



The Effect of Resilience and Stress Coping Styles on Suicide Attempts in Females Reporting Spouse-Related Abuse

Sepideh Hajian^{1,*}, Simin Kasaeinia² and Mahbobeh Ahmadi Doulabi¹

¹Midwifery and Reproductive Health Department, Shahid Beheshti University of Medical Sciences, Tehran, Iran

²Midwifery Department, Student Research Committee, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran

*Corresponding author: PhD, Midwifery and Reproductive Health Department, Faculty of Nursing and Midwifery, Vali Asr Ave., Niayesh Cross Road, Niayesh Complex, Postal code: 1985717443, Tehran, Iran. Tel/Fax: +98-2188202512, Email: s.hajian@sbmu.ac.ir

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Abstract

Background: Spouse-related abuse involves a wide range of behaviors by the partner and has many debilitating consequences for the victim, such as suicide attempt.

Objectives: The aim of this study was to predict the effect of resilience and stress coping styles on the likelihood of suicide attempt in females reporting spouse-related abuse.

Methods: The present descriptive comparative study was conducted on 150 female victims of spouse-related abuse in the city of Ilam, Iran, during year 2016. They were matched in two groups with and without a history of suicide attempt over the past 12 months. Data collection tools included the world health organization violence against women instrument, the connor-davidson resilience scale, and the coping inventory for stressful situations. Purposive and snowball methods were used. The obtained data was analyzed using the SPSS-21 software.

Results: No significant differences were observed between the two groups in terms of the frequency and severity of exposure to different forms of violence. The mean scores of resilience ($P < 0.001$; -13.03 to -6.34) and problem-oriented coping style ($P = 0.004$, -7.65 to -1.46) were significantly higher in females without a history of suicide attempt compared to the other group. For every unit increase in the resilience score, the likelihood of not attempting suicide increased by 1.134, and for every unit increase in the avoidance style score, the likelihood of not attempting suicide decreased by 0.931. This effect remained significant with the addition of demographic variables.

Conclusions: A high level of resilience and the use of problem-oriented coping have a major role in reducing the likelihood of suicide attempt in females subjected to violence. Introducing couples to coping strategies, problem solving, and anger management is an integral part of life skills education.

Keywords: Stress and Coping, Resilience, Suicide, Violence

1. Background

Spouse-related abuse is defined as physical, sexual, and psychological-emotional violence perpetrated by the spouse against women (1). Several studies have revealed that around half of married females experience some type of violence by their husbands at least once during their marital life (2, 3). This problem can entail several negative consequences for the victims, including anxiety, depression, feeling worthless, and even suicide attempt (4). Suicide attempt is defined as the behavior following suicidal ideation and is a sign of wanting to escape an unbearable pain and a negative self-awareness, in which despair is the dominant emotion. Since suicide is considered a kind of stigma and even a crime in most countries, many cases are not recorded and the rate of attempts thus

exceeds the declared figures (5). In Iran, although actual suicide deaths are reported to be higher in males than in females, suicide attempts are far greater in females. The higher prevalence of suicide attempts in females can be due to reasons, such as wanting their inner pain or psychache to be heard (6). There are many risk factors for female's suicide attempt, including young age, poor economic status (7), psychological disorders, family history of suicide attempts (6), spouse-related violence, and family conflicts (8). However, not all individuals involved in such conflicts attempt suicide, since they may have protective capacities that those, who attempt suicide often lack. Resilience is one such factor that refers to a personality trait that helps the individual face and bear hardships in life and is associated with higher physical and mental health

(9). Coping styles are also known as other means of stress management and are classified under three main groups, including problem-focused, emotion-focused, and avoidance coping efforts. The individual's main aim in the first type is to exercise control over the stressful situation, while in the second, the main objective is to alleviate the turmoil based on emotions. The third type is manifested by turning to an entertaining activity, through which the individual distances from the stressful situation and tries to avoid the problem (10).

In Iran, similar to other parts of the world, domestic violence is not uncommon, and the rate and variety of this issue varies greatly across different provinces of the country. In the western region of Iran, like the city of Ilam, a recent report suggests a growth in this problem in the last decade as more than one-fifth of female suicide attempts were attributed to family conflicts and spouse-related abuse (11). The first hypothesis of this study was that the severity and type of spouse-related violence could influence suicide attempts in abused females. The second hypothesis was based on the idea that other factors, such as demographic variables and certain psychological attributes in victims, could have effects against violence-induced suicide.

2. Objectives

This research aimed at predicting the effects of resilience on the likelihood of suicide attempt in female victims of spouse-related abuse and effects of stress coping styles on the likelihood of suicide attempt in female victims of spouse-related abuse in the city of Ilam.

