

SOCIO-PSYCHOLOGICAL FACTORS AND SUICIDE RELATED BEHAVIOURS AMONG FARMERS

Justin P. Jose, Sabu K.U. and Renjith R.

Abstract

Using the theoretical premise of the linkage between socio-psychological factors and mental stress leading to suicide behaviour, this paper discusses the social and psychological factors, mental stress leading to suicide behaviour, and the nature of suicide behaviours. The paper is based on the data from an empirical study conducted in the district of Kannur in the state of Kerala. The study covered a sample of 30 individuals from the agricultural community who had unsuccessful suicide attempts in the past. The main factors that produce stress situation that is conducive to suicide related behaviour include poor housing condition and economic hardships, unfavourable work place situation and household activities, and disruptive interpersonal relationships within and outside family. Significant correlation was found between these factors and stress situation. The stress situation experienced by the individuals led to fantasising suicide (or suicide ideation), suicide intent and suicide related behaviours, such as those concerning presence of others, planned timing, precaution against rescue, planned execution, objective of changing environment and certainty of death. Individuals under chronic stress resort to the suicide related behaviour patterns in different degrees.

Introduction

There is growing international concern about suicide and related behaviour as a clinical and public health problem. The current understanding of suicide as a multidimensional disorder, that results from a complex interaction of biological, psychological, sociological and environmental factors (Garland 2003) reiterates the importance of looking beyond the mental health model of suicide causation. However, the role of mental disorders in suicide cannot be ignored as empirical evidences consistently demonstrate depressive illness as a common predictor of suicide. Both western and eastern literature on suicide demonstrates high prevalence of mental disorders in people who resorted to suicide (Cheng 1995; Robins *et al.* 1959; Foster *et al.* 1999; Justin *et al.* 2008). Evidence from India has repeatedly shown significant correlation between mental depression and suicide attempt (Srivastava and Kulshreshtha 2000). Studies have also shown consistent relationship between mental depression and two sets of factors. First is that of the social factor of problems or dissatisfaction in social life such as financial difficulties. The second is that of psychosocial factors such as disruption in marital and family relationships that lead to stressful life (Sainsbury 1986; Heikkinen and Lönnqvist 1995; Foster *et al.* 1999; Gould *et al.* 1996).

Existing studies on suicide indicate that suicide tendency or behaviour is the result of mental depression or stress experienced by individuals that they are unable to cope with. Mental stress in turn is caused by several socio-psychological factors. This paper accepts this theoretical premise linking socio-psychological factors to mental stress and suicide behaviour, and discusses (i) the social and psychological factors related to mental stress; (ii) mental stress leading to suicide behaviour, and (iii) the suicide related behaviours.

The paper is based on the data from an empirical study conducted by us in the district of Kannur in the state of Kerala. The objective of the study was to assess the level of mental stress and the socio-psychosocial factors inducing it, and to explore the suicide related behaviours. The study covered a sample of 30 individuals – 17 men and 13 women – from the agricultural community who had unsuccessful suicide attempts in the past.

Data collection for the study was carried out in two stages. In the first stage, which took place in 2009, all the 30 participants were interviewed with the help of an interview schedule. In the second stage a sub-sample of 8 participants were contacted in 2010 for in-depth interview in order to collect additional data of qualitative nature. The participants of the study belonged to the age group of 19-70 years and had a family income of up to Rs.6000 per month. With regard to the marital status of the participants in the study, 22 of them were married, six unmarried and two widowed.

Socio-Psychological Factors

Socio-economic difficulties and problems in social relationships can be considered as the major sets of socio-psychological factors that are likely to produce mental stress leading to suicide behaviour. The main factors, examined in the present study undertaken by us, include (i) housing condition and economic hardships, (ii) work place situation and household activities, and (iii) interpersonal relationships. Difficulties and dissatisfaction in these areas were considered to have an impact on mental stress that is likely to lead to suicide behaviour.

