

Original Article

Reasons and experiences of self-inflicted burns among women in reproductive age in Baghdad, Iraq: a qualitative study

Abeer Gatea^{1,4}, Saharnaz Nedjat^{2,3}, Mir Saeed Yekaninejad²

¹Department of Epidemiology and Biostatistics, School of Public Health, International Campus Tehran University of Medical Sciences, Tehran, Iran; ²Department of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran; ³Knowledge Utilization Research Center, Tehran University of Medical Science, Tehran, Iran; ⁴Ministry of Health, Baghdad, Iraq

Received May 29, 2019; Accepted June 13, 2019; Epub June 15, 2019; Published June 30, 2019

Abstract: Background: Self-inflicted burn (SIB) is an important social and medical problem in the world. However, the evidence is limited to the reasons and experiences of women who committed SIB. Objective: To explore in-depth reasons and experiences of self-inflicted burn among women aged 15-45 years, in Baghdad city, Iraq. Methodology: The study was conducted among 30 participants, recruited from six different hospitals where the participants were treated. Maximum variation opportunistic sampling technique was used to select the participants, taking into account participants' variation in age, socioeconomic, and marital status. Data were collected through face to face semi-structured interviews. Each interview session was audio-recorded and supported by field notes. Content analysis was conducted using Max QDA 10 software. Results: We identified four major categories of problems leading to SIB. These were related to the personal, social, economic and family situation of the study subjects. Of these, the main factors mentioned by all participants' family pressure, unstable environment, and poor mental health. Conclusion: We found that SIB is linked to various socioeconomic problems. Meanwhile, comprehensive SIB prevention, care and support stands worthy of consideration to avert the problem as well as to save the lives of those who committed the problem.

Keywords: Reasons, qualitative study, SIB, age, baghdad

Introduction

Self-inflicted burning (SIB) is an important social and medical problem in the world. It is one of the exotic approaches that continue to scourge humanity [1]. In the recent years, developed countries have made considerable progress in lowering burn-related morbidity and mortality including SIB through a combination of raising awareness, prevention, care and support programs for SIB cases [2]. However, SIB is among the top accidents of public health importance in developing countries, which also bear a disproportionately higher burden of the problem [3]. According to the World Accident Report, self-burn is the highest in Asian countries and the lowest in the United States [4, 5]. This has been reported to be associated with the insecurity of the region, due to the ongoing wars. Though it varies from country to country, there

is a high risk of mortality associated with SIB. The rates of SIB associated mortality were 85% in Pakistan [6], 79.6% in Iran [7], and 60% in Nepal [8]. In contrast, in Sri Lanka the mortality rate was 27% [9], and in Brazil 40% [10] which are lower than figures in other setups. SIB is generally more common among females than among males [11].

The burden of burn-in Baghdad is quite high with a prevalence of 26.5% per 100,000 populations [12]. Out of 1,121 total burn cases reported among females in Baghdad in 2016, 62 (5.5%) cases were due to SIB [12]. This estimation is likely to be under-estimated as most cases are not reported due to religion, culture and family-related restrictions [11].

Although the available evidence indicates the existence of several risk factors that contribute

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Table 1. Characteristic of participants

	Frequency	Percent
Age		
Mean	26.2	
SD	8.6	
Age groups		
15-30	22	73.3
31-45	8	26.7
Marital status		
Married	15	50
Single	12	40
Divorced	2	6.7
Widowed	1	3.3
SES		
Poor	7	23.3
Intermediate	14	46.7
Good	9	30

to SIB among females, there is still a paucity of information on the reasons why females commit SIB. For instance, some studies reported psychological conditions [13], marital status and environmental conditions [14, 15] as the main factors for committing SIB among women in low-income countries. Moreover, internal conflict, war, economic depletion, poor public services and living standard deteriorations in a country are also believed to influence SIB and suicidal attempt [16]. In addition, a study from Iran indicated that social and economic conditions and violence against women might play a major role in the high rate of suicide burns [17]. Traditions and customs, lack of equality in rights and duties between men and women, male rules and inequity in situations were reported to be responsible for the higher rate of SIB among women [11].

In Iraq, there are few studies that attempted to explore the factors and causes of SIB among females in reproductive age. A quantitative study reported from Mosul province [11], pointed out that most cases of SIB occurred among housewives, young and uneducated women. In addition, the main reason of SIB was family violence [11]. Another quantitative study reported from Kurdistan, Iraq, [18] indicated that the main reasons leading to SIB were family and marital problems. In a study conducted in Al-Basra, province [19, 20], reported the main reasons of SIB were forced marriage, marital conflict and lack of support from family members. Despite these studies and evidence,

there is a huge gap on the reasons leading to committing SIB as well as the experience of the SIB survivors. Therefore, our aim was to explore in-depth reasons and experiences of SIB among women aged between 15-45 years.

