A Study of Social Network of Suicide Attempters in University Malaya Medical Centre, Kuala Lumpur

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Poor social support is associated with significant increased suicide risk. In this study, 60 suicide attempters were assessed on their socio demographic characteristics. and psychiatric diagnoses. Social support was rated by using The Interview Schedule of Social Interaction (ISSI) scale in relation to the social characteristics and the psychiatric diagnoses. The results showed that females were more preponderance than males and the females had poor social interaction as compared to the males. The Indians were still overrepresented and the proportion of Malays attempted suicide had increased. Poor access to social integration was significantly more often amongst the Hindus than all the other religions. Suicide attempters from the urban areas and who lived with small number of people had poor social interaction. Patients diagnosed to have an adjustment disorder more often had insufficient deep emotional relationships. In conclusion, social support or network is an important factor to be evaluated as part of the management plan for suicide attempters.

Key words: Social interaction, social integration, attachment

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Introduction

The term `social network' usually refers to a set of linkages and interactions between an individual and his family, friends, co-workers and neighbours that have a lasting impact on the life of the individual (1, 2). This social relationship provide intimacy, social integration or sense of belongings, opportunity for nurturant behaviour, reassurance of worth, emotional and instrumental assistance and guidance (3).

Several studies have shown that poor social support is associated with a significant increased suicide risk (4, 5). Relationship difficulties are the most common persistent problems of suicide attempters in both adults (6) and adolescents (7) either with parents or problems with boy or girlfriends.

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A study on social network of people who attempted suicide (8) had been conducted in Sweden. The instrument that was used to measure social network was the Interview Scale for Social Interaction (9) to assess the availability and perceived adequacy for any individual ofa number of facets of social relationships.

Evaluation of the social network should be an integral part of the clinical handling of suicide attempters, since it forms a basis of planning psychiatric treatment. The present study was conducted in University Malaya Medical Center (UMMC), Kuala Lumpur, Malaysia. UMMC is one of the teaching hospital and it provides facilities to the Kiang Valley population as well as a referral center from all over Malaysia. The aims of the study were to look at the social interaction score in relation to socio demographic data and to the psychiatric diagnoses among the suicide attempters at the medical center.

Methods and materials

Samples

The samples consist of 60 patients who had attempted suicide and were consecutively admitted to the University Malaya Medical Centre. The definition for attempted suicide was a non-fatal act of self-damage or self-harm (10). In this centre all suicide attempters brought to the Accident and Emergency Department were referred to the Psychiatric Medical Officer on-call and it was the policy of the centre to admit all suicide attempters to the appropriate wards. The patients were interviewed on the first day or second day of admission. For patients who were acutely psychotic and confused, they were interviewed when they had settled.

Assessment

1. Details of socio demographic data (age, sex, marital status, race, religion, educational levels, occupation, living area and number of people staying with) were recorded for each patient.

N Full psychiatric history, physical and mental status examination were performed on each patient. The psychiatric diagnoses were according to DSM-III-R criteria.

3 Social support was investigated in connection with the interview by a self-rating scale to each patient using the abbreviated version of The Interview Schedule of Social Interaction Scale (11) which consist of 30-items and measures social integration and attachment. The reliability and validity of this scale had been tested in Australia (9) and Sweden (11). The scale covers the availability and adequacy of 2 dimensions social integration and attachment, which are each divided into 2 subscales: availability of social integration (AVSI), availability of attachment (AVAT), adequacy of social integration (ADSI) and adequacy of attachment (ADAT). Each subscale has a maximum score: AVSI = 6, AVAT = 6, ADSI = 8 and ADAT = 10. The maximum total score of the 4 subscales combined is thus 30 points (ISSI score). The result from ISSI was referred to as social interaction score.

Analysis

The results were analysed using the EPI-6 and STATA software programmes. The Mann-Whitney U test and the Kruskal-Wallis test were used to determine the significant differences between the subgroups.

Results

60 patients who had attempted suicide consented to participate in the study where 52 (87%) were females and 8 (13%) males. Their age ranged from 14 to 65 years and the mean was 28+10 (SD). The age group of 20 to 25 years was the commonest to attempt suicide.

Socio demographic data

The details of socio demographic data of suicide attempters admitted to UMMC are shown in Table 1.

Marital status

Twenty six (43%) of the patients were married. Among the married patients, seventeen (65%) had problems with their spouse or marital discord which led them to attempt suicide.

Race and religion

Nearly half of the patients were Indian, one third were Chinese and 20% were Malays. Of these, the Hindus were 17 (28%), Buddhist were 14 (23%), Muslims were 13 (22%) and other religions were 16 (27%).

