

Original Articles**Deliberate Self Harm (DSH) at the National Hospital Sri Lanka (NHSL): significance of psychosocial factors and psychiatric morbidity**

Damani de Silva\*, Rohini de Alwis Seneviratne\*\*

*Journal of the Ceylon College of Physicians, 2003, 36, 39-42***Summary**

Deliberate Self-Harm (DSH) causes significant emotional distress and economic impact. Clinical characteristics of these patients have not been adequately studied from a psychosocial and psychiatric point in Sri Lanka.

**Objective:** To describe psychological factors and psychiatric disorders associated with DSH.

**Method:** Medical officers in psychiatry interviewed 105 patients admitted following DSH to the NHSL using a semistructured questionnaire.

**Results and Implications:** The majority of DSH seen at the NHSL are in socio-economically-deprived young persons. The predominant causes for the attempts are interpersonal conflicts. Those lower in the social hierarchy making the attempt, and the motives being mainly to communicate distress challenges the prevailing belief that those who attempt DSH are troublesome manipulators. A significant proportion have visited a doctor prior to the attempts but not disclosed psychosocial problems leading to the attempt. Appreciable psychiatry morbidity calls for implementation of hospital guidelines for routine psychiatric and psychosocial assessments.

**Introduction**

Suicide is a worldwide phenomenon that accounted for approximately 814000 deaths in the year 2000<sup>1</sup>. More people die from suicides than in all the armed conflicts around the world. Sri Lanka is among the ten countries recording both high rates and total number of suicides<sup>2</sup>. The national suicide rate in 1996 was

30.1 per 100,000-population<sup>3</sup>. Data are not available on the rate of DSH and is estimated to be 10-20 times of a country suicide rate<sup>2</sup>. These attempts have economic impacts on health care systems, and causes distress to individuals and families<sup>4</sup>. Several studies on DSH have been carried out in Colombo and other major hospitals in the last two decades. They have described demographic characteristics, precipitating factors and methods used. Clinical characteristics of DSH from a psychological, psychosocial and psychiatric viewpoint have not been adequately documented.

The objectives of this study were to identify the psychosocial circumstances around DSH and to describe associated psychological factors, and psychiatric illnesses.

**Methods**

The study was carried out for 12 months at the NHSL, a leading tertiary care hospital in Colombo catering to above 12 year-old persons: Patients following DSH who were admitted to four medical wards and those referred from any ward to the university psychiatry unit were included.

Written consent was obtained from all patients. The interview was conducted once the patient was considered fit for a psychosocial assessment using a semi-structured questionnaire and clinical interviews. Medical officers attached to the psychiatry unit trained in interview techniques assessed these patients.

The semi-structured questionnaire consisted of components that collected information on socio demographic data, methods of DSH, clinical characteristics including details of present and past suicidal attempts, help seeking behaviour and psychiatry disorder. Open-ended questions and verbatim reports of narratives were used to assess precipitating factors. These factors were further assessed with the aid of a check-list. The subjects

---

\* Senior Lecturer, Department of Psychological Medicine, Faculty of Medicine, Colombo.

\*\* Professor, Department of Community Medicine, Faculty of Medicine, Colombo.

were requested to rate whether each item had a major moderate or no influence on the attempt. Motives for attempts were investigated with a checklist of 14 items. Participants were requested to mark all responses applicable to the attempt.

Medical officers, based on clinical interviews made the diagnosis of psychiatric disorders. The data were analyzed using a standard statistical package.

## Results

### **Socio-demographic data**

A total of 105 patients were studied. Admissions following DSH included patients residing in the predominantly urbanized western province and those referred from other hospitals in the country for specialized care.

A majority of attempts were by young adults aged 20-39 years (73%) with a mean age of 31 years (SD=12). Females constituted 60%, 57% were single, 85% had less than 11 years of schooling, 28% were unemployed, 10% were students, and 21% were housewives.

### **Methods used in attempt**

Ninety five percent (95%) resorted to self-poisoning, 3% mutilated their bodies while 2% tried to hang themselves.

### **Precipitating factors**

On narrative analysis 58% reported verbal or physical abuse by others, as the reason for DSH. In this group 32% were conflicts between parents and children, where the child took the overdose. 30% were conflicts between spouses. Of these 77% of suicide attempts were by the female partner.

According to the checklist, factors that had major influences for precipitating the attempt were problems with partner-(36%) with parents (26%) loneliness (24%), rejections by lover (13%), drug dependence (13%), problems with friendships (10%), physical illness (10%), unemployment (10%), mental illness and related symptoms (10%).

