



RESEARCH ARTICLE

SOCIAL SUPPORT, COPING STRATEGIES, AND QUALITY OF LIFE IN ATTEMPTED SUICIDE:
A HOSPITAL BASED STUDY

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ABSTRACT

Background: There is a major concern all over the world regarding the rise in attempting suicide in certain population especially among the young. Wide variations have been found in suicidal attempt among different cultures, societies and countries. The rate of attempted suicide is 8-10 times more than the completed suicide. Coping is most often conceptualized as a response to the demands of specific stressful situations. Though deliberate self-harm encompasses a wide variety of medical and social disciplines some of the important psychosocial variable such as social support, coping strategies, and quality of life has not yet been explored in depth in India.

Aims: The aim was to analyze and compare the coping strategies, social support, and quality of life of suicide attempters versus matched normal controls, and to identify the risk factors leading to suicide.

Settings and design: The study was conducted in the Department of Psychiatry, Agartala Govt. Medical College & GBP Hospital, Agartala, Tripura. The samples for the study were recruited from different outpatient & indoor facilities of the GBP Hospital after application of the inclusion and exclusion criteria (n= 100) cases of suicide attempters and healthy controls (n=100) were included in the study.

Materials and Methods: A total of 100 consecutive suicide attempters were compared with same number of age, sex, and marital status matched healthy controls using Social Support Questionnaire, Bengali version of ways of coping Quissionare (Susan Folkman and Richard S. Lazarus) and WHO QOL-Bref. Statistical analysis was done by using SPSS- 20,

Results: Attempters experienced significantly less Social support than controls. Most common Coping strategies used by the suicide attempters were confronting coping (72.5%) followed by distancing (60%) and coping strategies used by the control groups were seeking social support (60%), accepting responsibility (52) and self-controlling (45%). Positive coping, and of QOL were significantly lower in attempters. Among all risk factors good education and good social support were protective against suicide.

Conclusion: Suicide attempters were differentiated from healthy controls based on lower social support, less healthy coping, and poor QOL. However, it is difficult to pinpoint a single factor responsible for suicidal behavior. It is the complex interplay of various interrelated factors and the resultant buffering effect, which is protecting the individual against deliberate self-harm.

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INTRODUCTION

The World Health Organization defines suicide act as "the injury with varying degrees of lethal intent and that suicide may be defined as a suicidal act with fatal outcome." Suicide worldwide was estimated to represent 1.8% of the total global burden of disease in 1998; in 2020, this figure is projected to

be 2.4% in countries with market and former socialist economies. Deliberate self-harm is a major issue in the health care all over the world (WHO, 1986) Many factors including biological, socio-cultural, and personality traits can modify this complex behavior. Suicide is a significant problem in India also with a reported rate of 10.8 per 100,000 population (National Crime Record Bureau, 2009). However it may be considerable under estimate due to underreporting and false reporting of many of the cases of suicides in India (Gajalakshmi, 2007). Certain thought provoking studies on suicide have been reported from India (Kumar, 2004). However, some of the important psychosocial variables such as life events or stressors, social support, coping strategies, and

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quality of life have not yet been assessed in relation to deliberate self-harm in India. Life change could act as a stressor causing physiological arousal and enhanced susceptibility for illness. Suicide victims have experienced more changes in living conditions, work problems, and object losses than normal controls (Hagnell, 1980). A body of research in recent years has focused on the role of social support in maintaining emotional well-being and moderating the effects of life events. There is evidence that Social network among suicide attempters are weaker than in non-suicidal individuals (Hart, 1988). Life events can alter the social support system in terms of size, frequency of interaction and stability, and such changes may be associated with suicidal behaviors. Coping behavior, or the things people do to reduce the stress, has been a variable that has recently become the focus of research (Lazarus, 1974). Coping behavior is operationally defined as the responses to external life stress that serve to prevent, avoid, reduce or control stress and emotional distress. Tripura tops suicide rate among small states in Northeastern region. The 2011 statistics from the National Crime Records Bureau (NCRB) reveal that 1,35,585 people died of suicide in India, with Tripura topping the list with 703 reported cases, followed by Sikkim (184), Arunachal Pradesh (134), Mizoram (90), Nagaland (33), and Manipur (33). Considering the paucity of such work from the Indian context the present study was conducted to analyze and compare the coping strategies and social support, and quality of life of suicide attempters and matched normal controls and to identify the risk factors leading to suicide attempt. There is dearth of study on this subject of Social support, coping strategies, and quality of life in attempted suicide from North-Eastern part of the country as yet. Hence, the present study is a sincere effort in this direction

MATERIALS AND METHODS

Study sample: The study was done in Agartala Govt. medical college & GBP hospital which is tertiary care center situated in Agartala, Tripura.

