



Structural Factors Contributing to Suicidal Ideation in Iranian Older Adults: A Grounded Theory Approach

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Abstract

Introduction: The high rate of complete suicide in older adults on the one hand and the low report of suicidal thoughts by them compared to other groups on the other hand, indicate the importance of suicide in this group. The objective of this study was to explore the structural factors contributing to suicidal ideation in Iranian older adults.

Methods: This was a qualitative study using grounded theory approach. The sample included a total of 13 community-dwelling (visiting day-care centers and psychiatric clinics) and institutionalized older adults aged 60 years or above selected using purposive and theoretical sampling methods. The data were collected using in-depth semi-structured interviews. The data were analyzed using constant comparative method, constant review of the written text of the interviews, field notes, and memo writing via Strauss and Corbin's method.

Results: The results indicated 2 main categories including *perceived adversities* and *negative self-concept* that were represented in the form of 10 subcategories including *having a difficult life, financial strain, retirement, disempowerment, disrupted family, being lonely, being a trouble to others, self-perceived uselessness, lack of control over life, and losing reputation*.

Conclusion: Suicidal ideation among Iranian older adults occurs in the context of negative life events that can cause significant pain and suffering. The concepts related to family, health, and performance of older adults are especially important in the development of suicidal thoughts due to their cultural significance. Therefore, professionals and policymakers can reduce suicidal ideation in older adults by enriching social interactions, increasing welfare activities, paying more attention to spiritual capacities, and generally reducing the structural challenges in day-care centers and nursing homes.

Keywords: Suicidal ideation, Older adults, Grounded theory

Introduction

In recent years, population aging has become an important concern in the global health domain. In

2015, 12% of the total world population aged 60 years and above (approximately 900 million) which



is expected to reach 22% by 2050 (approximately 2 billion) (1-3). Based on the most recent statistics, people aged 60 years and older constitute about 7.5 million (9.3%) of Iran's population (4). Although old age has been characterized in terms of better wellbeing, meaning in life, and better capacity to manage and control emotions (5), it can be a risk factor for depression and suicide due to physical problems, cognitive deficiencies, and other changes related to aging (6); so that in many countries, the prevalence of suicide among older adults is higher than that of other age groups. Therefore, old age can be regarded as both a period of better psychological wellbeing as well as a period of increased risk of suicide (7).

Researchers all around the globe have found a higher rate of suicide among older adults, compared to other age groups (7-9). In Iran, the study of suicide in old age is a relatively new field but the findings of two studies indicated the presence of suicidal thoughts in 21.6% of older adults hospitalized due to physical problems (10) and 84.2% of older adults admitted to toxicology units due to a suicide attempt (11). Moreover, in two recent studies in Iran, the rates of suicide attempts and deaths were 21.47 and 4.52 per 100,000 population, respectively (12) and the mean value of suicidal ideation was 12% on the Beck Scale for Suicide Ideation (BSSI) (13). The results of a meta-analysis study (14) showed that the overall prevalence of depression in Iranian older adults between 2001 and 2015 was 43% (14). Given that depression is one of the strongest risk factors for suicide, it is important to understand the challenges and concerns that can arise in this area. Considering the rapid growth in the number of older adults throughout the world, the number of older adults who will die from suicide may increase in the coming decades (15).

Development of suicidal thoughts is a complex matter and the exact role of different factors contributing to suicidal ideation is not still known. However, in quantitative and qualitative studies, the following factors have often been mentioned as the main contributors of suicide among older adults: depression (16); physical disabilities (17); stressful family relationships (18); high neuroticism (19); poor living conditions (20); feeling abandoned or lonely (16); low sense of belonging, lack of meaning in life (21); and stressful events, loneliness, dependence, and feeling useless (9). The review of literature indicated several points, which necessitates further study. First, most of the current

knowledge on suicide among older adults comes from quantitative studies and it seems that qualitative researchers have neglected this subject. In a systematic review (22), only three qualitative studies were found on older adult suicide. Second, cultural factors can influence suicide in older adults (23). In general, concepts related to family stress and independent performance have been reported more in the older adults of Asian cultures (24). Loneliness, feelings of unhappiness, and lack of family companionship, all indicating lack of family relationships and neglect in the family, are frequently reported in older adult suicide (25). Third, there are inconsistent findings in some concepts. While depression and physical illness are mentioned as the risk factors for suicide in older adults (26, 27), there is also evidence that older adults with suicidal thoughts and behaviors do not necessarily suffer from depression (20) or any serious physical illness (28).

