

Research Article

Causes of Suicide in Pakistan

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Abstract:

Background: Suicide is a complex phenomenon that involves social, cultural, biological, psychological, and environmental factors. Pakistan is a low-income Muslim country, in which suicide cases have increased in recent years.

Aim: Our review focuses on the causes of suicide in Pakistan.

Methodology: A systematic review was done to find out about the causes of suicide in Pakistan. Databases like PubMed, Google Scholar, and Science Direct were searched using keywords like “suicide”, “suicide attempt”, “etiology”, “causes”, and “Pakistan”. A total of 208 articles were screened out of which only 7 met our inclusion criteria. The rest were excluded because the data wasn’t of Pakistan or wasn’t just limited to Pakistan. Qualitative data were extracted from these articles and were tabulated and exposed to the major causes of suicide in Pakistan.

Results: Systematic review was conducted to find out about the causes of suicide in different age groups, genders, and regional groups. The majority of suicides were linked to domestic problems. Most suicide attempts were done by females, married people, and youth, indicating the strong association of gender bias, family disputes, and depression, with suicide. Mental health problems, unemployment and prolonged illnesses, and low income also contributed a great deal to suicide. Other causes like social injustice, failure in love, failure in exams, bullying, and sexual abuse were also there. There is a need for greater attention and in-depth studies to elaborate on causative mechanisms for these public health issues.

Conclusion: The most common reasons that compel an individual to take his/her own life are depression/mental illness, socioeconomic conditions, domestic violence and disputes, unemployment, and some major failure in life.

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INTRODUCTION:

Suicide is a behavior that results in death or several losses that are the immediate or final outcome. It is an act of harming oneself voluntarily and intentionally. Suicidal ideation is characterized as suicidal ideas. Suicidal thoughts are often referred to as thoughts of injuring or killing oneself. According to tradition, three Suicidal terms include suicidal ideas, attempts, and successful suicides. Suicidal ideation refers to delusional ideas, self-harm, and the preparation for suicide, and there is yet, a strong connection between intention and action [1].

Suicide attempts and suicide are among the major causes of morbidity and mortality worldwide. Suicide exposure has been related to an increased risk of physical sickness and adverse mental illness such as depression [2]. Several other factors are also related to suicide such as alcohol and drug abuse, social media effects, poor lifestyle, low income, high expenses, unemployment, study burden, academic stress, lack of education, lack of social support due to toxic relationships, toxic friends and abusive parents and teachers. therefore, this phenomenon should be understood from a multifactorial perspective [3]. Many studies showed that suicide rates are greater in males but suicidal attempts are higher in females. Adults with previous self-injurious thoughts and behavior have a high risk of dying than those older age [4].

Pakistan is a low-income, agricultural country whose 70% population lives in rural areas and one-third lives below the poverty line [5]. So,

low socioeconomic status, low qualifications, and unemployment have been among the leading causes of complete suicide attempts in Pakistan [5, 6]. Other major causes include familial disharmony, domestic violence, gender inequality, personal issues, and emotional problems [7, 8]. Social isolation, aggravation of existing anxiety disorders, mood disturbances from COVID-19, previous psychological history, and chronic illnesses have been reported to have been the causative factors for suicides in Pakistan [9, 10]. In addition to it, childhood trauma, sexual violence, cognitive distortions, personality traits, and previous unsuccessful attempts have also been indicated to play a part in why people commit suicide. Previous studies have revealed that Pakistan lacks certified data about suicide mortality as no statistical analysis about suicidal ideation and successful attempts is done on the national level [5].

There has been seen a rise in complete suicidal attempts among students. Academic pressure, failure to reach a goal and untreated psychiatric illnesses are most likely the causative factors for suicide in students. The literature lacks enough data for timely measures to be undertaken to prevent these incidents. Data specifying gender-associated suicides in Pakistan is also scarce, which poses a potential research gap for studies in the future. This study aims to identify the association of the above-mentioned causative factors with suicidal attempts. A better understanding of their effects on suicidal ideation and attempts can help formulate cost-effective interventions. Prevention programs that

target young people, females, and low socioeconomic groups, and aim to reduce harmful alcohol use, can help prevent suicides.