Educational levels

More than two third of the patients had their education up to secondary levels, 11 (18%) had only primary education and 6 (10%) patients had graduated from the university.

Occupation

One quarter were housewives, 33 (55%) were under employment and 13 (22%) were unemployed / students.

Table 1. The socio demographic data of suicide attempers admitted to University Malaya Medical Centre

Socio demographic data	Patients N = 60 (100%)
1. Age (mean ± SD) years	28 ± 10
2. Marital status	
Married	26 (43%)
Single	34 (57%)
3. Race	
Chinese	19 (32%)
Indian	29 (48%)
Malay	12 (20%)
4. Religion	
Buddha	14 (23%)
Hindu	17 (28%)
Islam	13 (22%)
Others	16 (27%)
5. Educational levels	
Primary	11 (18%)
Secondary	43 (72%)
Tertiary	6 (10%)
6. Occupation	
Housewife	14 (23%)
Employed	33 (55%)
Unemployed/student	13 (22%)
7. Living area	
Squatter area	12 (20%)
Urban	48 (80%)
8. Number of people staying with	
0-5	38 (63%)
>5	22 (37%)

Living area

Most of the patients come from the urban area. 20% of them were staying in the squatter areas.

Psychiatric Diagnoses (DMS-III-R, Axis 1)

Amongst the major psychiatric diagnoses, 38/60 (63%) of the patients had an adjustment disorder with depressed mood, 11/60 (18%) had an acute stress reaction, 10/60 (17%) had major depression and 1/60 (2%) had schizophrenia.

Social interaction scores **(ISSI) (Table** 2)

The ISSI total mean score for the suicide attempters was 16.3+4.1. Women had poor social interaction compared to the men (Kruskal-Wallis test+4.25, $p < 0.05$).

ISSI in relation to social characteristics

Table 3 summarised the relation between the ISSI scores and the social characteristics of the suicide attempters.

Marital status

The married suicide attempters had less social interaction than the singles. However, the difference was not statistically significant. There was also no statistical significant differences in their scores on availability of attachment or social integration and in the adequacy of deep emotional relationship or social integration.

Race

The Mann-Whitney U test was used for pair-wise comparison. The Malay patients had less access to social integration compared to the Chinese patients (AVSI, $p=0.07$) and the Malays also had less satisfaction with deep emotional relations compared to the Indians (ADAT, $p=0.07$)

Religion

There was significant statistical difference in the availability of social integration between the religion subgroups (AVSI, $p < 0.05$). Pair-wise comparison showed that the Hindus suicide attempters had less access to social integration compared to the Muslims, to the Buddhists and to the other religions (Mann-Whitney U test, AVSI, $p < 0.05$, $p < 0.05$, and $p < 0.05$ respectively).

Table 2. The Interview Schedule for Social Interaction (ISSI) and the subscales (mean ± SD) of the suicide attempters

	Total N=60	Women N=52	Men N=8
ISSI, total score (max = 30 points)	16.3 ± 4.1	15.8 + 4.1	19.0 ± 3.3
AVSI, availability for social integration (max = 6)	2.6 ± 1.7	2.5 ± 1.6	,1.4 ± 1.6
AVSI, adequacy of social integration (max = 8)	4.2 ± 1.9	4.1 ± 1.9	4.6 ± 1.6
AVSI, availability for attachment (max = 6)	4.9 ± 1.1	4.9 ± 1.8	5.5 ± 0.5
ADAT, adequacy of attachment (max = 10)	4.5 ± 2.1	4.3 ± 2.1	4.6 ± 1.8

Table 3. ISSI scores and the social characteristics of suicide attempters.

Social characteristics	ISSI scores (mean ± SD) Max = 30 points	Kruskal-Wallis test	Significance P value
1. **Marital status**			
Married	15.9 + 4.0	0.95	ns
Single	16.6 ± 4.3		
2. Race			
Chinese	16.2 ± 4.5	1.28	ns
Indian	16.8 + 3.9		
Malay	15.3 ± 4.4		
3. **Religion**			
Buddha	16.0 ± 4.5	2.16	ns
Hindu	15.9 ± 3.3		
Islam	15.7 ± 4.5		
Others	17.3 ± 4.6		
4. Educational levels			
Primary	15.3 ± 4.9	3.74	ns
Secondary	16.0 ± 3.7		
Tertiary	20.0 ± 4.3		
5. Occupation			
Housewife	15.6 + 4.1	2.32	ns
Employed	16.1 ± 4.5		
Unemployed/student	17.4 ± 3.0		
6. **Living area**			
Squatter area	18.5 ± 3.8	4.51	p < 0.05
Urban	15.7 ± 4.0		
7. **Number of people staying with**			
0-5	15.5 ± 4.2	4.13	p < 0.05
>5	17.5 ± 3.9		

Educational levels

There is a significant difference in the availability of social integration among the 3 educational levels amongst the suicide attempters (Kruskal-Wallis = 6.61, AVSI, $p < 0.05$). Using the Mann-Whitney U test for pair-wise comparison, it showed that patients who had secondary level of education had less social interaction score compared to those who had tertiary educational levels (ISSI, $p < 0.05$). Patients with primary and secondary education also had less access to social integration compared to patients with tertiary education (AVSI, $p < 0.01$ and $p < 0.01$)

Occupation

There was no statistical significant differences in social interaction amongst the different jobs held by the suicide attempters.