When older adults come to the decision to end their lives, understanding them requires knowledge on how they experience themselves and their situation. Research on suicide among older adults in Iran is still quite young and further studies, particularly qualitative ones, are required to explore more deeply their feelings and the way they perceive their past, present, and future lives (7). This may help increase knowledge on this topic and find the targets of preventive interventions (29). Therefore, the objective of the present study was to investigate suicidal ideation in older adults based on the perceptions and experiences of a group of Iranian older adults with suicidal ideation.

Methods

This study was conducted using the grounded theory approach (30) in 2018-2019. The sample included a total of 13 older adults aged 60 years and older in Tehran who met the inclusion criteria including having a medical record or history of diagnosing or reporting suicidal ideation, ability to speak and understand Persian, no recent history of serious or disabling illnesses, willingness to participate in the study, and no cognitive problems (based on the Abbreviated Mental Test Score (AMTS) (31). The older adults who had been diagnosed with suicidal ideation or a strong desire to die by psychologists and psychiatrists at the centers were interviewed. In some cases, the BSSI was used to ensure the suicidal ideation experience. If an older adult scored less than 6 on the AMTS, he/she was excluded from the study due to cognitive problems. Other limiting abilities of older

adults including mental or physical problems, were assessed based on medical records and reports of the psychologists of the centers. The study population included all older adults attending psychiatric clinics and hospitals, day-care centers, and nursing homes in Tehran, with a history of suicidal ideation, based on clinical diagnosis or self-report, recorded in their medical records. The researcher went to each selected center and interviewed older adults referred by the centers' psychologists and psychiatrist based on the inclusion criteria. This process continued until saturation.

The data were mainly collected through individual semi-structured interviews using open questions. Each interview began with general and open questions, then, the researcher gradually made the interview more specific by asking probe and follow-up questions to make a clearer picture of the phenomenon of interest. Here are some examples: *"Please tell me about your life experiences. You can explain it the way you want," "Have you experienced any hardships in your life?" "Can you describe the one that bothered you the most (i.e. your worst life experience)?" "How did you deal with the difficult experiences?"* In order for the participants to feel more comfortable, they were asked to choose the time and place of interview at their own convenience. Before the interview, the interviewer read the informed consent form to the participants that included the following information: researcher's personal and academic information, study objectives, and interview terms and conditions as well as participants' rights including voluntary participation and being allowed to quit the study whenever they wanted. Each interview started after gaining informed consent. The interviews were mostly conducted in day-care centers or nursing homes. In some cases, the interviews were conducted in public gardens or psychiatric hospitals. Each interview lasted 40-90 minutes and was recorded with the interviewee's permission. Overall, 17 interviews were conducted with 13 older adults. In order to gather additional information so as to fill the gaps in the first interview, 4 participants were interviewed for the second time. Then, the interviews were transcribed word by word and analyzed. The sampling started purposively and continued theoretically until saturation. In purposive sampling method, selecting proper and information-rich participants is important. Once the conceptual categories appeared from the data analysis, some other older adults were interviewed who were selected using

the theoretical sampling method. In order to analyze the data, the Strauss and Corbin's method (30) was used and supported by strategies such as micro and macro analysis, memo writing, diagramming, story writing, constant comparative analysis, questioning, and paradigm analysis. The grounded theory approach was used since it is one of the most powerful qualitative methods influenced by symbolic interaction, it could help describe the phenomenon of interest based on the lived and objective experiences of the individuals under study, and there was a lack of qualitative studies on suicide among Iranian older adults (32). It is used to discover social, cognitive, or psychological phenomena hidden in human interactions. This method is beyond mere description and makes it possible to understand the process (32). Given that suicide is a procedural phenomenon, grounded theory can be a proper method for understanding it in its natural environment. The Strauss and Corbin's method was also utilized because it provides clear stages of analysis and is used by many researchers who apply grounded theory in health studies. This method is comprised of four main stages including "analyzing data for concepts", "analyzing data for context", "bringing process into the analysis", and "integrating categories." The interviews and data analysis continued for 12 months until reaching theoretical saturation.