METHODS AND METHOD:

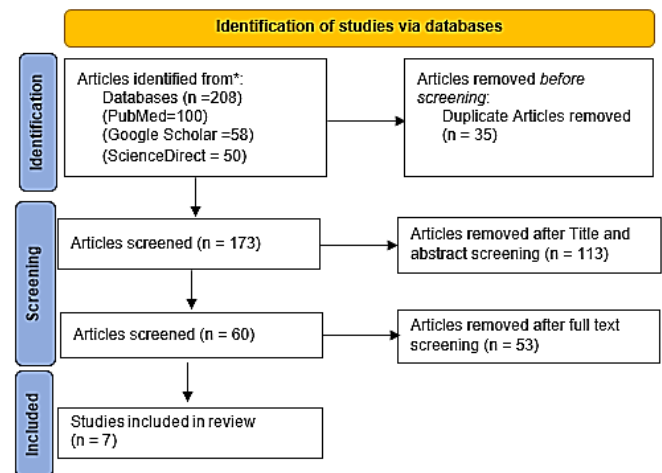
A systematic review was done to find out about the causes of suicide in Pakistan. Databases like PubMed, Google Scholar, and Science Direct were searched using keywords like “suicide”, “suicide attempt”, “etiology”, “causes”, and “Pakistan”. No filters in terms of time, study design, language, country of publication, etc. were used to retrieve all the available literature. Articles along with the references they included were searched to reach more articles. Identified studies were uploaded to Mendeley Library and duplicates were removed. Initially, the articles were screened based on title and then abstract, after which the full-text articles were screened. A total of 113 articles were screened out of which only 7 met our inclusion criteria. The rest were excluded because the data wasn’t from Pakistan or wasn’t just limited to Pakistan. Qualitative data were extracted from these articles and were tabulated and exposed to the major causes of suicide in Pakistan.

Sample Selection:

- Inclusion Criteria: Cross-sectional studies, case-control studies, cohort studies, review articles, systematic reviews, and original articles encompassing suicidal behavior, suicidal ideation, and attempted and complete suicides were included. Only English articles were added.
- Exclusion Criteria: All non-English articles,

Non-peer-reviewed literature, technical articles, newspaper columns and articles, letters, editorials, case reports, and case series studying causative factors for suicides were excluded.

PRISMA flow sheet diagram:



RESULTS

Seven studies were reviewed to find out the major causes of suicide and suicidal ideation in Pakistan. Across Four studies there was evidence that domestic violence and other domestic problems were associated with a significantly increased risk of suicide death [1, 13, 14, 16]. Three of these studies focused on the general population of different samples from Pakistan while one study [16] focused particularly on females. Domestic problems were associated with up to 59% of suicide cases in these studies [13]. In a survey conducted in Chitral, Pakistan, 76.4% of participants agreed that domestic problems were associated with an increased risk of suicidal behavior [16].

Mental health problems or psychiatric illnesses were

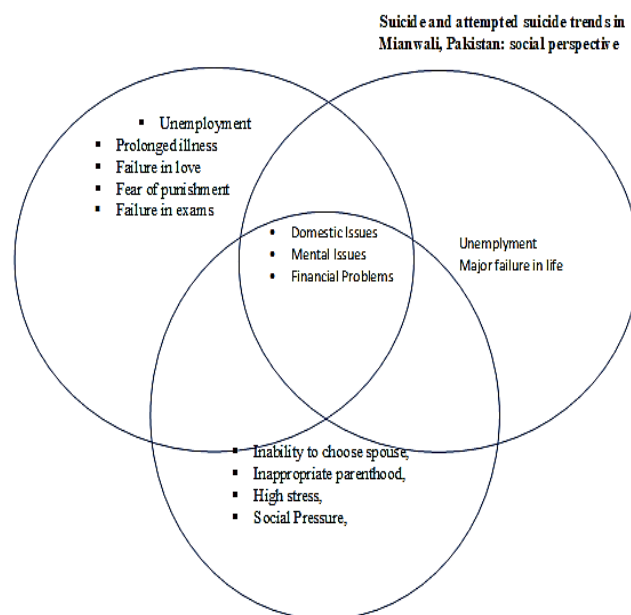
associated with an increased risk of suicidal behaviors in six studies [11-16]. The psychiatric problems included social pressure, depression, stress, and psychopathologies. Three of these studies included a general population of different samples from Pakistan, two studies focused particularly on females [15, 16] and one study focused on the teenage sample [11]. Individuals with depression, stress, and psychopathologies were at increased risk of suicidal behaviors. Mental disorders were associated with up to 35% of suicide cases in these studies [14]. In a survey conducted in Chitral, Pakistan, 83.6% of participants agreed that stress and depression were associated with an increased risk of suicidal behavior [16].

