Stigma Towards Substance use: Comparing Treatment Seeking Alcohol and Opioid Dependent men

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Abstract Despite clinically relevant implications, stigma towards substance users remains an understudied area, especially in developing countries. This study aimed to find the extent of stigma towards substance use reported by substance users attending a de-addiction centre in India. Purposive sampling was used to recruit consenting fifty patients each dependent on alcohol and opioid from a tertiary care hospital in north India. Demographic and clinical details were recorded. The Stigma Scale and the Perceived Stigma of substance Abuse Scale (PSAS) were administered to both the groups to assess stigma. Alcohol dependent subjects reported higher stigma than the opioid dependent subjects on the Stigma Scale (t=3.234, p=0.018). Linear regression showed that duration of dependence, being employed and currently abstinent predicted greater stigma experienced as per the Stigma Scale. Presently being employed and higher per-capita income predicted lower perceived stigma towards substance users as per PSAS. Stigma in substance users remains a major clinical concern, minimizing which can help mitigate negative clinical consequences like delayed treatment seeking and reduced treatment compliance.

Keywords Social stigma · Substance-related disorders · Alcohol · Opioids · India

Stigma can be described as a socio-cultural process in which specific social groups are devalued, rejected, and excluded on the basis of a socially discredited health condition (Weiss et al. 2006). Stigma may be understood in terms of the different ways it manifests at the personal, social, and structural levels. Personal stigma which can be viewed as perceived stigma, self-stigma as well as experienced stigma affects self-esteem and causes distress to the individual (Brohan et al. 2010). Social stigma which is expression of other members of the society is reflected in the form of stereotyping and prejudice against persons with particular health condition leading to discriminatory practices (P. Corrigan 2004). At the structural level,

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stigma manifests as macro level economic and political policies (P. Corrigan et al. 2009), secluding a particular group and perpetuating the differences.

Stigma is considered one of the major barriers to treatment seeking across a range of psychiatric disorders (Gary 2005; Wahl 2012). Substance use disorders (SUDs) affect a significant proportion of the population and are among the commonest psychiatric disorders. As SUDs lead to substantial economic losses and multiple social problems, substance users are viewed with a certain degree of stigma. The stigmatization may be much more than that for other health conditions for a variety of reasons (Rao et al. 2009; Ronzani et al. 2009; Schomerus et al. 2011). Substance use often co-exists with a range of other stigmatized health conditions (e.g., HIV/AIDS, hepatitis C virus, mental illness), potentially unsafe behaviors (e.g., rash driving), and deplorable social conditions (e.g., poverty, criminality) (Dean & Rud 1984). Also, SUDs are often treated as moral and criminal issues, rather than health concerns. This is especially true of illegal substances, which are perceived more negatively than legal substances (Room 2005). People with SUDs are more likely to be perceived as having personal control over their illness, and, therefore, are more likely to be held responsible and blamed.(P. W. Corrigan et al. 2005, 2009). Hence, persons with SUDs are likely to be stigmatized to a considerable extent.

Stigma towards people with SUDs exacerbates social alienation (Room 2005), and has the potential to adversely impact multiple domains of life, such as employment, housing, and social relationships. Thus, stigma may contribute to a host of adverse outcomes for people with SUDs, including poor mental and physical health (Link et al. 1997). It may also lead to delayed treatment seeking (Eisenberg et al. 2009; Franz et al. 2010) and non-compliance with SUD treatment (Brener et al. 2010).

The preceding literature shows that the research on stigma and SUDs is predominantly from the West, and is particularly lacking from the developing nations which comprise a significant proportion of the world population. Substance use disorders in India at least in the clinical setting primarily comprises of alcohol dependence, opioid dependence and tobacco dependence (Basu et al. 2012). Community based surveys suggest that alcohol and opioids prominently figure in the list of abused substances in the region (Ray 2004). Alcohol and opioids represent the most common licit and illicit substances of use for which treatment is sought in the region. Historically, use of substances has encountered a range of reactions from the Indian society from outright rejection to cautious acceptance (Sharma et al. 2010). Previous studies from the India regarding stigma in mental illnesses have focused on depression and somatoform disorder (Chowdhury et al. 2001; Raguram et al. 1996). We could identify only one study from the region looking at stigma related to substance use (Latkin et al. 2010). In view of the multifaceted consequences of stigma in SUDs, a better understanding of such phenomena from the perspective of substance users would help in devising appropriate mitigating strategies. Hence, the present research aimed to study the stigma and its clinical correlates in patients with SUDs attending a de-addiction service in north India.