3. Materials and Methods

The present descriptive comparative study was conducted on a population consisting of all the female victims of spouse-related abuse in Ilam, during year 2016. The study samples were 150 non-pregnant victims of violence, who were divided to a group with and a group without a history of suicide attempt over the last 12 months. The study inclusion criteria consisted of being of Iranian nationality, residing in Ilam, not using narcotics or psychotropic drugs, having no diagnosed psychiatric disorders or chronic diseases and not having lost a loved one over the last six months. Females with a history of suicide attempt (SA) over the last 12 months were assigned to the case/SA group and those without such a history (NA) were assigned to the control/NA group. The study exclusion criteria included withdrawal and unwillingness to answer the questionnaires at any stage of the study and not answering to one-third of the items of the world health

organization violence against women instrument (WHO-VAW) (12) and the abbreviated version of Connor-Davidson resilience scale (CD-RISC2) (13), or five of the items of the coping inventory for stressful situations (CISS), according to the instructions given for completing the questionnaire (14). Given the statistical power of 80%, the 2:1 ratio of the SA to the NA group (15), the study sample size was estimated at 150, including 50 females in the SA group and 100 in the NA group.

For assigning subjects to the SA group, sampling was performed through purposive and snowball methods by visiting the outpatient counseling centers and hospitalization wards of both hospitals of the city (70 females) and then visiting the city's coroner's office (30 females). The most common form of suicide in the subjects was deliberate self-poisoning. For the NA group, non-random quota sampling was employed at 14 health centers of Ilam, according to the population of married females covered by each center. The two groups were matched in terms of their most important demographic characteristics, such as age range, education and family's economic status. The subjects were divided to poor, average, and well-off groups, according to their monthly family income, home ownership, property area, household size, and husband's job.

In the SA group, data were collected after ensuring the stability of the victim's vital signs and general health (in the hospitalized cases) and ability to answer the interview questions. First, the WHO-VAW was completed either by the researcher through interviews or by the participant through self-completion to determine the type and severity of spouse-related abuse in the victim. The CD-RISC2 and CISS were then distributed among the participants to complete by themselves. In the NA group, the CD-RISC2 and CISS were distributed to the subjects if they noted at least one type of partner violence in the WHO-VAW, and those with no experience of violence over the last 12 months were excluded from the study.

At the beginning of sampling, the subjects were ensured of the confidentiality of their data and they then signed informed written consent forms. All the questionnaires were completed over a single day at the subjects' bedside, the counseling center, a room at the coroner's office or the health center, depending on the sampling site. The WHO-VAW was used in two multinational studies (12, 16) for determining the prevalence of spouse-related abuse and was validated by Garcia-Moreno in 2006 (12). The validity and reliability of this tool have been confirmed in a sample of 600 Iranian females, using the 25-item version of the tool. It measures the type and severity of spouse-related violence in physical, sexual, and psychological dimensions (17). For instance, according to this scale, violent acts, such as pushing, slapping, battering, throwing

objects and the like, are considered acts of physical violence. The severity of spouse-related violence over the last 12 months is graded in this questionnaire as 'no experience of violence' (never), 'one type of violence once or twice' (mild), 'three to five times' (moderate) and 'more than five times' (severe). The CD-RISC2 is a short form of the original scale, which contains 25 items that measure the level of resilience in stressful situations. Vaishnavi approved the scale's convergent and divergent validity along with its reliability in 2007 for easier usage (13). In addition, psychometric properties of CD-RISC2 have been confirmed and used in Iran (18). The CISS is a 48-item scale for measuring individual's coping behaviors in stressful situations in three styles, including emotion-focused, problem-focused, and avoidance. The construct validity of the subscales and stable structure of the CISS revealed that it is a useful international scale as a valid measure of coping styles (19). Furthermore, the psychometric properties of this tool have also been confirmed in Iran (20).

Sampling was conducted between June and November, 2016. Data were analyzed in SPSS-21 using descriptive and analytical statistical tests, such as the two-independent-samples t-test, X^2 , one-way ANOVA, and logistic regression. The level of statistical significance was set at $P < 0.05$.

4. Results

In the NA group, 40 of the eligible females reported no evidence of violence, therefore, did not fully complete the questionnaires and were therefore excluded from the research. Sampling was then continued until the required sample size was reached ($n = 100$). Table 1 compares the main demographic characteristics of the subjects between the SA and NA groups.

The most common type of spouse-related abuse in the study population was psychological violence, physical, and sexual violence, respectively. Comparing the frequency and severity of the different types of abuse over the last 12 months showed no significant differences between the two groups (Table 2). From participants' perspective, the main reasons for physical, psychological, and sexual violence were, by order of prevalence, the interference of the husband's family in the couple's marital life (37%), economic problems (33%), emotional fatigue and hurt, and unwillingness to have sex with the spouse (22%). Comparing the perceived reasons for spouse-related abuse from the female's perspective showed no significant differences between the two groups (NS).