The design of the study: The sample comprised 100 suicide attempters qualifying the criteria for suicide attempt as defined by WHO admitted to different departments of AGMC & GBP hospital. These patients were interviewed within the first week of their admission. Wherever possible, relatives, friends, and other possible sources of information such as spouse and colleagues were also interviewed for eliciting further information. Socio demographic information was gathered as per prepared standard questionnaire. Ethical approval & consent of the patients & controls were obtained in the initial portion of the study. Age, sex, and marital status matched healthy controls from the community formed the comparison group. These subjects were initially screened by GHQ-12 version (Goldberg, 1984) to exclude the presence of common mental disorders. The period of the study was one year from January 2015 to December 2015.

The aim of the study: The aim was to analyze and compare the coping strategies, social support, and quality of life of suicide attempters versus matched normal controls, and to identify the risk factors leading to suicide.

Inclusion Criteria: a) Those patients & control groups giving consent to participate in the study. b) Suicide attempters qualifying the criteria for suicide attempt as defined by WHO c) patients & control groups who were above 18 years of aged) Patients of both sexes. e) Informants of both sexes. f) healthy control of both sexes

Exclusion Criteria: a) Mental Retardation. b) Patients below the age of 18 years c) chronic debilitating physical illness whose physical condition did not allow detailed evaluation. Tools used were a) informed consent form, b) proforma for socio demographic data, c) ICD 10 Diagnostic guideline, d)

d) Social support questionnaire: This scale was specially developed by pooling items from Social Support Scale of Asha (1996) and the Social Support Scale of Nehra, Kulhara, and Verma (1996) by item analysis. Out of 47 items 22 were positively worded and 25 were negatively worded. The positive statements were intermingled with negative statements to reduce the likelihood of response set occurring. This scale has approximately the same number of items from each area. The retest reliability obtained for this scale was 0.89.

e) Ways of coping questionnaire (WOCQ): WOCQ (ways of coping questionnaire) was translated to local language (Bengali) WOCQ scales reliability Alpha values for 8 subscales of WOCQ came 0.87, 0.76, 0.91, 0.88, 0.95, 0.89, 0.77, and 0.97 respectively which suggests the statistical reliability of the scale. Ways of coping questionnaire is primarily a research instrument in studies for assessment of coping process. It was developed by Susan Folkman and Richard S. Lazarus in 1980. The questionnaire is designed to identify the thoughts and action of an individual has used to cope with a specific stressful encounter.

The questionnaire measures total of 8 type of coping strategies namely Confronting coping, distancing, self-controlling, seeking social support, Accepting responsibility, escape avoidance, planful problem solving and positive reappraisal. There are total 66 questions in the full questionnaire. There are two methods of scoring the ways of coping questionnaire, raw and relative. The decision as to which set of score to use depends on the information desired. Raw score describe coping effort for each of the eight types of coping, whereas relative score describe the proportion of effort represented by each type of coping. In both methods of coping, individuals respond to each item on a 4-point. Likert used "1-indicates "used somewhat", 2- indicates "used quite a bit and 3- indicates "used a great deal". In the raw scoring the raw scores are the sum of the subjects responses to the items that comprises a given type of coping was used in a particular encounter (Lazarus, 1984; Lazarus, 1993).

WHO QOL – bref: WHO QOL-Bref contains 26 items with four domains 1. Physical health and well-being 2. Psychological health and well-being, 3. Social relations, and 4. Environment. The scale has been shown to have good discriminant validity, sound content validity, and good test retest reliability at several international WHOQOL centers (Saxena, 2001). Statistical analysis: For comparison of quantitative variables we used a paired t-test or Wilcoxon signed rank test applied depending on whether the data were

normally distributed or not. Quantitative variables were compared by a Mc-Nemar chi-square test. Statistical analysis was done by using SPSS- 20.

