RIVEW ARTICLE

SOCIAL SUPPORT AND SUICIDE

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Abstract

A body of research in recent years has focused on social support in maintaining the emotional well being and moderating the adverse life events. In this review the author has tried to elucidate the conceptual model of social support, the various operating models of social support, social support in suicidal behaviour and the interaction of socials support with stress and coping in suicidal behaviour.

Key Words- suicide, attempt, social support, stress

General Concepts

The term social support refers to the mechanisms by which interpersonal relationships protect people from deleterious effects of stress (Kessler, 1989). Social support has a very import role to play in maintaining an optimum level of efficiency and is necessary for feelings of physical as well as psychological well being (Broadhead et al, 1983). Social support helps to maintain emotional well-being and mitigate the effects of adverse life events. There is debate whether the effect of social support on mental health direct or indirect. Two different views have been proposed, and both have gained some support from the literature. Lack of social support may be stressful independently or it may indicate a lack of a buffer against psychosocial stress originating from life events (Overholser et al, 1990).

Conceptualization

Although definitions of social support vary, the underlying implication is that persons who are supported instrumentally and emotionally are healthier than those who are not supported. The view posited by Heller et al (1986) is that social support is involved in social activity if it is 'perceived by the recipient of the activity as esteem enhancing or if it involves the provision of stress related interpersonal aid (emotional support, cognitive structuring, or instrumental aid)'. The first theme 'perception' refers to a

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subjective assessment of, and belief in (a) being cared for and valued by significant others (b) having significant others available in time of need and (c) being satisfied with these relationships. Mobilization of social support is conceptualized as an aid to coping 'refers to the provision of direct help or material aid.

Social support is considered as a personal experience as opposed to a set of objective circumstances. Social support as described by Coyne & Delongis (1986) is a 'cognitive appraisal or property of the person, rather than a reflection of a set of circumstances or of the transactional unit of a particular circumstance'. Some scientists have viewed social support as function of personality, for example some persons may 'have the capacity to seek out and obtain support from any environment at all times and particularly when order stress' (Flaherty et al, 1983). There is evidence that not all types or sources of support are equally efficacious in reducing stress. Harm may result from supportive actions that are not consistent with either the expectations or the personal coping style of the one in need of social support (Schilling, 1987).

Certain specific health-sustaining functions of social support can be reduced to (a) esteem support, or information that one is esteemed, accepted or affirmed (b) informational support, sometimes referred to as advice or coping support (c) affiliative support aimed at facilitating positive affective moods and (d) instrumental support, or the provision of either tangible or intangible aid. Despite that social support research that has accumulated over the last decade, the process by which social support accomplishes a health protective functioning is neither clearly understood nor adequately documented (Schilling, 1987).

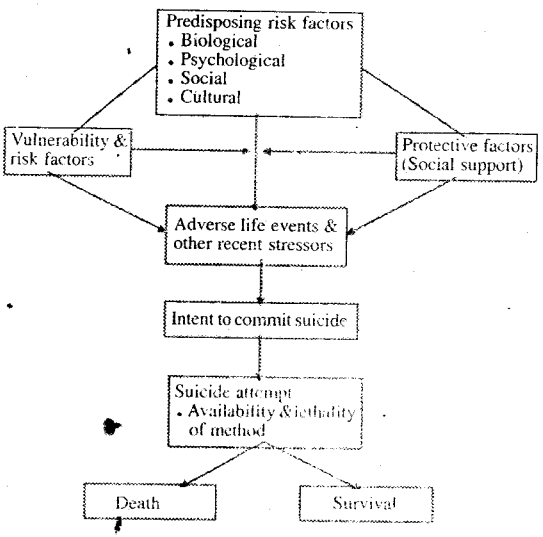
Social support in the suicide process

Theoretically, the role of social support in the suicide process differs in important aspects from the role of social support in physical illnesses. Suicidal behaviour, unlike physical illness, is a self-inflicted act, often of short duration. Applying a systematic approach, suicide can be considered as a time advancing process that is affected by complex biological, psychological, social, cultural and societal factors (Heikinen, 1993). The suicide process model (Figure-1) is applied to contemplate and organize the factors associated with suicide (Heikinen, 1994). In this threshold model of suicidal behaviour, certain predisposing risk factors such as family history of suicide and biological vulnerability can interact with risk / vulnerability factors which develop later in life, such as psychiatric illness, exposure to suicide, or chronic difficulties, for example.

