



PROFILE OF ATTEMPTED SUICIDE ATTENDING A TERTIARY CARE HOSPITAL IN SOUTH KASHMIR.

Seema Batool Shah	MD, Senior Resident, Department of Psychiatry, Government Medical College, Anantnag, Jammu And Kashmir, India.
Mansoor Ahmad Dar*	Assistant Professor, Department of Psychiatry, Government Medical College, Anantnag, Jammu And Kashmir, India. *Corresponding Author
Pinki Kumari	Senior Resident, Department of Psychiatry, Government Medical College, Anantnag, Jammu And Kashmir, India.

ABSTRACT Suicide is defined as "any act of self-damage inflicted with self-destructive intentions. It is a multifactorial problem that needs intensive attention. The psychiatric and psychosocial aspects of these patients have not been adequately studied in South Kashmir. This study was aimed to study the socio-demographic and clinical profile of suicide attempters in a tertiary care hospital of South Kashmir. This was a descriptive, cross sectional study conducted over a period of four months from June 2021 to October 2021. A total of 63 patients were included in the study and were assessed by a semi structured pro forma. Diagnosis was established by a consultant Psychiatrist using ICD-10 diagnostic criteria. The results showed a preponderance of unmarried female patients belong to the third and fourth decade of life. Among the respondents, 77% had no past suicidal attempts, 77.7% resorted to poisoning and the majority reported relationship issues and domestic quarrel as the precipitating factor. 52.3% suffered from a psychiatric disorder, the predominant being a mood disorder. Psychiatric disorders are quite common in patients of suicide attempts, which requires the implementation of hospital policies for routine psychiatric and psychosocial assessments as well as strengthening of consultation-liaison services in hospitals.

KEYWORDS : Suicide, Kashmir, Prevention, Poisoning,

INTRODUCTION:

Suicide is an enormous public health problem all over the world, with nearly 800,000 people dying due to suicide every year, which is almost 1 person every 40 seconds¹. In 2015, suicide alone accounted for 1.4% of all deaths worldwide making it the 17th leading cause of death². In the US, suicide is the third leading cause of death in adolescents after accidental death and homicides³. As per a report published by Institute of Medicine (National Academy Of Science), it was estimated that in the United States, the value of lost productivity due to suicide is \$ 93.5 billion per year⁴. regarding the Indian scenario, more than one Lakh lives are lost every year to suicide⁵. In the last three decades (1975-2005), a 43% increase has been documented⁵. The male female ratio has been stable at 1.4%. A variable pattern is seen in the different states of India with higher rates reported in southern states of Kerala, Karnataka, Andhra Pradesh and Tamil Nadu (>15%), while the northern parts of Punjab, Uttar Pradesh have a lower rate (<3%)⁵. It has been suggested that better literacy with better reporting system, higher socio economic status and higher expectations are the possible explanations for the higher suicide rates in the southern states (Vijayakumar L, 2008)⁵.

37.8% suicides are done by those under 30 years of age. The fact that 71% suicides have been reported by persons below 44 years imposes a huge social, economic and emotional burden on society⁵. Despite the fact that suicide is an enormous public health issue, suicide receives relatively less attention.

Suicide prevention is an urgent public health issue. It is crucial to understand the predisposing factors behind the suicide attempts among the population for preventing it. More than 90% of patients who have completed suicide have a major psychiatric disorder, primarily a mood disorder such as depression; however suicide risk is also increased in those with neurological disorders and cancer⁶. Recent studies of Deliberate Self Harm (DSH) have reported high rates of psychiatric disorders as well⁷. Studies show suicide attempt rates are 10-40 times higher than for completed suicides⁸⁻¹⁰. The methods used for suicide attempts are usually different, ranging from hanging, self-poisoning, self-cutting etc.¹¹ There is a dearth of studies conducted in Kashmir and no study has yet been done from south Kashmir. In this study, we aim to assess the sociodemographic and clinical profile as well as psychiatric comorbidities of patients presenting to the general psychiatric OPD of Government Medical College, Anantnag, using semi structured clinical interview and standardized testing.