RESULTS

The sample comprised 100 suicide attempters and 100 controls matched on age, sex, and marital status. The mean age of attempters versus control was 29.52±12.85 vs. 30.12±13.42 and the male female ratio was male attempters 56 (56%) vs. male control 56 (56%) and female attempters 44 (56%) vs. female control 44 (56%). In both groups 30% were married. Education, unmarried shows statistically significant. It signifies that less education and loneliness involved more suicidal attempt. In this study shows Hindu people are more prone to developed suicidal attempt (Table 1).

In this study it was found that the commonest comorbid psychiatric diagnosis was adjustment disorder with emotional disturbance (46.15%). followed by 30.76% mood disorders, 7.69% substance dependence, 5.76% schizophrenia, 3.84% personality disorder, dissociative disorder & 1.92% panic disorder (Table 2). Comparison of social support variables between attempters & controls showed significant lower scores in attempters except for religion & reliable attachment (Table 3). Comparison of different types of coping behavior between attempters & controls showed that scores for self-controlling, seeking social support & accepting responsibility were significantly higher in controls. Most common Coping strategies used by the suicide attempters were confronting coping (72.5%) followed by distancing (60%), Positive reappraisal (35%) and predominant coping strategies used by the control groups were seeking social support (60%), accepting responsibility (52) and self-controlling (45%). (Table 4).

Table 1. Sample characteristic

Variable	Number=100(%)		X ² /t	P value
	Attempters	Controls		
Mean age(years)	29.52	30.12	1.8	0.06
SD	12.85	13.42		
	Sex			
Male	56	56	0.08	0.92
Female	44	44		
	Marital status			
Married	30	30	3.12	0.74
Unmarried	70	70	5.42	0.003**
Mean education (years)	10.02	12.20	7.43	0.002**
SD	3.87	3.76		
	Religion			
Hindu	75	73	8.32	0.001**
Muslim	15	15	6.42	0.56
Christian	10	12	7.34	0.85
	Domicile			
Rural	75	75	4.19	0.80
Urban	25	25	3.78	0.002
	Occupation			
Employed	35	35	1.78	0.95
Unemployed	65	65	2.42	0.001
Psychiatric illness in first degree relatives	36	32	1.86	0.67
Past psychiatric illness	19	00	2.85	0.96
Medical illness	25	10	2.67	0.83
Past suicidal attempts	15	00	3.84	0.001

** P value < 0.05 (Significant)

Table 2. Psychiatric disorder found in sample (attempted suicide)

Psychiatric disorder	ICD 10	N=52		Percentage
		Attempters	Controls	
Mood disorders	F31 & F32	16	00	30.76
Adjustment disorder	F43.2	24	00	46.15
Substance dependence	F10.2 & F11.2	04	00	7.69
Schizophrenia	F20	03	00	5.76
Personality disorder	F60	02	00	3.84
Panic disorder	F41	01	00	1.92
Dissociative disorder	F44	02	00	3.84

Table 3. Comparison of variables in social support scale

Social support	Mean SD		t value	P value
	Attempters	Controls		
Total score	115.42±15.32	120.23±13.23	7.870	0.001**
Reliable attachment	34.42±5.74	36.67±6.74	5.240	0.84
Integration from friends	30.26±9.70	34.23±12.23	5.023	0.002**
Teachers/parental figures/elders	17.78±3.67	19.84±4.23	2.982	0.001**
Religion	08.43±1.87	10.30±2.45	1.854	0.78
Other sources	18.70±3.89	15.67±2.76	3.672	0.001**

**p<0.05 significant

The mean scores of all the four domains of QOL (physical health and well-being, psychological health and well-being, social relations and environment) were significantly lower in the attempters (Table 5).

coworkers, especially when the interaction is positive. The personal networks may provide social support that helps to maintain emotional well-being and buffer the effect of adverse life events, or it can have a direct, independent effect on

