

Knowledge and awareness of harmful effect of substance abuse among users and non-users: a cross-sectional study from Bari Imam

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Abstract

Objectives: To determine the prevalence of substance abuse among adult population of Nurpur Shahan and assess the participants' knowledge and awareness regarding substance abuse.

Methods: This was a cross-sectional study conducted in the households of Nurpur Shahaan, adjacent to Bari Imam on the outskirts of Islamabad, Pakistan, during January 2010. A structured questionnaire was used and 200 adults of ages 18 and above were assessed about their awareness of substance abuse, its social effects and health hazards. All collected data was entered into SPSS ver.10. The independent variables in the study were age, gender, marital status, social class, education level and knowledge of substance abuse. The dependent variables were substance abuse, type of substance abuse, attitude towards using and attitude towards quitting.

Results: Out of the 200 adults consenting to participate in the survey, 65 (33%) were reported to suffer from substance abuse, while 135 (67%) claimed not to be in the habit. Awareness about the dangers of substance abuse was higher among non-users (59.4%) as compared to the users, but 40.6% users continued to use drugs despite knowing that adverse effects would follow. Non-user respondents were more aware of the risks involved (75.8%) than the users (23.4%). It remained unclear whether anxiety and depression were an outcome of addiction or a defence mechanism to perpetuate maladaptive behaviour of substance abuse.

Conclusions: Substance abuse is prevalent among the lower and lower middle classes of Pakistan, with a propensity among male victims, to blame external circumstances, which they feel are beyond their control.

Keywords: Substance abuse, Drugs, Poppy (JPMA 62:412; 2012).

Introduction

Cultivation of poppy has been carried out in the northern part of Pakistan for a long time.¹ During British rule, opium was sold in licensed shops throughout the Indo-Pak subcontinent. By 1947, there were approximately 100,000 regular and registered opium users in Pakistan.² The turbulent events of 1979 — the Islamic Revolution in Iran, the Soviet invasion of Afghanistan and the enforcement of Hudood Ordinance — in Pakistan directly and indirectly contributed to the unstable geopolitical circumstances of the country.³ The ordinance outlawed cultivation, production, distribution and sale of all substances of abuse, including opium, charas and alcohol. If anything, the same period marked a substantial increase in the consumption of such substances in Pakistan. With the influx of nearly 5 million refugees into Pakistan, cultivation, production and smuggling of drugs, including heroin, increased dramatically given the fact that heroin was virtually unknown in Pakistan prior to 1979. Concurrently, the Hudood Ordinance⁴ drove the drug trade underground and led to the emergence of drug mafia. The existence of

historic trade-routes in Pakistan further facilitated trafficking to and from Afghanistan.

A vast majority of Pakistan's population is Muslim with highly conservative customs and traditions governing the lives of the general populace. All substances of abuse are vocally despised in public, especially alcohol, on account of it being directly referred to in the Quran as a social evil (They ask you (O Muhammad) concerning alcoholic drink and gambling. Say: "In them is a great sin, and (some) benefit for men, but the sin of them is greater than their benefit." And they ask you what they ought to spend. Say: "That which is beyond your needs." Thus Allâh makes clear to you His Laws in order that you may give thought).⁵ Nonetheless, alcohol and other illicit substances are widely abused in various sections of Pakistani society, most notably in the very affluent and the extremely impoverished. Heroin is one of the most commonly abused drugs followed by hashish, charas (the latter two derived from resinous exudates of the flowering tops of female Cannabis sativa plant), bhang, opium and other psychotropic opioid drugs. The role of these drugs in

inducing 'spiritual euphoria' is well-documented⁶ and is, in fact, of increasing global concern as endemic depression has also swelled the number of users indulging in opioid substances.^{7,8}

According to the 5th and last national survey (National Survey on Drug Abuse - N.S.D.A) conducted in 1993 by the Pakistan Narcotic Control Board, there were nearly 3 million users in Pakistan with 51% of them being heroin dependents.²

We believe knowledge about the desirable and undesirable effects of a drug may significantly alter the drug's usage. We, therefore, tried to assess the knowledge and attitude of the adults of Nurpur Shahaan regarding drugs, including alcohol, given the fact that they resided near one of the epicenters of drug trafficking in Islamabad, Pakistan - the shrine of Bari Imam.

