

Original Research Article

Attempted suicide: An observational study at Medical College Psychiatry OPD

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	International Archives of Integrated Medicine, Vol. 4, Issue 10, October, 2017. Copy right © 2017, IAIM, All Rights Reserved. Available online at http://iaimjournal.com/
	ISSN: 2394-0026 (P) ISSN: 2394-0034 (O)
	Received on: 07-10-2017 Accepted on: 12-10-2017 Source of support: Nil Conflict of interest: None declared.
How to cite this article: S. Sukumar. Attempted suicide: An observational study at Medical College Psychiatry OPD. IAIM, 2017; 4(10): 181-187.	

Abstract

Introduction: Acts of self-injury and self-poisoning that have not resulted in death are described by various terms such as attempted suicide, parasuicide, and deliberate self-harm. Due to the wider utility in various studies, the term attempted suicide is used in this study also. While suicide attempt is defined as intentional self-inflicted poisoning, injury or self-harm which may or may not have a fatal intent or outcome the term attempted suicide is used here for patients who have completely recovered from their attempt and referred for psychiatry opinion.

Aim: Aim of the study was to evaluate the socio-demographic factors, methods of the attempt, psychiatric morbidity, and other causes of attempted suicide.

Materials and methods: Victims of attempted suicide who were treated and referred from general medicine inpatient care for a regular psychiatric opinion were selected for this study. In the planned period of 3 months span 102 consecutively referred individuals were assessed. Through unstructured, comprehensive clinical interview individuals were evaluated and psychiatric diagnoses were made by using ICD-10-criteria. Datas were entered in a self-structured proforma, results were analyzed.

Results: Women (63%), less than 30 years of age (74%), married persons (66%), studied up to secondary and higher secondary education (62%), rural population (80%), semi-skilled workers including housewives (60%), outnumbered others. 21% had a family history of suicide. 13% have attempted in the past. 56% have attempted through organophosphorus and natural plant poisoning. 39% had psychiatric morbidity. Depressive, alcohol, personality disorders were common. 57% of suicidal attempts have resulted from Dysfunctional family living in the form of Interpersonal conflicts and quarrels.

Conclusion: Although identifying and treating the psychiatric condition is an immediate need, addressing the Healthy family functioning through school level educational and community level programmes would have long term impact on preventing suicidal attempts.

Key words

Suicidal attempts, Depression, Dysfunctional family living.

Introduction

It is well acknowledged that a prior suicide attempt is the single most important risk factor for suicide in the general population. Suicide thrashes demoralizing impact on survivors and the nearby population. Suicide attempt alarms an anguish inquest by the family members and treating clinicians. While suicide is felt as a socioeconomic loss, suicide attempts result in a significant social and economic burden for both families and communities due to the utilization of health services to treat the injury. Suicide attempts are as equal as and more complex than other mental disorders in 'Biopsychosocial' perspective. It would be evident by the psychosocial and sociocultural intervention programs articulated in the WHO report -2014 on suicide prevention. For both suicide and suicide attempts improved availability and quality of data from vital registration, hospital-based systems, and surveys are required for effective suicide prevention. The prevalence, characteristics, and methods of suicidal behavior vary widely between different communities, in different demographic groups and over time [1]. According to WHO world mental health surveys 2008, the global annual prevalence of self-reported suicide attempt is approximately 4 per 1000 adults. In 2012, the estimated global suicide rate was 15.4 per 100,000 adults (18 years and above). WHO report 2014 on suicide prevention has alarmed suicide as the second leading cause of death in 15-29 years age group. And it adds that there are indications that for each adult who died of suicide there may have been more than 20 others attempting suicide. It is said that most of the low and middle-income countries including India, China, Pakistan lack the administrative and medical resources needed to implement a comprehensive death registration system [2]. In terms of suicide prevention policy, only 28 countries are known to have national suicide prevention strategies worldwide. It is noted that in high income countries mental

disorders were reported in 90% of suicides whereas mental disorders were less prevalent (around 60%) in some Asian countries (India, China). The reported rates of mental disorders in attempted suicide are highly variable. Apart from mental disorders interpersonal problems and other socioeconomic factors are reported as a cause for attempted suicide [3]. In our Medical College Hospital rarely a day goes without a referral of attempted suicide from General Medicine inpatient care to our psychiatry OPD. Often the evaluation ends up with a pacifying, educative and corrective role by the consulting psychiatrist. On and off psychiatry diagnosis would be met by the patients but occasionally they come for follow-up treatment. In the view of our local situation and under the purview of the global burden this study - as a tip of an iceberg at the district level - aimed to assess the socio-demographic factors and clinical profile of referred patients to our psychiatry OPD.

