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Why do people attempt suicide? A mixed methods research from South India

Punithakumary Purushothaman¹*, Kariyarath Cheriyath Premarajan², Jayalakshmi Ramachandran², Susila Thangaraj³

Department of Community Medicine, ¹PSG Institute of Medical Science and Research, Coimbatore, ³Stanely Medical College, Coimbatore, Tamil Nadu, India

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*Correspondence:

Dr. Punithakumary Purushothaman, E-mail: punithakumary.p@gmail.com

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ABSTRACT

Background: Every 40 seconds a person dies by suicide. Suicide is the second leading cause of death among young people 15-29 years of age, globally. In India, there is an increasing trend of suicide from 10.4 per lakh in 2003 to 10.9 per lakh in 2009.

Methods: A (QUAN – QUAL) sequential explanatory design was used. Among 200 patients admitted for attempted suicide in JIPMER and Indira Gandhi Government Hospital and Post Graduate Institute Pondicherry were assessed for the reasons for attempting suicide using a semi-structured questionnaire. For a subsample of 40 (20%) In-depth interview was done to explore and understand the reasons and the undermined situation associated with attempted suicide at their residence.

Results: Among the study subjects (n=200), mean (±standard deviation) age of suicide attempt was 26±9.1 years. Commonest reason for attempting suicide was verbal abuse, most often by parents (31.9%). Other precipitating factors were physical abuse, illness, marital conflict, family related problem, etc. On IDI, it was found that there were several factors like, background factors, aggravating, and protective factor. A conceptual diagram was generated depicting the imbalance between the protective and aggravating factors acting on the background factors before the execution of a suicide attempt.

Conclusions: There is lot of scope to reduce the suicidal attempts in our country. Opportunistic screening should be done to identify any psycho-social issues among patients attending OPD. Strong social support and enabling environment should be provided for counselling individuals with suicidal ideation and intentions.

Keywords: Suicide, Suicidal ideations, Attempted suicide, Mixed methods research, South India

INTRODUCTION

Suicide is a major public health problem where, every 40 seconds a person dies by suicide somewhere in the world and many more attempt suicide. Suicides occur in all regions of the world and throughout the lifespan. Notably, among young people 15-29 years of age, suicide is the second leading cause of death globally.¹

Globally, there is an increasing trend of a suicide rate from 10 per lakh population in 1950 to 18 per lakh in 1999.² In India; there is an increasing trend of suicide from 10.4 per lakh in 2003 to 10.9 per lakh in 2009. In 2009, the suicide rate in Tamil Nadu was 21.5 per lakh which is twice the national level. Pondicherry recorded the highest suicide rate of 47.2 per lakh population in 2009; which is 4 times the national rate.^{3,4}

²Department of Preventive and Social Medicine, JIPMER, Pondicherry, India

Suicidal attempts are 20 times higher than the completed suicides.⁵ Globally, the estimated suicidal attempts per year was 9-36 million.⁶ There is one suicide attempt for every 3s in the world.⁵ In India, prevalence and incidence of suicide attempts are 0.8% and 5.36% respectively.^{7,8} For each suicide, there are 7-10 suicide attempts. The attempted suicide is recognized as one of the important predictor of suicidal deaths.^{9,10}

Identified determinants of suicide attempts from the previous studies were low socio economic status, poverty and hunger, unemployment, nuclear family, marital status, family problems, past/family history of suicide attempt, alcoholism, psychiatric illness, and chronic illness. 7,11-17,19,20

There is no single explanation of why people die by suicide. However, many suicides happen impulsively and, in such circumstances, easy access to a means of suicide - such as pesticides or plant poisons - can make the difference as to whether a person lives or dies. Social, psychological, cultural and other factors can interact to lead a person to suicidal behaviour.¹

As the determinants of suicide attempt are multifactorial, dependence on quantitative research limits an understanding of the complexity of suicide attempt. Hence there is need to, expand knowledge and enrich the data of suicide attempt, by integrating theory-based variables and subjectivity as objects of inquiry. This gives better understanding of the complexity of the path from suicide ideation to suicidal attempt.²¹

METHODS

A (QUAN – QUAL) sequential explanatory design was used. Study was conducted for the period of one year (2009-2010). Among 200 patients admitted for attempted suicide in JIPMER and Indira Gandhi Government

Hospital and Post Graduate Institute Pondicherry were assessed for the reasons for attempting suicide using a semi-structured questionnaire. For a subsample of 40(20%) In-depth interview was done to explore and understand the reasons and the undermined situation associated with attempted suicide at their residence.

