric Bulletin* 2004; 28:393-397.
- [4] Sailas ES, Feodoroff B, Virkkunen M *et al.* Mental Disorder In Prison Populations Aged 15-21: National Register Study Of Two Cohorts In Finland. *British Medical Journal* 2005; 330: 1364-1365.
- [5] Butler T, Andrews G, Allnut S *et al.* Mental Disorder In Australian Prisoners: A Comparison With A Community Sample. *Australian and New Zealand Journal Of Psychiatry* 2006; 40(3): 272-276.
- [6] Fazel M, Langstrom N, Fazel S *et al.* Psychopathology In Adolescent And Young Adult Criminal Offenders (15-21 Years) In Sweden. *Soc Psychiatry Psychiatr Epidemiology* 2008; 43: 319-324.
- [7] George P, Hatta SM. Prevalence Of Severe Mental Disorders Among Males Serving Long Term Sentences In A Malaysian Prison. *Asean Journal Of Psychiatry* 1997; 5(2): 12-17.
- [8] Ruzanna Z, Hatta SM. A Study of Psychiatric Disorders and Pattern of Criminality Among Convicted Female Prisoners In Malaysian Prison. *The Malaysian Journal of Psychiatry* 2000; 8(1): 34-42.
- [9] Azizul A. A Study of Suicide Ideations and Associated Factors Among Male Prisoners In A Malaysian Prison. A Master of Medicine (Psychiatry) Dissertation, Universiti Kebangsaan Malaysia, 2001.
- [10] Fazel S, Danesh J. Serious Mental Disorder In 23 000 Prisoners: A Systematic Review Of 62 Survey. *Lancet* 2002; 359: 545-550.
- [11] Baillargeon J, Biswanger IA, Penn JV *et al.* Psychiatric Disorders and Repeat Incarcerations: The Revolving Door. *Am J Psychiatry* 2009; 166: 103-109.
- [12] Bonta J, Law M, Hanson K. The Prediction of Criminal And Violent Recidivism Among Mentally Disordered Offenders: A Meta-Analysis. *Psychological Bulletin* 1998; 123: 123-142.
- [13] Teplin LA, Abram KM, Mcclelland GM *et al.* Psychiatric Disorders In Youth In Juvenile Detention. *Achieve Of General Psychiatry* 2002; 59: 1133-1143.
- [14] Papageorgiou VA, Vostanis P. Psychosocial Characteristics of Greek Young Offenders. *The Journal Of Forensic Psychiatry* 2000; 11(2): 390-400.
- [15] Prison Statistic 2004. Prison Department of Malaysia. Percetakan Nasional Malaysia Berhad.
- [16] Putkonen H, Konulainen EJ, Virkkunen M, Eronen M, Lonqvist J, Risk Of Repeat Offending Among Violent Female Offenders With Psychotic And Personality Disorders. *Am J Psychiatry* 2003; 160: 947-951.
- [17] Lamberti JS. Understanding and Preventing Criminal Recidivism Among Adults With Psychotic Disorders. *Psychiatric Services* 2007; 58(6): 773-781.