

REASONS AND PSYCHOSOCIAL STRESSORS IN PARASUICIDES: COMPARISON OF SELF-POISONERS AND SELF-CUTTERS.

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Abstract:

Objective: To compare motives, reasons and the stressors differences between deliberate self-poisoners and self-cutters.

Method: In a sample of 77 patients admitted to UMMC, who had completed a questionnaire and a self-report, those who had deliberately cut themselves ($n = 25$) were compared with those who had taken overdoses or a poison ($n = 52$).

Results: More patients who cut themselves than those who took overdoses said that they had wanted to die (56.7% versus 43.2%, $p < .001$) and had wanted to find out if someone loved them (7.7% versus 92.3%, $p = 0.03$). Self-cutters were more likely than self-poisoners to say that they had wanted to punish themselves (66.7.0% versus 33.3%, $p = 0.009$)... and (73.1%) self-Poisoners tried to get relief from a terrible state of mind versus (26.9%) Self-cutters, $p = .018$.

Conclusions: There are differences between the' motives for overdoses and for self-cutting. The often impulsive nature of these acts (especially self-cutting) means that prevention should focus on encouraging alternative methods of managing distress, problem-solving, and help-seeking before thoughts of self-harm develop.

Key words: *Parasuicides, Reasons, Psychosocial Stressors, Self-Poisoners, Self-Cutters.*

Introduction

Suicide is among the ten leading causes of death in most countries around the world. In UK it's the third most important contributor to life years lost after coronary heart disease and cancer. Over the last two decades several countries have reported a considerable increase in the number of young men who kill themselves. This increase has been one of the factors that have led to a series of international initiatives to promote the prevention of suicide and to reverse this trend (1). For every suicide it is estimated that more than 30 non-fatal episodes of self-harm occur.

In UMMC almost every day there is one or two patient admitted to psychiatric or medical ward due to attempted suicide. Rates of suicide have risen in young males in many countries since the 1970s, and despite a slight downward trend in recent years, suicide is now the second or third most frequent cause of death among 15- to 24-year-olds in several countries(2). Worldwide, nonfatal, deliberate self-harm is usually most common in young people, especially young females (3). This is particularly true in the United Kingdom, where adolescents and young adults are involved in more hospital presentations to general hospitals for deliberate self-harm than any other age group, with females in the 15- to 19-year age group being particularly vulnerable (4). Most episodes of deliberate self-harm in adolescents who present to the hospital involve overdoses; hence, most information on this problem

is about self-poisoners, especially females.

Studies of patients who have deliberately harmed themselves and presented to general hospitals have demonstrated that their behavior is often impulsive, in terms of involving little premeditation (5), and usually being precipitated by relationship problems with family or friends, difficulties with schoolwork, or disciplinary crises,(6), but in many cases it also occurs in the context of depressive, anxiety, and behavioral disorders (7). Repetition of self-harm is common, and there is a significant association with eventual suicide(8), Particularly where substance abuse is present (34). An important aspect of understanding the factors that lead to deliberate self-harm is examination of the motives (or intentions) and premeditation involved. Several studies have focused on this (9). The principal findings in a study of adolescents who presented to the hospital after overdoses were that approximately a third said they had wanted to die at the time of the acts and that many acts involved relatively short premeditation (10). The most common motives chosen by the adolescents from a list of possibilities were to get relief from distress, to escape from their situation, and to show other people how desperate they were feeling (11). There is clearly a need for information on the motives of adolescents who engage in deliberate self-harm and who do not receive medical treatment, including those who choose methods other than overdose. Such an investigation will widen our understanding of the motives for this behavior and will provide information that can assist helping agencies and those planning preventive initiatives.

The aim of this study is:

1- To compare the sociodemographic profiles of self poisoners and selfcutters.

2- To compare the clinical presentation of self-poisoners and self cutters.

3- To compare the psychosocial stressors, motives and reasons for attempted suicide between self poisoners and self cutters.

Methods

Virtually all hospital treated parasuicide patients in UMMC between January–April 2005, were selected for the study. UMMC afford a unique opportunity to interview parasuicide patients because it has a consistent policy of admitting all patients referred for parasuicide irrespective of the severity of the attempt. All parasuicide patients admitted to either medical or psychiatric ward were interviewed. The demographic data are collected, reasons and method of self-harm, past and family history of parasuicide, mental illness, as in the performa designed for the study. Diagnoses were established according to the DSM-IV criteria.

Subjects:

-The patients were interviewed by the investigator to complete the Performa.