Housing Condition and Economic Hardships

In the matter of housing, 21 out of the 30 participants experienced some level difficulty in housing, and all the 21 of them expressed their dissatisfaction with their housing facility. The quality of housing is dependent on the financial situation of a family. On the whole the participants of the study were from low income group and many of them were in debt which they were unable to pay back. It is the low family income and indebtedness from loans that resulted in the poor housing conditions. Financial liability arising from outstanding loans has been recognised as a major stress creating factor of suicide among farmers in India. This becomes more severe when one faces sudden and unexpected financial loss. It was found that the participants of the present study perceived financial liability as a threat to personal integrity and self worth, and felt helpless when they were unable to pay it off.

One of the participants expressed her stress inducing social problem with reference to poor housing at the time of attempting suicide in the following words. “We were staying in a small shed. During the rains water seeped inside the house. Along with that, when I thought of our financial difficulties, I felt no meaning in living and so I thought of dying myself. My biggest worry was our loans that are not paid off even now.” Another woman participant said that, as she was unable to keep her words in paying back the loan, she found it very difficult to face people. So she thought of dying. She is still under stress, expressing it in the form of just sitting and weeping. Similarly a man recalled his mental state at the time he attempted suicide: “At that time I was surrounded with problems all around. First of all I wanted to keep my word which I was unable to do. That was beyond anything I could tolerate.” Another man said: “I had a heavy loss in my business and did not have any means to pay off my debt. So I tried to kill myself.” Thus the economic factor of debt and the moral factor of the feeling of guilt in the inability to pay off the debt have been strong sources of stress experience leading to suicide.

Work Situation and Household Activities

Some of the participants of the study experienced stress generating difficulties and dissatisfaction in their work life. Majority (21 out of 30) of participants reported to have difficulties associated with work life, and 17 of them were dissatisfied with their work in different degrees. One of the reasons for dissatisfaction with work life was poor health condition. For instance, a woman reported that she was working for meeting the daily expenses in spite of her bad health and even against doctor’s advice. Another woman complained of too heavy work. “I could sit only at night. Throughout the day I was working and nobody else was there to see me.”

However, it may be noted that work place has also its own desirable function. It can serve as a source of secondary social support in the sense that an individual can share her/his difficulties and worries with peers at work place. This in turn can help one feel relaxed from painful relationships at home. For instance, a woman participant of the study reported: “When I am in the work place I am relaxed and when I come back home, I have a

lot of tension. My relationship with my husband made my life miserable. I hate that person.” But this is not the case with all the individuals who have problems at home. Some individuals found it uncomfortable to share their very personal problems with others at work place, distancing themselves from the social support system available at work place. One of the participants said that he felt ashamed to tell about his personal problems to others.

Another possible source of stress and strain that can contribute to mental depression is household activities in which almost every individual is engaged in various degrees. When enquired about the difficulties faced in their household activities, 17 out of the 30 participants reported to have some difficulty and the difficulties caused dissatisfaction of some level in the case of 12 of the participants. Thus household activities were not a major source of mental stress leading to suicide behaviour in the case of the present sample of participants.

Interpersonal Relationships

Failure or difficulties in interpersonal relationships within the family – between spouses, parents and children, and siblings – and in interaction with friends and neighbours can have significant impact in inducing and maintaining chronic mental stress that may lead to suicide related behaviours. There is enough supportive evidence from different studies that have shown strong linkage between stressful family relationships and suicide related behaviours (Justin *et al.* 2008; Bannerjee *et al.* 1990; Ponnudurai *et al.* 1986). Difficulties in intimate relationships are likely to result in serious mental depression leading to sudden impulsive suicide attempts. At times suicide attempt is resorted to as a means to force the loved one to reciprocate love. For instance, a 32 year old male participant in the study conducted by us said that, when he felt hurt by the loss of love on the part of his loved one, he could not do anything else, but to punish himself. That was in the form of attempting suicide.