Precipitating or triggering factors such as adverse life events and other recent psychosocial stressors occur close to suicide; when a person with risk factors/vulnerability undergoes a humiliating life experience or other psychosocial adversity and when there is an available method for suicide, the threshold for suicidal behaviour may be lowered. In many cases, suicide may be seen as an escape from intolerable, although probably transient, period of emotional turmoil, triggered by recent adversity. Counteracting these provoking factors, by acting as a barrier to suicidal behaviour, protective factors such as strong social support systems, cognitive flexibility, hopefulness, and appropriate treatment for an associated psychiatric disorder operate at phases during the process. Lack of protective factors may indicate increased vulnerability. During an individual's life course, the equilibrium be-

tween risk factors and protective factors varies from time to time. Suicidal intent is not constant with an individual person. It waxes, wanes, and disappears, and it may surface abruptly. Recent life events may act as precipitant stressors, which make the person, take the step from suicidal thoughts to suicidal acts. The suicide process model may help to explain why some people do not become suicidal given certain conditions and why others do.

Figure 1: The suicide process model



Operational models of social support and stress

Two general models of the influence of social support on stress have been proposed, each representing a different process through which social support can affect well-being. Neither hypothesized model has been strongly or consistently demonstrated.

Direct effect model

The direct (main) effect model of social support can prevent exposure to certain stressors, induce more benign appraisals of threat and/or boost morale and sense of well-being (Gottlieb, 1981). This effect influences the well–being in ways that do not necessarily involve improved means of coping with actual stressors or stressful events. In this model, social support is seen on its own as an important etiological variable, and is 'conceptualized as a basic human need that must be satisfied in order for an individual to enjoy a sense of well-being'. Social support bears a direct relationship to measures of psychological disorders in this model and is a means of primary prevention. Emotional sustenance or esteem enhancing components of social support are more critical to health maintenance than are the more practical stress reducing functions of cognitive or instrumental aid (Shumaker & Brownell, 1984). There is a dearth of evidence to support the greater impact of emotional and informational support versus tangible support and companionship on well-being. The literature reviewed strongly supports the proposition that social support has a significant direct relationship on physical and psychological well-being. However, the connections are "likely to be complex, reciprocal and contingent.

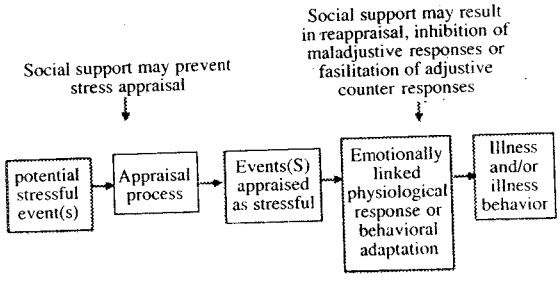
Buffering effect model

The buffering (interaction) effect model hypothesizes that social support mediates or "buffers" the adverse effects of chronic or adverse life stressors (Cohen & Wills, 1985). This effect influences problem-solving coping directed at changing or managing the stress situation. This is the most widely researched theory of social support buffering effect and it is claimed to offer a social model of mental disorder. Stress arises when one appraises a situation as threatening or otherwise demanding and does not have the appropriate coping response. Characteristic effects of stress appraisal include negative

affect, elevation of physiological response, and behavioural adaptations. Although a single stressful event may not place great demand on coping abilities of most persons, it is when multiple problems accumulate, persisting and straining the problem solving capacity of the individual, that the potential for serious disruption of neuroendocrine or immune system functioning, market change in health related behaviours (eg. excessive alcohol use, poor diet or exercise patterns), or various failures in self-care). The psychological definition of stress closely links with appraisal stress with feelings of helplessness and the possible loss of self-esteem. Feeling of helplessness arises because of the perceived inability to cope with situation that demands effective response. Loss of esteem occurs to the extent that failure to cope adequately is attributed to one's own ability or stable personality traits as opposed to some external cause.