MATERIALS & METHODS:

Our study was a time bound, descriptive cross sectional study, carried out for four months from June 2020 to October 2020 in Government

Medical College, Anantnag. A total of 63 patients formed our study sample. It includes both patients that were brought to the Psychiatric OPD as well as admitted patients referred to the department of Psychiatry during or after OPD hours for consultation-liaison from other departments of the hospital. In the present study, attempted suicide was taken as a non-fatal act, whether physical injury, poisoning or drug overdose carried out by the person with the full knowledge that it was harmful and in case of drug overdose, that the amount was excessive. Informed consent was taken from all patients or a reliable caretaker and interview was conducted once the patients were considered medically fit for assessment. A semi-structured pro forma was used for sociodemographic and clinical profile of patients and diagnosis was established using ICD-10 diagnostic criteria by the consultant psychiatrists. All the patients referred to psychiatric OPD irrespective of sex or age were included in our study. Patients medically unfit or patients without reliable informants were excluded from the study. Data was entered and analyzed by Statistical Package for Social Sciences (SPSS) version 24 and results were expressed as proportions and percentages.

RESULTS

A total of 63 patients were included in the study with majority of respondents being females (66.6%) and belonging to Islamic faith (98.4%). A vast majority of the patients belonged to age group of 21-40 (58.7%) followed by those less than 20 years (33.3%). 57.1% patients were unmarried, 50.7% lived in urban areas and another 57% lived in nuclear family. High school education was reported in 57.1% while as 23.8% reported either being illiterate or educated up to primary level.

Regarding the suicide attempt data, 77.7% had no history of past attempts and in 75% of attempters the lethality of the attempt was low. An alarming proportion (77.7%) attempted poisoning followed by few cases of hanging (0.07%) and jumping from building and drug overdose. Two patients presented with deliberate self-harm in the form of wrist slashing. On narrative analysis, 55.5% reported the act was impulsive while in 17.4% the act was planned with suicidal intent. Around 27% patients did not respond to the nature of attempt.

The most common reason given by the patients for the act was relationship failure (42.8%) followed by domestic quarrel (22.2%). Other reasons reported were financial stress (15.8%) and exam failure (12.6%) Evaluation of psychiatric diagnosis revealed that 23.8% had a history of mood disorder while about 14.28% suffered from anxiety and somatoform disorders. Accidental intake was reported by 15.8% and no psychiatric diagnosis was found in 49.2%.

Table 1 Sociodemographic profile of suicide attempters

Demographic profile	Male	Female	χ^2	P
Age				
<20	8	13	24.501	0.00002 (S)
21-40	11	26		
41-60	1	3		
>60	1	0		
Total	21	42		
Religion				
Hindu	1	0	12.695	0.005 (S)
Muslim	20	42		
Christian	0	0		
Marital status				
Unmarried	14	22	1.972	0.373 (NS)
Married	6	20		
Widowed/ Divorced	1	0		
Education				
Illiterate	3	4	4.084	0.665 (NS)
Primary	1	8		
High school	15	21		
Graduate	2	9		
Domicile				
Urban	9	23	1.9297	0.164 (NS)
Rural	12	19		
Family type				
Nuclear	11	25	0.0529	0.818 (NS)
Joint	10	17		

Table 2 Methods, previous attempts, and psychiatric morbidity of suicide attempters

	Male	Female	χ^2	P
Methods				
Poisoning (ingestion/celphos [56]/rat kill [68]/OC/phenyl/unknown substance/urea)	8	41	4.084	0.665 (NS)
Hanging	2	3		
Slashing wrist/self-harm	0	2		
Drug overdose	1	2		
Jumping from building	0	4		
Previous attempt				
Yes	2	12	0.376	0.539 (NS)
No	19	30		
Prevalence of psychiatric disorders				
Mood disorder (depressive episode, bipolar affective disorder)	5	10	14.552	<0.024 (S)
Neurotic, stress related and somatoform disorder (anxiety disorder, OCD, conversion disorder, somatoform)	2	7		
Psychotic disorders	1	0		
Personality disorders	0	6		
Intentional self-harm	0	2		
Accidental	3	7		
No psychiatric diagnosis	9	11		
Lethality of suicide attempt				
Low	16	32	23.5084	<0.00001 (S)
Moderate	3	5		
High	2	5		

S – Significant; NS – Not significant; OCD – Obsessive compulsive disorder

DISCUSSION

Suicide was one of the priority conditions in the WHO Mental Health Action Program (mhGAP) launched in 2008¹². However, the availability of data on suicide and attempted suicide is not sufficient. Asia being the largest continent, accounts for 60% of world suicides, and there has been lack of systematic exploration of suicide attempts in most Asian countries¹³. This was the scenario in Kashmir as well, especially south Kashmir where no such study has been conducted previously.