Materials and methods

Qualitative approach

The conventional content analysis approach was chosen as the research method of this study. The study aimed at examining both the manifest and latent content of the real reasons behind self-burn, other than original reason. The manifest content is apparent as data from the interview which can be seen and interpreted. As for the content, the latent or underlying content is what the researcher finds through the interview and what can be explained by the suggestions or hints offered by the participant which can clarify the images and points are hidden from the view.

Participants and sampling

Thirty participants were interviewed in this study. The interview time was between 45-75 minutes depending on the participant's situation. Participants were recruited from six hospitals where they were treated, through maximum variation opportunistic sampling technique based on the age groups, socioeconomic status (SES) and marital status of females (Table 1). This sampling technique was used to include all the extremes and marginalized [21]. We excluded seven of the participants from this study, three of them left the study during the first question and four before the end of the interview, because they felt fear and shame. They refused to talk about the main causes of their problems.

Interviews and guides

In-depth and semi-structured interviews were conducted to collect data from the participants by asking open-ended questions, in one-to-one interview. For instance, the open questions used to include the following questions: "can you tell me, why you decided to burn yourself?", "when you were considering burning yourself, was there any other reason? "was it a good idea"? If you had that hesitation, what then did you finally do to burn yourself?"; how is your feeling before, during and after you burn yourself? if

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your friend or any of your relative had the same problems? These open questions were allowing them to feel free and give us more expression without any restriction, as the most of them, they preferred the open questions to express their fears freely, and their feelings and what things were going in their mind. These things helped us to get answers to our questions. In addition, rapport was established to make the participants feel more comfortable and freer to talk, which would generate more insightful responses, especially regarding our topic. During the in-depth interview, data were recorded in two ways. First, everything during the interview was written on the notebook as a draft and after checking, would be translated to another notebook. Secondly, the data was recorded by Dictaphone and transcribed for the notebook. Finally, the data for the two methods were compared to get the answer to the intended questions.

Data saturation

For this part, we indicated that adequate data had been collected for a detailed analysis and no additional data could develop the properties of themes. We saw similar instances repeatedly and, empirically confident that a theme was saturated. Therefore, looking for groups that expand data diversity were avoided, only to ensure that saturation was based on the widest possible range of data on the theme.

Data analysis

Data was started to analyze by reading the data carefully, and it was repeated till immersion. In the next step, the data was read as a novel, and the whole text was read word by word. The codes were derived by highlighting the exact words to show concepts and ideas, and similar codes were summarized in categories. Each category was defined as a sub-category and the theme was developed to prepare the final report. Finally, the themes were labeled to sub-categories and categories for more explanation and understanding the process. The relationship between categories and subcategories were explained in detail. Max QDA 10 software was used to analyze the data.

Quality control and assurance: Three of the interviews were double-coded by the researcher to enable compatibility and agreement and, were aged above 18, and interviews took place

within one to two weeks after the hospital admission. Interviews were undertaken by the researcher. Inter rater agreement was 66.7%.

Peer debriefing: In the complete interviews, we read each interview in very detail and highlighted the text relevant to the research question. Later on, the same interview was provided to another person who read the text briefly and highlighted the relevant areas. We coded and the note was provided to another person, but not reviewed until after reading and coding the text independently. Ten percent of the interviews were reviewed in the manner already described to include a mixture of interviews that were most challenging to assessing and those that were not difficult. In every occasion, while there was a disagreement between the interviewer and another person, we discussed our interpretation and resolved the discrepancy during the meeting.

Member checking: It performed when all the data of the interview were analyzed. The data were returned to participant to look at it and checked it for more accuracy. Also, it provided an in-depth approached for sequentially triangulation from different time points in the pathway of participants. Then, helping to ensure the dependability of the data.

Ethical consideration

Ethical approval was obtained from the ethical committee of Tehran University of Medical Sciences (IR.TUMS.VCR.REC.1396.4251) before interview. Ethical approval was cross checked by Iraq Ministry of Health and issued the IRB number (1698). Written informed consent was obtained from each participant.

