

A Profile Study of 1016 Drug Addicts in Malaysia

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ABSTRACT

Introduction: A cross-sectioned study was carried out on 1016 drug addicts from Johor state to better understand their profile. **Method:** A structured questionnaire prepared in three languages was used to collect the data which was analyzed using the Statistical Package for Social Sciences. **Result & Discussion:** The overall mean age of the respondents was 33.8 (95% CI= 33.3 – 34.4) years and ranged from 16 to 61 years. ANOVA post hoc multiple comparison tests showed that there was a significant difference in the mean age between Malays and Chinese ($p < 0.0001$) and Malays and Indians ($p < 0.0001$). However, there was no significant difference in the mean ages between Chinese and Indians ($p > 0.05$). The majority of the respondents were Malay (79.6%) and had secondary education (72.1%) or primary education (21.7%). The majority (79%) was either semi-skilled or unskilled. More than 70% had more than five siblings. About 36% of the respondents had past a history of discipline problem at school. The majority (99.6%) of the drug addicts had smoked before and more than 90% were currently smoking. More than 80% had consumed alcoholic beverages. The majority did not use condom when they had sex. Only 24% stated that they did use a needle or syringe that had previously been used by someone else. Less than 4% had either bleached or boiled the needle or syringe that had previously been used by someone else. About 17% were tested positive for HIV. The mean age at which the respondents first started injecting drugs was 21.5 (95% CI= 20.7 – 22.2) years. ANOVA post hoc multiple comparison tests showed that there was no significant difference in the mean age of the different ethnic groups at which the respondents first started injecting drugs. The majority (84.2%) of the drug addicts started injecting drugs between 10 and 20 years of age. Friends introduced 80% of the drug addicts to drugs. The common reasons given for first taking drugs was “I was curious about the feeling of taking drugs (43.6%)”, “my friends asked me to try” (23.4%), “to release tension” (15.6%) and 5% stated “to try for fun”, and 3% that they were “depressed”. The majority (64.2%) of the drug addicts spend RM 500 or more per month on drugs and more than 10% of them spend as much as RM 1000 or more per month. **Conclusion:** These results indicate an urgent need for a more comprehensive prevention program involving family, schools, communities and the media and aimed at reducing drug abuse.

Keywords: Profile, drug addicts, Malaysia

INTRODUCTION

WHO^[1] defines the term dependence as the state of needing or depending on something or someone for support or to function or survive. As applied to alcohol and other drugs, the term implies a need for repeated doses of the drug to feel good or to avoid feeling bad. Dependence has also been defined as “a cluster of cognitive, behavioral and physiologic symptoms that indicate a person has impaired control of psychoactive substance use and continues use of the substance despite adverse consequences”. Gerada and Ashworth^[2]

reported that about 30% of adults in Britain have used illicit drugs at some time in their lives, but misuse of prescription drugs (such as benzodiazepines and barbiturates) is probably even more widespread. WHO^[3] reported that psychoactive substance use poses a significant threat to the health, social and economic fabric of families, communities and nations. The extent of worldwide psychoactive substance use is estimated at two billion alcohol users, 1.3 billion smokers and 185 million drug users. Tobacco, alcohol and illicit drugs contributed together 12.4% of all deaths worldwide in the year 2000. Illicit drugs account for 0.4% of all deaths worldwide. Disability Adjusted Life Years (DALY) is calculated by adding the years of life lost due to premature mortality and the years of life lost due to living with disability. Illicit drugs are estimated to account for 0.8% of total years lost worldwide. Needle reported that there were over ten million injecting drug users and that up to three million intra venous drug users (IDU) were living with HIV/AIDS. Injecting drug users accounted for 5 to 11% of the global AIDS cases^[4]. A study by the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) estimated that the economic cost of alcohol and drug abuse was USD246 billion in 1992^[5]. This estimate represents USD965 for every man, woman, and child living in the United States in 1992. This study reports that alcohol abuse and alcoholism generated about 60% of the estimated costs (USD148 billion), while drug abuse and dependence accounted for the remaining 40% (USD98 billion). Jones^[6] reported that a third of all thefts, burglaries, and street robberies in England and Wales are now drug related. Urine tests carried out on 839 people arrested in five areas of England (Cambridge, London, Manchester, Nottingham, and Sunderland) showed that nearly two-thirds tested positive for one illegal drug and more than a quarter did so for two or more such substances. Arrested drug users interviewed in Brighton and Derby in one recent Home Office study were spending an average of £400 (USD640) a week on drugs, although some were spending £2000 a week for a mixture of heroin and crack. Very little of this money was raised legally. Treating drug users who commit offences cuts crime rates more effectively than putting them in prison, according to an analysis of research in the United States and in England. Yet provision of drug treatment services is patchy, and treatment centers often have long waiting lists of users wanting help to break their habits. Several studies show that drug-dependent adults enter treatment with a variety of psychosocial problems that can interfere with treatment efforts. In addition to low self-esteem and depression, many drug-dependent clients report a history of antisocial tendency and poor social skills. In general, antisocial behavior has been found to be associated with poorer treatment outcomes. Specifically, antisocial clients are less likely to value and conform to conventional norms of society, and they demonstrate greater resistance to treatment^[7,8,9]. Knight *et al.*^[10] reported that the effects of parental support and conflict operate primarily through adolescent antisocial tendency. Drug dependence among young people is part of a broader vulnerability and results from a complex interaction of risk and protective factors. Kaplan and Sadick^[11] reported the lifetime prevalence of a diagnosis of drug dependence in USA for those aged 18 years and above was 16.7%. Drug dependence is more common in men and the difference is more marked for non-alcohol substances. In USA, the prevalence is higher in unemployed and the minority. Drug abuse has affected every area of society. It is an illness particular to human nature. The drug dependents/ addicts should not be treated as bad people but victims of illness. The nature of their illness is such that they have not naturally developed the kind of rational self-control that allows most

