ORIGINAL RESEARCH ARTICLE

PSYCHOLOGICAL ASSESSMENT OF PATIENTS REFERRED TO THE PSYCHIATRY UNIT OF A TERTIARY CARE HOSPITAL WITH SUICIDE ATTEMPT

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ABSTRACT

Background: Suicide is a social burden and 3rd leading cause of death among the youth worldwide. A few studies have shown that Borderline personality disorder and Histrionic personality disorder are the most likely amongst the personality disorders to predispose patients to suicide. Not many studies have been focussed on the issues of deliberate self harm and the personality factors which predispose to these attempts, which seem to be more common than suicide attempts.
Objective: To study personality factors and the incidence of depression as well as the stressors in patients with suicidal attempt.
Results and Discussion: The subjects tended to be married, employed, and educated, with no female preponderance. There is low prevalence of depression (8/30, 26.6%) in the subjects in this study. Though all of were referred to the psychiatry unit for a "suicide attempt", the majority (26/30, 86.6%) of them did not show severe suicidal ideation on Columbia Suicide Severity Rating scale (CSSR).
Conclusion: Most of the patients referred from the Emergency Medical Department (EMD) tended not to be depressed and had low suicidal ideation and only scored averagely on the life events stress scale. This study also did not find any significant difference in the Personality traits as assessed on Clinical Analysis Questionnaire (CAQ) in the depressed and non-depressed groups, or between the severe ideation and not-severe ideation groups on CSSR.

Key Words: suicide, deliberate self -harm, personality, depression, stressors

INTRODUCTION

Suicide is among the top three causes of death among youth worldwide with a global mortality rate of 16 per 100,000. According to the WHO, every year almost one million people die from suicide and 20 times more people attempt suicide(1). India ranks 43rd in descending order of rates of suicide with a rate of 10.6/100,000 reported in 2009 (WHO suicide rates).[1]

Those who cause harm to themselves but survive can be distinctly put into two groups[2]:

- the 'failed suicide' group - constituting those who actually wanted to kill themselves
- the 'deliberate self harm' group constituting those who did not actually want to die

Deliberate self-harm is defined as the intentional injuring of one's own body without apparent suicidal intent. The prevalence rates for self-harm is thought to be an underestimation because the source is mainly hospital records as most of them may not report the incident. This may also include behaviours like addiction, reckless driving, dangerous sexual behaviour, repeated accidents and provoking others to attack. A sense of hopelessness, difficulty in controlling feelings of anger and hostility, and a tendency to aggression are frequently associated with self-harm[3]. These individuals are usually self-critical and over-sensitive to criticism.

The usual motives are: To die(4), Trial by ordeal(4), In response to symptoms(4),To escape(4) ,
Communication with other people(4),Cry for help(5), Relief of tension/ anxiety and Phantasy (of revenge/ rescue)(6,7,8,9)

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BACKGROUND

Majority of studies on risk for suicide have focused on Axis I diagnoses and demographics with relatively few focusing on Axis II disorders and personality

PERSONALITY AND ITS ASSOCIATION

The personality traits in relation to suicidality include a positive association with Neuroticism and a negative association with Extraversion(10,11,12). Features of the suicidal temperament include such personality traits as anger and aggression, impulsivity, anxiety proneness and low socialization, as well as being more depressed, psychasthenic and socially introverted(13). Suicide risk appears to be associated with extreme scores on personality traits extroversion, neuroticism, and openness to experience(14). Lower neuroticism and lower agreeableness were associated with higher

suicide rates and may be important risk factors for completed suicide but not suicidal ideation or attempted suicide.[15] On the other hand personality disorders, particularly Cluster B (emotional/erratic) disorders are often more clearly associated with risk for suicide attempts and completion[16]. In particular, some studies suggest hostility, a common trait of Cluster B disorders, is positively related to suicide attempts[17,18,19]. The personality disorder (PD) most highly associated with suicidality is Borderline PD[20,21]. Comorbidity with major depression is highly prevalent in borderline personality disorder[22]. The rate of personality disorders in subjects who have demonstrated acts of self-harm have varied from 7% to 64% [23,24] Skin cutting appears to be the most common form of deliberate self-harm,[22-31] Young adults are a particularly vulnerable group and currently show the highest rates of suicide the world over[32,33]. In the West, marriage is generally protective against suicide and can be explained by sociological theories based on marital status integration and social integration[34]. Marriage is not a strong protective factor for suicide attempts in developing countries[35-40].

