

# Trends and Patterns of Suicide in Quetta City

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## ABSTRACT

**Objective:** To determine the patterns and trends of suicide attempts in the people of Quetta also examine the causes of suicide in this area.

**Study Design:** Cross-sectional study

**Place and Duration of Study:** This study was conducted at the Department of Forensic Medicine & Toxicology, Sandeman Provincial Hospital Quetta from 1<sup>st</sup> January 2016 to 31<sup>st</sup> December 2018.

**Materials and Methods:** Fifty two suicide victims of ages ranging from 10 to 50 years was taken from District Quetta and surrounding areas of Quetta, Data was collected from hospital administration and primary data was collected and interview of victim's family.

**Results:** Thirty four (65.38%) victims were males while 18 (34.62%) were females. There was a high rate of suicides in individuals whom were ages 18 to 30 years. The main causes of suicide attempts were noted as family issues, financial problem, lack of confidence, mental health and others as 21 (40.38%), 14 (26.92%), 8 (15.38%), 5 (9.62%) and 4 (7.69%) respectively. Gunshot was the common method of suicide in 23 (44.23%) followed by Drowning and poison.

**Conclusion:** Family disputes and marital issues was the main causes of suicide deaths in District Quetta and its surrounding areas and the most common method to attempt suicide was gunshot.

**Key Words:** Suicide, Trends of suicide, Patterns, Causes.

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## INTRODUCTION

Worldwide, suicide is one of the major public health issues with high rate of deaths. The annual rate of suicide has increased by 60% from last 45 years. It is the second leading cause of death in China and in some European countries. In these countries suicidal deaths are most common in people ages between 10 to 40 years. Globally, it is also the 10<sup>th</sup> leading cause of death.<sup>1</sup> In developing and low income countries the rate of deaths due to suicide is 85% according to the WHO.<sup>2</sup> In Pakistan, there is no any official data is available about the incidence rate of suicides. In Peshawar the incidence rate according to the some researches was 0.43 out of 0.1 million people and in Rawalpindi it was 2.86/100000.<sup>3,4</sup>

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The rate of suicide is higher in males as compared to females in Sindh province of Pakistan.<sup>5</sup> Moreover; males in age of 20 to 40 years are at high risk of attempting suicide (7.06/100,000) than females.<sup>6</sup> Pakistan is a developing Islamic state and many of factors contributed in suicides in which religious, social and political sensitivities are the reasons for suicides attempts. As an Islamic state, suicide considered a criminal offense. There are strong religious sanctions against suicide attempts.<sup>7</sup> the incidence of suicide attempts is quite high in young male female population. There are many methods of attempting suicide but the most common methods in Pakistan are; firearms, hanging and use of insecticides. Interpersonal relationships and domestic issues are the most common causes of suicide attempts. In Pakistan lack of resources is the major problem due to which young population brought to hopeless and this situation tend to move to suicide attempt.<sup>8</sup>

There is no proper statistics available on suicide rate in Pakistan. Individuals avoid going in public sector hospital in Pakistan due to fear of harassment by police and social stigma. Ultimately, turning them towards private sector health system and leading towards underreporting of suicide statistics. Approximately, 34% of population is suffering from mental health issues in Pakistan while depression is projected to be leading cause of suicide among 90% of cases.<sup>9</sup> A limited data is available in Pakistan on patterns of suicides and different methods of suicides in Pakistan. The study will contribute knowledge during policy making regarding mental health in Pakistan. The study

was to determine the suicide patterns and methods most frequently used for suicide attempt.

## MATERIALS AND METHODS

This cross-sectional study was conducted Department of Forensic Medicine & Toxicology, Sandeman Provincial Hospital Quetta from 1<sup>st</sup> January 2016 to 31<sup>st</sup> December 2018. A total of 52 individuals were found to be suicide deaths. All the confirmed suicidal deaths cases files signed by responsible authorities were included for data analysis. Primary data was collected from a pre-designed questionnaire and interview of victim's family. Suicide victims of ages ranging from 10 to 50 years were taken from District Quetta and surrounding areas of Quetta. Individuals' complete history including sex, age, residency, financial status, education was recorded. Causes of suicidal deaths and methods to attempt suicide were examined. All the statistical data was analyzed by computer software SPSS 17.

## RESULTS

There were 34 (65.38%) males while 18 (34.62%) were females. Four (7.69%) victim were ages <18 years, 37 (71.15%) victims had ages 18 to 30 years.