Three studies provided evidence of the association of increased risk of suicidal behavior with unemployment [11, 13, 14]. Two of these studies included the general population of different samples from Pakistan [13, 14] and one study focused on the teenage sample [11]. Up to 22 cases of suicide in these studies were found to be due to unemployment [14]. Suffering from prolonged hopelessness, low self-esteem, obesity, diabetes, cancer, or hypertension was found to be associated with an increased risk of suicidal behaviors in two studies [11, 13]. One of these studies included the general population of different samples from Pakistan [13] and one study focused on the teenage sample [11]. Up to 12 cases of suicide in these studies were found to be due to prolonged illnesses [13].

Low household income and financial problems were

associated with an increased risk of suicidal behaviors in six studies [1, 11-14, 16]. One of these studies focused particularly on females [1] and one study focused on the teenage sample [11] while the others included the general population of different samples from Pakistan. In a survey conducted in Chitral, Pakistan, 70.9% of participants agreed that stress and depression were associated with an increased risk of suicidal behavior [16]. Other causes of suicide and suicidal ideation include failure in love, failure in exams, and fear of punishment [13]. Societal interference in the success or failures of individuals was also associated with an increased risk of suicide [14]. Bullying along with sexual and physical abuse was also found to be associated with an increased risk of suicidal ideation [11]. A study conducted in Sindh also established a link between suicide with social injustice [15].

Changing pattern of suicide and parasuicide in Karachi



Exploring the Social Determinants of Female Suicide in District Chitral, Pakistan

Table: Study findings table

Study Title	Author	Journal	Year of Publication	Sample Population	Time of the study	Causes of Suicides
Suicide in Teenagers and Its Related Determinants in Developing Countries [11]	Shah & Punjani	International Journal of Science and Research	2013	The teenage population of developing countries	2012	Psychosocial Stressors, Low self-esteem and hopelessness, Psychopathology, Poverty, Unemployment, Biological Factors, Sexual and Physical abuse, Bullying
Deliberate self-harm and suicide: a review from Pakistan [12]	Shahid & Hyder	International Journal of Injury Control and Safety Promotion	2018	General Population of Pakistan	1981 - 2006	Low socioeconomic status, Marriage issues, Family problems, Mental disorders
Changing pattern of suicide and parasuicide in Karachi [13]	Ahmed & Zuberi	Journal Of Pakistan Medical Association	1981	The general population of Karachi	1974 - 1978	Domestic troubles, Mental disorders, Unemployment, Prolonged illness, Financial problems, Failure in love, Fear of punishment, Failure in exams
Suicide and attempted suicide trends in Mianwali, Pakistan: social perspective [14]	Tahir et al.	Eastern Mediterranean Health Journal	2013	The general population of Mianwali	2011	Mental disorder, Financial problems, Unemployment, Domestic violence, Major failure in life
Causes of suicide in the Gilgit-Baltistan region [1]	Rahnuma et al.	European Academic Research	2017	General Population of Gilgit-Baltistan	2016 - 2017	Domestic issue, Financial problems, Relationships concerning marriage, Societal interference in the success or failures of individuals
Sociological analysis of suicide among females: a study of	Tunio et al.	Liberal Arts and Social Sciences International Journal	2020	The female population of Nangarparkar	2019 - 2020	Failure in love, Social injustice, Mental illness

Nangarparkar, district Tharparker, Sindh [15]						
Exploring the Social Determinants of Female Suicide in District Chitral, Pakistan [16]	Bibi et al.	PAKISTAN JOURNAL OF SOCIETY, EDUCATION, AND LANGUAGE	2019	The female population of Chitral	2018	Inability to choose a spouse, Inappropriate parenthood, Low socioeconomic status, High stress, Depression, Social Pressure, Domestic problems

DISCUSSION:

In our systematic review, we screened 208 journal articles and selected 7 articles that contained qualitative information about the causes of suicides in Pakistan. Muslim Shah et al. [11] reported that psychosocial stressors, low self-esteem, and hopelessness, psychopathology like major depression disorder, biological factors like altered levels of neurotransmitters in the brain, sexual and physical abuse, poverty, unemployment, bullying, etc. are the major causes that can lead someone to decide to take his own life. It was also commented in this study that stress in the home caused by the authoritarian style of parents, negative family environment, and less parental warmth is followed by low self-esteem and depression which eventually results in suicidal ideation and suicidal attempts.

Muhammad Shahid et al. [12] mentioned that psychiatric disorders, gender bias, low socioeconomic status, interpersonal relationship problems, domestic disputes, poverty, unemployment, human rights violations, denial of justice, discrimination, violence

, and loosening of cohesion in society, are the leading causes that can lead to increased prevalence of were done by females, married people, and youth, indicating the strong association of gender bias, family disputes, and depression, with suicide.

