ORIGINAL ARTICLE

Psychiatric Diagnosis Among Patients With Self-Harm Attempts In A Tertiary Care Centre

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Abstract

Introduction: *Self harm or suicidal attempt is one of the most common primary psychiatric emergencies. It has been increasing daily but unfortunately people seeking attention and help from psychiatrist is still lagging. This study aims to observe psychiatric comorbidities among self-harm or suicidal attempt.*

Material And Method: *Those patients who presented with suicidal attempts and related problems in Nobel Medical College Teaching hospital, Biratnagar were assessed for socio demographic and clinical variables. Convenience sampling method was used. MINI 6.0 was applied to all the patients to see for psychiatric disorders. Those who had positive psychiatric disorders in MINI 6.0 were then reassessed according to ICD-10 (International classification of diseases, clinical description and diagnostic guidelines) and final psychiatric disorder was considered. Becks' suicide intent scale was used to assess the intensity of suicide. Data entry was done using Microsoft Excel and statistical analysis was done by using IBM SPSS Version 16.0.*

Results: *The result showed that 56.17% of the participants had some form of psychiatric comorbidities. The commonest among them was depression (23.97%), adjustment disorder (21.9%), followed by alcohol use disorder (5.47%) and others. The most common method of suicidal attempt was by poisoning (86.3%), followed by hanging (7.5%) and self- inflicted cut injury (6.2%). Psychosocial stressors were present in 84.9% of patients and 15.1% did not have notable psychosocial stressors.*

Conclusion*: Patients with self-harm or suicidal attempt have common psychiatric comorbidities depression and adjustment disorder being the most prevalent entities. Hence, every suicidal attempt becomes common psychiatric emergency condition in Nepal.*

Keywords: Self harm, suicidal attempts, comorbidities, psychiatric.

INTRODUCTION

Self-harm (suicide) and attempted suicide are major public health problems. We need more attention than ever from everyone on such health problems. According to one of WHO's study, among 38 European Region, the most common cause of death was suicide.[1] A study performed in Germany reported that 40%-60% of self-harm patients are more likely to end up with suicidal case.[2]

A study done in Egypt has found that most common among self-harm behavior included cutting (63%), shooting (15%), hitting (11%), and hanging and burning (9%).[3]The study has also concluded that these patients are likely to have some forms of psychiatric disorders. The common psychiatric disorder included Adjustment disorder (13%), Mixed anxiety-depressive (17%), and Schizophrenia (6%).[3]

Similarly, a study was done in Nepal by Ghimire S et al. which showed that the most prevalent psychiatric disorder was Adjustment disorder (13.5%) followed by Mood disorder (11%). However methods of suicidal attempts were different as compared to study done in Egypt and Germany. The commonest method of suicidal attempt among the study population was by consumption of Organophosphate and Organochlorine compounds (72.5%).[4]

Limited studies were conducted in our setting. This study was done to find the correlation between the different socio-demographic

variables among patients trying to harm themselves and prevalence of psychiatric disorders among them.

MATERIAL AND METHOD

A descriptive hospital based cross-sectional observational study was conducted over the period of one year from April 15, 2020, to Feb 15, 2021. The ethical approval was obtained from Nobel Medical College IRC (Dated April 15, 2020, IRC-NMCTH-410/2020). The sampling was done by convenience sampling method. The study set up was based on Nobel Medical College psychiatry in-patient and emergency department. The patients who were admitted for suicidal attempt were included in this study. Those who were uncooperative and did not give consent were excluded from the study group. Written consent was obtained from participants. Details for socio demographic profiles and clinical variables were noted. MINI 6.0, English version was applied to all the patients to see for psychiatric disorders.[5,6] Those who had positive psychiatric disorders in MINI 6.0 were then reassessed by using respective criteria of ICD-10 (International classification of diseases, clinical description and diagnostic guidelines) and final psychiatric disorder was considered.[7] Becks' suicide intent scale was used to assess the intensity of suicide.[8] The data entry was maintained in Excel. The detailed analysis of data is provided in the 'results' section which includes the frequency and breakdown by several variables. IBM SPSS Version 16.0 is used for data analysis.[9]