people to remain free of addiction^[12]. There are multiple contributions to the development of the disorder. Several factors have been reported to be associated with drug abuse such as conduct disorder, attention deficit/hyperactivity disorder, and victims of abuse/neglect. Depression is common among youths with both conduct disorder (CD) and substance problems^[13-16]. Depressed delinquents have more substance dependence diagnoses, tend to initiate behavioral problems at an earlier age, have increased anxiety and attention problems, and more trauma effects, than non-depressed delinquents. In Malaysia, the estimated number of drug users and intra-venous drug users is approximately 897,624 and 17,955 respectively^[17]. Out of the 58,012 HIV cases reported between 1986 and 2003, 79.4% was between 20-39 years.

The most prominent mode of transmission in Malaysia is through the sharing of infected needles among the drug addicts (IVDU), followed by sexual route. The other modes of transmission are mother-to-child and through infected blood and blood products. In 2003, IVDU accounted for 70.9% of all HIV cases. The majority (93.2%) were males; 71.7% were Malays followed by Chinese (14.6%) and Indians (7.5%)^[18]. Malaysia's vision since 1998 is to create a drug-free nation by the year 2023. However, the number of injecting drug users and HIV/AIDS cases keeps increasing.

Understanding drug abuse also helps in understanding how to prevent use in the first place. Prevention research is needed and a more comprehensive prevention program that involves the family, schools, communities, and the media are effective in reducing drug abuse. It is necessary to keep sending the message that it is better to not start at all than to enter rehabilitation if addiction occurs. The aim of this study is to determine profile of Drug Addicts amongst Malaysians. The profile of 1016 drug addicts is reported in this paper.

METHODS AND MATERIALS

A cross-sectional study was carried out in Johor state. All the districts in Johor were included. The survey frame was based on the list obtained from the state anti-drug agency. All eligible adult members (15 years and above), upon receiving verbal consent were interviewed personally. A structured pre-tested questionnaire produced in three languages (English, Malay and Chinese) was used to collect the data. Statistical Package for Social Sciences was used to analyze the data. Continuous variables were analyzed by describing the frequency distribution, mean, median, standard deviation and extreme values. The statistical tests employed were the chi-square test, *t*-test and ANOVA using multiple comparison method. A *p*-value of < 0.05 was considered as statistically significant.