Methods

Sample Source

The study was conducted at the Drug De-addiction & Treatment Centre (DDTC) of PGIMER, a multi-specialty teaching hospital. The DDTC caters to the substance using population from northern India. It provides therapeutic services in the outpatient and inpatient settings, through a team of psychiatrists, social workers, psychologists, and nurses, and a dedicated laboratory.

Treatment services include pharmacotherapy, psychotherapy and psychosocial rehabilitation. Service users are either self-referred or referred by other departments of PGIMER and other treatment facilities; and comprise primary of males from middle socio-economic backgrounds. Family members often accompany the patients to the DDTC. The treatment seeking is predominantly for alcohol and opioid dependence, even though tobacco dependence is more common than either.

Sample Profile and Data Collection

The study was conducted as a questionnaire-based cross-sectional research. The data collection was started after obtaining approval of the institutional ethics committee and lasted from November, 2011 to March, 2012. Patients were recruited after taking informed consent. The inclusion criteria for patients were being dependent on either alcohol or opioid, using the substance for at least 1 year and age 18 years and above. Dependence on both alcohol and opioids or refusal to give informed consent formed the exclusion criteria.

   A total of 100 patients were recruited through purposive sampling, 50 each with a diagnosis of alcohol and opioid dependence. A structured questionnaire was used to gather information from the patients. Demographic details and substance use-related history of patients were recorded. The diagnosis of alcohol and opioid was made by trained psychiatrists based on ICD-10 criteria. (*The ICD-10 classification of mental and behavioural disorders*: *diagnostic criteria for research* 1993). Stigma Scale (King et al. 2007) was used to assess the experienced stigma, while Perceived Stigma of substance Abuse Scale (PSAS) (Luoma et al. 2010) was used to assess perceived stigma towards substance use. Confidentiality of the data collected was assured, and adequate privacy was offered to the patients while they responded to the various questionnaires. Trained psychiatrists gathered the information from the patient in a single sitting.

Instruments

Stigma Scale: This standardized scale assesses the experienced and self stigma due to mental illness. The scale has been validated in a clinical population of patients with mental illness, which included substance users. It has 28 items, each with five Likert type responses from 'strongly agree' to 'strongly disagree'. Some of the items are reverse-coded. Factor analysis of this scale yields three factors: discrimination, disclosure and positive aspects of mental illness. The scale directly reflects the lived experience of stigma and higher scores reflect greater degree of stigma.

   Perceived Stigma of substance Abuse Scale (PSAS): This brief scale has eight questions regarding a subject's perceived stigma towards substance users. The scale measures an individual's attitude and perception towards a substance user. The responses are based on a 4 point Likert scale, from 'strongly agree' to 'strongly disagree'. It is a brief and unidimensional measure with good face validity and construct validity. Convergent validity has been demonstrated through comparison with measures of other stigma-related dimensions.

Data Analysis

The data analysis was done using SPSS version 15. Descriptive data are presented using frequencies, percentages, means, and standard deviations. Student *t*-test was used for comparison between the alcohol and opioid groups for parametric data, while $\chi 2$ test, Fischer's exact test or Mann Whitney *U* test was used for non-parametric data. Multivariable linear regression

with stepwise regression method was used to find the independent predictors of scores on stigma scale and PSAS. A p value of less than 0.05 was considered significant. Missing data was not encountered and the interviewers checked for completion during data gathering.

Results

The demographic details and clinical characteristics of patients (Table 1) show that all the patients were men. Among the patients, those in the alcohol group had a higher mean age ($t=$ 7.395, $p=0.005$) and were more often married ($\chi^2=14.439$, $p<0.001$). The clinical characteristics of the patients reveal that alcohol dependent patients had a longer duration of substance use and dependence ($t=8.136$ and 4.857, $p <0.001$ for both) and higher rates of physical illnesses ($\chi^2=7.162$, Fisher's exact $p=0.015$). However, the two groups were similar for number of other substances being used, previous treatment for substance use, number of prior admissions, comorbid psychiatric illnesses, family history of substance use disorder, and degree of substance-related complications. Among the opioid dependent patients, 21 were using prescription opioids (dextropropoxyphene, codeine, buprenorphine), 8 were using