Results

Thirty SIB subjects were included in this study. The women were aged between 15 and 45 years. Other socio-demographic characteristics of the study participants are presented in **Table 1**. Reasons to commit SIB divided into four categories were extracted from the data. These were personal, social, economic, and family problems. Eleven subcategories were extracted from the data (**Table 2**).

Category 1: Personal problem

The first category was derived from the data is a personal problem. Also, it had three sub-categories (**Table 2**).

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Table 2. Categories, subcategories, and themes

Categories	Sub-categories	Themes
1. Personal problem	1.1 Psychological problem	Depression, rowdy, moody, fidgety, living with a doubt person, blame herself for what she did during her life, remorse, resentment, comparison, inferiority, shame
	1.2 Relation to people	Cannot found someone to talk to her, lack of communication, difficult to contact with people, not acceptance her appearance
	1.3 Substance abuse	Take medicine without prescription, drinking alcohol
2. Social problem	-	Sexual discrimination, racial discrimination, duty of women, traditional and cultural of country
3. Economic problem	-	No job, no money, living in the poor condition
4. Family problem	4.1 Inability to take her decision about her life	Wished to have freedom during her life, Wished to change her life after divorce
	4.2 Lost her opportunity to become pregnant	No children, luckless for getting boy, long time for marriage, having a disability after accident
	4.3 leaving family member	Husband left her alone, her mother left the house
	4.4 Lost her education	Left the school
	4.5 Lost her opportunity to get married	Unmarried
	4.6 Lost her love	Over sense of loving, boyfriend relation
	4.7 Compulsory marriage	Younger age, married without loving, husband old age, older age, forcing marriage, early marriage
	4.8 Violence	Subjected to cruelty and violence by her parents and husband, Her husband is addicted

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Psychological problem: Ten of the participants thought the psychological problem for them is one of the reasons to choose the SIB. The participants feel more depressed, more nervous and difficult to deal with any person, every time they regretted for what they do, resentment of their life, they always feel inferior, and shame. One of the participants said, *"I became more nervous; my close friend had created a problem for me. After that, I hated all the people around me p30"*.

Relation to people: During the interview, eight of the participants discussed the problems with other people as one of the main reasons to choose the self-inflated burn. They felt alone, cannot find someone to talk with them if they have any problems, they are always busy with their life. For example, a participant said, *I cannot find someone to talk about what is going on in my mind "p1" and another said I've cut all communications with all friends because they don't accept me as a human "p4"*.

Some participants were suffering from losing people who were very close to them, which generates a sense of deprivation and depression. Moreover, their family did not give them the freedom to do what they wanted to do, whether it was right or wrong. The participant said *I was scared for my family; if they do not trust me how other people can do it "p26"*.

Four of the participants thought that, when they had the sore on your body and it sees by people, this issue which affected their psychological status and, the extent of their response to treatment. Some of them said that *"I became so ugly, I have sore, sore on the face, my boyfriend far away from me p1" and another said "I wanted to see a doctor to look at my own condition, and then he decided to do the surgery for me "28"*.

Substance abuse

Four of the participants had a history of taking medicine without a prescription. It is one of the reasons that prompted them to choose the SIB. Some women have used medicine to treat their hormone disorders which caused aggressiveness in them. One participant said that, *"I took a lot of medicine to forget my problems, but without any benefit "p2" and another said "I took some medicine and that's leading to increasing my weight "p17"*.

Category 2: - social problem

Twelve of the participants thought the tradition of our country is a reason to conduct SIB (**Table 2**). Therefore, for women, they are oppressed; her responsibility is to take care of her children and husband and, to manage her home. The girls must leave school when they reach at 9 years of age and their family preferred to marry them early, and they become under control of the husband and his family. Some participants said, *"I lived in a family with racial discrimination and, they preferred men. Females are listening to harsh speech and beating by family p10"*.

Category 3: economic problem

Thirteen of the participants were from a low socioeconomic level, which prompted SIB among them to get rid of the burdens of life. Some participants said, *"I stayed with my family for more than 4 months without money. During my stay I always experienced trouble, hitting, shouting, fear for me and my children. I developed a fear that if I lose my husband how I will take care of my children as I don't have any work (p13)" and another said "Our lifestyle was poor; I cannot get everything I need; my father is an old man and my brother is taking care of us because he has a job (p22)"*.

Category 4: Family pressure

Twenty-seven participants were believed the family pressure as one of the most important factors that leads them to choose the SIB. Family problems had eight sub-categories (**Table 2**).

