

Suicide Ideation and Patterns among Suicide Survivors Admitted in Teaching Tertiary Care Hospital Multan, South Punjab Pakistan

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ABSTRACT

Background: Suicide, defined as a fatal self-injurious act with intent to die, is a significant public health concern worldwide. Loneliness, depression, and trauma are linked to suicidal ideation, and methods of suicide vary across regions. This study focuses on evaluating factors influencing suicidal ideation and behavior in a tertiary care hospital in Punjab, Pakistan.

Subject and Method: A quantitative survey was completed as part of a cross-sectional study among patients who had attempted suicide in order to determine the magnitude of suicidal ideation and behavior. A pre-tested questionnaire was employed, and a random sample of 62 people was used. The data was compiled, assembled, and jotted down using Google Forms. Data analysis and computation have been done via SPSS version 22.

Result: An examination of the data revealed an unacceptably high occurrence of suicide. (prevalence) The majority felt life was not worth living, and many believed their families would be happier without them. Thoughts like "You'll be sorry when I'm gone" were common, and 48 survivors had the thought "I won't be in your way much longer" before attempting suicide. Another frightening factor was that most of the patients were in their early twenties.

Conclusion: The findings reveal high rates of suicidal thoughts among survivors of suicide attempts. Factors include hopelessness and a lack of understanding. So, there is a dire need for proper counselling and early recognition of problems. Comprehensive suicide prevention strategies and mental health support systems are crucial to addressing risk factors and providing effective intervention.

Keywords:

Suicidal thoughts and ideation, self-harm, suicide, youth, mental health problems

INTRODUCTION

Suicide is defined as a lethal self-injurious act with some evidence that the person intended to die.¹ A wide spectrum of thoughts, desires, and obsessions with death and suicide are referred to as suicidal ideations (SI), sometimes known as suicidal thoughts or ideas. Clinicians, researchers, and educators continue to face difficulties since there is no agreed, uniform definition of SI.² Suicidal ideation should become an integral interventional aim, as its timely recognition and control will lead to a lot fewer suicide attempts.³

Suicide is one of the most pressing public health concerns facing modern society, with more than 40,000 people dying by suicide each year in the United States,⁴ and emerging chronological trends suggest that suicide rates are increasing both within the United States⁵ and globally.⁶ These statistics on suicide continue to likely underestimate the actual number of cases. Suicide

registration is a challenging endeavor that frequently involves judicial authorities. Suicide deaths might not be acknowledged or might be mislabeled as coming from an accident or another reason. Due to its sensitive nature and the ongoing taboo surrounding it, suicide is occasionally neither acknowledged nor reported.⁷

In addition, statistics show that 77% of suicides take place in low and middle-income countries (LMICS), or nations with a gross national income (GNI) per capita of 12,695 USD or less, as a result of a significant majority of a world's population residing in these nations. Evidence suggests that patients who attempt suicide have a higher chance of repeat suicide attempts within a year (16.3%), as well as a higher risk of suicide over the course of one and five years (1.6 and 3.9% respectively).⁸ Moreover, suicide attempts are three times more common among females, whereas complete suicide is more common among males.⁹ A projected 10.6 million (year average) American adults (or 4.3% of the adult population) reported having suicidal thoughts in the previous year between 2015 and 2019.¹⁰ In Pakistan alone, there were 8.9 suicides per 100,000 people in 2019 (men 13.3% and women 4.3%),

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and between 15 to 35 persons per day due by suicide, or upto one per hour .¹¹

Different studies revealed that loneliness was a significant predictor of both suicidal ideation and behavior while depression, sexual abuse and trauma acting as strong mediators.⁶ Although pesticide ingestion, hanging and firearms are among the most common methods of suicide worldwide.1 trends vary between nations regarding the age groups, access and availability of the means.^{1,13,14} Mirroring global studies, the three most common methods for suicide in Pakistan are poisoning, firearms and hanging.^{15,16} Hence, this study was created to evaluate the South Punjab region of Pakistan's factors of suicidal ideation and behavior.