RESULTS

Characteristics of Respondents

Table 1 shows the characteristics of 1016 drug addicts by age, ethnicity and educational level and occupation. The overall mean age of the respondents was 33.8 (95% CI= 33.3 – 34.4) years with a median of thirty-three years, ranging from 16 to 61 years. The mean age for the Malays was 32.4 (S.D. ± 8.4) years ranging from 16 to 61 years; for the Chinese, the mean age was 40.2 (S.D. ± 7.8) years, ranging from 19 to 57 years. And for the Indians, the mean age was 38.6 (S.D. ± 8.6) years, ranging from 19 to 57 years. One Way Analysis (ANOVA) showed that there was a significant difference in the mean ages between the

Table 1. Characteristic of respondents by age, race, educational level and occupation

Characteristic	Frequency	Percentage
Age (Years)		
< 20 years	21	2.1
20 – 29.99	359	35.3
30 – 39.99	357	35.2
40 – 49.99	233	22.9
50 – 59.99	46	4.5
Total	1016	100.0
Race		
Malay	809	79.6
Chinese	120	11.8
Indian	73	7.2
Others	14	1.4
Total	1016	100.0
Educational Level		
No formal education	31	3.1
Primary	221	21.8
Secondary/Skill Course	733	72.1
College/University	31	3.0
Total	1016	100.0
Occupation		
Professional	2	0.2
Semi Professional	18	1.8
Skilled Worker	62	6.1
Semi Skilled	227	22.3
Unskilled Worker	576	56.7
Retired	7	0.7
Student	3	0.3
Unemployed	113	11.1
Others	8	0.8
Total	1016	100.0

different ethnic groups ($F > 38.86$, $p < 0.001$). ANOVA test enabled us to detect that at least two groups had significant difference in the mean age. However, it did not allow us to state which of the ethnic groups have means that are different from each other. The ANOVA: Post hoc multiple comparison tests using least significant difference method were than performed. Table 2 shows that there was a significant difference in the mean ages between Malays and Chinese ($p < 0.0001$) and Malays and Indians ($p < 0.0001$). However, there was no significant difference in the mean ages between Chinese and Indians ($p = 0.177$). The majority of the respondents were Malays (79.6%) followed by Chinese (11.8%) and Indian (7.2%). The majority had secondary education (72.1%) followed by primary education (21.7%). Only 3% had college or university education. Thirty-one percent of them were married. Of the 1016 drug addicts, the majority (79%) was either semi-skilled or unskilled and only two (0.2%) belonged to the professional group.

Table 2. ANOVA multiple comparisons post hoc LSD test analysis of mean age by race

(I) Race	(J) Race	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Malay	Chinese	-7.776(*)	.819	.000	-9.38	-6.17
	Indian	-6.143(*)	1.023	.000	-8.15	-4.14
	Others	-3.496	2.256	.122	-7.92	.93
Chinese	Malay	7.776(*)	.819	.000	6.17	9.38
	Indian	1.633	1.242	.189	-.80	4.07
	Others	4.280	2.364	.070	-.36	8.92
Indian	Malay	6.143(*)	1.023	.000	4.14	8.15
	Chinese	-1.633	1.242	.189	-4.07	.80
	Others	2.647	2.442	.279	-2.14	7.44
Others	Malay	3.496	2.256	.122	-.93	7.92
	Chinese	-4.280	2.364	.070	-8.92	.36
	Indian	-2.647	2.442	.279	-7.44	2.14

* The mean difference is significant at the .05 level.

Past History of Discipline Problems at School

Table 3 shows that 36.4% of the respondents had a past history of discipline problems at school. The respondents were then asked the type of discipline problems they had at school. Table 4 shows that the common problems were: truancy (30.8%), smoking (24.6%), fighting/

Table 3. Past history of discipline problems at school

Ever had discipline punishment at school	Number	%
Yes	371	36.5
No	645	63.5
Total	1016	100.0

Table 4. Type of discipline problem at school (past history)

Type of discipline problem	Number	%
Truancy	114	30.8
Smoking	91	24.6
Fighting / violence	76	20.5
Gangsterism	27	7.3
Use of illicit drug	14	3.8
Theft	4	1.1
Vandalism	2	0.5
Others	38	10.3
No response	5	1.1
Total	371	100.0

violence (20.5%), gangsters (7.3%) and use of illicit drugs (3.8%). The mean age when they first had discipline punishment was 13.74 (S.D. \pm 2.4). The median was 14 years, ranging from 7 to 20 years.

Risk Behaviors

Table 5 shows the prevalence of risk behaviors among the 1016 drug addicts.