Materials and methods

This study was conducted at the psychiatry Outpatient Department, Govt. Dharmapuri Medical College hospital, Dharmapuri, one of the rural district in Tamil Nadu state. The study was approved by the ethical committee of our institution. The suicide attempters, who were treated at General Medical ward and referred for psychiatry opinion were taken up for the study. Informed consent was obtained from the individuals. The study period was planned for 3 months, started on 14th April 2017 and ended on 14th July 2017. In that 3 months period, a total number of 102 patients were referred to our outpatient department. These 102 consequently referred individual were evaluated along with their family members. The evaluation was done by unstructured comprehensive clinical interview method and findings were recorded in a self-structured proforma. Psychiatric diagnoses were made by using ICD-10 criteria. Results were expressed in proportions and percentages.

Results

The study population encompassed from 12 years old female child to 60 years old male. Among the 102 individual, 63% were women population and 37% were men. 74% of study population belonged to 10-30 years age group. In that group women (75%) have attempted more than men (25%). 26% of the study population belonged to 30-60 years age group. In this age group, men (70%) have attempted more than women (30%). 66% of the study population were married. Among the married individual's women (64%) have attempted more than men (36%). Adolescents were 19%, unmarried adults were 15% and one female child was in pediatric age group (12 years old). 60% were doing semiskilled work including housewives. Students represented 20%. 14% were doing skilled and professional work and 7% were currently not doing any work. 26% had family history of suicide and suicidal attempts in 1^o and 2^o relatives. 42% had a family history of alcohol dependence in 1^o and 2^o relatives. 13% had past history of suicidal attempt and self injures behaviors in the form of delicate superficial forearm cuts. 56% have attempted with organopharous compounds and natural plant poisons such as oleander seed, oduvan leaves, and Datura. 14% have attempted through domicallary chemical agents such as ant killer, mosquito repellents, cockroach killer, phenol, head house lotion, cow dung powder and banner paste. 13%each have attempted thro rodenticide and tablets. 39% were found to have psychiatric morbidity which included both disorders and subclinical conditions. Depressive disorders, Alcohol dependence, personality disorders, were common and each contributed around 10%.

Among the Depressive disorders, 2 persons had their depression secondary to General medical conditions- Chronic skin disease, Rheumatoid arthritis. One Patient of untreated schizophrenia has attempted due to intolerable auditory hallucinations. 5 persons reflected acute stress reaction. These reactions were brought by failure in exam, faithlessness in love, allegation on faithlessness by a spouse, fear of beating on the loss of jewel. 56% have attributed interpersonal conflicts, coercive criticism, quarrels as the reason for their attempt. Conflicts over working place, residing place, economical or land dispute and on alcohol use, were found between husband and wife. Conflicts over the unmet demand of bike, school or college joining/preferences, on late coming, on love affairs or on marriage proposals were found between parents and adolescents. Critical scolding by parents over unattended household work, misuse of mobile, behaviors with opposite sex have resulted in suicidal attempts in adolescent daughters. Critical scolding by parents on irregular work or not going to work, alcohol use and on peer group relationships have resulted in suicidal attempts in adolescent sons. Criticism by mother or father-in-laws on improper work or on conduct resulted in a suicidal attempt in daughter- in- laws. The frequent quarrelsome behavior by alcoholic husbands has resulted in suicidal attempts in working wives and housewives. 4 persons were either hesitant (or) attributed nonspecific abdominal pain as a reason for their attempt which was concluded as denial of reasons. One healthy adolescent daughter was co-poisoned by mother upon a quarrel with husband (**Table – 1 to 9**).

Table – 1: Age and Sex distribution among patients.

Age (Years)	Male	Female	Total	Percentage
10-20	8	25	33	32%
21-30	11	31	42	41%
31-40	8	6	14	14%
41-50	6	1	7	7%
51-60	5	1	6	6%
Grand Total	38(37%)	64(63%)	102	-

Table – 2: Marital Status and others among patients.

	Male	Female	Total	Percentage
Married	24	43	67	66%
Unmarried	10	5	15	15%
Others				
Adolescents	5	14	19	19%
Paediatric age	-	1	1	0.9%

Table – 3: Occupational Status among patients.

	Number	Percentage
Housewives	31	30%
Semiskilled labour	30	29.4%
Skilled Job	10	10%
Professionals	4	4%
Students	20	20%
Not working	7	7%
Total	102	

Table – 4: Residential Area.

Residential Area	Number	Percentage
Rural	82	80.4
Semi urban	15	15%
Urban	5	5%
Total	102	

Table – 5: Past history of psychiatric morbidity.

Suicidal Attempt in the past	8	8%
Self-injurious behaviour (Delicate superficial forearm cuts)	5	5%
Alcohol dependence	1	0.9%
Oppositional defiant disorder	1	0.9%
Reading Disorder	1	0.9%

Table – 6: Family history of Psychiatric Morbidity.

