

Original Research Article

Personality traits of patients with attempted suicide: a hospital based study

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ABSTRACT

Background: Personality disorders (PDs) are linked as unique contributors to suicide related outcomes and reflect important individual differences in predicting suicide attempts. Aim and objectives of the study were to find the personality traits and factors in patients of suicidal attempt in a tertiary care teaching hospital in Navi Mumbai, India.

Methods: A cross-sectional, observational study was conducted for a period of one year in the department of Psychiatry in a tertiary care hospital, Navi Mumbai, India. Hundred successive patients presents with history of attempted suicide that fulfilled inclusion criteria were taken up for the study and administered the international personality disorder examination (IPDE) scale for evaluation of personality traits. Each patient was informed about the purpose of interview; his/her consent was obtained and strict confidentiality was ensured. General description, demographic data and psychiatric history were recorded using the self-designed proforma and the IPDE.

Results: Consumption of organo phosphorus compounds (OPC) was the predominant method used for attempting suicide. A large number of patients perceived poor social support and had stressors preceding the attempt. Financial problems and problems with primary support being most commonly elicited stressors. Patients with borderline personality traits were significantly associated to re-attempt suicide between the period of 1 to 2 years. Cluster 'B' was the predominant personality profile observed in suicide attempters with the most predominant type being Borderline personality followed by Dissocial and Histrionic personality traits.

Conclusions: Borderline personality dominated the personality trait in patients with attempted suicide. Counseling, simultaneous psychotherapy and medication are necessary for management of maladaptive personality.

Keywords: Attempted suicide, Personality trait, Stressors

INTRODUCTION

Suicide is derived from Latin word for "self-murder". It is fatal act that represents the person's wish to die. There is a range, however, between thinking about suicide and acting it out. Some persons have ideas of suicide that they will never act on; some plan for days, weeks, or even years before acting; and others take their lives seemingly on impulse, without premeditation.¹ Shneidman classified non-fatal suicidal acts according to person's statements about his intentions to bring on his death as intentional, sub intentional, unintentional and contra intentional, the contra intentional group being excluded as they did not

take any risk but none of these terms could replace the more widely accepted term "attempted suicide".² Freud thought that the study of melancholia, i.e. of depressive illness with strong suicidal tendencies might provide the answer. He interpreted the urge to self-destruction as an attack against a loved person with whom the individual had identified himself. This theory implied that what appeared to be destruction was at least partly an act of homicide i.e. directed against another person. Up to this time aggression was regarded as a perversion of the sexual drive and as a reaction to frustration. Many aspects of the human behaviour could be understood as the result of the interplay between sexual drive and death instinct or

in psychological terms as the expressions of the interplay of love and hate.³ In all countries, suicide is now one of the three leading causes of death among people. Until recently, the suicide rate was highest for the elderly, but now suicide predominates in younger people, both in absolute and relative terms, in a third of all countries. During the past decade, there have also been dramatic and disturbing increases in report of suicide among youth.⁴

Suicide risk and protective factors and their interaction form the empirical base for suicide prevention. Risk factors are associated with the greater potential for suicide and suicide behavior. Mental disorders, previous suicide attempts, hopelessness and psychological pain associated with easy access to lethal methods constitute important elements in the precipitation of the suicide.⁵

The World Health Organization (W.H.O) launched the multi-site intervention study on suicide behaviors (WHO, 2002) to better understand the issue resulted to suicide and eventually to provide guidance on suicide prevention to both developing and developed countries.⁶ However, in India the figures available for the year 1990 were 8.9 per 100,000, a rise of more than 40% from 1978. There are large variations between the states. The mortality rate was 26.3/100,000 for Kerala, 117/100,000 for Bihar, and 50/100,000 for the Union Territory of Pondicherry.⁷ Recent epidemiological study in Bangalore yielded a figure varying from 33 to 35/100,000.⁸

In psychological sciences, the term stress is used to denote an influence that is disquieting or disruptive to a person's emotional status that cannot be mastered or encompassed within a reasonable period of time. In simpler form, a stress is an adaptive challenge or task. A distinction must be made between stresses that are necessary and essential part of living and stresses that may overwhelm the coping mechanisms available to a person and contribute to a maladaptive outcome like mental illness. Suicide is strongly associated with psychological stress causing mental illness.^{9,10}

Evidence on the relationship between personality traits and suicide is strongly emerging. Studies on the records of psychiatric patients with and without suicide attempt show that those who committed suicide possessed anger, aggression, anxiety, and depression personality profiles.¹¹

Depressed patients with borderline personality traits were characteristically vulnerable and had familial generalized anxiety disorder in comparison with other groups.¹² Borderline and narcissistic personality pathology are link as unique contributors to suicide related outcomes.¹³ There exist paucity of data in Indian literature on personality profiles in patients with attempted suicide. Therefore, this study was designed to find the personality traits and factors in patients with suicidal attempt in a tertiary care teaching hospital in Navi Mumbai, India.