Table 4. comparison of coping behavior between attempters & controls

Coping behavior	Mean SD		Percentage (attempters)	Percentage (controls)	t value	P value
	Attempters	Controls				
Confronting coping	30.20	29.56	72.5	32	2.897	0.89
	7.63	6.45				
Distancing	26.45	24.09	60	15	1.587	0.74
	5.22	4.24				
Self-controlling	19.60	22.76	15	25	3.434	0.002**
	3.75	2.87				
Seeking social support	17.35	24.25	25	60	3.231	0.000**
	1.89	2.02				
Accepting responsibility	18.20	19.80	22.5	52	2.765	0.001**
	2.87	3.02				
Escape avoidance	13.34	12.74	30	10	1.672	0.94
	1.45	1.04				
Planful problem solving	13.78	16.78	17.5	45	1.234	0.85
	1.89	2.56				
Positive reappraisal	34.45	32.24	35	32	0.123	0.75
	5.45	5.89				

** P value <0.05 Significant

Table 5. Comparison of QOL between attempters & controls

QOL Variable	Mean SD		P value
	Attempters	Controls	
Physical health & well being	20.12	23.12	0.001**
	5.21	4.74	
Psychological health & well being	20.08	22.42	0.002**
	4.76	3.56	
Social relations	10.24	12.76	0.000**
	3.02	2.86	
Environment	30.53	32.46	0.000**
	8.26	6.20	

**P value<0.05(significant)

DISCUSSION

The present study attempted to differentiate suicide attempters from healthy controls based on their profile of social support, coping strategies, psychiatric diagnosis, and quality of life. Attempters had accumulation of life events especially unpleasant and personal events, lower social support, poor coping styles, and poor quality of life. Life events and other psychosocial stressors are commonly associated with suicidal behavior when attempters were compared to the general population and non-suicidal psychiatric patients Osvath et al. reported recent life events in 80% of suicides; job problems (28%), family discord (23%), somatic illness (22%), financial problems (18%), unemployment (16%), separation (14%), death (13%), and illness in a family member. In the present study psychosocial stressors like financial loss (34% vs. 14%), family conflict (30% Vs 6%), marital conflict (18% Vs 05), broken engagement, and love failure (12% vs. 2%) and major personal illness (10% Vs 2%) were significantly higher in attempters than controls. Coping skills are important protective factors against suicide. In the present study healthy coping behaviors such as self-controlling, seeking social support & accepting responsibility were significantly higher in controls. Social support is another important protective factor against suicide. Social support is provided by network comprising family, relatives, friends, neighbors, and

mental health irrespective of presence or absence of stressful life events. In the present study, confiding relationship, support from reliable attachment, friends, teachers, parental figures, elders, and other sources were significantly lower in attempters. There is evidence from comparative studies that social support systems are undermined among suicide attempters compared with non-suicidal individuals (Soykan, 2003). Quality of life is an important variable in assessing the suicide risk. Since this is relatively a new area, only few studies have looked into this aspect in suicide attempters (Cui, 2003). The score on all the four domains namely physical health and well-being, psychological health and well-being, social relations and environment were significantly lower in attempters in this study. Dissatisfaction with life at baseline is reported as a risk factor for suicide (Koivumaa-Honkanen, 2001) Suicide was significantly associated with low quality of life in China (Phillips, 2002). Western literature reports that about 90% of all those who attempt suicide suffer from a psychiatric disorder (Zonda, 2006). In a series of studies from the Indian context, the predominant psychiatric problem was adjustment disorder closely followed by major depression and alcohol abuse/dependence (Vijayakumar, 1999; Kumar et al., 2004). Pondicherry (which has a high rate of alcohol consumption) also has the highest suicide rate in (58%) in India (Kumar, 2004) Good education, and good social support are protective factors against suicide.

Limitations

The main limitation of this study was a biased control group which was purposefully done to match the psycho-socio-demographic characteristics with the study group in order to reduce the confounding variables as much as possible. Other variables such as personality profile, proneness to violent behavior, and impulsivity should also be considered to differentiate suicidal individuals from controls.

Conclusions

This study concludes that Social support, positive coping behaviors, and QOL were significantly lower in attempters. However, it is difficult to pinpoint a single factor responsible for suicidal behavior.

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