SUICIDE vs. DELIBERATE SELF HARM

Sarkar et al., in an analysis of suicide attempters which distinguished between failed suicide group and deliberate self-harm group, found that, in the former, the attempts were planned, intentionality and lethality were high, and most attempted to conceal the act. The latter comprised adolescents and young adults who were unmarried and had emotionally unstable and/or histrionic personality traits. The attempts in this group were impulsive, of low intentionality and lethality, and most sought help after the attempt[27]. It appears that individuals who deliberately harm themselves do not differ in their capacity to experience positive affect, even though they have more pathological personality traits and a propensity for negative affect. Carroll-Ghosh et al. made a distinction between those who 'attempt' and those who 'complete' suicide in that those who attempt are more likely to be females, under 35 years of age, use low means of lethality (e.g. wrist laceration), do it in a setting where there are high chances of rescue, and usually suffer from adjustment disorder or personality disorder[41].

While multiple risk factors have been identified for suicide attempts, there is not as much that data about the reasons and more specifically the personality attributes which may trend or be over representative in patients with DSH as also with suicide attempts.

OBJECTIVES

1. Assessing the personality factors of the patients with suicide attempt/deliberate self-harm
2. Assessing the prevalence and degree of depression in the subjects
3. Studying the stressors and life events preceding the attempt

MATERIAL AND METHODS

This observational cross sectional study in Mediciti Institute of medical sciences, Ghanpur, Medchal, includes 30 consecutive patients referred to the psychiatry unit of a tertiary care hospital with an apparent suicide attempt and assessed using Columbia suicidal severity rating scale[CSSR][42], Hamilton depression rating scale[HDRS][43], Life event stress scale [LESS][44] and Clinical analysis questionnaire [CAQ-PART 1][45]. This study was approved by the Mediciti Institute of Medical Sciences Institutional Ethics Committee.

RESULTS AND DISCUSSION

. **Table 1: Socio demographic profile**

Variable	Number (N=30)
1.Gender	
Male	5
Female	15
2. Marital Status	
Married	18
Unmarried	12
3. Employment	
Employed	22
Unemployed	8
4. Education	
Literate	22
Illiterate	8

DEPRESSION AND SUICIDE ATTEMPT

It was seen that in most of the individuals (19/30), 63.33%, no diagnosis of depression could be made on clinical basis. Depression, being the most common condition associated with suicide attempts, is thus unusually low in this group. This may suggest that the attempts could be impulsive or manipulative.

Another surprising finding is the severity of depression in the third (11/30, 36.33%) of patients who met the DSM IV TR criteria for depression. When they were rated on the HAM D. 22/30 (73.3%) scored less than 8, making them non-depressed. Only 3/30(10%) were severely depressed on HAM D, which would be most expected to lead to suicide attempts. 5 patients (16.67%) were found to be moderately depressed. This finding is statistically significant, x^2=6.533, p-value=0.0106. The findings of this study are thus contrary to the findings in the literature , which report that 50% of patients suffered from one or other mental

illness, the commonest of which was major depression.[46]

Table 2: Clinical variables

Variable		Numbers (n=30)
Diagnosis (DSM IV-TR)	No diagnosis	19
	Mild Depression	3
	Moderate Depression	5
	Severe Depression	3
HAM D Scores	Normal	22
	Moderate	5
	Severe	3
CSSR SCORES	Severe suicidal intent	4
	Not severe suicidal intent	26
LESS Scores	Low Susceptibility	11
	Moderate Susceptibility	16
	Severe Susceptibility	3
Reasons for attempts	Spouse	10
	In-laws	3
	Finances	6
	Love failures	2
	Parental pressures	9

As this was a tertiary care hospital based study, all patients were first attended to at the Emergency medical department and subsequently referred to the Psychiatry unit. Though all of were referred to the psychiatry unit for a "suicide attempt", the majority (26/30, 86.6%) of them did not show severe suicidal ideation on CSSR. This finding is statistically significant, x^2=16.13, p value=0.0001.
Thus referrals from the EMD seem to have been lumped together as suicide attempts regardless of the severity of suicidal ideation.