Majority (20 out of 30) of the participants in the present study had experienced varying levels of difficulties in marital relationships. When enquired about the level of satisfaction in their marital relationship, 12 out of the 30 participants reported dissatisfaction leading to mental stress. Many

a married woman in the sample of the study seems to have experienced significant level of disruption in marital relationship as a result of couple conflicts and domestic violence, which turned out to be stressful life events. When marital disharmony and disruption are coupled with economic plight in looking after the household affairs, they have greater impact in inducing and maintaining chronic stress leading to suicide related behaviours.

However, concern of the participants about their children's future and wellbeing was a frequent deterrent factor to suicide behaviour, although such deterrence could not prevent actual suicide attempts during stressful life events related to marital relationships on long term basis. Thus, it is possible that the victims fantasise suicide in everyday life in the context of ongoing stressful marital and family life situations, leaving them under constant threat of repeated suicide attempt and probable suicide completion. The following words of a married woman are typical of this situation. "I never have had a peaceful life after marriage. My marriage was on a Monday and the next day onwards I started working in the field. I did not die yet, only because of my daughters. When my husband continued to abuse me, I decided to die and took poison and drank it with water."

Alcoholic behaviour of the spouse can induce immense stress on the marriage partner, which in the case of progressive nature of alcoholic behaviour is often maintained on chronic basis. However, strong support from children is likely to act as a buffer or reduce the severity of the difficulties in spouse relationship resulting from alcoholic behaviour. A 60 year old mother contacted during the study said: "He drinks and sometimes fights with me and even asks me why I live and why I can't go and die. Such words make me even think of suicide. But I think of my children and forget it. My children have told me not to think of suicide again." Another participant, recollecting the circumstances leading to the incident of suicide attempt, considered it as an impulsive act resulting from the failure in interpersonal relationship. He said: "There was no preparation. It was a sudden decision. I made up my mind for it within four hours. I had to meet a person with certain dealing and I was unable to meet his demand. If that person consoled me at that time I couldn't have done like that. But that didn't happen and my sudden reaction was foolish."

A few of the participants had difficulties in the relationship with their children. Different degrees of difficulty with children were reported by 10 out of the 30 participants in the study. As it can be expected, those who faced problem in their relationship with children said that they were dissatisfied in their relationship with children. A unique case of difficulty and dissatisfaction in interpersonal relationship with children was reported by a 60 year old participant in the study. Her youngest son after his marriage started staying in a separate house with his wife. The aged woman had two stress generating concerns in this situation. First, as per the prevalent socio-cultural practice, the youngest son with his family of procreation was expected to remain with his aged parents and take care of the whole family, including the elderly parents. This had not happened in her case. Second, the participant and her spouse considered the stay of their son and family in a separate house in the neighbourhood as a social insult to them. Hence, the participant and her spouse had restricted social interaction and engagement with their son's family and children. On the whole interpersonal relationships within the family seemed to be an important stress producing factor. Similar finding has been reported from other studies as well (Justin *et al.* 2008; Bannerjee *et al.* 1990; Ponnudurai *et al.* 1986).

Another type of interpersonal interaction is that of the relationship with relatives other than members of the immediate family, and friends. A little over half (16) of the participants of the present study reported some degree of difficulty in their relationship with relatives. Similarly 17 participants in the sample expressed dissatisfaction in their relationship with the relatives. Further investigation indicated that over-involvement in the family affairs of other relatives, especially in-laws, or undue expectations from them had been a serious problem with interpersonal relationships that induced stress and strain. A male participant of the study, who had attempted suicide, expressed his anxiety that his children were more attached to his in-laws and therefore his parents and siblings were distancing themselves from his children. But, in accordance with their customary practice, he wanted his children to be more attached to his own father's relatives. With regard to the relationship with friends, just a handful (5) of the participants in the sample had some level of difficulty in their interaction with friends. Similarly just two participants expressed dissatisfaction in their relationship with friends.

