Original Article

# Attempted suicide in psychiatric emergency patients presenting at a tertiary care hospital

Srikumar[1*], Denzil A Pinto[2]

[1]PG Resident, [2]Professor, Department of Psychiatry, Father Muller Medical College, Mangalore, Karnataka, INDIA.
**Email:** srikumarharale@gmail.com

## Abstract

**Background:** India has been seeing a rise in deaths due to suicide in the recent years[1]. 17% of the 8, 00, 000 suicides committed worldwide every year are by Indians. The suicide attempts outnumber the completed suicides. This study aimed to evaluate the socio-demographic and clinical profile of patients of attempted suicide being admitted to a tertiary care hospital. **Material and Methods:** The participants were recruited from the patients being admitted at Father Muller Medical College hospital, Mangalore for deliberate self harm. The period of study was from May 2015 to July 2015. A total of forty (40) patients were recruited and evaluated using MINI Plus (Mini International Neuropsychiatric Interview Plus), SESS (Socio-Economic Status Schedule) and IPDE (International Personality Disorder Examination) for their socio-demographic and clinical profile. **Results:** All of the participants hailed from nuclear families with majority of the subjects being married (62.5%), holding a degree qualification (25%), being unemployed (35%), being Hindu by faith (75%), belonging to middle socioeconomic status (72.5%) and hailing from rural background (67.5%). Most common reasons/preceding events to deliberate self-harm were interpersonal problems with spouse (40%), followed equally by interpersonal problems with lover (22.5%) and interpersonal problems with family members (22.5%). The most common method of deliberate self-harm used was insecticide consumption (72.5%), followed by overdose of psychotropic drugs (10%).Up to 60% of the participants regretted the act and 90% denied having any future suicidal plans. Majority of the participants were diagnosed to have adjustment disorder (52.5%) and 60% were diagnosed with a personality disorder. **Conclusion:** Deliberate self harm was found to be significantly associated with presence of Personality disorder (<p=0.001), being in the age group of 18-30yrs(p<0.038), being married (p<0.042) and having interpersonal problems with spouse (p<0.025).

**Keywords:** attempted suicide, psychiatric morbidity, deliberate self harm.

[*]**Address for Correspondence:**
Dr. Srikumar, PG Resident, Department of Psychiatry, Father Muller Medical College, Mangalore, Karnataka, INDIA.
**Email:** srikumarharale@gmail.com
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## INTRODUCTION

World Health Organization (WHO) describes suicide as the act of killing oneself that results from an action or omission initiated with the intention of causing death and in the expectation of a fatal outcome[3]. "Deliberate Self-Harm" is defined by WHO as an act with non-fatal outcome, in which an individual deliberately initiates a non-habitual behaviour that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes which the subject desired via the actual or expected physical consequences. Suicide attempts are similar to suicides in the phenomenological characteristics, but differ only in the outcome being non fatal. Suicidal behavior per se has not been labeled as a disorder. However a majority of the cases are associated with different mental disorders, among which mood disorders (especially depression), substance use disorders (particularly alcohol dependence), schizophrenia, and personality disorders are the most common[4]. These disorders along-with other general medical conditions pose as risk factors for suicide. A history of attempted suicide is another factor that predisposes to future attempts. Suicides are rising in India. A majority of the suicides occur in the southern and eastern states where the rate is greater than 16 per lakh population[1]. Deliberate self-harm in India continues to be an unrecognized,

hidden, and a silent epidemic. Indian literature on the socio-demographic and clinical profile is conspicuous by its paucity. With this background, the present study was conducted to evaluate suicide attempts in the Indian set-up and look for any trends that may help in predicting such attempts in our patients.

## MATERIAL AND METHODS

This clinical study was conducted among the patients brought with deliberate self harm to Father Muller Medical College hospital, Kankanady, Mangalore. The period of the study was from May 2015 to July 2015. The cases met the following inclusion criteria: (a) Patients admitted for deliberate self-harm (b) Both male and female patients (c) Age group of 15-64yrs (d) Those who gave a written informed consent. The exclusion criteria for the cases were: (a) Patients deemed medically critical by the physicians to part take in the study (b) Patients in delirium (c) Patients with intellectual disability (d) Patients not willing to give consent. All the patients brought with deliberate self harm were first given emergency medical and surgical management as needed, in the emergency room. They were then shifted under the care of General Medicine department and a psychiatric referral was given as soon as the patients were deemed fit for interview. Forty such patients were recruited to the study through convenient sampling method. After explaining the purpose, method and design of the study, a written informed consent was obtained from all cases recruited for the study. The participants were assured of confidentiality. The socio-economic status of the participants was assessed using SESS. The clinical variables were recorded in a specially designed semi structured proforma. Every case was evaluated for psychiatric disorders using MINI PLUS and for personality disorders using the IPDE. Results were analysed using SPSS version 16.

## RESULTS

### Sociodemographic profile

In this study, the males (52.5%) and females (47.5%) were almost equal in distribution. All of the participants belonged to nuclear families. Most of the participants belonged to the 18-30yrs age group (47.5%). Majority of the participants were married (62.5%) and were holding at least a degree qualification (25%) 35% of the participants were unemployed, making them the majority in the sample. 75% belonged to Hindu faith. Majority belonged to middle socioeconomic status (72.5%) and hailed from a rural background (67.5%).