Following these propositions, the possible buffering mechanisms of social support are depicted in Figure 2. Social support may play a role at two different points in the causal chain linking stress to illness. First, support may intervene between the stressful event (or expectation of that event) and a stress reaction by attenuating or preventing a stress appraisal response. That is, the perception that others can and will provide necessary resources may redefine the potential for harm posed by a situation and bolster one's perceived ability to cope with opposed demands, and hence prevent a particular situation from being appraised as highly stressful. Second, adequate support may intervene between the experience of stress and the onset of pathological outcome by reducing or eliminating the stress reaction or by directly influencing the physiological processes. Support may alleviate the impact of stress appraisal by providing a solution to the problem by reducing the perceived importance of the problem by tranquilizing the neuro-endocrine system so that people are less reactive to the perceived stress, or by facilitating healthful behaviours.

Figure- 2 Two points at which social support may interfere with the hypothesized causal link between stressful events and illness



The critical point of the buffering effect model is that social support modifies the effects of stress; specifically at the effect of stress on psychological adaptation. A major caveat in the testing of buffering hypothesis has been lack of attention given to the circumstances in which perception of support and adaptational consequences arise.

Although empirical validation of both models does exist, 'overall the results are mixed'. More current research points to simultaneity between functioning of the two models as opposed to a mutually exclusive model (Ryan & Austin, 1989). Citing studies of social support in the mental health field, Flaherty et al (1983) concluded that 'social support emerged as a better predictor of outcome than life events, causing speculation that there is a direct effect in addition to that of buffering stress'.

Social support and suicide

The variables used in measuring social support include marriage, living alone, interaction between family members, recent moves, number of close friends, and other variables relating to change in social integration, especially when the interaction is positive. A recent study by Kumar (2007) shows lower social support from reliable attachment, friends, teachers, parental figures, elders and other sources in attempters compared to age, gender and martial status matched healthy controls.

Living alone status

Studies have provided evidence of excess living alone among suicide completers compared with living controls. In consecutive studies, living alone has been reported in 22-25% of the victims (Chynoweth et al, 1980). Bunch et al (1971) in a controlled study with living controls reported that marriage protects against suicide in recent maternal bereavement. The same investigator in another study (1972) also found that suicide victims visit their relatives less frequently than controls and have poor social support after bereavement. More suicide victims were left living on their own or in hotels after bereavement. Stocks & Scott (1991) in a retrospective analysis of frequent suicidal drug over dose reported that most of them were lacking a partner. Another investigation by Rorsman (1973) found that more female victims (50%) than living controls (16%) were living alone. Interestingly, in this study there was no difference in social support among males. Epidemiologists (Erlemeier, 1988) have predominantly reported social isolation and loneliness as risk factors for suicide in old age. In Heikkinen et al's study (1994a) living alone was more common among female victims. Females had complained of loneliness more often than males. Those females who had lived alone had countered a recent death more often than other females. The male victims who had lived alone had encountered a recent death more often than other females. The male victims who had lived alone had experienced separation, financial trouble, and unemployment during the last 3 months more frequently than other males, suggesting a concurrent stressor effect of these recent life events with living alone in male suicides. Study conducted in Kerala also shows lower confiding relationship and higher loneliness in attempters (Kumar, 2007).

Studies which have looked at the age differences in living alone and social interaction factors in suicide have shown that living alone has been more common among older suicides (Conwell et al, 1991) and elderly males (Arboleda-Florenz, 1999) . Rich et al (1986) who compared the living alone status found that 34% of older suicides (above 30 years) as against 8% of young suicides (below 30 years).

Recent move

Sainsbury (1973) reported that more suicide victims (40%) than controls (12%) moved within 2 years and movers were more often single, widowed, child less and living alone. In a comparative analysis of social stress (Hagnell & Rorsman, 1980) between suicide victims and living controls, move in last year was more common among suicides (32%) than controls (13%).