RESULT

In the conducted study, Table 1 showed that among the total population study, 77 (52.7%) were male and 69 (47.3%) were female. There were 46.6% married and 50.7% unmarried patients respectively, out of which, 43.8% of patients were from rural area and 56.2% from urban. As per religion, majority of population i.e; 112 patients (76.7%) were Hindu and others (23.3%) were from different religion (Muslim, Christianity, Buddhism and undecided). According to cast, it was found that highest percentage of population (37.7%) belonged to Janajati and second highest belonged to Madhesi (29.5%). Similarly, by occupation, students were most common (52.1%) among participants. There were 87% of literate participants belonging to different category of education degree holder ranging from primary (13%) to graduate or above level (7.5%).

Table 1: Socio-Demographic Distribution

Socio-Demographic	Patients by Types	Frequency	Percent
Sex	Male	77	52.7
	Female	69	47.3
Age	1-15	12	8.21
	16-30	88	60.27
	31-45	24	16.43
	46-60	13	8.09
	61-75	6	4.10
	76-90	3	2.05
Cast	Brahman	15	10.3
	Chettri	15	10.3
	Dalit	10	6.8
	Janajati	55	37.7
	Madhesi	43	29.5
	Muslim	8	5.5
Education	Illiterate	18	12.3
	Primary	19	13.0
	Secondary	45	30.8
	Higher	54	36.3
	Secondary	11	7.5
	Graduate /above		
Residence	Rural	64	43.8
	Urban	82	56.2
Occupation	Businessman	10	6.8
	Farmer	19	13.0
	Housewife	10	6.8
	Service Holder	16	11.0
	Student	76	52.1
	Unemployed	15	10.3
Religion	Hindu	112	76.7
	Muslim	10	6.8
	Other	24	16.4
Marital Status	Married	68	46.6
	Unmarried	74	50.7
	Widow	4	2.7
Total	-	146	100.00

Table 2 shows the prevalence of 56.17% who had Comorbid psychiatric Diagnosis, among them the most common being depression (23.97%), followed by adjustment disorder (21.9%) and third most common was the alcohol use disorder (5.47%), however 43.8% had no specific

psychiatric diagnosis. In this study, it was found that the most common method of suicidal attempt was by poisoning (86.3%) followed by hanging (7.5%) and self- inflicted cut injury (6.2%).

Table 2: Diagnosis of the respondents as per ICD-10

Diagnostics	Patients by Type	Frequency	Percent
Psychiatric Comorbidities	Adjustment Disorder	32	21.9
	ADS	8	5.47
	Psychosis	2	1.36
	ADS with Psychosis	2	1.36
	BPAD (current episode mania)	1	0.68
	Depression	35	23.97
	Multiple Substance use with ADS	1	0.68
	Seizure Disorder	1	0.68
	No Psychiatric Diagnosis	64	43.83
Method Of Suicidal Attempt	Hanging	11	7.5
	Poisoning	126	86.3
	Self-Inflicted cut injury	9	6.2
Premorbid Personality	Not well adjusted	30	20.5
	Well adjusted	116	79.5
Intent of Suicide	High	50	34.2
	Moderate	86	58.9
	Low	6	4.1
	Could not be assessed	4	2.8
Past-History Of Attempt	Yes	10	6.8
	No	136	93.2
Impulsive Act	Yes	116	79.5
	No	30	20.5
Psychosocial Stressors	Present	124	84.9
	Not Present	22	15.1
Total	-	146	100

There were 79.5% of patients in category of well-adjusted premorbid personality and 20.5% in not-well-adjusted premorbid personality. Becks suicide intent scale showed 58.9% patients had moderate intention of suicide, 34.2% patients had high intension of suicide, 4.1% had low intension of suicide and 2.8% could not be assessed. Regarding the past history, 93.2% of patients were found to have no past history of suicidal attempt and remaining 6.8% had past history of suicidal attempt. Psychosocial stressors were present in 84.9% of patients and 15.1% did not had notable psychosocial stressors. History of impulsive act was found in 79.5% patients whereas 20.5% did not show impulsive act.