Quantitative data were analyzed using SPSS version 19: IBM. For qualitative data analysis, all interviews were audio recorded and transcribed verbatim and then was translated into English. A framework analytical approach was used for data analysis.²² This process, involving a number of highly interconnected and iterative stages, began with data immersion. This was followed by a series of other stages involving identifying a thematic framework: sifting through the data, identifying meaningful and relevant quotes; placing the quotes under the appropriate thematic category; mapping; and finally interpretation. Once all the interviews were coded, segments of text that were related to a common theme were pieced together and in this manner emergent themes were identified. The qualitative analysis was done using NVIVO.

RESULTS

The risk factors identified form quantitative study was grouped into three-socio-demographic factors, Biopshycosocial factors and precipitating factors Table 1.

Among the study subjects (n=200), mean (±standard deviation) age of suicide attempt was 26±9.1 years. The most common precipitating factor was verbal abuse 72 (36%). 40 (55.6%) was by parents, 23 (31.9%) by spouse, 2 (2.8%) by teacher, and 7 (9.7%) by others. Illness referred to some physically and mentally disabling symptoms such as dysmenorrhea, headache, toothache, diabetes mellitus, sleeplessness, and heart disease among females and abdominal pain, headache, and tremor in hand were among males.

Table 1: Risk factors that were identified by quantitative study for suicide attempt.

Risk factors

N (%)

1. Sociodemographic

Female gender

Low socio economic status

124 62

1. Sociodemographic factors	Female gender	130	65	200
	Low socio economic status	124	62	200
	Rural area	139	69.5	200
2. Biopshycosocial factors	History of chronic illness	18	16.5	_ `
	Family history of suicide or suicide attempt	25	12.5	
	Past history of suicide attempt	14	7	>200
	Psychiatric illness	3	1.3	
	Did not have any Biopshycosocial factors	125	62.7	
3. Precipitating factors	Verbal abuse	72	36	
	Illness	42	21	
	Marital conflict	25	12.5	
	Family related problem	25	12.5	
	Interpersonal conflicts	6	3	(200
	Physical abuse	4	2	
	Others — academic failure, loss of hope in life, stress in working place, love affair, death/neglect of a spouse, influence of alcohol	26	13	

Table 2: Determinants of suicide attempt identified from the community based IDI, among the study population.

Environment	Person			
At family level	Organic			
Extramarital affair of husband, lack of support from	Due to illness			
family and loss of family member	• Pain			
Verbal abuse and physical abuse	 Tremor in hand 			
Economic burden, large debt	 Sleeplessness 			
At community	Behavioral			
Loss of social supportInfluenced by peer groupVerbal abuse	 Cognitive – Hopelessness, abandonment Psychological- affective- burdensomeness, stress, anger, guilt and fear, shame, self pity Overt behavior- under the influence of alcohol 			

Table 3: Quotes from the community based IDI.

Environmental factors

A) At family level

Extramarital affair of husband, lack of support from family and loss of family member

"Nobody is there for me...either my husband or my father whom I liked most, and I am an orphan now" (22 yr old female)

"My husband is not trustworthy, I thought at least my daughter will be there for me...but she also started to dislike me, now who is there for me and for whom shall I live" (35yr old female)

Verbal abuse and physical abuse

"I was scolded by my father as to why I was telling my brother to die? If I die he can save 1 lakh (nee setha enaku 1 lakh mitcham)" (16yr old girl)

"My father scolded me very badly with vulgar words....how can I say those words which I could not bear" (19yr old girl)

"My husband had put a towel around my neck and pressed with his leg on it; I could not even breathe and thought that I would die" (25yr old married women)

Economic burden, Large debt

"I lost the confidence in my ability to give back the money, so I thought better I will die" (35 yr married male)

"Because of my studies there should not be burden in the house; money should be saved for my sister's marriage too. If everything is been spent on me then nothing will be left for my sisters" (16yr old boy)

B) At community

Loss of social support

"No one came for the rescue of us when those people were beating me and my children, when husband was out of station. So I thought why my children and I should live in this place where no one cares for us" (34yr old married women)

Influenced by peer group

"One of my friend told that she also had the same problem and she threatened her family members saying that she will commit suicide if they fix her marriage. So I also thought of doing that." (18yr old girl)

Verbal abuse

"Who is that person to scold me with those bad words (appadiae idinji poiten)? My heart was so heavy, I could not sleep and I dint tell anyone and thought I would die" (21 yr old unmarried woman)

From the IDI of 40 (20%) subjects, there emerged two categories like: factors related to environment factors related to person and four sub categories, codes (Table 2). Finally all these gave rise to the theme "factors influencing the process of suicide attempt".