Table 1 Demographic characteristics of patients and caregivers

	Alcohol group (N=50)	Opioids group (N=50)	χ^2/ Student t Test (significance)
Demographic characteristics			
Age in years	39.2 (±9.9)	27.0 (±5.8)	$t=7.395$ (<0.001)*
Male gender	50 (100%)	50 (100%)	$\chi^2=0.000$ (1.000)
Married	42 (84%)	24 (48%)	$\chi^2=14.439$ (<0.001)*
Employed	35 (70%)	26 (52%)	$\chi^2=3.405$ (0.065)
Educated above 10th grade	37 (74%)	36 (72%)	$\chi^2=0.051$ (0.822)
Nuclear family	21 (42%)	21 (42%)	$\chi^2=0.000$ (1.000)
Urban background	40 (80%)	32 (64%)	$\chi^2=3.175$ (0.075)
Monthly per-capita income (INR)	6,795 (±6,259)	4,501 (±3,413)	U=1,040 (0.147)
Substance use characteristics			
Duration of use in years	18.1 (±8.9)	6.6 (±4.8)	$t=8.136$ (<0.001)*
Duration of dependence in years	11.0 (±6.7)	5.9 (±3.3)	$t=4.857$ (<0.001)*
Additional substances			
Nicotine	31 (62%)	33 (66%)	$\chi^2=0.174$ (0.677)
Sedative-hypnotics	4 (8%)	4 (8%)	$\chi^2=0.000$ (1.000)
Currently abstinent (1 month)	13 (26%)	16 (32%)	$\chi^2=0.437$ (0.509)
Duration of abstinence in months in those abstinent	5.1 (±6.7)	6.3 (±8.1)	U=114.5 (0.854)
Previous treatment	25 (50%)	28 (56%)	$\chi^2=0.361$ (0.548)
Past admission (s)	19 (38%)	17 (34%)	$\chi^2=0.248$ (0.618)
Comorbid psychiatric illness	6 (12%)	6 (12%)	$\chi^2=0.000$ (1.000)
Comorbid physical illness	11 (22%)	2 (4%)	$\chi^2=7.162$ (0.015)*
Family history of substance use	17 (34%)	10 (20%)	$\chi^2=2.486$ (0.115)
History of self reported violence	18 (36%)	12 (24%)	$\chi^2=1.714$ (0.190)

Shown as Mean (±SD) or N (*Percentage*), *Difference significant at $p<0.05$ with student t-test, Mann Whitney U test or χ^2 test

Table 2 Stigma related measures

	Alcohol group ($N=50$)	Opioids group ($N=50$)	χ^2/ Student t Test (significance)
Stigma scale	51.3 (±16.1)	44.3 (±12.8)	2.414 (0.018)*
Stigma scale (Discrimination)	25.2 (±11.7)	20.6 (±9.3)	2.191 (0.031)*
Stigma scale (Disclosure)	16.5 (±6.7)	14.6 (±6.7)	1.475 (0.144)
Stigma scale (Positive aspects)	10.9 (±4.2)	11.5 (±3.6)	0.824 (0.412)
PSAS	19.9 (±3.7)	19.3 (±3.0)	0.766 (0.446)

PSAS Perceived Stigma of Substance Abuse Scale, * difference significant at $p<0.05$

heroin, 6 were using natural preparations (raw opium and poppy husk) and remaining 15 were using mixed preparations. Six of the opioid dependent patients were injection drug users.

The measures for stigma (Table 2) showed that Stigma Scale scores were significantly higher for patients in the alcohol group ($t=3.234$, $p=0.018$), mainly in the discrimination factor ($t=4.949$, $p=0.031$). PSAS scores of the two groups did not show statistically significant differences. In the alcohol dependence group, the Stigma Scale scores showed a weak negative correlation with the scores on PSAS ($r_s=-0.296$, $p=0.037$). This suggested that for the alcohol group, more reported experienced stigma was associated with lower perceived stigma towards substance users. Such a relationship was not seen for the opioid group. In the opioid group, the type of opiate used did not have significant relationship with scores on stigma scale or PSAS (Kruskal Wallis $\chi^2=3.940$ and 6.600, $p=0.268$ and 0.086 respectively). Injectable drug use was not associated with increased Stigma Scale or PSAS scores (Mann Whitney $U=177$ and 247, $p=0.127$ and 0.610 respectively).

Multivariate linear regression (Table 3) showed that after controlling for other variables, duration of dependence, presently being employed and abstinent predicted greater stigma experienced as per the Stigma Scale. The model accounted for 14.0% of the variance. However, being employed and having higher per-capita income predicted lower perceived stigma towards substance users as per PSAS, with the model explaining 6.8% of the variance.