In this study, four criteria of credibility, conformability, dependability, and transferability were used to increase the robustness of the data. Concerning the credibility criteria, constant comparative analysis is one of the best ways to validate data. In this study, by comparing different parts of an interview, incorrect parts of the data were corrected. Other strategies such as triangulation and prolonged engagement with the data were also used to increase credibility. To ensure the conformability, all stages of research including data collection, data analysis, and extraction of codes and categories were explained in detail so that other researchers could evaluate these steps. Moreover, based on the conformability criterion in the present study, the data and documents were carefully assessed by the professors of the research team. The thick description of the data collection process was also used as a strategy. Finally, regarding transferability, the findings of this study were compared with those of other studies to examine the appropriateness of the data. Among the most important ethical considerations were acquiring the written and verbal consent of the participants, informing participants about the

objectives and significance of the research before starting the interviews, obtaining permission from participants to use audio recordings for recording the interviews, emphasizing the possibility of refusing to continue cooperation at any stage of the research, using pseudonyms instead of real names, and protecting the interview transcriptions to ensure the confidentiality of the data.

Results

The study participants included 13 older adults (9 women and 4 men) with suicidal ideation selected from day-care centers (7 older adults), residential nursing homes (4 older adults), and psychiatric clinics or hospitals. Table 1 provides an overview of the demographic characteristics of the participants. The analysis of the data revealed 2 main categories, 10 subcategories, and 6 initial categories representing the structural factors of suicidal ideation in older adults (Table 2). The main

categories and subcategories are described below.

Perceived adversities

This category referred to perceived adversities during old age that caused the participants a lot of distress. These adversities were divided into 5 subcategories:

Having a difficult life

This subcategory does not refer to a specific problem or type of problems but involves one's overall perception of life as a problem. In other words, the pain, suffering, and stress resulting from numerous problems of life were so prevalent in older adults' lives that made their lives a hard experience for them. One of the study participants stated: "... I have not lived at all; I have never felt living like other people. I have no happy or satisfying life memory, except hardships, displacements, stress, and secrecy" (Participant 5).

Table 1. Demographic characteristics of participants (N = 13)

	Category	N	Percentage
Gender	Male	4	30.8
	Female	9	69.2
Age group	60-67	3	23.1
	68-74	7	53.8
	75-82	2	15.4
	83-90	1	7.7
	Illiterate	3	23.1
Education	Primary	5	38.5
	Secondary	1	7.7
	High school diploma	2	15.4
	Bachelor's degree	1	7.7
	Master's degree and Higher	1	7.7
Occupation	Homemaker	4	30.8
	Self-employed	6	46.2
	Employee	2	15.4
	Military man	1	7.7
Marital Status	Married	5	38.5
	Separated	3	23.1
	Widowed	5	38.5
Residence	Community-residing	9	69.2
	Nursing homes	4	30.8

Table 2. The main categories, subcategories, initial categories

Main Categories	Subcategories	Initial Categories
Perceived adversities	Having a difficult life	
	Financial strain	
	Retirement	
	Disempowerment	Health problems, Reduced abilities
	Disrupted family	Loss of loved ones, Conflict in marital relationship,
Negative self-concept	Being Lonely	Fragile family ties, Problems related to family members
	Being a trouble to others	
	Self-perceived uselessness	
	Lack of control over life	
	Losing reputation	

Financial strain

Financial strain was very distressing especially for the older adults who had lost their physical strength, were unemployed due to disablement or retirement, or were unable to get financial support from their families due to marital or family conflicts. One of the participants that had recently suffered from a stroke, said: "... *We had a very good life. My husband had a profitable business there, but within 6 months, we went bankrupt and suddenly fell from grace. I faced many hardships*" (Participant 4).

Retirement

Retirement was identified as another perceived adversity because of its unpleasant consequences including financial strain, forced displacement, being away from friends and colleagues, having too much free time, and spending too much time alone at home. One of the participants stated: "*I was retired and my income decreased by half. Having three daughters with different problems made life difficult for me ...*" (Participant 11).

Disempowerment

Disempowerment referred to a set of physical and psychological problems and their consequences, which may limit older adults' ability to perform daily activities. These limitations were not only due to specific disorders, but also resulted from other factors including the normal process of aging. *Disempowerment* had two initial categories including "health problems" and "reduced abilities".

