

RISK FACTORS FOR REPEATED SUICIDAL ATTEMPTS: A 6 –YEAR RETROSPECTIVE STUDY AT JOS UNIVERSITY TEACHING HOSPITAL, JOS.

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ABSTRACT

Background

Among patients who have attempted suicide, the risk of later suicide is much increased and mortality due to suicide has continued to increase over the years both in developed and developing countries. Few studies in this environment have looked at the risk factors and psychiatric morbidity among patients with repeated suicidal attempts.

Objective

The objective of the study is to determine the risk factors for repeated suicidal attempts among patients with attempted suicide.

Method

This is a retrospective study of all patients that presented with a diagnosis of attempted suicide at the emergency unit of Jos University Teaching Hospital (JUTH) between January 2002 and January 2008.

Results

During a 6-year period, 57 patients presented with suicidal attempts. Sixteen were males and 41 were females, twenty-four have had at least one previous attempt of suicide. There was no statistically significant association between any of the sociodemographic variables studied i.e. marital status, occupation, recent problem with a sexual partner, family history of suicide and repetition of suicidal attempts. However, a statistically significant association was found between repeated suicidal attempts and depression ($\chi^2 = 9.61$, $P = 0.008$). Forty (70.2%) patients reported the use of psychoactive substances notably alcohol but there was no statistically significant association between substance use and repeated suicidal attempts ($\chi^2 = 1.63$, $p = 0.44$).

Conclusion

This study revealed that psychiatric disorders are risk factors associated with repeated suicidal attempts. Therefore, early detection and treatment of such disorders is necessary in the management of patients with attempted suicide.

Key words; Suicidal attempt, Risk factors,

INTRODUCTION

Over the last 45 years, mortality due to suicide has increased in some developed and developing countries among both adults and young people^{1,2}. Suicidal attempts are also 10-40 times more frequent than completed suicide, depending on age, sex and location.³

Suicidal attempts and other acts of self harm that result in non-fatal injuries take a heavy toll on the health of younger persons. Therefore, reduction of the overall suicide rate as well as the number of suicidal attempts is among the 2010 national health objectives.⁴

Compared with the general population, people who attempted suicide are more likely to have experienced stressful life events before the act particularly a recent quarrel with a spouse, girl friend or boy friend.^{5,6} Other events include separation from or rejection by a sexual partner, illness of a family member, physical illness and a recent court appearance.^{5,6}

Many patients who attempted suicide have some affective symptoms, and personality disorder has been reported in about a third to halve of such patients.⁷⁻⁹ Among patients who have intentionally harmed themselves, the risk of later suicide is much increased. For example, in the first year after suicidal attempt, the risk of completed suicide is 100 times that of the general population, also 35-50% of cases with

completed suicide reported a history of previous deliberate self harm and having a history of suicidal attempt also predicts a further attempt.^{9,10}

Other risk factors for repeated suicidal attempts are; a history of psychiatric disorder, personality disorder, having a criminal record, abuse of psychoactive substances, unemployment and lower socioeconomic status.^{9,10} Among alcohol dependent patients, risk factors for suicidal attempts have been identified to include; female sex, family history of suicidal behaviour, childhood trauma and long duration of heavy drinking.¹¹

SUBJECTS AND METHOD

All the patients with the diagnosis of attempted suicide at the emergency unit of the hospital between January 2002 and January 2008 were included in the study using records available in the hospital. Their sociodemographic profile, history of previous suicidal attempts, family history of suicide, evidence of a co-morbid psychiatric or medical condition, and history of alcohol or other psychoactive substances use were obtained from the patients' records. The data was analyzed using the SPSS version 13.0 statistical software for windows. The significance of observed difference was determined by chi-square tests and a p-value of <0.05 was considered statistically significant.

RESULTS

A total of fifty-seven patients presented with attempted suicide between January 2002 and

January 2008. Forty-one (71.9%) were females and 16(28.1%) were males. Eleven (19.3%) were married at the time of committing the act, 37(64.9%) were unemployed, 30(52.6%) reported a recent problem with their sexual partners and 24(42.1%) had a history of previous suicidal attempt or attempts.

Twenty-nine (50.9%) were abusing alcohol and 11(19.3%) reported the abuse of other psychoactive substances notably cannabis. Forty-two (73.7%) patients were diagnosed with a co-morbid mental disorder with depression representing 76.2% of the diagnosis. Other

diagnoses included; personality disorder, anxiety disorders, and somatoform disorders. Similarly a co-morbid diagnosis of physical illness like Human Immunodeficiency Virus Infection was found in 13 (22.8%) of the subjects.