### Clinical features

The most frequently found reasons/preceding events to deliberate self-harm were interpersonal problems with spouse (40%), followed equally by interpersonal problems with lover (22.5%) and interpersonal problems with family members (22.5%). 62% cases reported that it was an unplanned suicidal attempt. Among the methods of deliberate self-harm used, most common was insecticide consumption (72.5%), followed by overdose of psychotropic drugs (10%).up to 60% of the participants regretted the act and 90% denied having any future suicidal plans.95% of the cases had no past history of suicidal attempts and 90% had no positive family history of suicidal attempts. Administration of the mini plus and ipde revealed that majority of the participants were having a diagnosis of adjustment disorder (52.5%), while 60% were diagnosed with a personality disorder.

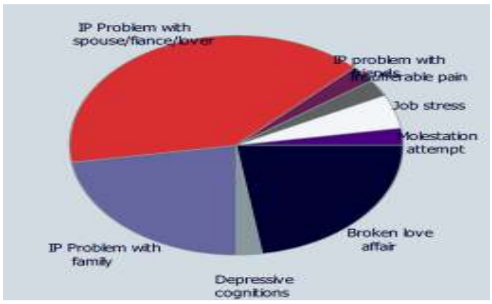


**Figure 1:** Reason/preceding event to the suicidal attempt

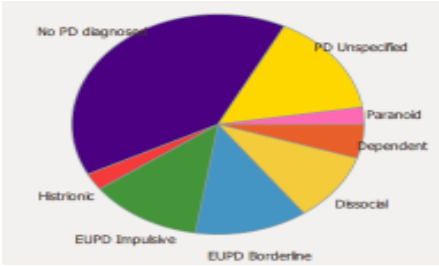


**Figure 2:** IPDE results

**Table 1:** Statistically significant associations were found between suicidal attempts and the following clinical variables:

| Clinical variable | p value |
|---|---|
| Personality disorder present | p=0.001 |
| Age 18-30 years | p<0.038 |
| Married | p<0.042 |
| Strained IPR with spouse | p<0.025 |

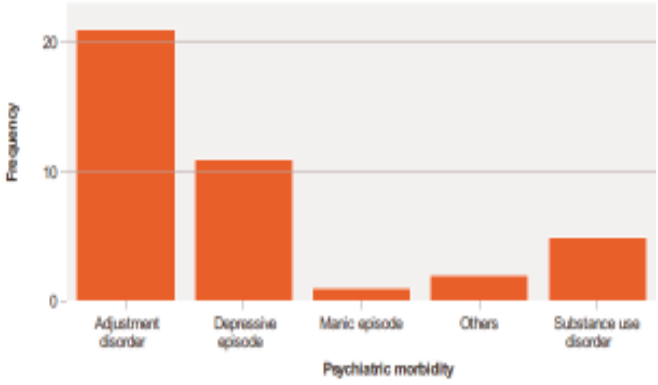


**Figure 3:** Distribution of psychiatric disorders

## DISCUSSION

The present study is an observational, analytical, cross sectional, clinical study. This study presents the findings seen in forty patients at a tertiary care hospital referred to psychiatry consultation-liaison services for psychiatric evaluation. The data obtained is consistent with a few earlier studies. No much gender difference is noted in the patients presenting with suicide attempts. This is in keeping with the findings of Nilamadhab Kar[6] and Partha Praatim Das *et al*[7]. 47.5% i.e., the majority are aged below 30yrs of age. Similar findings are seen in other Indian studies by Chandrasekaran *et al*[8], Ponnudurai *et al*[9] and Venkoba Rao[10]. 62.5% of participants were married. This is similar to findings of a multi-national study by Fleischmann *et al* who find that Indian patients who attempt suicide are more likely to be married[11]. All the participants belonged to nuclear families, which are prone to have less stronger support system than joint families. Thus they may be a risk factor. However in the absence of a control group, any such findings can be deemed presumptuous. Consumption of insecticides is the most common method of attempting suicides in the study. Latha *et al*[12] and Adityanjee *et al*[13] also report the same. The ease of access to insecticides is also part of the problem. Future laws need to address this aspect. The most frequent preceding event to suicide attempt is interpersonal problems with spouse, in the current study. Siwach and Gupta[14] also find that marital disharmony is the most frequent reason reported. This is followed equally by interpersonal problems with lover (22.5%) and interpersonal problems with family members (22.5%). Thus, any suicide prevention plans should address these key areas. All forty participants were diagnosed with psychiatric disorders. This is not in keeping with other studies. Parker *et al*[15] find that up to 45% of suicide attempters in the Indian setup don't meet any psychiatric diagnosis. This difference could be because of the small sample size of just forty cases. Also the inclusion of personality disorders and substance abuse disorders in the evaluation tends to diagnose more participants as having a psychiatric disorder. Parker *et al*[15] also find that adjustment disorder is the most common diagnosis in such patients. At 52.5%, this is the most common diagnosis found even in the current study. Thus the findings are in keeping with prior studies.

## LIMITATIONS AND CONCLUSION

Our study has some limitations. Since the sample size is small, the findings cannot be extrapolated to the general population. Suicidal intent and other clinical information was not evaluated at the time of the attempt but rather later when the patient was medically stable. The samples were recruited through convenient sampling, which can affect the findings. In conclusion, suicide attempts were found to be significantly associated with presence of personality disorder, in the age group of 18-30yrs, in married persons and in those having marital disharmony. These associations need to be explored in clinical interviews of potential suicidal patients during emergency psychiatric referrals and otherwise.

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