Measurement of Socio-Psychological Factors

In order to assess to what extent those who attempted suicide experienced the various socio-psychological factors, the Social Problem Questionnaire (SPQ), developed by Corney and Clare (1985), was adopted. The SPQ contained a total of 33 questions, that elicited stress inducing ‘dissatisfactions’ and ‘difficulties’ experienced by the participants in the study. The questions were on the experience of the difficulties and dissatisfaction in the above discussed matters, which were grouped into five categories for the purpose of scoring, viz. housing condition, financial situation, work life, marital relationship and others (which referred to sources of difficulties and dissatisfaction not specifically mentioned by the participants). The maximum score in each of these five categories was 6.

Perceived Stress

Experience of difficulties and dissatisfaction from the various sources of socio-psychological factors are likely to generate different levels of stress in individuals. The results of the present study have shown that these factors gave rise to different levels of disruption and maladjustment that induced and maintained stress situation in the everyday life of the participants in the study. The level of the participants’ experience of stress was measured by the “Perceived Stress Scale.” This scale has been extensively used in research studies to assess the degree to which participants appraise their daily life as unpredictable, uncontrollable, and overwhelming (Averill 1973; Cohen 1978; Glass and Singer 1972; Lazarus 1966, 1977). This self-rated scale includes 14 items scored on a 5-point scale and possesses satisfactory internal and short-term reliability (Cohen and Hoberman 1983).

The maximum score of perceived stress on this scale, used in the present study, was 48. The mean score on the perceived stress scale of the 30 participants in the study was 30.6 out of the maximum of 48, which indicated a relatively high level of perceived stress experienced by the study participants. As already mentioned, the various socio-psychological factors experienced

by the participants induced in them different degrees of stress situation. This is supported by the results of the test of correlation between the mean scores in perceived stress on the one hand and the mean scores in the socio-psychological factors on the other. Data in this matter are presented in table 1.

Table 1
Correlation between the mean scores in perceived stress and the mean scores in the different socio-psychological factors

	Range	Mean	S.D.	Correlation	Significance
Perceived stress	0-48	30.6	8.7		
Housing condition	0-6	3.3	2.5	.464	p < 0.01
Financial situation	0-6	4.0	2.4	.604	p < 0.01
Work life	0-6	2.6	2.5	.451	p < 0.05
Marital relationship	0-6	2.6	2.6	.463	p < 0.05
Factors unspecified	0-6	2.5	2.7	.403	p < 0.05

Results of the tests presented in table 1 show statistically significant correlation between mean scores in the perceived stress on the one hand and the means scores in the five socio-psychological factors on the other. Higher the scores in the problematic socio-psychological factors, higher are the scores in perceived stress. In brief, difficulties and dissatisfaction experienced by the participants in finance, housing condition, work life and marital relationships seem to have significantly contributed to the feeling of stress of a chronic nature, which in turn led to suicide behaviour.

Suicide Related Behaviour

Chronic mental stress induces suicide related behaviour. Suicide related behaviour refers to all cognitive and behavioural efforts of an individual for deliberately inflicting self harm or self annihilation for modifying her/his environment or removing self from the environment. It includes mental, and verbal and non-verbal actions that express the individual's suicide inducing stress. It is possible to distinguish between suicide ideation and suicide intent as two forms of suicide related behaviour.

Suicide Ideation

The behaviour of suicide ideation refers to the mental disposition of the desire to end life or brooding over the idea of committing suicide or lack of desire to live. The scale for suicide ideation developed by Beck *et al.* (1979) was used for assessing the level of suicide ideation of the participants of the present study. It is a 19-item clinical research instrument designed to quantify and assess the level of suicidal ideation during the past one week as well as the worst ever suicide ideation which occurred at any time in one's life. The scores on the Beck's scale obtained by the participants of the present study ranged from 0 to 28 and the mean score was 13.9 with the standard deviation (SD) of 8.7.

