Research Article

Socio-demographic correlates of deliberate self-harm among the patients of substance abuse disorders attending a Medical College of West Bengal

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Abstract

Background: Deliberate self-harm (DSH) is a challenge to public health now-a-days. It is reported across several specific psychiatric illnesses like personality disorders, alcohol and substance abuse, and affective disorders.

Objectives: The objectives of the study were (i) to study the socio-demographic characteristics of the patients attending the Drug De-addiction Center of a Medical College in West Bengal and (ii) to determine the proportion of DSH committed by them and to find out the factors responsible for DSH among them.

Material and Methods: A descriptive study with cross-sectional design was conducted in the Drug De-addiction Center of Burdwan Medical College and Hospital, West Bengal. Informed consent was obtained from the participants before data collection. In total, 585 new patients were included in the study by complete enumeration. Data analysis was done using statistical software SPSS 20.0.

Results: All patients were male having majority in productive age group. Majority was employed and from nuclear families. Alcohol use was majority among the types of addiction. DSH was reported by 14.7% of cases. Employment status and alcohol addiction were statistically significant as factor for DSH.

Conclusion: The presence of risk for DSH should be assessed in drug addicts routinely along with motivation of family members to support the patients to prevent DSH.

KEY WORDS: Deliberate self-harm, substance abuse disorders, Medical College

Introduction

Substance use disorder has emerged as an important public health problem in the world. According to World Health Organization "Substance abuse is sporadic or persistent drug use inconsistent with or unrelated to acceptable medical practice".[1]

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It has become a burning problem in India. Survey revealed that among the persons seeking treatment for substance abuse in India majority was alcoholic (44.9%) followed by cannabis (11.6%), heroin (11.1%), opium (8.3%), and other opiates (6.6%).[2]

Deliberate self-harm (DSH) is defined not as a disease but "a behavior which is performed by a person to harm himself/herself without an apparent suicidal intent".[3]

DSH is an important challenge to public health now-a-days. It is reported across several specific psychiatric illnesses like personality disorders, alcohol and substance abuse, and affective disorders.[4] Psychiatric illness was seen

in 71.68% DSH victims and depression was the major culprit among them.[5] Literature search could not reveal such studies on DSH among drug addicts in West Bengal particularly Burdwan. With this background the present study was carried out with the objectives to study the socio-demographic characteristics of the patients attending the Drug De-addiction Center of a Medical College in West Bengal, to determine the proportion of DSH committed by them and to find out the factors responsible for DSH among them.

Material and Methods

It was a descriptive study with cross-sectional design. The study period was one year, i.e., from January 2012 to December 2012. The study was conducted in the Drug De-addiction Center of Burdwan Medical College and Hospital, West Bengal. Burdwan town is situated about 100 km away from Kolkata. Burdwan town is surrounded by rural areas. The clinic of Drug De-addiction Center is held on Tuesday in the Department of Psychiatry in every week. All new patients who attended the clinic during the study period were included in the study. Clearance was obtained from the Institutional Ethics Committee of Burdwan Medical College beforehand. Unwilling and seriously ill patients were excluded from the study. Confidentiality was assured and informed consent was obtained from the participants before data collection. During the study period 585 patients attended the clinic and all of them were included by complete enumeration. Data were collected with the help of a pre-designed and pre-tested interviewer-administered questionnaire. Pretesting was done on 10 patients of Substance abuse disorder in Bankura Sammilani Medical College, Bankura in December 2011 and modified accordingly. It was translated in local language, again retranslated into English and validated by language expert. The questionnaire contained both close ended and open ended questions. Questions included age, sex, religion, residence, education, occupation, type of addiction, and history of DSH. Exit interview was used for data collection from the patients outside the clinic after their consultation with the doctor. Data were entered in MS Excel sheet and checked for accuracy. Data analysis was done with the help of statistical software SPSS 20.0. Chi-square test was used to find out statistical association. p-Value < 0.05 was considered as significant.

Results

It was found that all of the patients were male incidentally. More than 80% of patients were in productive age group, i.e., 20–49 years. Adolescents and people above 50 years of age contributed to 5.5% and 11.2%, respectively. Mean age of the patients was 34.36 years with standard deviation ± 11.16. Regarding literacy status illiterates were about two-fifth. More than four-fifth patients were married. About two-third of patients came from nuclear families. Unemployed contribute to 61.8% of patients. More than half of the patients were alcoholic out of which 86 (26.1%) were addicted to only alcohol. Other addictions included smoking, chewing tobacco, cannabis, volatile solvents, heroin, and hypnotics. Poly-substance abuse was found in 13.2% of patients. DSH was reported by 14.7% of all patients.