Inability to take her decision about her life

During the interviews; five of the participants had given a description with detailed for themselves, when you live under the pressure of your family, you become unable to make your own decision about anything which is related to your life and, this issue make you feel hesitant and you became unable to cope with the difficult issues. This instilled a kind of confusion and turmoil for instance the participant said, *"They are scared if I do something wrong and the situation of our country is not secure. My family decided to take me out of school and forced me to stay at home. I wished to continue*

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my school to finish my education (p4)" and another one said "I wanted my family to give me the opportunity and freedom to live and do what I wanted (P7)".

Lost her opportunity to become pregnant

Three out of thirty participants were believed that this problem is a common in our country and can be a reason to conduct SIB. For instance, a participant said, *"I have a problem with my husband as I married before 7 years and I don't have children till now therefore, I decided to burn myself. I thought my husband could change his decision to marry another woman if I burn myself again (p2)".*

Leaving family member

Seven of the participants believed that the tension of the relationship with their family or their spouse and the consequent problems were one of the reasons that led them to choose the burning method to solve their problem. One of them said, *"No one cares about me, either I need something or not in my life (p1)".*

Lost her education

During the interview, three of the participants admitted that the reason for burning was to lose their chance of education because of the parents' pressures. They do not have the opportunity to change their situation, therefore, they decided to burn themselves. One of them said, *"I left the school because of a problem with my brother, he interfered with what I wear, and who is my friend, he asked me not to talk with some of my friends as he thinks she is not a perfectly nice girl (p10)".*

Lost her chance to find her partner

To be unmarried or lost her chance to find her partner is a type of family pressure. The chance of marriage remains the wish for each girl to create a new life and come to her dreams true. One of the participants thought that losing her chance to marry was the reason for burning herself because of all the pressure she had by her family and relatives, and she said, *"I am single till now, I didn't get an opportunity to marry (p9)".*

Lost her love

When you are under pressure to lose who you love, and you have no choice to know what you

want, lead to burn yourself to get rid of emotional stress and situation surrounds you. Two of the participants explained the cause of burn themselves for losing their lover. The participant said that *"I love my husband too much. I decided to burn myself because of my family as they forced me to leave him. My family pressurized me to leave him as I suffered a lot for him (p13)".*

Compulsory marriage

The compulsory marriage is a sub-category of family pressure. Six of them explained the reason for conducting the SIB. The one of the participants said, *"I married an old man, and he is twenty years older than me. I believed that it is hard for me to compromise, and I was feeling miserable at that time (p21)" and another said, "I married a person, but I did not love him. I thought my feelings will change after marriage, but it does not happen (p18)".*

Violence

On the other hand, one of the participants believed, when there is no equality in the relationship between two people or convergence of ideas and misunderstandings about the simplest things there are always problems, although you try to waive the simplest rights in duties, you may reach the stage you cannot afford it. She said, *"I subjected to cruelty and violence in my husband's house. I wanted to get rid of them and return to my family, but always my family did not support me, they do not want me to divorce, they said to me; either you tolerate them, or die (p27)".*

When you are living with an addicted person and, you tried to help him to stop it, but it does not work and, it was hard for you to tolerate that. The participants believed that to live with the addicted person is one of the reasons that affected their psychological status and led them to choose the SIB. The participant said, *"I know he is nervous and aggressive when he is drinking alcohol (p13)" "My husband has mental problems, he is drinking alcohol (p23)".*

Discussion

Iraq has been suffering from a protracted political, security, and economic situation for more than three decades and this might account for high suicide rate in the country. In this study, we

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aimed at exploring the in-depth the reasons and experience of SIB among female aged 15-45 years. In the present study, we found four categories of problems leading to SIB according to the perception and experience of the participants.

Based on the data analysis, the personal problem is a more important reason to commit SIB among females. Some psychological problems arise among females due to the reasons such as the inability to achieve their dreams or lack of trust people any more. When you feel depressed, rowdier and more nervous, especially, when you are living with a person had a debt problem with your behavior could be among psychological reasons to conduct SIB. Previous studies showed that the females had a psychiatric history and depression during her life is a catalyst factor to attempt the SIB [22, 23]. A qualitative study conducted by Mirlashari, et al [24], reported that the participants feel ugly because of the scars on their body. The most victims of SIB feel the fear of family and friends because of the scars on their body, which generates inferiority complex in them which lead to committing the burning process. According to interviews, most of them lived normal lives, but others, they do not. This depends on their families' and how they understood their problems. A study conducted by Shahram in 2014, confirmed that the motivating factor of self-immolation was the feeling of sadness [25].