-A self-report Questionnaire on deliberate self-harm were completed by 77 patient who were admitted to UMMC because of attempted suicide.

Measures:

All patients were asked whether they had ever engaged in deliberate self-harm ("Have you ever deliberately taken an overdose [e.g., of pills or other medication] or tried to harm yourself in some other way [such as cut yourself? If they had done so, they were asked to describe the nature of the act, or the last episode if they had had more than one ("Describe what you did to yourself on that occasion. Please give as much detail as you can—for example, the name of the drug taken in an overdose. The criteria were based on the definition of self-harm used in the WHO/EURO Multi-centre Study of Suicidal Behavior (12). The criteria were an act with a nonfatal outcome in which an individual deliberately did one or more of the following: Initiated behavior (e.g., self-cutting, jumping from a height) that he or she intended to cause self-harm.* Ingested a substance in excess of the prescribed or generally recognized therapeutic dose.* Ingested a recreational or illicit drug that was an act that the person regarded as self-harm.* Ingested a non-ingestible substance or object. The patients were then asked to choose any motives from a list of eight that explained why they had carried out the act. Respondents could choose more than one reason, if more than one applied. The list was based on that used by Bancroft et al. 1976, 1979, (39), where the motives were shown to the patient as in other studies, as in the present investigation, been presented to the patient as a list. The reasons and the motives to be chosen by the patients in the self report were: wanted to show how desperate I was feeling, wanted to die, wanted to punish myself, wanted to frighten someone, wanted to get my own back on someone, wanted to get relief from a terrible state of mind, wanted to find out if someone really loved me, and wanted to get some attention. The purpose of the study was explained to the patients. The patients were told that those who did not wish to participate did not need to do so.

Design and Procedures: The study design was in keeping with the guidelines of the University of Malaya Medical Center ethical committee. It was approved by the University of Malaya Medical Center Research Ethics Committee.

Data Analysis: The analysis was performed using SPSS version 12.0 (SPSS, 2004). Associations of gender, ethnic group and self-harm method and differences in premeditation were explored using $[\text{chi}]^2$ tests. We used the eight reasons as predictor variables to see if the self-cutters and Self-Poisoners could be distinguished by specific motives for their deliberate self-harm episodes.

Results:

Association between Sociodemographic profile and Methods of self-harm:

Sociodemographic profile	method of self-harm		P-value	
	Self-poisoner		self-cutters	
Sex	Male	11	9	0.13
	Female	41	16	
Race	Malay	8	3	0.01
	Chinese	19	18	
	Indian	25	4	
Marital status	Single	34	15	0.415
	Married	18	10	
Education	primary	36	19	0.3
	Tertiary	16	6	
Religion	Muslim/	10	4	0.01
	Christian	9	3	
	Hindu	19	1	
Work	Buddhist	14	7	0.14
	working	27	9	
Residence	Nonworking	25	16	0.53
	alone/parents	28	13	
	Friend/husband	24	12	

Table 2: Association between Clinical domains and Methods of self-harm:

Sociodemographic profile	method of self-harm		P-value	
	Self-poisoner		self-cutters	
Diagnosis	Adjustment disorder	33	5	0.001
	Depression	13	11	
	Others	6	9	
Past hist self-harm	Yes	13	15	0.003
	No	39	10	
Hist of mental-illness	Yes	13	16	0.001
	No	39	9	
FH self-harm	Yes	3	0	0.302
	No	49	25	
FH mental-illness	Yes	2	3	0.19

	No	50	22	
Medical illness	Yes	13	6	0.58
	No	39	19	
Alcohol abuse	Yes	11	5	0.58
	No	41	20	
Drug abuse	Yes	3	4	0.15
	No	49	21	

Table 3: Association between psychosocial Stressors and the Methods of Self-harm

Psychosocial stressors	methods of self-harm		P
	Self-Poisoners	Self-Cutters	
Relationship problem	39	15	0.199
Other reasons	13	10	

OR = 2.0

The odd ratio of some one with relationship problem to self-poisoning relatively is 2 times compare to some with other problems.