METHODS

This was a prospective, observational, descriptive study conducted in the department of Psychiatry at a tertiary care teaching hospital in Navi-Mumbai. Ethical clearance was obtained from the Institutional Ethics Committee. The study duration was two year and was conducted from January 2012 to December 2013. The sample size included 100 patients surveyed during the study period.

The study included adult patients between the age group 18 to 60 years with history of attempted suicide and referred to Psychiatry Department for evaluation. Patients not willing for participation, informed consent, critically ill and accidental self-harm were excluded. Successive patients satisfying the inclusion and exclusion criteria were taken up for the study and administered the international personality disorder examination (IPDE) for evaluation of personality traits. Each patient was informed about the purpose of interview; his/her consent was obtained and strict confidentiality was ensured. The interview was conducted as soon as possible after the patient had satisfactorily recovered medically and was able to co-operate for the interview. Those patients referred to Psychiatry OPD for evaluation were interviewed in the outpatient department itself and other patients were interviewed in their respective wards of initial admission. General description, demographic data and psychiatric history were recorded using the self-designed study proforma and the IPDE.

Research instrument

1) Study case record /proforma: It consisted of a self-designed interview schedule to record the socio-demographic data, the psychiatric history including that of the suicide attempt, mode of suicide, causes / factors, the physical examination and International Personality Disorder Examination mental status examination.

2) IPDE: IPDE Screening Questionnaire is a self-administered form that contains 77 DSM-IV or 59 ICD-10 items. The patient responds either True or False to each and can complete the questionnaire in 15 minutes or less. The clinician can quickly score the questionnaire and identify those patients whose scores suggest the presence of a personality disorder. It has proven to be a user friendly and clinically tool for clinicians. It has demonstrated inter-rater reliability and temporal stability that is similar such instruments. It is semi-structured clinical interview in accordance with both ICD-10 and DSM-IV criteria that provides a means for arriving at diagnoses of major categories of persons.¹⁴

Statistical analysis

Data obtained was then entered in Microsoft excel and analyzed in Statistical Package for the Social Sciences (SPSS. version 17) for descriptive statistics.

RESULTS

In this study, one hundred (n=100) participants with attempted suicide were analyzed. Males were 54% (n=54) and females were 46% (n=46). Majority (68%) were young adults in the age group of 18 to 25 years. Married were 52% (n=52) and unmarried were 48% (n=48). In this study, organo-phosphorus compound poisoning (93%) followed by benzodiazepine overdose were the commonest mode of attempted suicide and 14% had history of previous suicide attempt in the past. Table 1 summarizes the characteristic and socio-demographic details of the participants.

Table 1: Characteristic and socio-demographic details of the participants.

Characteristics		Value (Percentage)
Participants with Attempted suicide		100
Age (years)	18-25	68 (68%)
	26-35	20 (20%)
	36-45	8 (8%)
	46-60	4 (4%)
Gender	Male	52 (52%)
	Female	46 (46%)
Marital status	Married	54 (54%)
	Unmarried	48 (48%)
	Divorce	0 (0%)
Family type	Nuclear	51 (51%)
	Joint	49 (49%)
Education	Illiterate	11 (11%)
	Primary	39 (39%)
	Secondary	25 (25%)
	Graduation	15 (15%)
	Post-graduation	10 (10%)
Occupation	Student	38 (38%)
	Salaried	33 (33%)
	Business	22 (22%)
	Unemployment	7 (7%)
Mode of suicide	Organo-phosphorus compounds	93 (93%)
	Benzodiazepine overdose	7 (7%)
History of stressors prior to the suicidal attempt	Yes	52 (52%)
	No	48 (48%)
History of previous suicidal attempt in the past	Yes	14 (14%)
	No	88 (88%)

In this study, 52% participants had history of stressors prior to the suicidal attempt, among which problems of primary support group and economic/finance was common. In this study, 68% had poor social support as perceived by the participants Table 2.

Table 2: Stressors prior to suicidal attempt and status of social support in the participants.

Characteristics		Value (percentage)
Stressors prior to the suicidal attempt	Economic/ finance	14 (14%)
	Support	13 (13%)
	Housing	11 (11%)
	Occupation	5 (5%)
	Environment	4 (4%)
Social support	Education	5 (5%)
	Poor	68 (68%)
	Good	32 (32%)

Table 3: Personality traits in participants with attempted suicide.

Personality profile		Value (percentage)
Cluster A	Paranoid	1 (1%)
	Schizoid	1 (1%)
	Schizotypal	0 (0%)
	Total	2 (2%)
Cluster B	Borderline	28 (28%)
	Dissocial	17 (17%)
	Histrionic	15 (15%)
	Impulsive	5 (5%)
	Total	65 (65%)
Cluster C	Anxious	15 (15%)
	Anankastic	11 (11%)
	Dependent	7 (7%)
	Total	33 (33%)
Grand Total		100 (100%)

The various personality profiles of participants with suicidal attempt as per the IPD are summarized in Table 3. Cluster 'B' were the predominant personality profile observed in the suicide attempters in this study, with the most predominant type being Borderline personality (28%), followed by Dissocial (17%) and Histrionic personality traits (15%). There was also a significant association ($P < 0.05$) between personality traits and past attempts interval, i.e. patients with borderline personality traits were significantly associated to re-attempt suicide between periods of 1 – 2 years.

