

## Research Article

# Suicidal behaviors as a risk factor among heroin addicts with comorbid depression: A comparative study

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## Abstract

The main purpose of the present study was to find out the differences on suicidal ideation, hostility, hopelessness and negative self-evaluation among heroin addicts with comorbid depression. After reviewing the literature, it was hypothesized that heroin addicts with high depression may have high scores on variable of suicidal ideation, hostility, hopelessness, and negative self-evaluation as compared to those with low depression. The sample was consisted of 60 males from Low-socioeconomic status (SES) (34 of them were screened as having high scores on the variable of depression and 26 were screened as low scorers). Siddiqui Shah Depression Scale (Siddiqui & Shah, 1997) and Urdu version of Suicide Probability Scale (Cull & Gill, 1982) was administered. To compare heroin addicts with high and low depression on various variables, *t* - test was applied. The research findings showed that heroin addicts with mean age of 30 years (range 20 to 40) having the mean duration of heroin dependence of 10 years with high depression were significantly high on the variable of suicidal ideation, hostility and hopelessness ( $p < .05$ ) as compared to those with low depression. And there was no significant difference on the variable of negative self-evaluation for both groups ( $p > .05$ ). So it was concluded that services for patients with Heroin addiction should include periodic screening for suicidal behavior along with psychiatric treatment and psychosocial support

## Introduction

Suicidal behavior denotes to the thoughts and behaviors related to individuals who are intentionally taking their own life such as suicide ideation (thoughts about intentionally taking their own life), suicide plan, (formulation of a specific plot by an individual to end their own life), suicide attempt and other self-harm behaviors (intentional self-poisoning or self-injury) [1].

Individuals who use heroin and other drugs are at greater risk for suicidal behaviors. Specially, when they also have some comorbid psychiatric condition [2,3]. Various psychological theories provide a framework to understand the complex relationship of suicidal behaviors with number of factors. According to Diathesis–stress, pre-existing vulnerability factors are leads to suicide when activated by stress and Linehan’s model of emotion dysregulation explained underline dialectical behaviors [4,5]. Whereas integrated motivational-volitional model of suicidal behavior focused more on the feelings of defeat and entrapment as common causes of suicide [6]. Many other theoretical approaches emphasized on appraisal of events as causative factors. These

all factors highlighted by various theories are key components of depression which leads to suicide while individual is under stress that is phase of his drug addiction.

Research evidence showed that approximately 90% of addicts who commit suicide have been suffering from diagnosable mental disorder [7,8]. According to Mohammed and Aleksandar [9], although there is co-morbidity of substance misuse and other psychiatric disorders in clinical population but depression is most frequently associated with addiction and suicide. In one study, it is shown that patients who attempted suicide were 13 to 21 times more likely to have a history of major depression and nearly three times more likely to have dependent on more than one substance than those who never attempted suicide [10].

The epidemiology of suicide in individuals with opioid dependence has been extensively studied. These studies reported a wide range of lifetime prevalence of attempted suicide in patients with opioid dependence (8.0% – 48.0%) and a variety of risk factors associated with suicide attempt, including gender, unemployment, depression, personality disorder and a high degree of aggression/impulsivity [11,12].

### More Information

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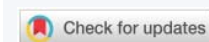
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A research conducted by Shane and Joanne [13], revealed that heroin users have a death rate of 13 times higher than their peers, and death among heroin users attributed to suicide range from 3% - 35%.

After reviewing literature, the fact is highlighted that though there are considerable evidences of the link between suicide, substance use and role of associated psychiatric disorders. But there is scarcity of research with reference to Pakistan. So present study was designed with the objective to see the differences on suicidal behaviors (suicidal ideation, hostility, hopelessness and negative self-evaluation) among heroin addicts with comorbid depression

## Method

### Objectives

The main objective of study is to see the specific vulnerability of heroin addicts with comorbid depression on the variables of suicidal ideations, hopelessness, hostility and negative self-evaluation.

### Hypothesis

It was hypothesized that heroin addicts with high depression may have high scores on variable of suicidal ideation, hostility, hopelessness, negative self-evaluation as compare to those with low depression.

### Sample

The present study was conducted in various Drug treatment centers and Rehabilitation centers located in Rawalpindi, Pakistan. The sample was consisted of 60 registered male heroin addicts diagnosed according to DSM-IV TR [14]. Patients dependent on other substances, poly drug users and patients having Psychiatric disorder other than depression were excluded. The ages of participants in the sample ranged from 20 years to 40 years with mean age of 30 years. The entire sample belonged to low socio economic class. The minimum education level was Primary as both the measures are in native (Urdu) language, so all patients could easily understand the measures.

### Procedure

Different Rehabilitation centers were visited according to the convenience and purpose of the study. A letter of consent describing the current study was provided to the concerned authorities of Treatment and Rehabilitation centers along with Demographic form and Questionnaires. After getting the permission from the authorities of these centers participants were approached. First rapport was developed with the participants and after that they were interviewed and the examiner filled the Demographic form and administered the Siddiqui Shah Depression Scale and Suicide Probability Scale with 10 minutes break between the two scales. Siddiqui Shah Depression Scale is a four-point rating scale and a self-

report endogenous measure of depression and it consists of 36 items. It was reported to be valid and reliable instrument to assess the depression in Clinical and Non-Clinical Pakistani population. The Alpha coefficients for the clinical and non-clinical samples were 0.91 and 0.89 respectively. 26 is cut-off score, and above 26 is mild depression, whereas 50 and above is severe depression [15]. Suicide Probability Scale [16] is a brief self-report measure designed to assess the suicidal risks in adolescents and adults. It consists of four-point rating scale and it has Urdu translated version [17]. The Split half reliability is 0.85 for Hopelessness, 0.88 for Suicidal Ideation, 0.58 for Negative Self Evaluation, 0.78for Hostility and 0.93 for Suicidal Probability Scale.