Methods

A cross-sectional survey was carried out by Fourth Year students of Shifa College of Medicine in the community of Nurpur Shahan (rural Islamabad) during January 2010. A pre-designed, self-designed pilot tested questionnaire was used. The research team was trained in the interview technique before going out into the community. The questionnaire was translated into Urdu then translated back into English to ensure its validity. All questions were asked in the local languages of the area (Punjabi and Urdu) with some specific key words to describe or explain the questions in layman terms, as decided by the researchers before the start of the survey. It was found to be valid in non-English languages. The questionnaire was either self-administered or read out in Urdu/Punjabi by the research team to the participants who could not read. All researchers who had to read the questionnaire out to the participants phrased the questions in the same way. These measures were taken to standardise the data collection and improve the reliability of the questionnaire. All adults were said to be aware of substance abuse if under their own capacity they answered positively to the query, 'Do you know what substance abuse is?' Awareness regarding substance abuse among users was assessed along three criteria; whether they understood that substance abuse would directly affect their health, whether they knew that substance abuse was responsible for the incidence of numerous fatal diseases among their user peers and their non-user family members, and whether they were aware of any facilities they could go to in an effort to quit or manage their substance abuse. The independent variables in the study were age, gender, marital status, social class, education level and knowledge of drugs. The dependent variables were substance abuse, type of substance abuse, attitude towards drugs and attitude towards quitting. Epi

info version 3.5 was used for sample calculation for a population of 35, 000 in the village of Nurpur Shahan and expected frequency of 11% drug users (11 % of Pakistani population involved in substance abuse as found in literature). At 95% of Confidence Interval (CI), sample size was calculated to be 150. For contingencies the sample size was increased to 200. Systemic random sampling was used; for every household surveyed the next two would be skipped. Inclusion criteria for the study were adults of either gender above the ages of 18 who would be questioned after obtaining their informed consent. The data collected was then transferred to SPS version 10.0.1 statistical software. For quantitative variables like age, descriptive statistics in the form of Mean \pm S.D was reported. Categorical variables like gender, educational status and awareness level were reported. Chi-square test was used to investigate substance abuse with various independent variables and P value of <0.05 was considered significant.

Two major principles were upheld to ensure the ethical validity of the study: Firstly, authorisation of the Ethics Review Committee of Shifa College of Medicine was obtained, and, secondly, informed consent of all participants in the study above the age of 18 was secured. All participants were assured of the confidentiality of data collected.

Results

The total sample size for the study was 200 with an age distribution of 31.27 ± 9.32 across the whole sample. Of the 200 adult respondents participating in the survey, 65 (33%) admitted to being substance users (Figure). An overwhelming majority of them, 63 (35.4%) were males, while only 2 females (9.1%) admitted suffering from substance abuse (Table-1). Besides, 31 (40.8%) users claimed to have attained at least primary level of education versus 45 (59.2%) non-users. Seventeen (34.7%) users belonged to the lower socioeconomic status, 41 (34.5%) to lower middle class, and only 7 (21.9%) belonged to the upper middle class.

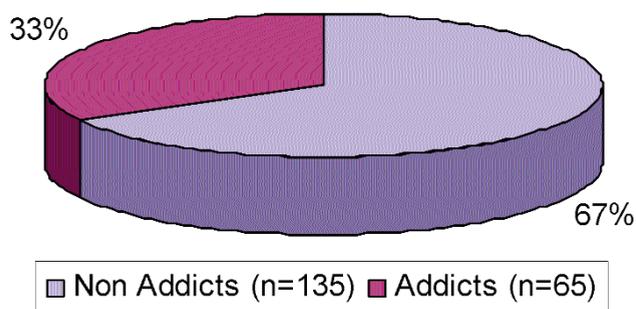


Figure: Percentage of addicts in Nurpur Shahan.

Table-1:

Substance Abuse	Variables Gender		Marital Status			Level of Education			Social Class		
	Male	Female	Married	Unmarried	None	Primary	Secondary	Graduation	Low	Lower Middle	Upper Middle
Yes	63 (35.40%)	2 (9.10%)	52 (35.10%)	13 (25.0%)	10 (30.30%)	31 (40.80%)	23 (29.10%)	1 (8.30%)	17 (34.70%)	41 (34.50%)	7 (21.90%)
No	115 (65.60%)	20 (90.90%)	96 (64.90%)	39 (75.0%)	23 (69.70%)	45 (59.20%)	56 (70.90%)	11 (91.70%)	32 (65.30%)	78 (65.50%)	25 (78.10%)
Total	178 (100.0%)	22 (100.0%)	148 (100.0%)	52 (100.0%)	33 (100.0%)	76 (100.0%)	79 (100.0%)	12 (100.0%)	49 (100.0%)	119 (100.0%)	32 (100.0%)

Substance Abuse	Awareness Spread of Disease		Dangers of Addiction		Know of Rehab Facilities	
	Yes	No	Yes	No	Yes	No
Yes	42 (40.0%)	65 (24.20%)	43 (40.60%)	22 (23.40%)	23 (44.20%)	42 (28.40%)
No	63 (60.0%)	135 (75.80%)	63 (59.40%)	72 (76.60%)	29 (55.80%)	106 (71.60%)
Total	105 (100.0%)	95 (100.0%)	106 (100.0%)	94 (100.0%)	52 (100.0%)	148 (100.0%)

Table-2: Known Risk Factors Associated with Substance Abuse; n=200.