Table 4: Reasons and the Motives Chosen by Self-Cutters and Self-Poisoners to explain their episodes of deliberate Self-Harm;

Reasons and motives	method of self-harm		P
	Self-Cutters	Self-Poisoners	
I wanted to show how desperate I was feeling	7(30.4%)	16(69.6%)	0.51
I wanted to die	17(56.7%)	13(43.3%)	0.001
I wanted to punish myself	8(66.7%)	4(33.3%)	0.009
I wanted to frighten someone	1(50.0%)	1(50.0%)	0.54
I wanted to get my own back on someone	1(50.0%)	1(50.0%)	0.54
I wanted to get relief from a terrible state of mind	14(26.9%)	38(73.1%)	0.108
I wanted to find out if someone really loved me	1(7.7%)	12(92.3%)	0.03
I wanted to get some attention	3(13.0%)	20(87.0%)	0.01

Discussion

Previous investigations of the motives for deliberate self-harm focused only on those who have taken overdoses and been admitted to the hospital (13), thereby excluding a substantial proportion of the self-harming population, in this study we studied them both. The fact that many more of those who had taken overdoses compared to those who had cut

themselves had presented to the hospital explains why, to date, Self-Poisoners have been the focus of most studies of motives for deliberate self-harm. However, by far the most common method of deliberate self-harm in our study was self-poisoning 55 patients compared to 25 patients who cut-themselves.

The focus of this study is to compare the sociodemographic profiles of self-Poisoners and self-cutters (Table 1), to compare the clinical presentation of self-Poisoners and self-cutters (Table 2), to compare the psychosocial stressors of self-Poisoners and self-cutters (Table 3), and to compare the motives and reasons for attempted suicide between self-Poisoners and self-cutters (Table 4).

In term of Association between Socio-demographic profile and methods of self-harm:

In this study we are able to find that the age, race and the religion are the significant socio-demographic factors. (Table 1), in term of ethnic group mostly Indian and they tend to harm themselves by self-poisoning P= 0.01

In this study in term of religion more Buddhist and Hindu tend to harm themselves than the Muslims and Christians P=0.01. This is similar to the findings by Raleigh et al, 1990 that Muslims had relatively lower rates of suicide than Hindus (14).

Professor.T .Maniam "department of Psychiatry, National University of Malaysia, Kuala Lumpur" In his study in Malaysia that, ninety-five cases of suicide and 134 cases of parasuicide that occurred between October 1973 and September 1984 in the hill resort district of Cameron Highlands in Malaysia reported that Eighty-one per cent (81%) of suicides and 78% of parasuicides were Indians, although they only form 25% of the population. The average annual suicide rate for Indians (over 10 years of age) was 157 per 100,000. About 94% of suicides and 66% of parasuicides were by ingesting agricultural poisons. The age- and sex-specific suicide rates for women were highest in the 20-24-year-old age group. Some possible reasons for high suicide rates among Indians are discussed. (15)

In a study of 306 patients who were admitted to the University Hospital in Kuala Lumpur in 1989 after attempting suicide. Fourteen of them succumbed to injuries. Psychosocial data of 296 patients out of the 306 survivors are reported. Suicidal behavior is more common in the young and especially amongst the females. Nearly 45.0% of them are from social class IV and V. Persons of Indian ethnic origin are overrepresented, while in Malays suicidal behavior seemed to be less common. Self-poisoning was reported to be the commonest method in attempting suicide. Diagnosis of adjustment disorder was made in 58.5% of the patients (16).

In a parasuicide study in Singapore it was found that young females appear to be the most vulnerable accounting for 60.5% of the study population. The Indian community has significantly higher risk of parasuicide compared to the Chinese and Malays. Overdose of medication was the most common method with paracetamol being implicated in 48.1% of all overdoses (17).

In a study at Penang General Hospital in Malaysia, as acute poisoning is a significant health problem all over the world. The objectives of that study was to determine the pattern of acute drug and chemical poisoning at Penang General Hospital (PGH), in the northern region of Malaysia, and to compare poisoning characteristics between different ethnic groups. The study was a retrospective case review of all poisoned patients admitted to PGH during the years 2000-2002. They collected

data concerning demographic parameters of patients, information about the agent(s) implicated, and circumstances surrounding the event. There were 493 poisoning incidents. Nearly two-thirds of the poisoned cases involved female patients. The predominant mode of poisoning was intentional (51.5%). The age group 15.1-30 years ranked at the top, constituting 55.2% of all cases. Drugs were the predominant agents implicated. Among cases associated with drugs, Paracetamol was the main causative agent (44.7%). Chinese patients constituted 37.7% of all poisoning cases, followed by the Indians (31.6%) and Malays (26.6%). Between ethnic groups, Indian patients were found to have the highest rate of poisoning admission of 75.2 per 100,000 persons (18).