The most common method that was employed by all of the suicide attempters and those who are not serious about the attempt was poisoning by an organo-phosphorous poison. Again, this is seen as more of a marker of serious suicide attempt than, for example, wrist slashing. However, in this study, this was the commonest method used even by those not scoring high on the CSSR.

Thus in this study even though most of the subjects would fall under deliberate self harm instead of the serious suicide attempt group, skin cutting which is reported in the literature as the commonest method in the deliberate self-harm group[22,25] has not been used by any patient in the study group.

The motives of the non serious attempters included trying to escape the situation or to manipulate them rather than dying and they were glad to have had survived, on assessment, they no longer wished to die and they discussed plans for their future. The minority, 3/30 (10%), of the attempters who were severely depressed had ideas of worthlessness, and consumed poison alone, in larger amounts, and made sure that they won't be rescued and had no guilt for the attempt and the main motive was to die. The problems with spouses and the parental pressure topped the list and the minor reasons were debts, failures in love and the problems with in laws. But demoralization, criticism, rejection sensitivity, public humiliation were the major concerns in these individuals. Out of the 4 patients who had severe suicidal ideation on CSSR, 3 scored >18 on HAM-D but this finding was not statistically significant, p=0.31.

These findings are consistent with the findings in the literature that a sense of hopelessness, sensitivity to criticism, are associated with the deliberate self harm group. [3]

STRESSORS AND SUICIDE ATTEMPT

On the life event stress scale majority, 16/30(53.3 %) of the individuals showed moderate susceptibility to the stressors but the study couldn't differentiate the serious and the non-serious attempters. Thus the study points out that there was no significant difference in life stressors between the serious and the non-serious attempters. This is in contrast to the studies which suggest that the marital conflicts, financial burden, form the major stressors for the severe suicide attempters. [47,48,49,50]

Those who had severe ideation were more severely depressed. Thus most of the patients referred from the EMD for an apparent suicide attempt actually had low suicidal intent and low depression.

PERSONALITY: The different dimensions of the personality on CAQ were compared with those having depression and those who are not depressed.
There was no difference between the depressed and the non-depressed groups on counts of WARMTH (high scores), INTELLIGENCE (lower scores), EMOTIONAL STABILITY (low scores), DOMINANCE (high scores), IMPULSIVITY (low scores), SELF DISCIPLINE (high scores), TENSION (average scores). On counts of CONFORMITY, the non-depressed group was relatively less conforming, while on BOLDNESS, the non-depressed group scored high, while the depressed group was split into both extremes.

This study thus fails to find any significant difference in the Personality traits as assessed on CAQ in the depressed and non-depressed groups. Non-significant differences on some counts surprisingly showed that the non-depressed group tended towards BOLDNESS and less CONFORMITY. The findings are also contrarian

to expectations in high scores on WARMTH, DOMINANCE and SELF-DISCIPLINE, and low scores on IMPULSIVITY. Only low scores on INTELLIGENCE and EMOTIONAL STABILITY tend to go with expected trends.

Table 3: Personality factors vs not severe attempts on CSSR: Total No. of patients – 26/30

Personality Factors	High	Average	Low
Warmth	12	6	8
Intelligence	-	2	24
Emotional Stability	3	7	16
Dominance	13	10	3
Impulsivity	-	9	17
Conformity	6	10	10
Boldness	12	8	6
Sensitivity	5	9	12
Suspiciousness	7	13	6
Imagination	2	6	18
Shrewd	11	11	4
Insecurity	6	5	15
Radicalism	4	7	15
Self Sufficiency	4	9	13
Self-Discipline	15	9	2
Tension	2	14	10

Table 4: Personality factors vs severe attempts on CSSR: Total No. of patients – 4/30