Environmental factors

These factors were acting from external source like the family or the community. Factors acting from the family level are verbal abuse and physical abuse, extramarital affair of husband, lack of support from family and loss of family member, economic burden. Factors acting from the community level are loss of social support, peer pressure, verbal abuse. Verbal abuse by father or husband on daughter or wife makes them lose their self image. In addition being a female they fail to retaliate and go for suicide attempt. When the verbal abuse is by a third person from the community it still makes women broken hearted and make them to attempt suicide. Sometimes males verbally / physically abuse women under the influence of alcohol. Women have said that, when a man takes alcohol they do not know what they talk and do,

they lose their control and become aggressive. Some women have said that husbands "beat them to death" under the influence of alcohol. The Quotes were given in table 3.

Factors related to person

Factors related to the persona were organic- due to illness, behavioural- hopelessness, abandonment, burdensomeness, stress, anger, guilt and fear, shame, self pity, overt behaviour- under the influence of alcohol. Of the 40, 8 (20%) have said that ill health is the reason for suicide attempt. Seven were females, and most of them have said that dysmenorrhea as the reason. Women were unable to bare the pain every month. Sleep is very important for every person to function normally. When

there is loss of sleep one day people feel physically weak, tired. If sleeplessness persists for longer duration then in addition to physical weakness they also get psychological problems to an extent that they would end their life. Because they were unable to bear, that why they didn't get sleep which is the basic need of any human, when rest all of the family members sleeps.

Guilt was the reason for a woman who was a victim of illegitimate pregnancy. She was unable to come out of her mistake and had the fear that no one will forgive from her family for this great mistake. Shame was another factor which led to people to attempt suicide, especially when their family problem was made to known to the community by their own family members.

Table 4: Quotes from the community based IDI.

Person

A) Organic- due to illness

Pain

"Pain was so sever and worse than the labour pain which I could not bear. So I thought why should I live and bear the pain every month, instead I can die" (28 yr old married women)

"unnecessarily why should I bear this much of severe pain" (21 yr old unmarried women)

Tremor in hand

"I was not able to be like an ordinary person. I have all the talents but I am unable to use because of problematic hand. In this old age my father is going for night duty security job(rumba kodumaya irukku)" (26 yr old unmarried man)

Sleeplessness

"Without sleep I feel I should run somewhere, I will break my head or I will hang myself somewhere. Because everyone at home sleeps only I am like this" (40 yr old woman)

B) Behavioral

$Cognitive-Hopelessness,\,abandonment$

"I hate my life, i had been suffering and mow i became ill. So what i am going to do by living" (37yr old widow)

"My husband beat me, and after that he didn't even come once to see me whether i am alive or dead in my room.(naan vuyiroda irundena illayannu)" (38yr old married woman)

Psychological- affective- burdensomeness, stress, anger, guilt &fear, shame, self pity

"Only till some year our parents can take care of us. Beyond that we should not be at home being a burden to them(naama amma appavukku barama irukkakudathu)"

Overt behaviour- under the influence of alcohol

"Usually I never mind anything, i used to talk against my wife if she tells me anything but on that day I dint know what happened to me, because I was drunk"

When males were under the influence of alcohol they themselves did not know what they are doing. Trivial conversation within the family makes males to attempt suicide especially when they are under the influence of alcohol. The Quotes were given in Table 4.

DISCUSSION

In the present study Marital Conflict was due to husband's extramarital affair, alcoholic behaviour, emotional abuse and physical abuse. These findings were consistent with the other study. 9,16

When a woman's husband had extramarital affair she though knew her husband is not trustworthy, her daughter would be there, for whom she can live. When she came to know that even her daughter is not there for her, her escape potential had been locked and led to suicide attempt. Family related problem from the study were due to conflict with in laws, parents, brothers and sisters. Conflict with in-laws was due to lack of child, want of money and misunderstanding. It also occurred due to economic burden, excess debt, stress, delayed marriage. Other studies also showed the same. 9.14

Delayed marriage was one of the underlying causes. When other factors like family conflict was added, it aggravated the depression and results in suicide attempt. Here there was interaction between thwarted belongingness and perceived burdensomeness as per interpersonal psychological theory.²³

From the quantitative results it was found there was a significantly higher number of subject from LSES. From the IDI economic burden and heavy debt were identified as precipitating factors. People from low SES borrow loan for bare essentials, marriage or health related problems and falls in to debt. In order to escape from humiliation and disgrace in front of their neighbourhood they attempt suicide. Even higher education becomes an unaffordable luxury for them. Crushed between the desire to pursue higher studies and essential needs of the family like their sisters waiting for marriage, people consider that death is the only situation.