In our study, we gathered data on sociodemographic profile, suicide attempt data and psychiatric comorbidities of subjects which presented or were referred to the Psychiatric OPD of Government Medical College, Anantnag.

A total of 63 patients were part of our study, with majority of patients in the age group of 21-40, this finding being in concordance with study conducted by Sahu et al¹⁴. It can be explained as these people are most vulnerable due to major life transitions. In many Indian studies, individuals below 30 years of age were found more vulnerable for attempting suicide¹⁵⁻¹⁹. Females accounting for 66.6% had the highest presence in our study, which has also been reported by similar studies and reviews from the region. The female to male ratio in our study is almost 2.2 to 1, which can be explained by low literacy levels, passive gender role, early marriages, lack of financial independence and various socio cultural factors predominant in our society^{20,21}.

Unmarried people (57.1%) were more than married people(41.2%), which could be explained by study from Denmark which reported that single status was a significant risk factor for suicide²². Similar finding has also been seen in another Asian country, Bangladesh(Roy J et al)²³.

However, a study conducted from Central India (Sahu et al) reported preponderance of married people which does not make marriage a very good prognostic factor²⁴. Also, our cases were predominantly urban which reflects the transition of our society and the accompanying stress of urban life.

Our study showed education up to secondary level in about 57.1%, which has also been reported by Roy J et al²³ and Sahu et al¹⁴. This reflects the fact that literacy is not significantly associated with lower rates of suicide attempts. Majority of our patients (57%) lived in nuclear families which has also been reported in studies by Roy J et al.²³

The most common (77.7%) method employed for suicidal attempt was consumption of unknown substances (organophosphates, celphos, phenyl, zinc phosphide) while the proportion of hanging, jumping and drug overdose was quite low. Similar findings have been reported by other studies (Sahu et al, Roy J et al)^{14,23}. Easy availability of these substances within the home or premises made poisoning the most common mode employed. An association has been reported between method availability and method specific suicide rates²⁴.

55.5% reported the act was done impulsively with similar findings seen in reports of Van Spijker et al²⁵. Also, a majority of 77% reported no history of past attempts which is coinciding with the fact that in most cases the act was impulsive. In our study, relationship issues (42.8%) and domestic quarrel (22.2%) accounted the most behind suicidal attempts among the study group which confirmed the trend in other studies²⁶⁻²⁷.

While assessing psychiatric disorders, we found 52.3% of the suicide attempters suffered from a psychiatric disorder. 23.8% had a history of mood disorder which has been observed in some other studies also (Sahu et al, Ramdurg S et al)²⁸. However, 49.2% of the subjects did not show any clinical morbidity.

LIMITATION

Our study was a cross sectional study conducted over a duration of four months, which is a short duration. It was a hospital based study, which led to a modest sample size and the results could not be generalized to the community. A number of primary health centers are present in the vicinity of our hospital, which could also have led to our smaller sample size.

CONCLUSION

Despite the global concern, suicide is still under reported and neglected public health problem in our society. Our youth is particularly at high risk for suicide. Suicide being a multifaceted problem, a multidimensional approach is the need of the hour to reduce it. Suicide prevention programmes, availability of trained psychiatrists at various levels of health care, sensitizing lay persons about the warning signs and restricting the easy availability of lethal substances are some of the policies that need to be adopted.

Financial Support

Nil

Conflict of Interest

None declared

REFERENCES:

- 1) World Health Organization. Suicide data. Geneva World Health Organization; 2016.
- 2) World Health Organization. Preventing suicide: A global imperative. 2014. Available from: http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/. Accessed 20 Sep 2015.
- 3) Kaplan & Sadock's Synopsis of psychiatry. 12th Edition. Chapter 2. Page 179.
- 4) Shepard DS, Gurewich D, Lwin AK, Reed GA Jr, Silverman MM. Suicide and Suicidal Attempts in the United States: Costs and Policy Implications. *Suicide Life Threat Behav.* 2016 Jun;46(3):352-62. doi: 10.1111/sltb.12225. Epub 2015 Oct 29. PMID: 26511788; PMCID: PMC5061092.
- 5) Vijayakumar L. Suicide in India in Suicide in Asia. In: Yip PS, editor. *Hong Kong Univ Press*; 2008. pp. 121–31.
- 6) Erlangsen A et al. Association between neurological disorders and death by suicide in Denmark. *JAMA* 2020 Feb 4; 323:444.
- 7) Suominen K, Henriksson M, Suokas J, Isometsä E, Ostamo A, Lönnqvist J. Mental disorders and comorbidity in attempted suicide. *Acta Psychiatr Scand.* 1996 Oct; 94(4): 234-40. doi: 10.1111/j.1600-0447.1996.tb09855.x. PMID: 8911558.
- 8) Schmidtke A, Bille-Brahe U, DeLeo D. Attempted suicide in Europe: rates, trends and sociodemographic characteristics of suicide attempters during the period 1989–1992. Results of the WHO/EURO Multicentre Study on Parasuicide. *Acta Psychiatr Scand.* 1996; 93(5):327-38.
- 9) Harrison P, Cowen P, Burns T, editors. *Shorter Oxford Textbook of Psychiatry*. 6th ed. New York: Oxford University Press; 2000
- 10) Soomro, G Mustafa, and Sara Kakhi. "Deliberate self-harm (and attempted suicide)." *BMJ clinical evidence* vol. 2015 1012. 28 May. 2015
- 11) Madhusudan T, Chaudhury S, Chakraborty PK. Risk factors for suicide in wives of military personnel. *Med J Armed Forces India.* 2008;64:127–8.
- 12) World Health Organization. *Suicide Prevention Day*. Geneva: World Health Organization; 2017.
- 13) Wu KC, Chen YY, Yip PS. Suicide methods in Asia: Implications in suicide prevention. *Int J Environ Res Public Health* 2012;9:1135-58
- 14) Sahu, Samiksha et al. "Sociodemographic, clinical profile, and psychiatric morbidities among patients with attempted suicide in a tertiary care center: A study from Central India." *Industrial psychiatry journal* vol. 30, Suppl 1 (2021): S115-S119. doi: 10.4103/0972-6748.328801
- 15) Chandrasekaran R, Gnanaseelan J, Sahai A, Swaminathan RP, Perme B. Psychiatric and personality disorders in survivors following their first suicide attempt. *Indian J Psychiatry* 2003;45(2):45-8.
- 16) Ponnudurai R, Jeyakar J, Saraswathy M. Attempted suicides in Madras. *Indian J Psychiatry* 1986;28(1):59-62.
- 17) Narang RL, Mishra BP, Nitesh M. Attempted suicide in Ludhiana. *Indian J Psychiatry* 2000;42(1):83-7.
- 18) Kumar PNS. Age and gender related analysis of psychosocial factors in attempted suicide. *Indian J Psychiatry* 1998;40(4):338-45.
- 19) Khan MM. Suicide prevention and developing countries. *J R Soc Med* 2005;98:459-63
- 20) Jordans MJ, Kaufman A, Brenman NF, Adhikari RP, Luitel NP, Tol WA, et al. Suicide in South Asia: a scoping review. *BMC Psychiatry* 2014;14:358.
- 21) Reza AS, Feroz AHM, Islam SN, Karim MN, Rabbani MG, Alam MS, et al. Risk Factors of Suicide and Para Suicide in Rural Bangladesh. *J Med* 2014;14(2):123-9
- 22) Qin P, Agerbo E, Mortensen PB. Suicide Risk in Relation to Socioeconomic, Demographic, Psychiatric, and Familial Factors: A National Register-Based Study of All Suicides in Denmark, 1981–1997. *Am J Psychiatry* 2003;160(4):765-72.
- 23) Roy J, Adiluzzaman M, Hassan M, Roy D, et al. Socio-demographic profile and psychiatric morbidities of suicide attempters: a cross-sectional observation in a tertiary care hospital of Bangladesh. *Bang J Psychiatry* 2016;30(2):36-40.
- 24) Das PP, Grover S, Avasthi A, Chakrabarti S, Malhotra S, Kumar S. Intentional self-harm seen in psychiatric referrals in tertiary care hospital. *Indian J Psychiatry* 2008;50(3):187-91
- 25) Shah MMA, Ahmed S, Arafat SMY. Demography and Risk Factors of Suicide in Bangladesh: A Six-Month Paper Content Analysis. *Psychiatry J* 2017;2017:5
- 26) Reza AS, Feroz AHM, Islam SN, Karim MN, Rabbani MG, Alam MS, et al. Risk Factors of Suicide and Para Suicide in Rural Bangladesh. *J Med* 2014;14(2):123-9
- 27) Ramdurg S, Goyal S, Goyal P, Sagar R, Sharan P. Sociodemographic profile, clinical factors, and mode of attempt in suicide attempters in consultation liaison psychiatry in a tertiary care center. *Ind Psychiatry J.* 2011;20:11–6.