**Table No.1: Demographical information of all the suicide victims**

Variable	No.	%
<b>Gender</b>		
Male	34	65.38
Female	18	34.62
<b>Age (years)</b>		
>18	4	7.69
18-30	37	71.15
31-42	9	17.31
>42	2	3.85
<b>Residency</b>		
Urban	25	48.08
Rural	27	51.92
<b>Socioeconomic status</b>		
Low Status	31	59.61
Middle Status	21	41.39
<b>Education</b>		
Below Matric	38	73.08
Matric or above	14	26.92

**Table No.2: Causes of suicidal deaths**

Characteristics	No.	%
Family disputes	21	40.38
Financial issues	14	26.92
Lack of confidence	8	15.38
Mental Health Issue	5	9.62
Family Ignorance and lack of Support	4	7.69

9 (17.31%) were ages between 31 to 42 years and 2 (3.85%) victims had ages >42 years. Twenty five (48.08%) individuals had urban residency while 27 (51.92%) had rural residency. Thirty one (59.61%) victims had low socio-economic status while 21

(40.39%) had middle socio-economic status. Thirty eight (73.08%) individuals were illiterate and only 14 (26.92%) were literate above matric (Table 1).

**Table No.3: Methods of suicidal deaths**

Characteristics	No.	%
Gunshot	23	44.23
Chemical Poison	11	21.15
Drowning	8	15.38
Hanging	6	11.52
Fall from Height	2	3.85
Burning	2	3.85

The cause behind suicidal deaths was recorded as family disputes in 21 (40.38%), financial issue in 14 (26.92%), lack of confidence in 8 (15.38%), mental health problem in 5 (9.62%) and 4 (7.69%) deaths was due to lack of family support and ignorance (Table 2). Gunshot was the most common method to attempt suicide in 23 (44.23%) victims, Chemical poison found in 11 (21.15%), 8 (15.38%) with drowning, 6 (11.52%) with hanging, 2 fall from height and 2 victims burn himself (Table 3)

## DISCUSSION

Suicide is a leading cause of death in different countries and Pakistan is not an exception. Determination of death cause is an important phase of clinical investigation that leads towards suicidal or murdered results. The suicide reported confirmation is based on different interviews with deceased's family members, relatives, friends and psychologists opinions.<sup>10</sup>

In the present study, male's suicide victims' rate was high as compared to females it was 65.38% and 34.62%. A study conducted by Liaqat et al<sup>11</sup> in 2017 regarding suicide patterns and methods in Pakistan reported that males population was high as compared to females as 70% and 30%. Another study conducted by Hanna et al<sup>6</sup> reported that male to female ratio was 1:1.75. A study conducted by Zafar et al<sup>12</sup> regarding suicidal deaths in Chitral district demonstrated that female ratio was high as compared to males.

We found mostly individuals of suicidal deaths was ages 18 to 30 years 71.15%. These results show similarity to the study conducted by Spicer et al<sup>13</sup> in which peak age of suicidal deaths was 20 to 29 years. In our study the rate of suicide deaths was high in females of ages below 20 years. It was due to family limitations, pressure to arrange marriages, early marriages and due to financial condition. Similar results was found in other study in which mostly females performed suicide due to early marriages and family pressure and lack of confidence.<sup>14</sup>

This study showed that family disputes were most common cause of suicide deaths and that was 40.38%. We examine through interview of family members that most of the disputes were happens due to rude behavior among family members, likeness dislikeness, marriages issues and joint family system. These results were similar to a study conducted regarding suicidal deaths,

in which most common reason for suicide was family disputes and rated 40%.<sup>15,16</sup> We found 26.92% suicide deaths was because of financial issues and that brings victims to high depression. A study conducted by Al-Madniet al<sup>17</sup> in which depression is the main reason of suicidal deaths. Some of previous studies reported depression and anxiety was the most common cause of suicidal deaths.<sup>18,19</sup>

In our study, lack of confidence in 8 (15.38%), Mental health problem in 5 (9.62%) and 4 (7.69%) deaths was due to lack of family support and ignorance. These all causes was similar to other studies in which lack of confidence and family ignorance were the main causes of suicide.<sup>20,21</sup> In present study, we found that gunshot method was the most common method to attempt suicide and mostly victims were males, and as per our examination Quetta and surrounding areas has tribal families and weapons are commonly found in every families. Due to this factor gunshot method was most common. A study conducted by Zafar et al<sup>12</sup> in which gunshot was the third most common method to attempt suicide death.

## CONCLUSION

In Pakistan suicide rate is increasing during the last 15 years and this was because of illiteracy and lack of confidence, in our study, we concluded that male's victim's rate was high as compared to females and most common cause of suicidal deaths was Family disputes. We found that gunshot was the most common method to attempt suicide in this region.

### Author's Contribution:

Concept & Design of Study:	Samina Rehman
Drafting:	Rakshanda Naheed
Data Analysis:	Mujeeb-ur-Rehman Baloch
Revisiting Critically:	Samina Rehman Rakshanda Naheed
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**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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