In the study done by S. Haroon Ahmed et al. [13], domestic troubles, mental disorders, prolonged illness, and unemployment are statistically proven to be the frequent causes of suicide in Pakistan, especially in Karachi. It is also said that domestic troubles and failure in love are also included in the causes leading to suicide. Like Muhammad Shahid et al. [12], S. Haroon Ahmed et al. also stated that suicides are more prevalent in females and young people which leads to the need for more research and statistical data to figure out the facts.

M.N. Tahir et al. [14] mentioned in their study that depression/mental illness, socioeconomic conditions, domestic violence, unemployment, and major failure in life were the major reasons for attempting suicide in Mianwali, one of the cities of Pakistan. Students,

the unemployed, and laborers were the most common occupations in which suicides prevailed. They also commented on the fact that 80% of the people with mental disorders ultimately commit suicide to reside in lower and middle-income countries like Pakistan.

In their study, Bibi Rahnuma et al. [1] stated that domestic issues like family pressure, joint family problems, intra-marital problems, etc., financial problems, mental disorders, societal interference in the success or failures of individuals, the difference of class and social status among people are the most potent causes of suicides in the beautiful region of Pakistan, Gilgit Baltistan. Looking deep into their study revealed that all of these causes are more or less common in the rest of the cities and regions of Pakistan.

Shabana Tunio et al. [15] revealed in their study that social injustice, failure in love, mental illness, isolation, poverty, domestic violence, abuse including emotional and physical violence, illiteracy or lack of education, ill health condition, and tough family environment leading to intrafamily disputes were the most likely causes provoking people to take their own lives. They also stated that poverty and failure in love were the most common reasons among females of Nangarpaker, District Tharparker to commit suicide one poverty and other failures in love. It led them to recommend that suicide must be recognized as a major social issue, and more work needed to be done on this, especially suicide among females.

Rukhsana Bibi et al. [16] mentioned that freedom of choice for male ignorance of parents with regards to children's feelings, family dispute terming female

suicide on accident, and the patriarchal family system leads to suicide. Family disputes, depression, social pressure, high stress, non-compliance of family, poor socioeconomic condition, unemployment, loss of jobs, and aggression associated with it, are significantly related to the increasing rate of suicides, and hence steps needed to be taken to reduce the number of deaths caused by it.

Similar to the studies in our systematic review, Angus M Kim et al., [17] also mentioned that depression and anxiety, work-related problems like loss of jobs and unemployment, family issues, intra-marital and relationship issues, financial problems and sexual/physical abuse are included in the factors involved in the causation of suicides. Massimiliano Beghi et al. [18] reported in their study that male sex, violent methods to self-harm, any psychiatric disorder (depression, anxiety, and bipolar disorders), a poor medical condition, stressors/bereavement, and living alone appeared to be more significant for predicting completed suicides in late life, which resembles more or less to the findings of our study.

Quality appraisal of the studies included in the systematic review was done using the scale by Joanna Briggs Institute (JBI). Keeping in view the different study designs, answers were given to the questions asked by this quality appraisal scale and studies were scored. According to the score, 4 studies were categorized as high quality, 2 as moderate, and 1 as low-quality study. It indicates that the overall quality of this systematic review will be remarkable in the generation of data for guidelines. Risk assessment of bias cannot be done by GRADE or

RoB scale as study designs in this systematic review were different. Moreover, no cohort studies and randomized control studies were found in the literature search, indicating that there is a lack of high-quality evidence of data on the causes of suicides in Pakistan, and more research needed to be done to evaluate and rectify the risk of bias.

STRENGTHS AND LIMITATIONS:

This systematic review finds its strength in the fact that a rigorous methodology was used to perform it and was accomplished according to a published protocol. The search strategy was carefully developed and comprehensive in nature. The thematic synthesis of the literature brought out several important insights and allows for several recommendations for further research. More contextual and longitudinal qualitative research on the causes of suicide in Pakistan would be needed to fully address this important question. Very few of the articles explicitly explored the causes of suicide in Pakistan and it was often only a very small part of each article that was used for the review itself. Furthermore, only a few studies were investigating the causes of suicides specifically and were also encompassing other aspects like regional, religious, and legal implications, making it difficult to focus solely on the objective of this systematic review.