In bivariate analysis age, religion, educational status, marital status, and family type were not found to be statistically significant with the occurrence of DSH. However, proportion of DSH cases was majority among the businessman category and it was found to be statistically significant ($p < 0.05$) (Table 1). Proportion of DSH cases was maximum among alcoholics (23.1%) as compared to other types of addiction which was also significantly associated with DSH ($p < 0.05$) (Table 2).

Discussion

The present study attempted to assess the socio-demographic characteristics of the patients attending the Drug De-addiction Center in a Medical College, with objectives to determine the proportion of DSH committed by them and to

Table 1: Distribution of patients according to socio-demographic characteristics ($n = 585$)

Item	Number	Percentage
Age(in years)		
10–19	32	5.5
20–29	187	32.0
30–39	183	31.3
40–49	117	20.0
≥ 50	66	11.2
Marital status		
Single	113	19.3
With spouse	472	80.7
Literacy status		
Illiterate	227	38.8
Literate	358	61.2
Employment status		
Service	84	14.4
Unemployed	362	61.8
Business	139	24.8
Type of family		
Nuclear	380	65.0
Joint	205	35.0
Type of addiction*		
Alcohol	329	56.2
Tobacco	184	31.4
Heroin	66	11.3
Cannabis	84	14.3
Volatile solvents	4	0.69
Hypnotic	4	0.69

*Multiple responses.

Table 2: Distribution of patients according to some socio-demographic characteristics and the presence of deliberate self-harm (n = 585)

Socio-demographic characteristics	Deliberate self-harm		χ^2 value	d.f.	*p*-Value
	Present	Absent			
Age group(in years)					
10–19	5 (15.6)	27 (84.4)	7.52	4	> 0.05
20–29	35 (23.0)	152 (77.0)			
30–39	33 (22.0)	150 (78.0)			
40–49	15 (14.7)	102 (85.3)			
≥ 50	4 (6.0)	62 (94.0)			
Marital status					
Single	14 (12.4)	99 (87.6)	0.59	1	> 0.05
With spouse	72 (15.2)	400 (84.6)			
Literacy status					
Illiterate	28 (22.0)	199 (78.0)	1.65	1	> 0.05
Literate	58 (35.7)	300 (64.3)			
Type of family					
Nuclear	63 (16.6)	317 (83.4)	3.01	1	>0.05
Joint 23(11.2) 182(88.8)	Joint	23 (11.2)	182 (88.8)		
Employment status					
Service	5 (6.0)	79 (94.0)			
Unemployed	57 (15.7)	305 (84.5)	6.172		< 0.05
Business	24 (17.3)	115 (82.7)			
Addiction					
Alcohol	76 (23.1)	253 (76.9)	42.29	1	< 0.05
Others	10 (3.9)	246 (96.1)			

*Figures in the parentheses indicate percentage.

find out the factors responsible for DSH among them. Majority of the patients were males, in 20–49 years age group, married, unemployed, and from nuclear families. Two-fifth of them were illiterates.

Proportion of DSH cases was similar to the finding in a study in Saudi Arabia.[6] Age, religion, residence, education, occupation, marital status, and addiction were the variables studied. Proportion of the DSH patients were more in 20–40 years age group, but it was not statistically significant. Similar finding was reported in studies conducted in China,[7] in India[8–10] and Pakistan.[11] Proportion of DSH cases was more in nuclear families but was not statistically significant. Similar finding was noted in a study in India.[9] Proportion of DSH cases were more among literates but not statistically significant. Similar finding was reported in a study at a research institute in north India.[10] The present study reveals that the persons engaged in business were more in committing DSH which may be due to uncertainty in income from their business. This finding corroborates with the finding of the studies in China and Karnataka, India.[7,8] DSH occurred more in married people in the present study which is similar to the study in northern India but was not statistically significant.[9] This may be due to marital disharmony. DSH was more found among alcoholics as compared to other addictions which is similar to a study in Sri Lanka where strong association was found between alcohol addiction and DSH.[11,12]

The strength of the study was that the data collection was done from 585 patients. Limitation of the study was the presence of DSH was assessed by history only which could be falsely reported.

Conclusion

Risk of DSH is high in substance abusers and hence its presence should be routinely checked for among patients attending deaddiction OPD. This will ensure appropriately treatment of these patients who are undergoing severe emotional distress. Family members should be motivated to keep close watch on such patients and to support them through the de-addiction process. Through these measures this growing problem can be reduced.

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