Suicide Intent

Suicide intent refers to the actions in relation to suicide that determine the level of the actual intention in committing suicide or how determined or serious an individual was to kill oneself in the suicide attempt. The seriousness of suicide intent is deduced from the attempter's verbal and non-verbal behaviour prior to and during the suicide attempt, the objective circumstances that surrounded the attempt, preparation and manner of execution of the attempt, the setting, as well as prior cues given by the participants that could facilitate or hamper the discovery of the attempt. The main aspects of the behaviour related to suicide attempt considered in the study are presence of others, planned timing, precaution against rescue, planned execution, objective of changing environment and certainty of death.

Presence of Others

Presence of others at the time of suicide attempt is one of the criteria to assess the level of intention. The assumption here is that a person, who attempts suicide in the absence of anyone, is likely to have stronger suicide intent and more likely to complete suicide than a person who attempts it in the presence or vicinity of someone. Seven out of the 30 participants in the study reported that somebody was present at the time of their suicide attempt which indicated a definite chance for rescue and thus relatively weaker suicide intent. Another 12 participants made their attempt for suicide

when somebody was nearby, again leaving some chance for possible assistance following suicide attempt. However, such attempts can turn fatal if they were either unnoticed or the methods used for the attempt were lethal or irreversible or severe. Those who attempted suicide in the absence of anyone left no chance for rescue or help from others. There were 9 such participants of strong suicide intent in the sample of the present study.

Planned Timing

Timing of the attempt is another criterion to judge the seriousness of the intent. Planned timing of suicide attempt reduces the possibility of outside intervention or help which is associated with serious suicide attempt and completion. In such cases, it is more likely that the person completes suicide. Regarding this point, 8 of the participants in the study reported that they timed their suicide attempt considering a possible external intervention or help from others. The other participants in the sample had not planned the timing of their suicide attempt wherein outsiders' intervention might be likely.

Precaution against Rescue

The degree of suicide intent depends on whether any precaution against recovery or possible rescue was taken in the planning. It was found that 5 of the participants took no precaution against recovery or possible rescue, while 23 of the participants reported some precaution against recovery or possible rescue. Similarly only a handful of (4) participants shared their suicide thoughts with potential helpers.

Planned Execution

Obviously, those who work out a definite plan for suicide are more likely to execute it in the near future than those who do not plan out well. In the present study, 11 of the participants had no definite plan for suicide execution during the last suicide attempt, while 6 others had poor or partial planning. There were 11 participants in the study who worked out definite plans for the execution, and made extensive preparations. Leaving suicide note is an indicator of planning suicide. Just 3 of the participants in the

current study left suicide notes and another 2 participants tore away the note they had written. The remaining 25 participants did not write a suicide note.

Objective of Changing Environment

Suicide may be attempted by an individual in order bring about a significant change in the environment wherein he or she lives. In such cases, the actual intent of the attempt is not to die but to influence the significant others or environment in one's favour. The other category of suicide attempt, wherein an individual attempts suicide for removing self from the environment, is considered to have higher suicide risk. There are also cases of suicide attempts in between these two extremes. In the present study, 5 out of the 30 participants attempted suicide in order to alter the environment and significant others in their favour, whereas 13 of them reported that they attempted suicide mainly to remove self from the environment indicating higher level of suicide intent. However, in the case of another 10 individuals suicide attempt was for influencing environment and significant others, and also for removing self from environment.

Certainty of Death

Regarding the certainty of death in their suicide attempt, just one of the participants thought that death would be unlikely, while 5 of them thought that death was possible though not probable. Majority (22) of the participants believed in the certainty of death in the suicide attempt. It may also be noted that 4 of the participants reported that the harm inflicted on them in the suicide attempt was less than what they expected.

Scores in Suicide Intent

In order measure the level of suicide intent, the Beck Suicide Intent Scale (Beck *et al.* 1974) was used in the present study. The scale consisted of 15 items that quantify the verbal and non-verbal behaviour of a person prior to and during the suicide attempt. Each item was rated on an ordinal scale from 0 to 2 with the maximum score of 30. The first part of the scale (items 1-8) covered the objective circumstances that surrounded the suicide attempt,

and included items on the preparation and manner of execution of the attempt, the setting, as well as prior cues given by the individual that could facilitate or hamper the attempt. This part was completed by the participants through recall. The second part (items 9-15) covered the participants' perception of the lethality of the methods used, expectations about the possibility of rescue and intervention, extent of premeditation, and the alleged purpose of the attempt. Out of the 30 participants, 28 responded to the questions on these items.