DISCUSSION:

Nobel medical college teaching hospital is a tertiary care center covering the patients from eastern part of Nepal. This study aimed to observe the prevalence of psychiatric comorbidity in patients with suicidal attempt in Nobel medical college teaching hospital, Biratnagar.

In this study, among total population, 77 (52.7%) were male and 69 (47.3%) were female. The married and unmarried patients were found to be 46.6% and 50.7% respectively which had similar finding to the studies done in various national and international levels.[3,4,10,11,12] The study done by Haw C et. al showed highest number of young adult patients similar to finding in current study where maximum number of patients belonged to 16-30 years age group.[12]

In our study, Janajati (37.7%) comprised of large study population group and maximum patients were educated up to higher secondary (36.3%) and usually from urban area (56.2%). These variables were less commonly studied in our health settings. The importance of caste, education and place of residence among the study population group which showed significant findings among specific group of patients with suicidal attempt were highlighted in this study.

In our study, most common occupation group were students (52.1%) which was similar to findings in study done by Ghimire S et. al and Thapaliya S et. al.[4,11] Hindus were most common among the group in study done by Ghimire S et. al[4] which was similar to our study 76.7%. The data regarding religion might be different from other international studies due to high number of population being Hindu in Nepal. In our study, there were more number of unmarried patients (50.7%) than married (46.6%) which showed different result from other studies from Nepal, having more number of married patients.[4,11]

The most common comorbid psychiatric diagnosis among study population was Depression (23.97%), Adjustment disorder (21.9%), Alcohol dependence syndrome (5.47%) followed by other psychiatric disorders. In consistence with this finding, the study done by Shrestha R et. al (51%) and Haw C et. al (72%)

also revealed commonest comorbidity to be depression.[10,12] In contrast to this finding, studies from other region of Nepal and other countries showed that the most common psychiatric disorder was adjustment disorder.[3,4,11] In our locality insecticide and pesticide poisoning was the most common method of suicide (86.3%) which was similar to other studies of Nepal[4,10,11] but self-inflicted cut injury was the most common method of suicide in foreign countries.[3] This may be different due to easy availability of insecticide and pesticide in agricultural country like Nepal.

There were 79.5% of patients who had well-adjusted premorbid personality and 20.5% did not have well adjusted premorbid personality which was similar to other studies.[4,11] On the application of Becks suicide intent scale, 58.9% patient had moderate intention of suicide, 34.2% patient had high intension of suicide, 4.1% had low intension of suicide and 2.8% could not be assessed whereas in the study conducted by Thapaliya S et. al, moderate intent of suicide (59.5%) was highest in number.[11] Regarding the past history 93.2% of patients did not have any past history of suicidal attempt and remaining 6.8% had past history of suicidal attempt similar to findings by Thapaiya S et. al and Haw C et. al.[11,12] Thapaliya S et. al showed significant relation of psychosocial stressor (87.11%)[11] which was also found in 84.9% of our patients. Among the total patients, 79.5% had history of impulsive act while 20.5% did not show impulsive act similar to another study done in Nepal.[11]

The sample size was small and the study was limited to one center. This also included the patients who had a consent form assigned by patient and immediate relative to be release. The generalization of the study cannot be applied to another demographic as of such small-scale study. Although it was a study done in single institution, it almost covered the participants from eastern region being one of the tertiary care centers in Nepal.

CONCLUSION:

Patient with self-harm or suicidal attempt have common psychiatric comorbidities. The most common being depression (23.97%), adjustment disorder (21.9%), followed by others. Highest number of suicidal attempt was found among younger patients between age group 16-30 yrs. Hence, every suicidal attempt becomes common psychiatric emergency condition in Nepal and should be addressed by the concerned health professional without delay.

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