Social network

There is evidence that social networks among suicide attempters are weaker than non-suicidal individuals (Heikkinen et al (1993). Veiel et al (1988) reported crucial

difference in the social network between attempters and controls in a controlled study. Magne-Ingvar et al (1992) found that very few suicide attempters had a well functioning relationship and two thirds had problems in their occupational situation. Divorced partners had unsatisfactory social interaction compared with those who were married or co-habiting with those who were single or widowed. Perez-Smith et al, (2002) reported higher levels of suicidality among adolescents who lived in neighbourhood with weak **social networks.**

Friends

Maris (1981) reported that suicide victims have significantly fewer close friends in the year before their death compared with natural deaths. Same author in another comparative study (Maris, 1992), natural deaths had twice as many close friends as suicides. Half of suicides had no close friends compared with one third of natural deaths. Thompson et al (2002) have demonstrated a mediating role for social support from friends and family and perceived effectiveness at obtaining resources in reducing suicide attempt. In Turvey et al's study (2002) there was absence of relatives or friends to confide in late life suicide. Bearman & Moody (2004) reported that having had a friend who committed suicide increased the likelihood of suicidal ideation and attempts for both boys and girls. Female adolescents' suicidal thoughts were significantly increased by social isolation and friendship patterns in which friends were not friends with each other.

Veiel et al (1988) reported crucial difference between attempters and controls in the number of friends with whom the subject had agreeable everyday interactions and in the number of kin that provided crisis support, both psychological and instrumental. A study (Nisbet, 1996) conducted among black females suggests that finding emotional and psychological support in friends and family members helps to safeguard against suicide. The most substantial finding of this study was that for all sex/race categories, seeking support from friendship and familial resources is negatively related to attempted suicide where as seeking support from professional resources is associated with an increase in the likelihood of suicide attempt. This may be due to serious emotional disturbances in the later group.

Family

Rubenstein et al (1989) have reported protective effect of family cohesion and family friendship in suicide attempt. In a case-control analysis and follow up study (Cui et al, 2003) on the risk factors of suicide in a rural population, suicide attempts were negatively associated with higher scores for the family cohesion. Family closeness as a resiliency factor against suicide has been reported (O'Donnell et al, 2004). Eskin (1995) noted low perceived family support and low perceived peer support to be commonly associated with past and current suicide attempt in adolescents. In an assessment of sheltered homeless adults (Schutt et al, 1994), perceived social support was found to lessen distress and suicidal thoughts directly and also buffers homeless persons from the distress associated with traumatic experiences. Distress was found to directly increase the suicidal thought and also in interactions with low levels of social support.

Hirsch & Ellis (1995) when examined the effects of family support and demographics of suicidal behaviour in adults, the type of primary care giver a person reported

having while growing-up was significantly related to serious suicidal ideas, as they were more common among single parent households. This suggests that suicidal behaviours may occur due to complex interaction between social factors and childhood care. The influence of living in a single parent home may contribute to whether or not the person considers suicide.

Religious beliefs

In a cross cultural analysis of suicide Gibbs (1997) concluded that among many protective factors that mitigate the risks of suicide, religiosity and social support are very important as both these were found to counter many stressors in the population. In a review of the relationship between religiousness/spirituality and mental health reported an inverse association of religiousness with suicide (Van Ness & Larson, 2002). Satisfaction with religious beliefs was protective against suicide in adolescents in another study (O'Donnell et al, 2004). In a study of natural deaths in adults aged 50 and over, participation in religious activities does appear to reduce the odds of the occurrence of suicide (Nisbet et al, 2000). This effect remained significant even after controlling the effect of age, sex, race, marital status and frequency of social contacts. Study by Vijayakumar & Rajkumar also shows low religiosity in suicide attempters. Dervic et al (2004) reported that religiously unaffiliated subjects had significantly more lifetime suicide attempts and more first-degree relatives who committed suicide than subjects who endorsed a religious affiliation. Unaffiliated subjects were younger, less often married, less often had children, and had less contact with family members. Furthermore, subjects with no religious affiliation perceived fewer reasons for living, particularly fewer moral objections to suicide.

Migration

Immigrants have higher rate of suicidal behaviour than those in their countries of origin and their new countries. Immigration is a stressful life event, which may lead to depression and suicidal behaviour (Hovey, 2000). Chandrasena et al (1991) in their study on suicide among immigrant psychiatric patients in Canada noted that foreign-born patients who had come to Canada for family or economic reasons but were unemployed, with poor social integration are at risk of suicide. Sher (1999) has suggested that most immigrants who exhibit suicidal behaviour in the new country had suicidal tendencies, and/or some degree of depression, and/or certain maladaptive personality traits in their country of origin. An epidemiological survey (Ponizovsky et al, 1997) of suicide ideation among recent adult migrants from former Soviet Union to Israel showed that suicidal ideation was most frequent among socially and emotionally isolated immigrants with lower social support.