The study was conducted at a tertiary care hospital in South Punjab, Pakistan, from July 10 to October 20, 2022. The data was collected from 4 medical wards and 1 thoracic surgery ward in the hospital. In order to gain a thorough understanding of behaviors and ideations related to suicide, a cross-sectional study was carried out among survivors of suicide attempts in tertiary care hospital Multan, Pakistan. The frequency of suicide thoughts and behaviors was quantitatively measured by a descriptive survey method.

Our sample size was 62 which was calculated using a Cleveland sample size calculator for cross-sectional survey taking standard deviation of outcome 4, absolute error or precision as 1 and type 1 error rate as 0.05.(internet sample size calculator). Convenient (Simple Random)sampling method was employed and all the participants were of potential suicide attempt.

The quantitative survey had two sections: one for demographic data and the other for information on behaviors and ideation related to suicide that was generated as dichotomous variables. The survey included 10 dichotomous variables to assess suicidal behaviors and ideation.

Data completeness and relevance were carefully gathered to guarantee data quality. It was rigorously examined for consistency and completeness before being entered into SPSS for analysis. Excel spreadsheets with the cleaned, coded, and entered data were exported to SPSS version 22 for additional analysis. Data on sociodemographic characteristics and suicidal thoughts was analyzed using descriptive statistics. For patterns of suicide, frequency distributions and percentages were calculated.

RESULTS

There were 62 responses in all and most of (38 responses in all, and 38 of) them were women. The

majority of respondents were between the ages of 21 and 25, followed by 29% and 27% of respondents between the ages of 15 and 30 and 31 to 35, respectively. Of the total participants, 21 were single, 1 was divorced, and 40 of them were married. The percentage of educated and uneducated respondents was about 44 and 56, respectively.

In teaching tertiary care hospital Multan, South Punjab Pakistan, patients had a relatively high prevalence of suicidal thoughts, as shown in Table 1. According to the results, about 73 percent of people said that it was not worthwhile to live. My family would be happier without me, according to an average of 38 people. **“I will not be here to handle that”** was something that 86% of the participants overheard. **“You’ll be sorry when I’m gone”** was a notion that about two-thirds of the respondents acknowledged experiencing. **“I won’t be in your way much longer”** was one of the thoughts that 48 of the survivors had before trying suicide.

Table 1: Patients in South Punjab, Pakistan reported a high rate of suicide behavior and ideation: 2022

Variables	Category	N	Frequency	Percentage
Life isn't worth living.	Yes	62	45	72.6
	No	62	17	27.4
My family would be better off without me.	Yes	62	38	61.3
	No	62	24	38.7
I won't be around to deal with that.	Yes	62	53	85.5
	No	62	9	14.5
You will be sorry when I'm gone.	Yes	62	38	61.3
	No	62	24	38.7
I won't be in your way much longer.	Yes	62	48	77.4
	No	62	14	22.6
I just can't deal with everything life is too hard.	Yes	62	50	80.6
	No	62	12	19.4
Next time I'll do it better to do the job right.	Yes	62	12	19.4
	No	62	50	80.6
Nobody understands me, nobody feels the way I do.	Yes	62	50	80.6
	No	62	12	19.4
There is nothing I can do to make it better.	Yes	62	56	90.3
	No	62	6	9.7
I would be better off dead.	Yes	62	54	87.1
	No	62	8	12.9

Before attempting suicide, more than half of the patients believed that life was simply too difficult for them to handle everything. But paradoxically, after having one suicide attempt, 5 out of 62 patients were

not in favor of thinking, "Next time, I'll do it better to do the job right," and 12 of them still wanted to do it again. Eighty point six percent of the respondents were thinking that "nobody understands me; nobody thinks the way I do". Ninety percent of patients responded yes to having thought, "there is nothing I can do to make it better". And 54 respondents said "I would be better off dead". All these questions were asked simply to reflect their thoughts and assess the magnitude of suicidal behaviour before their attempt.

The patterns adopted were paraphenylenediamine intake (found in kala pathar, a hair dye available in nearby stores) and corrosive intake, mostly used in washroom cleaning (also easily available at home). Most of the attempts were sudden acts of aggression, even in youngsters (15–20 years old) over a trivial fight with parents, which is very alarming.