Personality Factors	High	Average	Low
Warmth	1	3	-
Intelligence	-	-	4
Emotional Stability	1	2	1
Dominance	2	1	1
Impulsivity	-	2	2
Conformity	-	3	1
Boldness	2	1	1
Sensitivity	1	3	-
Suspiciousness	-	4	-
Imagination	-	2	2
Shrewd	1	-	3
Insecurity	-	-	4
Radicalism	-	3	1
Self Sufficiency	-	2	2
Self-Discipline	3	1	-
Tension	1	1	2

If the different dimensions of personality traits as assessed on CAQ are compared between those with severe suicidal ideation on CSSR and those who did not have severe suicidal ideation that is between the serious attempters and the impulsive ones a similar pattern emerges. The non-severe ideation group, 26/30, (86.67%) tended to be low in INTELLIGENCE, low in EMOTIONAL STABILITY, with average to high TENSION, but, again surprisingly, high on WARMTH, DOMINANCE, BOLDNESS and SELF-DISCIPLINE, while scoring low on IMPULSIVITY and SENSITIVITY. Thus again, no clear distinguishing personality trait emerges that could set the non-severe ideation group apart from the severe-suicidal-ideation group. This is at variance in some findings in the literature that people with deliberate self-harm are found to be emotionally unstable and display histrionic personality traits.[27]

CONCLUSIONS

1. There is low prevalence of depression in the subjects in this study, with only 11 (33%) patients meeting DSM IV TR criteria for depression. This number further falls when rated on HAM –D, where 22/30 (73.3%) scored less than 8, making them non-depressed. Only 3/30(10%) were severely depressed on HAM D. These 3 patients were amongst the 4 patients who had severe ideation on CSSR scale. Thus most attempts seem to be impulsive or manipulative rather than true suicide attempts or even deliberate self-harm.
2. Though all of the patients were referred to the psychiatry unit for a "suicide attempt", the majority (26/30, 86.6%) of them did not show severe suicidal ideation on CSSR. Thus referrals from the EMD seem to have been lumped together as suicide attempts regardless of the severity of suicidal ideation.
3. The study shows that there was no significant difference in life stressors between the serious and the non-serious attempters.
4. This study did not find any significant difference in the Personality traits as assessed on CAQ in the depressed and non-depressed groups. Non-significant differences on some counts surprisingly showed that the non-depressed group tended towards BOLDNESS and less CONFORMITY. The findings are also contrarian to expectations in high scores on WARMTH, DOMINANCE and SELF-DISCIPLINE, and low scores on IMPULSIVITY. Only low scores on INTELLIGENCE and EMOTIONAL STABILITY tend to go with expected trends.
5. Comparison between the severe ideation and not-severe ideation groups on CSSR yields no clear distinguishing personality traits. The non-severe ideation group, 26/30, (86.67%) tended to be low in INTELLIGENCE, low in EMOTIONAL STABILITY, with average to high TENSION, but, again surprisingly, high on WARMTH, DOMINANCE, BOLDNESS and SELF-DISCIPLINE, while scoring low on IMPULSIVITY and SENSITIVITY.

LIMITATIONS

The study is observational and more analytic studies are needed to find out the correlation of these personality factors with the suicide attempt. The sample size is small in nature. Control sample is needed to find out the differences in personality between those who attempted suicide and those who did not .The study is done in a rural population and they may not be the representative of the whole population in general. The life event stress scale used in the study does not capture the main stressors the patients had in this study

FUTURE DIRECTIONS: This study raises questions about the apparent suicide attempts. All such cases are loosely clumped together as suicide attempts even in the absence of a strong suicidal ideation. This can have legal implications too including the question whether all such cases would fall under the same section and whether such cases should come under the IPC at all.

AUTHORS' CONTRIBUTIONS

Dr. Lakshmi Swetha Nekkanti conceptualized and designed the study. She was involved in acquisition of data, and with analysis and interpretation of data along with Dr Anurag Srivastava. She and Dr Anurag Srivastava drafted the article, and revised it critically for important intellectual content. She gave final approval of the version to be published and take public responsibility for appropriate portions of the content and agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Dr. Laksmi Swetha Nekkanti is the guarantor for this study.

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