### **Motives**

Motives for attempts were categorized and analyzed as in table 1.

**Table 1. Motives of people attempting suicide**

N=60	
<i>Motives</i>	<i>%</i>
<b><i>Relief from distress</i></b>	
'Thoughts were unbearable, and couldn't endure'	64
'Situation unbearable and saw no alternative'	48
'Lost control, don't know why I did it'	43
'Wanted to die'	42
'To get way form an unacceptable situation'	19
'To sleep for a while'	00
<b><i>Communicate distress "cry for help"</i></b>	
'To know whether he /she really cares'	16
'Wanted to show how much I loved him/her'	14
'For others to know how desperate I felt'	11
'To get help'	11
'To make things easier for others'	05
<b><i>Manipulation</i></b>	
'To persuade others to change mind'	02
<b><i>Punishment</i></b>	
'To make others to pay for the way I was treated'	13
'To make someone feel guilty'	03

The majority was seeking relief from emotional distress, or was communicating distress. Very few had motives of manipulation or punishment.

### **Psychiatry history**

This was the first attempt at self-harm in 83% of patients. Of the total, 28% had visited a doctor within the last month, and 1% had discussed the problem that led to the episode of DSH with them. Fifteen (15%) discussed their problems leading to the attempt with another person, (7% with family and 4% with friends). A family history of suicide or attempted suicide was present in 28% of the entire sample.

### **Psychiatry diagnosis**

An evaluation of psychiatric disorders identified 15% suffering from depressive disorders, 7% from psychotic disorders and 12% from alcohol dependence.

### **Discussion**

The clinical characteristics of the study population in relation to other studies, and its relevance to clinical practice in Sri Lanka are important aspects to be evaluated.

The majority of attempts were by young adults who were in a productive age group. Suicide is the second cause of death between 25-49 years and the 3rd cause of death in the 15-24 year age group in Sri Lanka<sup>3</sup>.

The pattern of gender distribution in this study is similar to the WHO/Euro study on Para suicide where the female rate was 1.5 times the male rate<sup>5</sup>. Previous studies at the NHSL and in Sri Lanka have found the male rates to be higher<sup>6,7</sup>. Gender differences in rates can be explained with individual as well as social factors. A sense of powerlessness during conflicts, due to lower social status that females hold in a patriarchal society could be a contributory factor to the higher rates among females.

A majority of persons attempting suicide was single (57%), poorly educated (85% received less than 11 years of schooling), and unemployed (28%). These findings suggest the influence of sociological factors impacting on a relatively economically deprived group in society with a greater share of adversity. Socio-economic deprivation is now a well-established determinant of psychiatric morbidity and attempted suicide<sup>7</sup>.

The commonest method of DSH was poisoning which is similar to the findings of other hospital-based

studies in Sri Lanka<sup>8,9,10</sup>. The substance used for DSH is associated with availability of the substances (57% used substances available at home). Hence, precaution is necessary when prescribing drugs for those at high risk of attempting suicide and public education is needed on safe storage of poisonous substances in homes.

The majority of attempts were precipitated by interpersonal relationship problems within the family and those in the lower ranks of the social hierarchy attempted suicide. Many of those who attempted suicide were subjected to verbal and/or physical abuse. Thus, concerted programmes on conflict resolution using non-aggressive forms of communication, and addressing social inequalities that give hierarchical social structures is indicated.

The motives for attempts in the majority were to communicate distress or to get away from emotional pain. This finding is contrary to popular belief that the majority of suicidal attempts are for manipulation. Bancroft reported a similar discrepancy between patient explanations and those assessed by doctors in 1979<sup>11</sup>. Interviewers tended to label patients as manipulative and controlling while patients expressed motives as communicating distress or to get away from emotional pain.

In this study the index attempt was the first in 83% of subjects. This is significantly different to that reported in the West where 30-60% of suicide subjects have made previous attempts<sup>12,13</sup>. Case fatality rates in our country were reported as 4.9% in 2000 while those in the UK were 1-2%<sup>3,14</sup>. Medical management of DSH and cultural differences of suicidal behaviour need further exploration to explain this pattern.

Though many (28%) had visited a doctor during a month prior to the attempt, rarely did they discuss underlying problems leading to the attempt. This is a significant finding as a proportion of the consultations may have been with psychosomatic distress related to life events or illnesses related to attempts. An appreciable proportion (11%) had discussed their problems with family and friends and cultural practices of discussing psychosocial problems with informal caregivers could be used as a point of intervention for suicide prevention (for example, conflict resolution and supportive skills among family and friends).

