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SUICIDE ATTEMPTS IN A NIGERIAN MILITARY SETTING

G.T. Okulate, MBChB, FMCPsych (Nig), FWACP, Chief Consultant Psychiatrist, Military Hospital, Yaba, P.O. Box 8869, Shomolu, Lagos State, Nigeria

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G.T. OKULATE

ABSTRACT

Objectives: To describe the characteristics of patients who attempted suicide in a military setting and to examine the differences between the suicide attempters and a group of non-suicide, affective disorder patients.

Design: Fifty one consecutive cases of suicide attempts were studied using a questionnaire which inquired about demographic characteristics and suicide related issues such as method of attempt used and giving a notice. The suicide attempt group was then compared with a control group who had no history of attempted suicide.

Setting: Department of Psychiatry, Military Hospital, Yaba, Lagos, Nigeria, which is a 500-bed military general hospital.

Subjects: Fifty one attempted suicide patients. Intervention reports on intervention methods applied were not within the scope of this report.

Main outcome measures: These were also not within the scope of the present study.

Results: Suicide attempt patients constituted 0.37% of all admissions during a five-year period, and 60.8% of them were under the age of 30 years. The numbers of male and female patients were approximately the same. Depression and acute stress reaction were the commonest diagnoses. While military dependants most commonly ingested substances in their suicide attempts, military personnel most often used more violent methods including hanging and self-stabbing, but none used firearms. Compared with non suicide patients, suicide attempt ones were more likely to be unmarried and to have a family history of mental disorder but less likely to have lost a parent through death before the age of 18 years.

Conclusions: The need for a more controlled access to substances capable of being used for self-destruction was highlighted. The need for emergency room doctors to become more skilful in the identification and assessment of suicide attempt patients was also emphasised.

INTRODUCTION

Suicide attempts are of extremely serious public health concern in all societies even though they tend to be under-reported(1) especially if they are not life threatening(2) and because of the associated stigma. Under-reporting and other sources of inadequate gathering of statistical information often lead to grossly low incidence rates being reported(3). Various risk factors have been associated with suicide attempts. These include female gender, being young and being single(4), being depressed(5), and having made previous attempts(6).

The Nigerian military population is essentially a youthful population, particularly because of the continual active demobilisation of the older soldiers. Together with their dependants who often include extended relations, military personnel mostly live within multi ethnic, multi religious barrack communities. Although the military enforces its own values, prevalent cultural multiplicity often results in values dilution. Frequent paternal absences on account of military duties complicate the loosening of family ties and family cohesion. This has become even more important since the active involvement of Nigerian troops in peace-keeping operations in Liberia and Sierra-Leone.

Studies on suicide attempt in Nigeria especially in the youths are very few, and have mostly reported on the characteristics of suicide attempters(2,7). However, despite its peculiarities, no report of similar nature is available about the Nigerian military population and its dependants. This paper is the first of such reports.

MATERIALS AND METHODS

Fifty one patients were referred to the Department of Psychiatry, Military Hospital, Yaba, Lagos, Nigeria for attempted suicide during a five-year period (1991-1995). Of these, forty seven (92.2%) were seen in consultation-liaison setting, mostly consultations requests from the Department of Medicine. Information was collected from the patients using a questionnaire which was administered by the author himself. The questionnaire sought information on the patients socio-demographic characteristics and other suicide-related items, including mode of attempt, giving a notice, underlying reason, and family history of mental disorders and suicide attempt. All diagnoses were recorded using ICD 9 and later ICD 10(8) standards. For the purpose of comparison, forty eight consecutive non-suicidal patients with affective disorders of non-organic aetiology, who had had at least two episodes of illness, and who were treated during the same period of time had their case records examined. Statistical analysis was done using the Chi-square, adopting a significance level of 0.01.

RESULTS

During the five-year period, there were a total of 13,737 admissions in the hospital. Of these admissions, 51 (0.37%) were due to attempted suicide. Fifteen of the 51 attempted suicide patients were military personnel, while 36 were dependants. Although all the fifteen military personnel were men, the overall number of male and female suicide attempters were about the same (26 males and 25 females). Thirty (58.8%) of the patients were single, eighteen (35.3%) were married, two were divorced or separated while one was widowed. More of the patients were Christians (39, 76.5%), than Muslims (12, 23.5%). The age range of the 51 patients was from 11 to 56 years. Eleven (21.6%) were under 20 years of age, 20 (39.2%) were between 21 and 29 years, 12 (23.5%) between 30 and 39 years, six (11.8%) between 40 and 49 years, while two (3.9%) were between 50 and 59 years.

Other characteristics of the suicide attempt patients:

Recurrence: Eighteen (35.3%) of the patients had a previous history of suicide attempt. Of these, ten had previously attempted once, five, two times, and three, three times. Seven of the recurrent attempters were military personnel while the others were dependants. It was also noteworthy that 10 of the recurrent attempters had a diagnosis of depression at the time of assessment.