Table 2
Participants by their scores in the two sets of items of suicide intent

Sets of Items	No. of Participants	Maximum Obtainable	Maximum Obtained	Mean	SD
Objective circumstances	28	16	11	6	2.9
Perceptions about suicide	28	14	14	10.3	3.2
Total	28	30	25	17.6	5.9

Table 2 presents the data on the scores obtained by the participants in suicide intent. The analysis of the data on the objective circumstances showed a mean score of 6 out of the possible maximum of 16. It indicates that majority of the participants had moderate or low level of suicide intent in their attempt with regard to the objective circumstances. The mean score, obtained in the second part on the items of perceptions about suicide, was 10.3 in the maximum possible score of 14. These scores indicate a relatively higher level of suicidal intent in their attempt. The combined total scores in suicide intent with the mean of 17.6 out of the maximum of 30 showed a moderate or relatively high level of suicidal intent in the attempts made by the participants.

Conclusion

Although suicide related behaviour is a personal act of an individual, it is determined by a number of socio-psychological factors. It is under this socio-psychological perspective of suicide causation that the present research study on suicide was undertaken. The findings of the study reported in this paper have shown that these factors, conceptualised as difficulties and dissatisfactions in various domains of social life, have an important role in inducing and maintaining the experience of chronic stress. Chronic stress in

turn is likely to lead to suicide ideation or fantasising suicide and suicide related behaviours. There are several socio-psychological factors that produce suicide inducing stress situation. Obviously, not all of them are realised in every case of suicide behaviour. What factor or factors are critical in individual cases varies from situation to situation. Some factors like difficulties in work place or in carrying out household chores seem to be relatively weaker stress generating factors in relation to suicide behaviours.

One of the conclusions from the findings of the study reported in the present paper suggests that many of those who attempted suicide had experienced a substantially high level of difficulties and dissatisfaction in the financial condition of self and family, which induced and maintained high level of perceived stress and suicide related behaviours. The feeling of the failure in fulfilling one's moral obligation of clearing debts adds to the intensity of stress related to financial liability. The strong linkage between financial hardships and increasing suicide related behaviours among farming communities not only in Kerala but also in many other parts of India needs to be viewed in the broader socio-economic realities, especially in the context of globalisation and its impact on farming communities. Rapid changes in the socio-economic sphere and rising unemployment are likely to make those, who are adversely affected by these changes, vulnerable to suicide related behaviours.

Another important factor conducive to generation of stressful situation leading to suicide related behaviour is that of interpersonal relationships within the family, especially between spouses. As already indicated, this is amply supported by the findings of different research studies. Difficulties and dissatisfaction in relationships within the family, especially disruptions in marital relationships, play a significant role in inducing and maintaining chronic stress conducive to suicide related behaviour. Marital disharmony and disruption, coupled with economic plight of looking after family and household affairs, is a very strong factor that induces and maintains chronic stress leading to suicide related behaviours, especially among women. Similar findings were reported in the study of the background of the suicide victims conducted in Kerala by Kumar (2005), viz. that economic factor of indebtedness and marital disharmony in interpersonal relationship were the major factors responsible for suicide inducing mental stress.

From the discussion on the association between chronic stress situation and suicide related behaviour, it is evident that difficulties and dissatisfaction in social life have critical influence in inducing and maintaining stress situation on a long term basis. The perceived stress was treated as a unitary construct and measured in terms of the degrees to which situations in the participants' lives were appraised as stressful, whereas the measurement tapped the degree of stress to which participants found their lives unpredictable, uncontrollable and overloading. Suicide related behaviours were treated as all cognitive and behavioural efforts of an individual with a deliberate purpose of inflicting self harm or self annihilation to modify her/his environment or to remove self from environment.

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