### **Psychiatric diagnoses**

A high percentage of patients gave a history of psychiatric illness (15% with depressive disorders, 7% with psychotic disorders and 12% with alcohol dependence) or had a member of the family who

attempted or committed suicide (28%). A history of psychiatric disorder is a proven clinical indicator used to identify individuals at risk of suicide.

A high proportion of psychiatric illnesses detected among this group is similar to findings in other countries. Routine psychosocial assessment is necessary to diagnose these persons. An audit carried out at the NHSL in 1994 revealed less than 0.4% received a psychosocial assessment by the primary care team and 4% were referred for specialist care<sup>15</sup>.

A higher percentage of depressive disorder in DSH is reported in studies from the UK. The lower figure in our study may be due to reporting of milder depressions as adjustment reactions. Another possibility is a different clinical profile for DSH being present in Asian countries. Indian studies report a lower percentage of psychiatric morbidity among attempted suicides. An epidemiological study of DSH in Bangalore reported psychiatric morbidity of 9.8%<sup>16</sup>. Further studies with standardized instruments are indicated to study these differences.

### Conclusion and Implications

Precipitating factors and the motives of the majority of those who attempt suicide show that they belong to a socially deprived population, are in emotional pain and are communicating distress.

Appreciable psychiatric morbidity calls for implementation of hospital guidelines for routine psychiatric and psychosocial assessments.

### References

- Murthy RS, ed., *Mental Health: New understanding, new hopes*. The World Health Report. World Health Organization Geneva, 2001; 37-39.
- Department of mental health. *Figures and facts about suicide*. World Health Organization, Geneva. 1999: 9.
- Registrar general's mortality statistics, *Annual Health Bulletin*, Ministry of Health, Sri Lanka. 2000: 95.
- De Silva A, De Silva D, Jayasinghe KSA. Economic cost of suicides. *Proceedings of Sri Lanka Medical Association academic sessions*, 1998.
- Sakinofsky I, et al. Attempted suicide in Europe. Rates, trends and socio-demographic characteristics of suicide attempters during the period 1989-1992. *Results of the WHO/Euro multicentre study on Para suicide, Acta psychiatrica Scandinavica* 1996; 93: 327-338.
- Fernando PR, *Acute poisoning*. *Ceylon Medical Journal* 1977; 22: 90-93.
- Gunnel DJ, Peters TJ, Kammcring RM, Brooks J. Relation between parasuicide, suicide, psychiatric admissions and socio-economic deprivation, *British Medical Journal* 1995; 311: 226-230.
- De Silva HJ, Kasturiaratchi N, Seneviratne SL, Senaratne DC, Molagoda A, Ellawala NS. Suicide in Sri Lanka: points to ponder. *Ceylon Medical Journal* 2000; 45: 17-24.
- Fernando R, Fernando D. Pesticide poisoning in Sri Lanka. Review of the eighties and the outlook for nineties. The National Poisons Information Centre. Colombo, 1995.
- Jeyaratnam J, De Alwis Seneviratne RS, and Coplestone JF. Survey of pesticide poisoning in Sri Lanka. *Bulletin of the World Health Organization* 1982; 60 (4): 615-619.
- Bancroft J. Crisis intervention. In: S Bloch ed., *An introduction to the psychotherapies*. Oxford University Press, Oxford. 1979; 83-101.
- Kreitman N and Casey P. Repetition of parasuicide: an epidemiological and clinical study. *British Journal of Psychiatry* 1988; 153: 792-800.
- Platt S, Hawton K, Kreitman N, Fagg J and Foster J. Recent clinical and epidemiological trends in Edinburgh and Oxford: a tale of two cities. *Psychological Medicine* 18: 405-418.
- Hawton K, Fagg J. Suicide and other causes of death following attempted suicide. *Br. J. Psychiatry* 1988; 152: 359-66.
- Eddleston M, Sheriff MHR, Hawton K. Deliberate self harm in Sri Lanka: an overlooked tragedy in the developing world, *British Medical Journal* 1998; 317:133-135.
- De Silva D, Pathirana CVS, Ratnayake AP, Ranasinghe WVGR. Audit of medical record keeping and clinical management of poisoning at a teaching hospital. *The Ceylon Medical Journal* 1988; 43: 2, 118.
- Gururaj G, Mohan KI. Epidemiology of suicides in Bangalore. National Institute of mental health and neurosciences, Bangalore, India. 2001: 43.