Diagnoses: The diagnostic evaluation of the patients using ICD 10 criteria revealed that twenty three (45.1%) of them had a diagnosis of depression, eighteen (35.3%) were diagnosed acute stress reaction, eight (15.7%) schizophrenia, one (1.9%) alcohol dependence, and one (1.9%) organic mental disorder. Sixteen patients (31.4%) had a second diagnosis of personality disorder. Acute stress reaction was the commonest diagnosis among the dependants (17 out of 36), and were usually characterised by disturbed interpersonal relationships with significant others particularly parents, lovers and spouses. Sixteen of them were females.

Notice of intention. Only nine patients (four military, five dependants) gave notice of intention either verbally or in writing.

Methods of suicide attempt: The majority of the patients (28, 54.9%) ingested substances in their suicide bid. These substances included diazepam, promethazine, chlorpromazine, and combinations of them. Substance ingestion was the commonest method used by those diagnosed as acute stress reaction (sixteen out of eighteen). Eight patients used the method of jumping, (from heights or into wells or into deep flowing waters). Fifteen employed other serious methods like hanging, electrocution, and self stabbing. It was noteworthy that all the 15 military personnel except one used very serious and devastating methods, including self-stabbing and hanging but surprisingly none of the military personnel used firearms, which they actually had easy access to.

Family history: Twelve (23.2%) out of 51 patients gave a family history of psychosis or substance abuse. None gave a family history of suicide or suicide attempt.

Pre-enlistment maladjustment: Among the fifteen soldiers, three had a pre-enlistment history of psychosis, one had a history of substance dependence while one revealed joining the army with a fake certificate and pleaded endlessly for forgiveness. The fake certificate was later confirmed.

Table 1

Comparison of suicide attempt patients with non-suicide, affective disorder patients

Age (years)	Suicide attempt patients	Non-suicide attempt patients	Significance
20 & below	11	8	Ns
21-29	20	19	
30-39	12	12	
40-49	6	8	
50-59	2	1	
Sex			Ns
Male	26	30	
Female	25	18	
Marital status			P < 0.01
Single	30	17	
Married	18	28	
Divorced/separated	2	2	
Widowed	1	1	
Parental death			P < 0.01
Before 18 years of age	5	11	
After 18 years of age	20	7	
Parents alive	26	30	
Family history of mental disorder?			P < 0.01
Yes	12	3	
No	39	45	
Previous life events			Ns
Acute events	23	11	
Chronic events	19	23	
None	9	14	

Ns = Not significant

Comparison with non-suicidal patients with affective disorders: The 51 suicide attempt patients were compared with a group of 48 non-suicide patients consisting of 37 with unipolar depression and 11 with bipolar disorder. Table 1 shows the comparison of the suicide attempt patients and the non-suicidal ones with respect to age, sex, marital status, parental death before 18 years of age, and family history of mental disorders in first degree relatives, and occurrence of adverse life events before the illness. The two groups did not differ with respect to age distribution, gender, and the experience of unfavourable previous life events. They, however, differed significantly with respect to marital status, parental death before the age of 18 years, and the occurrence of mental disorders in first degree relatives. The suicide attempt patients were more likely to be unmarried, and to have a family history of mental disorders in first degree relatives than the non-suicide patients. They were however less likely to have lost a parent before the age of 18 years than the non-suicide patients.

DISCUSSION

Most of the patients who attempted suicide and were seen at the Military Hospital were seen in medical wards where they had been admitted after intravenous fluid administration, gastric lavage and other emergency life saving measures. It was also quite certain that many of them were seen in the emergency room, treated and being conscious and alert, were given referral letters to psychiatric out-patient clinics which they failed to attend. This factor, together with non-referral by the primary health care doctors and sometimes non-presentation for medical attention due to an apparent non-seriousness of the case as assessed by relations would account for the low rate of suicide attempts found in this study. Sometimes also, it was possible that some young persons might be treated medically or surgically in an emergency room without being diagnosed as suicidal. Low rates were also observed in a similar study in Benin City, Nigeria(2), where figures of between 1.32 and 2.12 patients per total admissions per year were reported. A rate of 0.37% observed in the present study is even lower than these. However, given the high degree of adolescent problems often encountered in military barracks (in clinical and administrative settings), including substance misuse, paternal absence, sexual problems, poor school certificate examination performance, and young school-leavers unemployment, it is most likely that the rate obtained in this study reflects gross under-reporting. A more comprehensive community survey of the prevalence of suicide attempts in the military locations is therefore indicated. Drug related factors, for instance, have been shown to be important in adolescent suicide(9). Paternal absence, resulting from the extensive involvement of Nigerian troops in foreign peace enforcement missions must have encouraged a lot of peer group influences, substance misuse and other consequences among the dependants. The equal representation of both sexes among suicide attempters as revealed by this study has also been found in other studies done in developing countries(2,10).