Health problems

This subcategory referred to both physical and psychological disorders, such as brain surgery, stroke, Alzheimer's disease, drug abuse, depression, digestive problems, Parkinson's disease, rheumatism, etc. which reduced the overall health of older adults and impaired their functioning. One of the participants stated: "*When you reach this age, you definitely experience problems. My most important problem is depression. I've been struggling with depression for about 40 years*" (Participant 9).

Reduced abilities

Due to the negative consequences of health problems, the participants experienced reduced abilities. They experienced fear and negative thoughts and made negative predictions about their future. One of the study participants described their

condition after suffering from a stroke: "*I suddenly went from riches to rags; as a person, who used to work tirelessly, it was devastating for me not to be able to work anymore... I hated life*" (Participant 8).

Disrupted family

This category implies that instead of being a source of comfort, the families of the participants caused them a lot of stress and suffering. The category of *disrupted family* had four initial categories including "loss of loved ones", "conflict in marital relationship", "fragile family ties", and "problems related to family members".

Loss of loved ones

This category referred to loss of loved ones due to death or immigration that despite happening many years before, caused the older adult significant pain or distress. One of the participants stated: "... *my husband's death created a great gap in my life and I felt as if my life was totally destroyed*" (Participant 6).

Conflict in marital relationship

Most of the participants stated that marital conflicts for them had started since they got married, continued and strengthened during young and middle adulthood, and were still present in old age. One of the study participants stated: "*This [marital conflict] is one of the things that has always tormented me, that she [his wife] has never been able to understand me*" (Participant 2).

Fragile family ties

This subcategory included challenging relationships between different family members including children, grandparents, relatives, and in general, the extended family. The clearest indicator of fragile family ties was constant conflict between family members. One of the participants who used to take care of her sick parents, stated: "...*Even though I had brothers and sisters, I had to unwillingly accept this responsibility (taking care of my sick parents), only because my husband was dead and I lived alone. Therefore, I was always upset with them*" (Participant 6).

Problems related to family members

This subcategory referred to problems with one or more family members (mostly with children or spouse) that were of particular importance to older adults and made them really worried. One of the study participants stated: "*I lost my son because he*

got addicted to drugs ... he is now jobless. He was fired from his job because of his addiction; his wife took their child and got a divorce" (Participant 1).

Negative self-concept

This category referred to the older adults' perception of their current condition and the way they viewed their lives. *Negative self-concept* consisted of 5 subcategories.

Being lonely

The older adults stated that they were lonely and helpless and there was no one to support them. They experienced this mostly when they faced death or immigration of their loved ones, especially their spouse or children. One of the participants stated: *"I never imagined that one day I'd become so lonely and when he left us, I really felt helpless"* (Participant 12).

Being a trouble to others

Due to suffering from debilitating physical disorders or mobility limitations related to old age, some of the participants experienced impairments in their functioning. This caused them to believe that they were a burden on others. One of the study participants stated: *"I suffered a lot because of the feeling that I was a burden to my daughter. This was due to my hardworking attitude and warrior mindset"* (Participant 7).

Self-perceived uselessness

This involved the older adults' negative attitudes towards the meaning of their lives. Among the examples of *self-perceived uselessness* were feeling separated from the flow of life, feeling useless, losing life goals, feeling that the future would be bleak, etc. One of the participants stated: *"My problems are all rooted in having a useless life, in mismanagement of life; all these things go hand in hand, and I can't do anything about them, no matter how much I try"* (Participant 8).

Lack of control over life

This concept had personal, collective, and fate-related dimensions. The personal dimension was expressed by the participants who were bedridden, suffered from different disorders, such as stroke, and were not able to meet their personal needs; the collective dimension was expressed by those who were not involved in making family decisions; and the fate-related dimension was expressed by those who believed that they had no control over their

lives since they were born and felt as if adverse life events had always been decided by fate. For example, one of the study participants stated: *"I have had no role in my life; I have never been able to make a decision for my own life; I have never had the opportunity to do so because my life has always been nothing but misery and disappointment"* (Participant 5).

Losing reputation

Most of the older adults provided descriptions of losing their reputation in the society and losing the others' respect. A number of older adults considered themselves worthy as a result of years of living or because of their past position in the family and their relation with others. However, this worthiness was seriously challenged and degraded by perceived problems. One of the participants stated about his addicted son's behavior: *"I was a reputable person. Many people knew me and I had a lot of friends who had a high regard for me...My son borrowed money from my friends and tarnished my reputation. I couldn't regain my status in the family and society and I lost other people's respect"* (Participant 1).