Discussion

The findings of the study and attitudes to stigma should be contextualized to the setting of the country. Persons with substance use disorders are seen at primary, secondary and tertiary care settings; both in the government and the private sector. The treatment is primarily government subsidized or through out-of-pocket spending, with insurance based treatment for substance use disorders virtually non-existent. The patients seek treatment sometimes on their own initiative, but more frequently on the insistence of the other family members who partake in the follow-up care of the patient, helping in the abstinence process. The access to treatment is variable, with majority of the healthcare facilities located in the urban areas. In our study all the patients being men is in consonance with the finding that SUD treatment seekers in the region are almost exclusively men (Basu et al. 2012; Basu et al. 2013). Also, our alcohol dependent group being older than the opioid dependent group reflects the usual age of presentation and progression of these two disorders in India (Mattoo et al. 2009; Saddichha et al. 2010). The pattern of opioid abuse is also similar to that of the geographical area, where natural opiates as well as prescription opioids and heroin are used (Basu et al. 2012).

Table 3 Multivariable analysis

Predictors of stigma scale scores

Variable	Standardized *B*	Significance
Duration of dependence	0.306	0.002
Presently employed	0.242	0.013
Currently abstinent	0.206	0.030

Adjusted R^2 for the model=0.140

Predictors of PSAS scores

Variable	Standardized *B*	Significance
Presently employed	−0.247	0.013
Per-capita income	−0.196	0.048

Adjusted R^2 for the model=0.068

In our study, SUDs were associated with a considerable degree of perceived and experienced stigma among the patients. These findings are supported by previous research suggesting that SUD patients experience stigma to a significant extent (Latkin et al. 2010; Luoma et al. 2010). Direct comparisons are difficult as different studies have used distinct stigma related instruments. In the present study, it was seen that alcohol dependent patients experienced greater stigma than opioid dependence patients, mainly in the discriminatory aspects of stigma. However, previous research has found that use of illicit drugs was associated with greater discrimination (Ahern et al. 2007; Young et al. 2005). The finding of alcohol being associated with greater discrimination in the present study might be explained by alcohol intoxication being more clearly evident behaviorally as compared to opioid intoxication. Secondly, alcohol dependent group had a much longer duration of substance dependence as compared to opioid dependent group which might have led to more discrimination being experienced during the life course. Thirdly, there might be some degree of cultural acceptance of natural opiates, especially in north western parts of India (Ganguly et al. 1995). Fourthly, there may be lesser degree of realization that the prescription opioid users are in-fact substance users, and are not taking the opioids for medical complaints. Lastly, it is possible that users of illicit drugs appraise stigma towards substance use differently when compared to users to legal substances (Palamar et al. 2012). All of the above reasons may contribute to greater experienced stigma reported by alcohol users.

The study also interestingly finds that among the alcohol dependent patients, experienced stigma was inversely related to the perceived stigma towards substance use. Possibly as an alcohol dependent person accumulates experiences of stigma over time, he/she may become more accepting of other's substance use.

Multivariable regression suggests that apart from use of longer duration of SUD, presently being employed and abstinent was associated with greater stigma. It is possible that employed SUD patients shift company from 'accepting' substance using peers to a substance delimited workplace. Hence the substance users might have greater chances of encountering persons not approving of substance use in the workplace and subjecting them to direct or indirect stigmatization. The explanation for higher stigma experienced by the currently abstinent subjects could be that in the period of abstinence, substance dependent patients are more likely to interact with other members of society apart from the substance using peers. This

would result them to experience and register (being not in a state of 'high') negative attitudes to their substance use.

The findings of our study need to be seen in the context of its strengths and limitations. The present work is the first systematic study from South Asia looking at stigma towards two different groups of substances. A wide range of clinically relevant variables have been assessed. Two different scales of stigma looking at different aspects of stigma have been utilized in the study to get a more comprehensive picture of experienced and perceived stigma. The limitations include a small purposive sample comprising of only men attending a tertiary-care de-addiction service; study of only two SUDs; exclusion of comorbid alcohol and opioid dependence; and stigma being studied in terms of self-reports with no proxy behavioral measures or severity indices being used. Social desirability bias and respondent bias could not be fully controlled due to the nature of the study. Thus, generalization of the study findings to other populations needs to be done with caution.

With these limitations and distinctions our study shows that the stigma experienced and perceived by patients with SUDs is a cause for concern. The discriminatory attitudes perceived especially by the alcohol dependent patients may hinder treatment seeking and attempts at abstinence. Stigma experienced while returning to workplace may lead to vulnerability to relapse. Previous studies have shown that stigma adversely affects outcomes and leads to poor self-esteem (Link et al. 2001; Rüsch et al. 2009). Many methods have been utilized to reduce this stigma (Livingston et al. 2012). Training and educating targeted populations like clinicians and raising awareness in the general population can help in reducing the stigma towards patients with SUDs. This might help in reducing he delays to treatment and minimizing dysfunction due to the disorder. Presently systematic research assessing stigma is limited from the developing world. Further research is required to evaluate how the stigma towards substance use disorders affects psychological functioning and impair treatment seeking.

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