Some cases were feeling a lack of confidence in them, and they preferred to isolate themselves and not talking to anyone, and feel so guilty, and regret about what they did. In addition, the words and the view of parents and friends, which make them feel bad for what they did. Al-Shamsi and Othman 2018 [18], reported that the lack of relationship with people which are the main causes of committing suicide among women which lead to SIB. Some medicines to treat ailments have side effects including drug abuse. Bolling, et al 2018, reported the common risk factor of SIB is drug abuse [26]. And in India, the association between psychiatric problems and drug abuse has been reported [27].

The social problem in our country, there is a sexual and racial discrimination, and the traditional and cultural of the country. In most Arab

countries, they are not allowed to go to school when they reached at the age of 9 years, and they preferred to choose the early marriage to get rid of their family control and move to a new family. A study in Iran by Alaghebandan, et al [17], they explained the rules of the customs, traditions, and religion, most people do not favor women's work or get her social or financial independence, and they prefer her to marry and stay at home.

The economic problem which is the inability to provide your life requirements, especially when you don't have any job or money and forced to live in poor condition. The level of the economic situation has an impact on education and employment, particularly among female which force them to leave the school, then it affects their psychological situation and on the other hand, unavailability of requirements to run a normal life lead to creating the problems in personal life. A previous study in Iran by Tayeb, et al [28]; mentioned that married women, comprised of the youngest age, and they are suffering from low socioeconomic status and forced to follow their customs and tradition. Homayoun et al in 2007 [29], found that a major cause of self-immolation was reported to have economic problems. A study by Rastegar and Alaghebandan in 2003, they reported that most cases are suffering from a low socioeconomic situation [30].

Also, the category of family pressure is a reason to conduct the SIB which had many subcategories as a lack of getting work or losing her education; losing her love or family during the war, early marriage or forcing her to marry without her acceptance. In our community, there are a lot of cases of unequal balance between her and her husband, which lead to domestic and marital violence, or losing her opportunity to become pregnant, over these reasons prompted them to end their lives and choose SIB as a solution to get rid of their problems. Most families limit the movement of their females, according to the traditions of the country and preferred to marry at an early age. Therefore, females were suffering from the loss of their freedom to make any decision regarding their lives whether they are married or not. A previous study in Iran; the authors found that the conflict with a spouse, family members, loss of close family, unemployment, uneducated, un-

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married are some motivating factors for conducting SIB among women [31-35]. A study in Pakistan [6], the authors also indicated that the most commonly affected of self-inflicted burn injuries were at a younger age, married, uneducated, the homemaker and the conflict after marriage were commonly cited the cause of such injuries.

Many studies are done in India, which is explaining the ways of choosing the self-inflicted burn among women [36-41]. The authors explained that suicide among women was due to conflict with the family, her husband's family, spouse, dowry harassment, alcohol abuse, and, the stress due to unemployment. Also, a study in Sri Lanka [9]; the author has specified the marital conflict as the main motivating factor to attempt SIB. In Brazil, the younger age, illiterate, marital status was at high risk of attempting the self-burning more than other groups. However, interpersonal problems and marital disharmony appeared to be the main reason for self-injury by burning [22]. It is difficult to change society's perspective about women in underdeveloped countries. The issue needs to intensify all efforts in multiple directions as well as the contribution of humanitarian organizations to bring a positive change, even gradually.

Conclusions

We found that SIB is linked to various socioeconomic problems. Such as personal problem, social problem, economic problem and family problems. Meanwhile, comprehensive SIB prevention, care and support stand worthy of consideration to avert the problem as well as to save the lives of those who committed the problem.

Limitation

The limitation of this study was: (1) During the interview, some participants were feeling embarrassment and were reluctant to talk about what they went through, especially in the presence of their relatives because of some of them were in health trouble which created problems to obtain accurate and deep information about them; (2) External validity or transferability is limited like any qualitative study because of sampling approach and limited sample size.

Acknowledgements

We are greatly indebted to all staffs in the Burns Centre at the Baghdad city and to the

concerned participants in this research for their indispensable cooperation and support. This research was funded by International Campus Tehran University of Medical Sciences, Tehran, Iran.

Disclosure of conflict of interest

None.

Address correspondence to: Saharnaz Nedjat, Department of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran; Knowledge Utilization Research Center, Tehran University of Medical Science, Tehran 6517838695, Iran. Tel: +982188989123; Fax: +982188989127; E-mail: nejatsan@tums.ac.ir

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