DISCUSSION

Personality disorders (PDs) are frequently diagnosed in patients presenting with suicide risk suggesting that personality pathology may reflect important individual differences in predicting suicide attempts.¹⁵ In this study an attempt has been made to study the different types of personality profiles in patients of attempted suicide in a tertiary care hospital Navi Mumbai. Out of hundred cases of attempted suicide, sixty eight percent of the patients were in the age group of 18-25 years. This finding is similar to several other studies and suggests that

attempted suicide is a problem of young adults.¹⁶⁻¹⁸ There were predominantly more males (54%) than females (46%) in our study. This is similar to many Indian studies that have reported a preponderance of males as compared to females.¹⁹ Similar to other Indian studies, majority (52%) of patients of attempted suicide were married.²⁰ This suggests that, at least in the Indian context, marriage does not provide a buffer against suicide. Over half (51%) of the sample patients were from nuclear families. This is similar to the findings reported by Narang et al and Srivastava MK et al where patients from nuclear families were found to be vulnerable for suicide.^{20,21} Around 39% of the patients were educated only up to the primary level. This is similar to findings in many other Indian studies, which suggests lower educational achievement as a risk factor for suicide attempt.^{20,22} Prospective Western study support that the socio-demographic factors in suicide attempters did not differ from general population.²³

Contrary to study by Beghi et al, unemployment was not found to be a risk factor for suicide attempt.²⁴ Thirty-eight percent of the study sample patients were students, 33% were salaried, 22%, ran their own business and only 7% were unemployed. Low representation of unemployment in the sample study in contrast to Western study may be due to difficulty in its identification in agrarian rather than in industrialized countries and also that lower need of employment in students and in most females of the sample patients who were housewives.^{23,25}

Poisoning is the most common method of attempted suicide.^{26,27} As with the present study, where 93% patients had consumed organophosphorus compounds (OPC), most of the Indian studies also report that consumption of OPC as one of the commonest mode of suicidal attempts. This may be due to its easy availability especially in semi-urban and rural population.²⁵

Studies have shown that only a small number of people who make suicide attempt, commit suicide later.^{28,29} Present study too had only 14% patients with history of previous suicide attempts. Also all of these had only one previous attempt. But more importantly out of the total, 15% patients committed suicide again within a period of 1 month, 28% within 1 month to 1 year and 57% did so between a periods of 1 to 2 years. This suggests that previous attempts of suicide are one of the strongest risk factors of repeat suicide attempt.²⁴

Concurring with other Indian and Western data, there was high prevalence (50%) of stressors prior to the suicidal attempt with 14% having problems with primary support group and 13% having economic problems.^{25,26,30} This may be due to poor problem solving skills that leads to cognitive constriction and an easy way out approach through annihilation. The “psychic pain” could be too much to bear for the attempters such that suicide is looked upon as “one and the only solution” to solve their

problems. However the stressors may serve only as a precipitating factor and may not be a causal one.³¹

In present study, majority of suicidal attempter had low education and poor social support. The reason could be as suggested by Suppakitiporn et al, where they concluded that patients who were depressed and attempted suicide were more likely to report having fewer friends and low level of social support as compared to other suicide attempters.³²

Abnormal personality has been repeatedly shown to be an important risk factor for suicide attempts not only in Western but also many Indian studies.^{12,13,16,24,25,33} Cluster ‘B’ was the predominant personality profile observed in the suicide attempters this study, with the most predominant type being Borderline personality (28%), followed by Dissocial (17%) and Histrionic personality traits (15%). There was also a significant association ($P < 0.05$) between personality traits and past attempts interval, i.e. patients with borderline personality traits were significantly associated to re-attempt suicide between periods of 1 – 2 years. This suggests that symptoms of impulsivity in personality and especially borderline personality traits are strong predictors of a suicide attempt later on. It may act in many ways: by predisposing to major psychiatric disorders by leading to difficulties in relationship and social adjustment, by precipitating undesirable life events, by impairing the ability to cope with a psychiatric or physical disorder, and by drawing a person into conflicts with family members and others.²⁵

Limitation

The limitations of the current study were that the small sample size, cross sectional descriptive design and selection bias through studying at one single hospital. Further studies needs to be done on larger sample and associated risk factors need to be delineated.

CONCLUSION

In this study we found that suicide attempt was more common in young adult males. Consumption of organo phosphorus compounds (OPC) was the predominant method used for attempting suicide. A large number of patients perceived poor social support and had stressors preceding the attempt.

Financial problems and problems with primary support being most commonly elicited stressors. Patients with borderline personality traits were significantly associated to re-attempt suicide between the periods of 1 to 2 years.

Cluster ‘B’ was the predominant personality profile observed in suicide attempters with the most predominant type being Borderline personality followed by Dissocial and Histrionic personality traits.

Owing to the personality vulnerability of the suicide attempters, simultaneous psychotherapy and medication are necessary to manage maladaptive personality. Thus the above factors need to be focused upon, in the management, and, during the counseling sessions of patients of attempted suicide.

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