Discussion

The present study aimed at exploring the structure of suicidal ideation in older adults. The results showed *perceived adversities* and *negative self-conception* as the structural components of the development of suicidal thoughts in older adults. In line with the study finding regarding *perceived adversities*, a number of risk factors related to old age have been mentioned by previous studies as potential stimuli or stressors contributing to suicidal ideation in older adults including death of a partner, loss of job due to illness or retirement (9), social isolation, financial problems (33), physical limitations, family members' problems or disorders (18, 20), depression, chronic or painful disorders, alcohol or drug abuse (9, 34), and family problems (35). Nevertheless, it should be noted that there are conflicting findings about the relationship between retirement and mental health in old age. In contrast to the results of the present study concerning retirement, some previous studies have found that retirement is essentially beneficial to mental health (36). In the present study, *disempowerment* and *disrupted family* were especially important. Therefore, they can be called the cultural findings of the study. These two concepts have been mentioned in other

studies, especially those conducted in Asian societies, but in the present study, they were frequently mentioned by the participants and were more significant than the other old age hardships; this may have cultural implications. Cultural expectations in Asian societies including the Iranian society, place a high value on family integration, future of children, respecting older adults, and older adults' independence in performing daily activities (24). At the same time, in Iran, as an Islamic country, religious beliefs, along with other cultural aspects, have major effects on the people (37). Living in a long-term care facility like a nursing home can estrange older adults from their family members, just when they are more fragile than ever (18, 38). Moreover, previous studies conducted in nursing homes have clearly shown that at least five factors worsen the mental health of older adults living in nursing homes and may increase the risk of depression and suicidal ideation. These factors were negative stereotypes of nursing home staff towards older adults, community stereotypes about nursing home residents, incontinence and lack of sense of control in older adults, lack of security and private life, and disconnection from family and friends (39).

Similar to a related study conducted in Taiwan by Lee et al. (40), the findings of this study showed physical illness and disempowerment play a significant role in the development of suicidal thoughts in older adults. In the present study, older adults who were diagnosed with depression were in the minority which is consistent with similar studies (33). This does not necessarily mean that older adults are not depressed but depression might not have been diagnosed.

The subcategories of *negative self-concept*, as an important concept identified in the present study, are consistent with several concepts identified in other qualitative studies. For instance, *being lonely* is consistent with sense of aching loneliness (33); *being a trouble to others* is consistent with burden-impact (being a burden to others) (29); *self-perceived uselessness* is consistent with worthlessness (9); *lack of control over life* is consistent with powerlessness (41); and *losing reputation* is consistent with suffering due to ungratefulness of family members (42). Besides, the concepts presented by the lifespan developmental theory (43), such as control, that is of great importance in the development of suicidal thoughts and behaviors in older adults, are very similar to some of the subcategories of *negative self-concept*

found in the present study. Analysis of the data related to *negative self-concept* showed ambivalence in the older adults; while they wanted to satisfy their needs without the help of others, they were extremely dependent on others. This ambivalence shows the complexity of human relationships. In other words, no matter how much a person feels independent, they are still dependent on the help of other people (33).

Given that suicide is a sensitive and controversial topic, the main limitation of the current study was the difficult access to institutionalized older adults. In fact, some of the nursing home directors and nurses believed that speaking with older adults about suicide might encourage them to try it; therefore, they were reluctant to cooperate in this study. Further studies are recommended to focus on institutionalized older adults to provide more comprehensive information on suicide in this population.

Conclusion

Among the concepts identified in the present study, those related to family, health, or performance of older adults are especially important due to their cultural significance in the development of suicidal thoughts. Older adults are more likely to experience mental health problems due to old age and physical and mental disabilities. Therefore, enriching the social interactions of the older adults, promoting values, norms, and social relationships, providing opportunities to increase their physical activities, making them familiar with and engage in religious activities to strengthen the meaning of life, and improving endurance and stability can protect against suicidal ideation. To the best of the researchers' knowledge, this is the first qualitative study on suicidal ideation in older adults in Iran. Therefore, further studies need to investigate suicidal ideation in older adults more deeply.

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Conflict of Interest

The authors declared no conflict of interest.

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