In most of the industrialised nations, female preponderance is usually reported(11) except Finland, where higher rates of suicide attempts in men were found(12). This study has shown that suicide attempt is more common in the young age group (under 30 years), than other groups, similar to findings of other authors(2,11). This coincides with recent trends of the increasing incidence of depressive disorders in the younger age groups. (12,13,14). It was thus not surprising that depression was the commonest diagnosis made among the patients in this study, again similar to some other studies(5,13). The strong association between suicide, suicide attempt and depression is well known(12). In fact, in this study, 55.6% of the recurrent attempters had depression.

Young dependants in conflict with their parents and

lovers attempted suicide under acute stress, a situation which has been widely reported in similar persons(15). While this may be perceived by the clinician as an overt anger or aggression manifestation, or even a manipulative venture, the inexperienced clinician may unknowingly miss a depressive episode. This therefore makes it imperative for emergency room physicians to be more skilful in identifying and assessing suicide attempt patients. As mentioned, recurrence of attempts was commonest among the depressed patients. Since a past history of suicide attempt is one of the most powerful predictors of eventual suicide(6), a follow up of these patients was obviously indicated.

The tendency for young persons to ingest substances in suicide bids has also been widely reported(15,16). These substances, particularly benzodiazepines and barbiturates are widely available in Nigeria, largely uncontrolled. Access to means of suicide, particularly very dangerous ones, is important in suicide(17). In the study of Hawton *et al* (18), they found that reduction in the availability of firearms led to a marked reduction in firearms suicide deaths in UK farmers. Surprisingly, an unrestricted accessibility to firearms did not result in firearms-related suicide attempts among our soldiers. This paradoxical tendency was also reported by Perez and Caja(19) from Spain. In Nigeria, easy availability of drugs with abuse potential and potential for use for suicidal attempt is a well known phenomenon which has been widely condemned. There is a need for thorough enforcement of legislation against this phenomenon.

One limitation of this study was that the control group comprising of non-suicide patients was not studied prospectively like the suicide attempters. Nevertheless, the finding that suicide attempt patients had a higher tendency towards having a family history of mental disorder amongst their first degree relatives agreed with the finding of Roy(20). Most studies done outside Nigeria suggested that suicide attempters are more likely to have lost a parent early in life(21), and to have greater stress in their lives(22) when compared with non-suicidal patients. Indeed, Gispert *et al* (22), found that suicide risk scores were correlated with recent life stresses. The present study did not find any relationship between early childhood parental death and suicidal attempt. Perhaps the extended family structure in the Nigerian system allows sufficient room for adequate parental surrogacy.

In conclusion, because every case of completed suicide results in family turmoil, psychological distress for others and even economic losses, suicide attempt should be given more emphasis in continuing education programmes for health care workers who are likely to see them in homes, private clinics and emergency rooms. A deliberate follow-up of all attempted suicide cases will help to detect early those heading towards further or final self-destructive behaviour.

APPENDIX

Psychiatric consultation study

1. Name:
2. Age:
3. Sex:
4. Date of admission:
5. Date of psychiatric referral:
6. Marital status: Married, single, divorced, widowed, separated, (please circle)
7. Social class correlates:
 - a. Highest educational level - no school/primary school/modern school/WASC/GCE 'O'/GCE 'A'/University/others (specify) _____
 - b. Occupation _____
 - c. Whether military or civilian
 - d. If military, rank
8. Onset of illness: Accute/insidious
9. Physical complaints: (Presenting)
Individual complaints – Organ system duration (if known)
10. Referring specialty
 - i. General surgery
 - ii. Surgical specialties – ENT/eye/orthopaedic/neurosurgery
 - iii. Internal medicine
11. Past medical history (with date)

12. Attempted suicide
– Drug overdose/other forms
13. Did he/she give a verbal or written notice of suicide intent? (Yes/No)
14. Previous psychiatric illness: Nil/Yes
15. Mother – alive/dead
16. If dead, age at death
17. Patient's age at mother's death
18. Cause of death
19. Father – alive/dead
20. If dead, age at death
21. Patient's age at father's death
22. Family history of mental illness Yes/No
23. Relationship of (22) to patient
24. Ethnic
25. Religion
26. Age when illness mentioned in (22) started in family member
27. Family history of suicide/attempted suicide Yes/No
28. Relationship of (27) to patient
29. Family history of alcohol/drug abuse Yes/No (specify drug)
30. Relationship of (29) to patient
31. Suicide attempts in the patient
 - a. No of times
 - b. Methods employed
 - c. Where and how treated
32. Age of onset of first episode of affective disorder
33. Any precipitating factor/significant life event for first episode
34. State interval of life event to onset

35. No of manic episodes so far
36. No of depressive episodes so far
37. Whether first episode was a depression or a mania
38. Axis I and Axis II diagnoses

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