## Results

Data was analyzed by using SPSS 24.0 version and results were recorded. Tables were also formulated for the comprehensive view of results. The level of significance for the present data was  $p < 0.05$ .  $t$  - test was used to see the differences.

In table 1 showed among 60 males 37% Married ( $n = 22$ ) and 63% unmarried ( $n = 38$ ), 40% are middle passed ( $n = 24$ ) and 60% are under middle, 33% are with low depression ( $n = 26$ ) and 57% are with high depression ( $n = 34$ ).

Table 2 Mean Differences on Suicidal ideation, Hostility, Hopelessness and Negative self- evaluation among Heroin addicts with high depression (34) and with low depression (26) (cutoff score = 26).

Table 2 indicates the mean differences on suicidal ideation, hostility, hopelessness and negative self-evaluation) among Heroin addicts with high depression (34) and with low depression [26]. Results indicate that there are significant mean differences ( $p > 0.05$ ) between the two groups on the variable of suicidal ideation, hostility, hopelessness and no significant differences on the variable of negative self-evaluation.

## Discussion

Our findings support the fact that suicidal behaviors are very significant risk factor for herion addicts with comorbid depression. [18,19]. 23% of substance dependents attempted suicide and have depressive symptoms. It is because they

**Table 1:** Demographic characteristics of Heroin Addicts.

| Various Demographic Variables | Number of Patients ( $n = 60$ ) | Percentages |
|-------------------------------|---------------------------------|-------------|
| Marital Status                |                                 |             |
| Married                       | 22                              | 37%         |
| Unmarried                     | 38                              | 63%         |
| Education                     |                                 |             |
| Above middle                  | 24                              | 40%         |
| Below middle                  | 36                              | 60%         |
| Depression                    |                                 |             |
| With Low depression           | 26                              | 33%         |
| With High depression          | 34                              | 57%         |



**Table 2:** Mean Differences on Suicidal ideation, Hostility, Hopelessness and Negative self- evaluation among Heroin addicts with high depression (34) and with low depression (26) (cutoff score = 26).

| Variable | HA with High Depression<br>(n = 34) |       | HA with Low Depression<br>(n = 26) |       | t     | p    | 95% CI |       | Cohn's d |
|----------|-------------------------------------|-------|------------------------------------|-------|-------|------|--------|-------|----------|
|          | M                                   | SD    | M                                  | SD    |       |      | LL     | UL    |          |
| H        | 16.44                               | 5.03  | 20.23                              | 5.4   | 4.04  | .000 | 2.58   | 7.64  | 1.06     |
| SI       | 21.32                               | 5.74  | 26.27                              | 5.01  | 4.47  | .000 | 3.3    | 8.64  | 1.17     |
| HOP      | 26.94                               | 6.44  | 33.15                              | 6.67  | 3.90  | .000 | 3.31   | 8.63  | 1.02     |
| NSE      | 16                                  | 3.71  | 16.77                              | 4.87  | 0.627 | .533 | -1.51  | 2.89  | 0.16     |
| SP       | 80.71                               | 14.57 | 96.42                              | 13.42 | 5.35  | .000 | 11.45  | 25.12 | 1.4      |

Df = 58, Note: HA: Heroin Addicts; H: Hostility; SI: Suicidal Ideation; HOP: Hopelessness; NSE: Negative Self-Evaluation; SP: Suicidal Probability

considered their lives as useless and think that they are burden on this earth, that's why they have ideation to take their life. If the heroin addicts have low self-esteem, they are more likely to be dependent on drug [20]. Heroin Dependent can't control their emotions especially anger and express it inappropriately. According to Roy [10] 25% of psychiatric patients with the history of impulsive behavior are at risk for suicide [8].

Heroin Dependent Individuals with high and low depression have different levels of hopelessness. It is an overall dissatisfaction with life and generalizes negative expectations about future. These individuals see their lives negatively because they experience negative life events. They attribute these events as internal, stable and global. So they become depressed and hopeless [21]. There is no difference among both groups on the variable of negative self- evaluation. It is basically subjective feelings that things are not going well and others are distant and uncaring that is difficult to do anything worthwhile. Basically our society is underdeveloped. People are suffering from many problems and specifically addicts. They have greater financial and interpersonal problems. So this the reason that both groups have equal scores.

### Limitation

The study has some limitations related to small sample size and data collected from one city which generate the more generalizability issues. So future studies must be conducted with larger sample size.

### Conclusion

In conclusion, suicidal behaviors are highly prevalent among heroin addicts with comorbid depression. So, here is an urgent need for the mental health professionals to identify and address these issues. Specially, services for patients with Heroin addiction should include periodic screening for suicidal behavior along with psychiatric treatment and psychosocial support.

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