	No.	Percentage
Suicide	21	20.5%
Attempted Suicide	6	6%
Alcohol dependence	43	42%
Psychotic disorder –unspecified	4	4%
Absconding behaviour (whereabouts unknown)	7	7%
Total	81	79.4%

Discussion

This study observed the socio-demographic factors, mode of attempts and assessed the psychiatric morbidity in the referred suicide attempters. The findings of this study are in

accordance with other Indian studies [4, 5]. In this study majority of the suicide attempts were below 30 years of age (74%). Similar observations were made in many Indian studies [5, 6]. Female predominance (63%) was

observed in this study, which is in accordance with the findings in earlier studies from India [6]. Contrary to the above, male gender preponderance was observed from earlier Indian studies [7]. Gender neutrality was also reported. In this study, married persons (66%) represented more than unmarried. Similar findings were observed in earlier many Indian studies [8].

Table – 7: Mode of Attempt of suicidal attempts by patients.

		No	Percentage
I	Organophosphorus Compounds	35	34.3%
II	Natural Plant poisoning Oleander seeds -15 Oduvan leaves -7 Datura and others-3	25	25 %
III	Domiciliary chemical agents Ant Killer-4 Mosquito repellents-3 Cockroach killer-1 Phenol-2 Cowdung powder-2 Head louse lotion -1 Banner paste-1	14	14%
IV	Rodenticide	13	13%
V	Tablets	13	13%
VI	Hanging	1	0.9
VII	Others (Self-injection)	1	0.9
	Total	102	

Table – 8: Psychiatric Morbidity.

		No	Percentage
I	Mood Disorders	10	10%
	1. Depressive episode-5 (Mild to moderate) 2. Dysthymia-5		
II	Alcohol-related morbidity	13	13%
1.	Alcohol dependence	7	
2.	Harmful use of alcohol	6	
III	Personality-related morbidity	11	11%
1.	Emotionally Unstable personality disorder- Borderline type.	6	
2.	Personality disorder - unspecified	1	
3.	Emotionally unstable Personality traits	4	
IV	Schizophrenia	1	0.9%
V	Acute Stress Reaction	5	5%
	Total	40	39%

Predominance in unmarried persons also reported in few studies. In married group female predominance and in unmarried group male predominance was noted as in other studies [9]. The majority (62%) of the subjects were studied up to secondary and Higher secondary education.

Only 13% have studied diploma (or) degree course. Similar findings were found in other studies whereas majority were found to have less than 10th std in other studies [10]. Housewives and semiskilled workers represented 60% of the subjects. Students were found to be 20% similar findings were found in other studies [11]. 13% of the subjects had past history suicide attempt whereas other disorders represented 3% which is similar to the finding in few studies [12]. 20.5% of the subjects had a family history of suicide in their 1° and 2° relatives which is similar to the findings observed [5]. 42% of the subjects had a family history of alcohol dependence in their 1°&2° relatives. Taken together of other disorders overall 79% of the subjects had a family history of psychiatric morbidity. As widely known in this study also organophosphorus poisoning was the predominant mode of attempt represented 34.3%. 25% of the subjects attempted thro natural plant poisoning. 13% each represented by Rodenticides and tablet poisoning. As most of the subjects were from rural areas OPC and natural plant poisoning represented more due to easy availability. The same trend was found in other Indian studies [13]. Psychiatric morbidity including disorders and subclinical conditions were found in 39% of the individuals. If

subclinical conditions such as the Harmful use of alcohol, Borderline personality traits and transient conditions such as Acute stress reaction were excluded 24.5% had mental disorders that were in need of regular follow-up treatment. This trend of psychiatric morbidity around 20-30% was found in other studies also [4, 5]. Contrary to the above findings around 50-60% morbidity were reported in other studies [10, 11]. The 57% reported a study of R.L. Narang, et al. have included patients with fatal outcome also. The 46% morbidity reported in R.C. Sharma study the study population included both medical ward and psychiatry OPD [14]. The 62% morbidity reported study by R.C Gupta, et al. the study population included patients from psychiatry ward and medical ward and diagnoses were made by DSM III [15]. In this study Interpersonal conflicts, criticism, scolding, and quarrels have represented 57% of the subjects as a cause for their attempt. The same findings of more of Interpersonal conflicts than psychiatric morbidity have been reported in many studies [5, 7]. In this study, 80% of the subjects are from the rural area. Although same rural population represented more in other studies. This rural and urban representation appears to depend on location of the Institution [16].

Table – 9: Dysfunctional Family Living and Others.

		No	Percentage
I	Interpersonal Conflicts	28	27%
	1. Between Husband & Wife-13 2. Between Parents & Children-12 3. With others-3		
II	Interpersonal coercive criticism & scolding	23	22%
	1. Criticism & scolding by parents-14 2. Criticism & scolding by in-laws-8 3. Criticism by Others -1		
III	Alcohol-related quarrels	6	6%
IV	Others		
	1. Passive attempter -1 (Copoisoned by mother) 2. Denial of reason-4		
	Total	57	56%

Conclusion

This study is confounded by its limitations. The sample size is small and the study population also confined to psychiatry OPD. Even though no standardized scales have been used the results are found to be on par with other similar studies. Although hospital-based data on medically treated suicide attempts may not give the true picture of the community this study may be helpful in addressing the evaluations of suicide attempters for both General medicine psychiatry professionals.

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