Table 5. Prevalence of risk behaviors among drugs addicts(n=1016)

Risk Behavior	Prevalence %
Smoking	
Ever Smoked	99.6
Current Smoker	90.6
Alcohol consumption	
Ever consumed alcoholic beverages during lifetime	84.4
Ever consumed alcoholic beverages during the last one year	44.6
Past history of sex before marriage (n=1016)	58.1
Condom use	
i) Condom use by respondent or partner the last time had sex with regular partner	14.6
ii) Condom use by respondent or the commercial partner, the last time had sex with a commercial partner	33.3
iii) Condom use by respondent or non-partner the last time had sex with non-regular partner	30.8
Needle sharing behavior	
Used a needle or syringe that had previously been used by someone else during the last time respondent injected drugs.	24

Smoking Habit

The respondents were then asked on their smoking habits. The results show that 99.6 % of the drugs addicts had smoked before and more than 90% were currently smoking. The mean age they started smoking was 15.3 (S.D. \pm 3.5) years, ranging from 7 to 42 years. The reasons given by the respondents why they started smoking was: "to try for fun" (50.3%), "friends asked me to try" (25.7%); "think it is stylish to smoke" (10.9%), "to release tension" (4.7%), "try because of curiosity" (3%), "feel bored when working/ at home" (2.2%), "parents smoke, so I smoke too" (1.9%) and "ego-feeling that men should smoke" (1.3%).

Alcohol Consumption

The respondents were also asked if they had "ever consumed alcoholic beverages". Of the 1016 respondents, 858 (84.4%) said, "Yes". To the next question, "Last year had you ever consumed alcoholic beverages", 52.8% of them said, "Yes".

Sexual Behavior

Of the 1016 drug addicts, 741 (72.9%) have had sexual intercourse. The respondents who have had sexual intercourse were then asked if they "ever had sex before marriage". Of the 741, 590(79.6%) stated "Yes". The respondents were then asked "whether they ever had sexual intercourse in the last twelve months". Of the 741 who have had sexual intercourse in their lifetime, 288 (38.9%) said "Yes". Those respondents who replied, "Yes", were then asked with whom they had sex. Of the 288 respondents who had sex in the last 12 months, the majority (79.2%) stated they had sex with regular sexual partners (wife or live-in sexual partners), 11.8% had sex with commercial partners (sexual partner with whom you have sex in exchange for money) and 9% stated that they had sex with non-regular sexual partners (sexual partner that you are not married to and never have lived with and did not pay money for sex). Those respondents, who stated that they had sexual intercourse in the last twelve months, were asked "The last time you had sex with your regular partner, did you or your partner use a condom?". Only 14.6% stated, "Yes". The respondents were then asked "The last time you had sex with a commercial partner, did you or your partner use a condom?", only 33.3% stated, "Yes". The respondents were also asked "The last time you had sex with a non-regular partner, did you or your partner use a condom?". Only 30.8% stated, "Yes".

Needle Sharing Behavior

The respondents were then asked, "Think about the last time you injected drugs. Did you use a needle or syringe that had previously been used by someone else?" Of the 1016 respondents, 24% stated that they did use a needle or syringe that had previously been used by someone else. Those respondents who had used a needle or syringe that had previously been used by someone else were then asked, "How did you usually clean them?". Table 6 shows that less than 4% had either bleached or boiled the syringe.

Family Background

On examining their family background, the results showed that 74% had more than five siblings and 58% of the drug addicts were amongst the first three older siblings in the family. The majority (80.1%) of the parents were not divorced. For those whose parents were divorced, more than 90% of their parents died while they were still young (less than 20 years). To the next question posed to these respondents "Does any member of the family take illicit drugs", 14.8% of them said, "Yes".

Table 6. Percentage distribution of method of cleaning used needles

During the last time respondent injected drugs, if you did you use a needle or syringe that had previously been used by someone else, how did you clean them?	Number	(%)
Bleach	1	0.4
Boiling	8	3.3
Cold water	99	40.6
Hot water	88	36.1
Other	37	15.2
No response	11	4.5
Total	244	100.0

HIV/AIDS

The drug addicts were asked if they knew anyone who was infected with HIV/AIDS; 80% stated "Yes". Out of the 1016 respondents, 80.8% of the respondents had a HIV test done. Of those respondents who have had HIV test done, 16.8% were tested positive to HIV/AIDS. Those who were positive were asked whether they were aware of any services provided for HIV positive cases; the majority (58.5%) stated they were not aware. These HIV positive cases were then asked whether they were aware of care and support programs provided by non-government organizations (NGOs) for people living with HIV/AIDS; 79% stated "No". Those respondents who had stated "Yes", to this question were asked to list down the NGOs they knew that provided such care and support programme for people living with HIV/AIDS. Only 15% stated "Pengasih" and 1% stated AIDS Foundation. Respondents below twenty-five years of age, were asked if they had heard of the "PROSTAR" Program. Ninety percent had never heard of PROSTAR or their activities.