Factors related to person

Women attempted suicide because of severe dysmenorrhea. One of them has said that pain was unbearable and it was "worse than labour pain", she attempted suicide when there was no one at home. This was in line with "interpersonal psychological theory" where an individual will not commit suicide unless they have both desire to die and the ability to do. 23 This theory was revealed in many study subjects. As stated by girl

"I dint know what to do when I had severe abdominal pain, but when I saw the yellow oleander, I just thought why don't I eat that and die"

Studies also have shown that during menstruation there is low estradiol and progesterone and during that time it is reported that there is severe suicide intention. Suicide attempt among women are more likely when oestrogen and progesterone levels are low and the attempts made under these conditions are associated with greater severity.²⁴

Women from LSES especially destitute try to live for their children in the midst of all struggles. When her health becomes weak making her not able to work, she borrows money from others to take care of essential needs of the family.

The cause of suicide attempt is multifactorial. It follows "cry of pain" model given by Williams. ²⁵ This was typically seen in one study subject, who had seen only sorrows in her life from childhood after losing her parents. She sustained her life through Christian faith. She lost that faith when she was married to an alcoholic husband. When she herself wanted to commit suicide after her husband's death, her unborn child in womb acted as an escape potential for her. When her health got worsened, debts hiked and lost social support, all her escape potentials were blocked. As there was no prospect of rescue, she attempted suicide in order to escape from a feeling of entrapment.

Conceptual framework

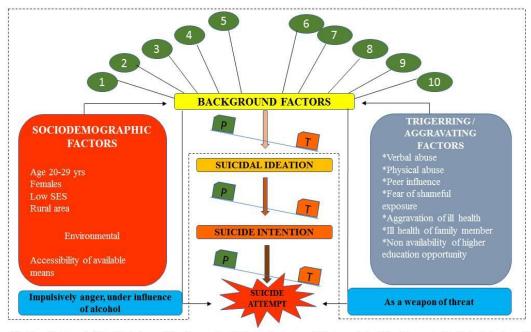
A conceptual framework was developed for process of suicidal attempt (Figure 1). The process of suicide

attempt starts from suicidal ideation to suicidal intention and ends in suicidal attempt. The factors that make a person to attempt suicide are background factors, aggravating factors, sociodemographic factors, impulsively and as weapon of threat. Always people live with the background factors like, chronic ill health; loss of family member, delayed marriage etc. person with background factors get suicidal ideation, suicide intention and attempts suicide. Sociodemographic factors, environmental factors like accessibility of available means, and aggravating factors when added to background factors people get suicidal ideation, suicide intention and they attempt suicide. Protective factors like religious affiliation, motherhood feel, caring and loving parents etc. prevents them from attempting suicide even when there are background, aggravating, impulsivity factors. There are aggregative factors like verbal& physical abuse, peer influence, fears of shameful exposure etc. which make the person to attempt in the midst of background factors. Sometimes people with background factors attempt suicide impulsively under alcohol, because of anger, without passing into the full process of suicide attempt. Similarly as a weapon of threat people directly attempt suicide after having only suicidal ideation. There is always balance between protective and aggregative factors that makes people not to attempt suicide.

There are various paths by which a person attempts suicide-process of suicide attempt

- Passes through the complete process of suicide attempt- suicide ideation, suicide intention and suicide attempt. When there are background factors like chronic ill health; loss of family member, delayed marriage etc. people get suicide ideation, suicide intention and suicide attempt. Sociodemographic factors, environmental factors like accessibility of available means, and aggravating factors when added to background factors also pass through the full process.
- Suicidal ideation to suicide attempt- as a weapon of threat they don't have the suicide intention but attempt suicide
- In the presence of background factors alone people attempt suicide impulsively when they are angry or under the influence of alcohol.

However there is a balance which is maintained between protective and aggravating factors throughout the process of suicide attempt. When there is an imbalance between these two factors people attempt suicide. Protective factors are religious affiliation, motherhood feel, caring and loving parents etc. prevents them from attempting suicide even when there are background, aggravating, impulsivity factors. The aggregative factors are verbal& physical abuse, peer influence, fears of shameful exposure etc.



Background factors (1. Chronic ill health 2. Loss of family member 3. Delayed marriage 4. Extramarital affair of house 5. Alcoholic behavior of family member 6. Heavy debt. 7. Economic crisis 8. Lack of child 9. Irresponsible behavior of family head 10. Over burden because of higher education)

P=Protective factors (Religious affiliation, Motherhood feel, Caring and loving parents, Remarriage of widow)

T= Triggering factors

----- Protective factors

Figure 1: Factors influencing the process of suicide attempt among the study participants.

CONCLUSION

There is lot of scope to reduce the suicidal attempts in our country. Opportunistic screening should be done to identify any psycho-social issues among patients attending OPD. Strong social support and enabling environment should be provided for counselling individuals with suicidal ideation and intentions.

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Institutional Ethics Committee

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