CONCLUSION:

Suicide is not only a socio-cultural event; it is a critical health concern and should be considered as such in Pakistan. The most common reasons that compel an individual to take his/her own life are depression/mental illness, socioeconomic conditions,

domestic violence and disputes, unemployment, and some major failure in life. Some other causes include gender bias, intra-marital problems, bullying, and societal interference in the success or failure of individuals. To control the suicide rate government has to give priority to education, and the eradication of poverty and domestic violence. Easy access to medical care in case of emergency and enhancing the role of emergency medical departments should be studied. Further reporting of suicide data and research is needed to be done to get accurate results.

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REFERENCES:

1. Rahnuma B, Fangtong J, Khan M, Saddique K. Causes of suicide In Gilgit Baltistan Region. European Academic Research. 2017;8(1):4041-4051.
2. DeVyllder JE, Lukens EP, Link BG, Lieberman JA. Suicidal ideation and suicide attempts among adults with psychotic experiences: data from the Collaborative Psychiatric Epidemiology Surveys. JAMA Psychiatry. 2015;72(3):219-225.
3. Kim AM, Jeon SW, Cho SJ, Shin YC, Park JH. Comparison of the factors for suicidal ideation and suicide attempt: a comprehensive exami-

- nation of stress, view of life, mental health, and alcohol use. *Asian J Psychiatr.* 2021;65(8):102-844.
4. Castellví P, Lucas-Romero E, Miranda-Mendizábal A, Parés-Badell O, Almenara J, Alonso I et al. Longitudinal association between self-injurious thoughts and behaviors and suicidal behavior in adolescents and young adults: A systematic review with meta-analysis. *J Affect Disord.* 2017;215(11):37-48.
5. Khan MM, Naqvi H, Thaver D, Prince M. Epidemiology of suicide in Pakistan: determining rates in six cities. *Arch Suicide Res.* 2008;12(2):155-160.
6. Shekhani SS, Perveen S, Hashmi DeS, Akbar K, Bachani S, Khan MM. Suicide and deliberate self-harm in Pakistan: a scoping review. *BMC Psychiatry.* 2018;18(1):44.
7. Khan MM. Suicide prevention in Pakistan: an impossible challenge? *J Pak Med Assoc.* 2007;57(10):478-480
8. Pooja F, Chhabria P, Kumar P, Kalpana F, Kumar P, Iqbal A et al. Frequency of Psychiatric Disorders in Suicide Attempters: A Cross-Sectional Study from Low-Income Country. *Cureus.* 2021;13(4):e14669.
9. Qin P, Hawton K, Mortensen PB, Webb R. Combined effects of physical illness and comorbid psychiatric disorder on risk of suicide in a national population study. *Br J Psychiatry.* 2014;204(6):430-435.
10. Kawohl W, Nordt C. COVID-19, unemployment, and suicide. *Lancet Psychiatry.* 2020;7(5):389-390.
11. Shah M, Punjani N. Suicide in Teenagers and Its Related Determinants in Developing Countries. *International Journal of Science and Research (IJSR).* 2014;3(6):62-65.
12. Shahid M, Hyder AA. Deliberate self-harm and suicide: a review from Pakistan. *Int J Inj Contr Saf Promot.* 2008;15(4):233-241.
13. Ahmed SH, Zuberi H. Changing pattern of suicide and parasuicide in karachi. *J Pak Med Assoc.* 1981;31(4):76-78.
14. Tahir MN, Akbar AH, Naseer R, Khan QO, Khan F, Yaqub I. Suicide and attempted suicide trends in Mianwali, Pakistan: social perspective. *East Mediterr Health J.* 2014;19(Suppl 3):S111-4.
15. Tunio S, Shouakt G, Khan MA. Sociological Analysis of Suicide among Female: A Study of Nangarparkar, District Tharparker, Sindh. *Liberal Arts and Social Sciences International Journal (LASSIJ).* 2019;3(1):1-7.
16. Bibi R, & Khan Y, Shah M. Exploring the social determinants of female suicide in district chitral, Pakistan. *Pakistan Journal of Society, Education and Language.* 2019;5(1):2523-1227.
17. Kim AM, Jeon SW, Cho SJ, Shin YC, Park JH. Comparison of the factors for suicidal ideation and suicide attempt: a comprehensive examination of stress, view of life, mental health, and alcohol use. *Asian J Psychiatr.* 2021;65(4):102-844
18. Beghi M, Butera E, Cerri CG, Cornaggia CM, Febbo F, Mollica A, et al. Suicidal behaviour in older age: A systematic review of risk factors

associated to suicide attempts and completed suicides. *Neurosci Biobehav Rev.* 2021;127 (8) : 193-211.