Adolescent suicidal behaviour and social support

Suicidal ideation and its related factors were studied in adolescents. Students who had attempted suicide had major family problems, lacked social support and had experienced stressful events having a negative impact on their lives (Rutter & Behrendt, 2004). Rich & Bonner (1987) have reported that 30% of variation in suicide ideation in students could be accounted for by the linear combination of negative life stress, depression, loneliness and few reasons for living. Social support variable accounted for 52% of the variance in suicide potential in adolescents in D'Attilio et al's (1992) study.

The greatest proportion of the variance in suicide risk was attributable to the quality of perceived social support. Haring et al (1991) reported peaking of suicides at the age of 15 and 19 and pointed weakened social integration as the causative factors. King et al (1990) identified adolescent female suicide attempters having fewer support persons, less likely to be living with their mothers, less likely to describe confiding relationships with parent/guardians and less active and affectionate relationships with mother figures than matched controls.

when adolescents at high risk for suicide were compared with less risk groups (de Wilde et al, 1994) the high risk group distinguished itself from the 'normal' group by reporting less support and understanding from siblings and relations outside the family, more changes in living situation, sexual abuse during adolescence and more siblings leaving home during the preceding year. Cole et al (1992) also found poor quality friendships and lower self esteem in adolescents with high suicide risk. In males, negative life events and daily hassles were significantly associated with suicidal ideation. Involvement in bully victims at school, especially for students with relatively little social support was cited as significantly related to suicidal ideation elsewhere (Rigby & Slee, 1999). Slap et al (1989) in a comparative study of adolescent attempters versus non-attempters reported more disturbed family relationships in attempters. Pronovost et al (1995) reported that communication and parental support was significantly less in families with suicidal teenagers compared to non-suicidal teenagers. In addition, the variations in perception between adolescent and his or her parents are much greater in families with suicidal teens. In an intervention program, De Man & Leduc (1995) reported that stress, social support, anomie, self-esteem and loss of control are significantly related with suicidal ideation along with other personal variables.

Correlation between life events, social support and suicide

Life events can alter the structure and function of the social support system in term of size, frequency of interaction and stability and such changes may be associated with suicidal behaviour. Studies on social support has demonstrated the presence of either main (network) or buffering (interaction) effects of factors that mitigate the impact of life stress. Flannergy & Weiman (1989) in a more comprehensive assessment of both social support resources and life stress found buffering effects but not main network effect having a significant role in reducing life stress.

In an analysis of risk and protective factors in suicidal and non-suicidal high school students, Rubenstein et al (1989) found life stress and depression as independent risk factors and family cohesion was found to offset the effects of stress and friendships to have a more indirect effect. Rudd (1990) in an integrative path model analysis of the relationship between several variables and suicidal ideations found a significant relationship between social support and both life stress and suicidal ideation. Bonner & Rich (1990) in an investigation to cross validate a stress-psychosocial vulnerability model of suicidal ideation and behaviour indicated that 51% of the variation in suicide ideation could be accounted by the linear combination of low reasons for living, irrational beliefs, jail stress and loneliness. In addition, when the variables were entered into a hierarchical multiple-regression model, interac-

tions between selective psychosocial vulnerability factors and jail stress were found to best explain suicide intent.

Abbar et al (1993) in an attempt to understand suicide as being multi determined reported that social and family factors, negative life events and medical illness may interact with psychiatric and personality disorders, genetic variables, biological factors and psychosocial stressors in three ways to produce suicidal acts; as predisposing factors increasing vulnerability, as precipitating or contributing factors. Morano et al (1993) reported influence of recent loss on serious suicide attempts, especially when paired with a perceived lack of family support and hopelessness, which provides evidence for a 'stress vulnerability' model of adolescent suicide behaviour. In a study (Ketty et al (2000) to investigate the impact of recent life events and social adjustment on suicide attempters, recent life events elevated the suicide risk in groups already at high risk of suicide completion, where as high levels of social adjustment protected against stress related suicidal behaviour. Schutt et al (1994) reported that perceived social support lessens the distress and suicidal thoughts and also buffers homeless persons from the distress associated with traumatic experiences.

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