Research evidence suggests that young, married South Asian women are a high-risk group for suicide (Bhugra et al, 1999) (19). A survey of hospital admissions in England and Wales for attempted suicide by self-poisoning showed that young South Asian women had rates nearly three times higher than those for young white British women. South Asian women reported marital problems more often than their white counterparts, and commonly identified problems with culture conflict. They were less likely to have a previous diagnosis of mental illness and less likely to have received psychiatric help. Rates for South Asian men were lower than those for their white British counterparts. The age distribution for both Asian women and men was significantly younger than that for the white group (Merrill & Owens, 1986).

An analysis of suicides among Indian immigrants in England and Wales for 1970-1978 showed an excess of suicides among young women (particularly in the 15-24 age group), who were disproportionately more likely to be married. Indian women had significantly higher suicides rates than Indian men. Muslims had relatively lower rates of suicide than Hindus (Raleigh et al, 1990).

A comparison of Asian and Caucasian adolescents who had self-poisoned revealed that 'disciplinary crises with parents' were the most common precipitating factor, with cultural conflict accounting for 89% of such crises among Asian adolescents (Handy et al, 1991).

In term of Association between Clinical domains and methods of self-harm:

In this study the Diagnosis and the previous history of self harm are the most significant factors. Many studies have suggested that the majority (as many as 90%) of young people who complete suicide and those who make serious suicide attempts have at least one diagnosable mental disorder at the time of their suicide attempt (20)

Depression and hopelessness correlated positively and significantly with suicidal behavior (21). In this study we found that self-poisoners tend to be diagnosed as adjustment disorder $P=0.001$. Table 2, we found that twenty-four patients who attempted suicide had major depressive disorder (MDD), and 38 patients who harm themselves are diagnosed as adjustment disorder.

A person with adjustment disorder often experiences feelings of depression or anxiety or combined depression and anxiety. As a result, that person may act out behaviorally against the "rules and regulations" of family, work, or society. In some people, an adjustment disorder may manifest itself in such behaviors as skipping school, unexpected fighting, recklessness, or legal problems. Other people, however, instead of acting out,

may tend to withdraw socially and isolate themselves during their adjustment problems. A person with an adjustment disorder with depressed mood may have mostly a depressed mood, hopeless feelings, and crying spells. Adjustment disorders can occur at any age. People are particularly vulnerable during normal transitional periods such as adolescence, mid-life, and late life. The conditions associated with adjustment disorder develop within three months of the beginning of the stressful problem. An adjustment disorder usually lasts no longer than three to six months. The condition may persist, however, if an individual is suffering from chronic stress such as that caused by an illness, a difficult relationship, or worsening financial problems.

Many people have difficulties adjusting to stressful events. Stressful events include starting a new job, ending an important relationship, or conflicts with work colleagues. As a result, the individual may have difficulty with his or her mood and behavior several months after the event. There are as many different responses to stressful events as there are stressful events. Some who have recently experienced a stressor may be more sad or irritable than usual and feeling somewhat hopeless. Others become more nervous and worried. And other individuals combine these two emotional patterns. The symptoms associated with adjustment difficulties usually subside within about 6 months after the stressful event.

The strongest risk factor for deliberate self-harm and suicide is a history of deliberate self harm (DSH). In the first year after DSH the average rate of repetition of nonfatal DSH has been reported to be 17 % (22). As in this study 13 patient of the Self-poisoners had a history of previous self-harm compared to 15 patient of self-cutters. $p=0.003$ (Table 2). High proportion (23) of self-poisoners had no past history of self-harm i.e. for the 1st time. This may explain that most of the 1st time suicide attempter tends to choose self-poisoning as a method of self-harm

The highest risk was observed within the first 3-6 months after DSH but the risk remains elevated even in long term follow-up studies over 20 years(24). In 5-9 year follow-up studies after attempted suicide, 3-13% of the patients eventually committed suicide. Although the relative risk for suicide after attempted suicide is about 40 times higher than in the general population (2 5)

Reasons and the Motives Chosen by Self-Cutters and Self-Poisoners to explain their episodes of deliberate Self-Harm ;(Table 4)

In common with the findings of hospital-based studies by Hawton et al. in 1982 (26) and Boegers et al. in 1998 of adolescents who have harmed themselves, the reasons most frequently reported by the patients in this study was to get relief from a terrible state of mind 38(73.1%) of Self-Poisoners and 14(26.9%) of the Self-Cutters. Suggested that many used deliberate self-harm to cope with distress especially most common among those who have relationship problem, as in this study the odd ratio was found to be 2.0 for relationship problems compared to other reasons (table 3)

This is in keeping with findings of earlier hospital-based studies of both adolescents and adult self-poisoners, which also highlighted the more frequent attribution of such motives by clinicians (27). Substantial proportions of both the self-poisoners and the self-cutters said they had wished to die, this study had shown 17(56.7%) Self-Cutters wish to die compared to 13 (43.3%) Self-Poisoners, who wanted to die, $p=0.001$ as in table 4.