Drug Dependence

The mean age at which the respondents first started injecting drugs was 21.5 (95% CI= 20.7 – 22.2) years with a median of 21 years. The ANOVA post hoc multiple comparison tests showed that there was no significant difference in the mean age of the different ethnic groups at which the respondents first started injecting drugs. The majority (84.2%) of the drug addicts started injecting drugs between 10 and 20 years of age. The mean duration of years of injecting drugs was 6.1 (95% CI= 5.7 – 6.7) years with a median of four years, ranging from less than one year to 40 years. The majority (80%) of the respondents were introduced to drugs by friends. The common main reason given for 'first taking' of drugs was "I was curious about the feeling of taking drugs (43.6%); "my friends asked me to try" (23.4%); "to release tension" (15.6%); 5% stated "to try for fun", 3% that they were depressed and 0.3% stated that "since their parents take, they take too". The majority (64.2%) of the drug addicts spend RM 500 or more per month on drugs and more than 10% spend as much as RM 1000 or more per month. The respondents were also asked the frequency of intravenous drug use during last month. Table 7 shows that among those respondents who had used intra-venous drugs during the last month, 62% had used intra-venous drugs 2–3 times per day.

Table 7. Frequency of intra-venous drugs use during last month

How often did you use intra venous drugs during last month	Frequency	%
4 or more times/day	306	38.9
2 – 3 times a day	253	32.1
2 – 3 times a week	45	5.7
4 – 6 times a week	38	4.8
About once a week	14	1.8
2 – 3 times	66	8.4
Only once	56	7.1
No Response	9	1.1
Total	787	100.0

DISCUSSION

In this study, the results showed that out of the 1016 drug addicts, 24% stated that they did use a needle or syringe that had previously been used by someone else and less than 4% had either bleached or boiled the syringe. Lau *et al.*^[19] reported that needle sharing among IDUs was prevalent (60.6% and 45.3% for male and female IDUs, respectively in China and the sharers were often friends, spouses, and acquaintances). Few IDUs sterilized the used needles properly. The authors concluded that harm reduction programs are urgently warranted in China. A study on HIV risk behavior and practices among heroin addicts in Lahore, Pakistan reported a prevalence of 23.3% of injection drug use^[20]. The HIV risk injection practices reported included: group injecting (83.2%), sharing syringes (58.7%), and re-using used syringes (78%). Based on principles of public health, harm reduction offers a pragmatic yet compassionate set of strategies designed to reduce the harmful consequences of addictive behavior for both drug consumers and the communities in which they live^[21]. Needle exchange programs (NEP) have been shown to be effective at reducing HIV risk behavior^[22] and HIV transmission among injection drug users^[23]. Syringe exchange program use, can be an important component in reducing the spread of blood-borne infectious diseases among high-risk injection drug users^[21]. As the most prominent mode of transmission in Malaysia is through the sharing of infected needles among the drug addicts (IVDU), the Government of Malaysia should look into the possibility of sterile injection equipment be legally provided to reduce the risk of HIV infection in persons who inject illicit drugs. The majority (80%) of the respondents were introduced to drugs by friends with siblings or parents constituting less than 1%. In our study, condom use by the drug addicts or their partner the last time they had sex was low (14.6% to 33.3%). This results correlate with the study carried out by Emmanuel *et al.*^[20] which reported that condom use was low (11-50%) among heroin addicts. The results showed that 99.6 % of the drugs addicts had smoked before and more than 90% were currently smoking. The majority of the respondents (84.4 %) had consumed alcoholic beverages during their lifetime. However, only 46.4% had consumed alcoholic beverages during the last one year. In addition to harm reduction, a multi-level approach to community-focused training in drug education is recommended.

CONCLUSION

The majority (93.8%) of the 1016 drug addicts were Malays, had secondary or primary education and the majority had sex before marriage. Almost all (99.6%) were either current or had smoked before. The mean age at which the respondents first started injecting drugs was 21.5 years. Eighty percent of the respondents were introduced to drugs by friends. The majority spent RM500 or more per month on drugs. Condom use by the drug addicts or their partner the last time they had sex was low (14.6% to 33.3%). The prevalence of needle sharing (use of a needle or syringe that had previously been used by someone else) was 24%. Less than 4% had either bleached or boiled the syringe.

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