There was no statistically significant association between repeated suicidal attempts and any of the sociodemographic variables studied as depicted in Table I. However, a statistically significant association was found between repeated suicidal attempts and co-morbid diagnosis of a mental disorder particularly depression ($\chi^2=9.610$, $df =2$, $p=0.008$) as illustrated in Table II.

TABLE 1: Sociodemographic Variables and Risk of Repeated Suicidal Attempts

VARIABLES	PREVIOUS ATTEMPTS	NO PREVIOUS ATTEMPTS	STATISTICS
1.MARRITAL STATUS			
a .Married	4	7	$\chi^2=0.252$ df =2 p =0.882
b. Single	10	14	
c. Divorced	10	12	
TOTAL	24	33	
OCCUPATION			
a. Employed	11	9	$\chi^2=2.102$ df =1 p=0.147
b. Unemployed	13	24	
TOTAL	24	33	
RECENT PROBLEM			
a. Present	11	19	$\chi^2=0.768$ df=1 p=0.381
b. Absent	13	14	
TOTAL	24	33	
FAMILY HISTORY OF SUICIDE			
a. Present	5	6	$\chi^2=0.068$ df=1 p=0.802
b. Absent	19	27	
TOTAL	24	33	

TABLE II: Relationship between Substance Abuse, Other Mental Disorders and Organic Illnesses with Repetition of Suicidal Attempts

VARIABLES	PREVIOUS ATTEMPTS	NO PREVIOUS ATTEMPTS	STATISTICS
1.SUBSTANCE ABUSE			
a. Alcohol	14	15	$\chi^2=1.627$ df=2 p=0.44
b. Other substances	5	6	
c. No substance	5	12	
TOTAL	24	33	
2.MENTAL DISORDERS			
a. Depression	19	13	$\chi^2=9.610$ df=2 p=0.008
b. Other disorders	3	7	
c. No disorder	2	13	
TOTAL	24	33	
3.PHYSICAL ILLNESS			
a. Present	4	9	$\chi^2=0.888$ df=1 p=0.346
b. Absent	20	24	
TOTAL	24	33	

DISCUSSION

Out of the 57 patients studied, 24(42.1%) had at least a previous attempt at suicide. None of the Sociodemographic variables studied showed a statistically significant association with repetition of suicidal attempt. This finding is at variance with other studies, for instance Kreitman and Appley found certain sociodemographic variables like unemployment and lower social status to be associated with repeated suicidal attempts^{9,10} but the lack of association in this study could be related to the differences in the study design and the sample size, hence a larger population may

be needed to generalize the findings of this study.

In this study, 80.7% of the subjects were not married, this may be due to the fact that marriage serves as a protection against suicidal attempt/attempts since highest rates for both men and women are reported among the divorced and the single.^{6,13} This study however, could not demonstrate any statistically significant association between marital status and repeated suicidal attempts. Similarly, the study also fails to show any significant relationship between a recent problem with sexual partner as well as a family history of suicide and repeated suicidal attempts. This is in contrast to the

findings by Paykel et al, and Bancroft et al, which showed that recent events and stressful life problems like a recent quarrel with the sexual partner are associated with the risk of repeated suicidal attempts.^{5,6} The finding in this study may be related to the concealment of such act (suicidal attempts, history of mental disorder and conflict with sexual partners) in our culture and the site of the study since a selected category of people with suicidal attempt/attempts may likely present in the tertiary hospital with majority either overlooked or treated at the peripheral hospitals.

Forty (70.2%) of the subjects studied reported the use of psychoactive substances notably alcohol, a finding which suggested the use of psychoactive substance in patients with suicidal behaviour. However, there was no statistically significant association between the abuse of psychoactive substance and repeated suicidal attempts. This is at variance with the finding by Hawton et al, that showed the use of psychoactive substances to be associated with the risk of repeated suicidal behavior¹⁴. This is because most patients with both single and previous episodes of attempted suicide reported the use of psychoactive substances.

Majority (80.2%) of the patients did not have any co-morbid organic illness but the limitation and the high cost of investigations in this environment could be responsible for the under diagnosis of physical disorders among the study subjects. The diagnosis of a mental disorder particularly depression was observed to be associated with repetition of suicidal behaviour. This is in support of other studies that found mental disorders as risk factors for suicidal attempt/attempts⁷⁻¹⁰. Mental disorders especially mood disorders are known to be associated with cognitive distortions, guilt feelings, hopelessness and pessimistic thoughts leading to suicidal thoughts and attempts. It is therefore recommended that psychiatric diagnosis must be sort for in patients presenting with suicidal behaviour in order to avoid or forestall the risk of repeated suicidal attempts.

Conclusion

This study revealed that psychiatric disorders are risk factors associated with repeated suicidal attempts. Therefore, early detection and treatment of such disorders is necessary in the management of patients with attempted suicide.

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