DISCUSSION

Our study recognized the remarkable burden of suicide ideation and behavior among suicide survivors in Pakistan. It highlighted the importance of age, gender, domestic fights and lack of social support as the major factors leading to impulsive suicide attempt. (It extricated the influence of age, gender, anxiety, fights, domestic violence, drug abuse and social support over suicide attempt). The factors established might perhaps not fully decipher the suicidal behavior because of explanatory variables like socioeconomic status, physical and psychological co-morbidities.

These findings are in line with previous studies conducted in Pakistan and other countries, which have reported a high prevalence of suicide ideation and suicide attempts.¹⁷ (Moreover, the higher rates in this study are in contrast to other studies.) One study conducted in Dangla, Ethiopia, reported suicide ideation and attempt rates of 22.5 and 16.2%, respectively.¹⁸ Comparatively, in Japan, the overall 12-month suicidal ideation, plan and attempt rate was 7.9, 6.8 and 8.9%.¹⁹ Research done in Nepal concluded that 13.59% of research participants had suicidal ideation and 10.33% had attempted suicide.²⁰ Prevalence of suicidal ideation was found to be 13.5% in Bangladesh in 2022 and 3.1% in Bhutan^{21,22} According to a study, 36% of global suicide prevalence was seen in Indian women.²³

The 21–25-year-old age group turned out to be the most rampant in suicide ideation and behavior. Corrosive intake came across as the customary method to attempt suicide, followed by insecticide spray and pill poisoning. This is similar to study by Khan et al, in

their study from Karachi, reported that for the majority of suicide victims, it was their first attempt, showing the high case-fatality ratio.²⁴ More than 90% of patients used poisonous/lethal substances which included organophosphate compounds, washing liquids and household bleach. Therefore, a useful approach may be to reduce access to such potentially lethal methods of self-harm. According to a study conducted in Ethiopia, people between the ages of 15 and 34 showed increased rates of suicidal thinking and behavior. Hanging was found to be the most common form of suicide attempt, followed by drug overdoses or poisoning.²⁵

Our study had more female respondents owing to a male dominated society and females being neglected while a study done in Ethiopia had 68% male respondents.²⁵ Endorsing suicide ideation and attempted suicide are not indisputably linked. The significance of SI cannot be discussed without addressing suicidal behaviors and their consequences. The final time a healthcare worker questioned a patient who committed suicide, they said they had never considered it.²⁶

The vicissitude from suicidal thinking to actual suicide frequently happens impulsively in response to acute physical and mental stressors, notably among family clashes and disputes. Young people who commit suicide have been found to have a history of violence at home, not just among the children themselves but also more generally as a means of resolving conflicts among family members.²⁷

Depression criteria were present in 50–65% of suicide cases, more frequently in females than in males. The risk of suicide is also closely related to substance addiction, particularly in males and older teens. Personality problems like borderline or antisocial personality disorder affect 30–40% of those who commit suicide.^{28,29} This scoping review shows that majority of individuals who engage in suicidal behavior are below the age of 30, underscoring the need to address mental health and other issues faced by young people in Pakistan. Furthermore, the study found that paradoxically, after having made one suicide attempt, fifty out of 62 patients were not in favor of thinking "Next time I'll do it better to do the job right," and twelve of them still wanted to do it again. By identifying the factors associated with suicide attempts and highlighting the prevalence of suicidal thoughts, this research underscores the need for comprehensive suicide prevention strategies and mental health support systems that address the underlying risk factors and

provide effective support and intervention for those who attempted suicide.

The present study has several limitations. First, the study used a small sample size, and the results may not be generalizable to other populations. Second, the study did not include a control group, which limits the ability to establish causality. Third, the study did not include details of personal information for confidential reasons to trace back the participants.

CONCLUSION

In conclusion, this study sheds light on the factors contributing to suicidal ideation and behavior among survivors of suicide attempts in the teaching tertiary care hospital Multan, South Punjab Pakistan. The study revealed a high prevalence of suicidal thoughts among the participants, with a significant proportion expressing feelings of hopelessness, believing that their families would be happier without them, and experiencing a lack of understanding from others. So, there is a dire need of proper counselling and early recognition of problems. There should be proper government and non-government organizations (NGOs) to cope with mentality of such victims. Moreover, families and close friends should also pay attention to their loved ones and understand their feelings.

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