It is clear that there are some differences in the reasons patients engage in self-cutting compared to self-poisoning usually give. More self-cutters compared to self-poisoners indicated that they wanted to die, in response to a list of eight reasons. (Table 4)

The less frequent choice by Self-Poisoners of the "wanted to die" motive is in keeping with deliberate self-cutting often being associated with tension reduction especially in repetitive self-mutilators. It is much easier to engage in self-cutting on the spur of the moment using whatever is at hand, while taking an overdose requires a certain amount of planning.

The reasons people give for taking overdoses: In a study by Bancroft JH, Skrimshire AM, Simkin S. they investigate the reasons people give for taking overdoses of drugs. A representative sample of 128 subjects was interviewed immediately after their recovery from an overdose. During the interview they were given alternative reasons for taking overdoses and asked to choose any that applied to them. Spontaneous comments about suicidal intent were also recorded. Of the subjects, 44% indicated that they had wanted to die.

On the basis of their choices 33% were 'seeking help', 42% 'escaping from the situation', 52% 'obtaining relief from a terrible state of mind' and 19% 'trying to influence someone'. The associations between these various reasons and other expected effects or feelings associated with the act were examined by means of multidimensional scaling analysis.

In this study 38(73.1%) they wanted to get relief from a terrible state of mind. In addition, the characteristics of those expressing suicidal intent and other reasons were studied, together with such consequences as toxic effects and psychiatric after-care. The possibility is discussed that a large proportion of those indicating suicidal intent do so either to gain social acceptability for their act or to influence helping agencies.

In this study 20(87.0%) of Self-Poisoners reported that wanted to get some attention compared to 3(13.0%) of Self-Cutters $P=0.01$

The relationship between aggressive drives and suicidal behavior has received extensive attention in the psychoanalytic literature. Freud (28) initially recognized the relationship between aggression and suicidal behavior. He envisaged suicidal acts as anger turned against the self, a notion that was elaborated by Menninger (1938) in his seminal work *Man Against Himself* (29). Menninger proposed that every suicidal act was composed of three basic elements: the wish to kill, the wish to die, and the wish to be killed.

However, this may not be true in every suicidal act, and we attempted to determine whether, in different diagnostic groups of adolescents, the correlates of suicidal behavior might be different. Thus, in some adolescents, the primary associated emotion would be aggression (the wish to kill), and in others, depression (the wish to die).

These ideas have received considerable empirical support from clinical Psychometric and biological research (30,31). There have, however, been studies that have not found such a relationship. A possible explanation for these discrepancies is that aggression is related only to certain types of suicidal behavior, whereas depression is related to other forms of suicidal behavior (32).

A constructivist theory of self-injurious behavior (Deiter,

& Pearlman, 2000) Nicholls, holds that people who self-injure usually have not developed three important self-capacities: the ability to tolerate strong affect, the ability to maintain a sense of self-worth, and the ability to maintain a sense of connection to others. The first of these speaks directly to the affect-regulation role of self-harm; the others are perhaps related to its communicative functions.

Clinical Implications:

The impulsive nature of self-harming behavior means that there is often little time for intervention. In addition, the reasons for deliberate self-harm most commonly endorsed by the patients suggested that they are often trying to escape from an unbearable situation (to get relief from a terrible state of mind or to show how

desperate they were feeling). Prevention should focus on reducing the problems that lead to thoughts of self-harm and helping young people acquire alternative methods of problem-solving and recognizing sources of help. This is something that could be implemented in schools, colleges and universities through discussion or mental health awareness educational programs. It might also be promoted through the media. For the clinician assessing self-harmers after overdoses or deliberate self-injury, the findings of this study highlight the need to include exploration of motives for self-harm. Gaining an understanding of the motivation can be important not only in providing a fuller picture of the nature of self-harm in individual cases, but also in addressing prevention of future episodes. Thus, for example, when a specific motive for an act can be shared between patient and clinician, they can then look at how alternative coping strategies can be used in the future if the patient is confronted by circumstances similar to those that preceded the recent episode.

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