Risk Factors	User		Total
	Yes	No	
Peer is also a user			
Family Member	15 93.80%	1 6.30%	16 100%
Friend	50 98%	1 2%	51 100%
None	0 0%	133 100%	133 100%
Perceived Cause of Substance Abuse			
Spouse	10 100%	0 0%	10 100%
Employment Issues	12 92%	1 8%	13 100%
Peer Pressure	16 100%	0 0%	16 100%
Family Issues	1 100%	0 0%	1 100%
None	5 4%	134 96%	139 100%
Uses to Manage Feelings of Anxiety/Depression			
Yes	43 96	2 4	45 100
No	22 14.20%	133 85.80%	155 100%

Awareness among the non-user population, judged according to the three criteria already outlined, was reported as 63 (59.4%) non-users confirming their knowledge of the dangers of substance abuse compared to the 43 (40.6%) users, who continued to use drugs despite knowing that doing so would cause them serious health consequences. Among the non-users, 135 (75.8%) were unaware of diseases spreading from drug addiction compared to 65 users (24.2%). Besides, 23 (44.2%) users and 29 (55.8%) non-users were aware of the existence of healthcare facilities for people suffering from substance abuse, but 42 (28.4%) users and 106 (71.6%) non-users

remained unaware of the existence of re-rehabilitation facilities.

Comparing risk factors for substance abuse yielded the harshest contrasts between the users and the non-users (Table-2). Of the users, 50 (98%) had a close friend who was also using, while another 15 (93.8%) had a family member who suffered from substance abuse. The three leading causes of using drugs were peer pressure (n=16), employment issues (n=12) and marital conflicts (n=10). In addition, 43 (96%) users admitted that they used to manage feelings of anxiety and depression. It was unclear from the results obtained whether anxiety and depression were an outcome of addiction or a defence mechanism to perpetuate maladaptive behaviour of substance abuse.

Discussion

Pakistan presently has a burden of about 3.5 million drug users increasing at an annual rate of 7%.⁹ This represents a massive burden on the national economy in terms of lost manpower and an inability to successfully rehabilitate these victims into productive and responsible citizens.

Our findings showed the same trends as noticed by other studies. In a study conducted by Aga Khan University Hospital between January 2002 and October 2006, domestic conflicts and social issues were found to be the major causes of opioid abuse with 11% of married respondents using opioids for self harm.¹⁰ This was confirmed by our study in which we also found that majority of users tend to use drugs due to an inability to face circumstances which they feel to be beyond their control.

With the majority of drug users being <35 years old¹¹ males (mean age in our study being a comparable 31.27 ± 9.32), marriages tend to occur at younger ages with the user not discontinuing their substance abuse and putting their families at risk of contracting HIV/Hepatitis due to their increasing tendency to drift towards intravenous drug

use.¹¹ Disturbingly, the impact of peer-pressure on user behaviour was re-confirmed with a 2006 study in which out of 300 students, 31% reported that their best friends were drug users, with 22% of them being drug users themselves. A total of 35% students had their parents indulging in alcohol or substance abuse.¹²

Although awareness levels tabulated in our study indicated that non-users were reasonably aware of the bleak future that awaited them if they did not continue, the increasing knowledge of facilities they can approach for rehabilitation assistance is a welcome sign, indicating that in spite of the lack of resources and infrastructure provided by the government, the private sector in tandem with regional NGOs is working to assist as many users as possible within the limited facilities available to them.

More efforts need to be made quickly in order to curb this rapid increase in the number of users in the country since such a burden could prove crippling to the overall economic stability of the country.

Conclusion

Significant proportions of the users were spread almost evenly between the low and the lower middle classes. Awareness among the non-users was much higher as compared to the users and the users continued to rely on drugs despite knowing that doing so would cause them serious health consequences. To tackle this problem, core issues like social instability, injustice and economic disparity need to be addressed.

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