Living area

The suicide attempters who come from the urban areas had poor social interaction compared to those who come from the squatter areas (ISSI, $p < 0.05$) They also had less satisfaction with their social integration (ADS I, $p < 0.05$).

Number of people staying with patients

Suicide attempters who had < 5 people staying together with them had less social integration compared to those who had more people staying with them (ISSI, $p < 0.05$).

Social interaction in relation to Psychiatric Diagnoses

There was no significant differences in social interaction scores and in the subscales between the diagnostic groups. However, pair-wise comparison showed that patients who had been diagnosed to have an adjustment disorder more often had insufficient deep emotional relationships than those who had an acute stress reaction (ADAT, $p < 0.05$).

Discussion

In the present study the social support was measured by using the self-rating scale ISSI (8). The ISSI was administered to the patients on the first or second day of admission to the hospital and the patient could be in an emotional turmoil due to various circumtances. Therefore one cannot exclude that the ISSI results were confounded by the constriction of affect and intellect.

It was found that the women had less total social interaction score compared to the men. The city women today had to face not only their personal and family problems but also their career, financial and educational problems. It was probably due to their busy life, and what more for the housewives as a homemaker, which results in less interaction with the family members, relatives, neighbours or friends. The other reason was probably due to the preceding event faced by women in this study, ie their interpersonal conflict. The majority of the married woman had problems with their husband and 35% had a chronic marital discord. Therefore, there was less intimacy and they had nobody to turn to share their problems. There is a significant association between severity of depression and deficiencies of marital intimacy (12). It is the Malaysian culture for the wife to have high respect the husband. However, the social network can be destructive and life diminishing as well (2). The support that the women expected from the spouse or boyfriends or kin had turned them down. There is also evidence that men and women appear to be different in perceiving support and personal relationships (13).

Due to the multi racial population in Malaysia, one remarkable finding in this study is the increased proportion of Malays who are mainly Muslims, attempting suicide. In Islam the Muslims should have sense of kinship and brotherhood within the community and Islam forbid suicide as it is one of the big sin. However, in this study it showed that the Malays had less access to social integration (AVSI) and had less satisfaction with their deep emotional relations (ADAT). The Hindus also had

less availability to social integration and this was probably the reason why they lacked emotional or instrumental support. When they were under stress, they seemed to think easily of suicide as the way to run away from the problems. This was a common finding especially amongst young Indian female who found themselves having conflict within their role in the family (14).

When comparing the occupational status, there was no significant difference in social support in the 3 groups, although it is well known that there is high risk of suicide attempt in the unemployed. (15, 16). In the Swedish study of social network of suicide attempters (8), it showed that the unemployed had the least satisfaction in the social support and to have ajob or to be in the vocational rehabilitation is important. On the other hand, in the present study, the housewives had the least social support. As explained earlier these women could have had a destructive social network from the spouse.

Patients who come from the urban areas had poor social interaction as compared to those who come from the squatter areas. It shows that in Malaysia, with the persistent upward trend of urbanization, privatization and emerging of multimedia, support is slowly weakening. Furthermore the urban nuclear family is now much more vulnerable to various types of life stress. A person who stays with more people will get better social network compared to those who are isolated. Even though one would argue that the quality of the social support is what matters but from this study it showed that the quantity of the network was a better account. It has been shown that an isolated person, living alone, against their will, with no friends and having no one to confide in, is more prevalent to attempt suicide (17).

In this study it was found that most of the patients sample had depressive symptoms. However there was no significant difference in social support among the diagnostic subgroups. These patients were at risk of attempted suicide as a result of their reaction to the precipitating events. Therefore the maladaptive coping mechanism to stress could play a major role to lead them to the attempt. Hence poor social networking and support probably further impaired the ability for the patients to deal with-or find a better way of coping with stress.

In conclusion, from this study, certain social characteristics - had poor social support which could have led them to attempt suicide. Poor social network is a risk factor for attempting suicide and therefore it is important to evaluate it carefully before any plans are organized for the patients.

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