The SA group had a lower mean score of resilience compared to the NA group. The assessment of coping style in the two groups also showed that the subjects were only different in terms of the mean score of the problem-focused

style of coping, which was significantly lower in the SA group compared to the NA group (Table 3).

Assessing the effect of resilience on the incidence of suicide showed that this variable has a significant effect on suicide attempt, such that, with every unit increase in the resilience score, the likelihood of not attempting suicide increases by 1.122 (standardized beta coefficient $t = 1.22$ and Wald statistics = 20.63, $P < 0.001$). Assessing the concurrent effects of the three coping styles on suicide attempt showed that avoidance and problem-focused styles had a significant effect on the likelihood of suicide prevention or attempt, such that, with every unit increase in the score of the problem-focused style, the likelihood of not attempting suicide increases by 1.099 (standardized beta coefficient = 1.99 and Wald statistics = 11.2, $P < 0.001$), and with every unit increase in the score of the avoidance style, the likelihood of not attempting suicide decreases by 0.948 (standardized beta coefficient = 0.948 and Wald statistics = 5.07, $P = 0.02$).

Nonetheless, assessing the concurrent effects of resilience and the coping styles on suicide confirmed that only resilience and avoidance style could explain the variation in suicide attempt, and given its Wald statistic value and beta coefficient, resilience has a greater effect on this variable than avoidance style, such that, for every unit increase in the score of resilience, the likelihood of not attempting suicide increases by 1.134, and for every unit increase in the score of avoidance style, the likelihood of not attempting suicide decreases by 0.931 (Table 4). Resilience and coping styles explained 32.7% of the variance in suicide attempt. This effect remained significant with the addition of demographic variables, such as marital status and the number of children.

5. Discussion

According to the study findings, resilience and the style of coping with violence-induced stress significantly determine suicide avoidance or attempt in female victims of spouse-related abuse, as suicide attempters tend to have lower degrees of resilience and benefit less from problem-focused behaviors.

Given the lack of significant difference between spouse-related abuse victims in terms of the severity and type of husband's violence, the first hypothesis of the study, was rejected, because, despite the high prevalence of different types of violence in both groups, these factors do not necessarily lead to suicide attempt in all victims. The second research hypothesis was also rejected, because the two groups were not significantly different from each other in terms of the main demographic variables. Nevertheless, certain psychological traits, such as higher

Table 1. Demographic Information of the Study Sample: Suicide Attempters (SA) and Non-Attempters (NA)^a

Variable	Group		P Value
	SA	NA	
Age	28.20 ± 6.26	28.65 ± 6.55	P = 0.68, NS ^b
Spouse age	33.38 ± 7.97	34.16 ± 7.39	P = 0.56, NS ^b
Marriage age	7.86 ± 5.47	7.46 ± 5.81	P = 0.68, NS ^b
Educational attainment, y			P = 0.85, NS ^c
Illiterate	3 (6)	3 (3)	
1 - 6	8 (16)	14 (14)	
7 - 12	30 (60)	73 (73)	
> 12	4 (8)	10 (10)	
Spouse educational attainment, y			P = 0.54, NS ^c
Illiterate	0 (0)	2 (2)	
1 - 6	4 (8)	9 (9)	
7 - 12	39 (78)	78 (78)	
> 12	7 (14)	11 (11)	
Marital status			P < 0.004 ^d
Currently married	45 (90)	100 (100)	
Divorced	5 (10)	0 (0)	
Occupational status			P = 1.0, NS ^c
Homemaker	49 (98)	99 (99)	
Employee	1 (2)	1 (1)	
Spouse occupation			P = 0.76, NS ^c
Official employed	2 (4)	10 (10)	
Unemployed	6 (12)	9 (9)	
Semi-manual skilled	17 (34)	32 (32)	
Manual skilled	25 (50)	49 (49)	
Consanguinity marriage			P = 0.42, NS ^d
Yes	19 (38)	47 (47)	
No	31 (62)	53 (53)	
Family economic condition			P = 0.16, NS ^d
Poor	36 (72)	68 (68)	
Intermediate	7 (14)	18 (18)	
Well	7 (14)	14 (14)	
Number of children			P = 0.042 ^c
No children	4 (8)	24 (24)	
1 - 3	38 (76)	58 (58)	
4 - 6	8 (16)	18 (18)	
family history of suicide			P = 0.32, NS ^d
Yes	13 (26)	19 (19)	
No	37 (74)	81 (81)	

^aValues are expressed as mean ± SD or No. (%).

^bTwo independent samples t-test.

^cFisher's exact test.

^dChi-Square test.

resilience and problem-focused style in women with no history of suicide attempt imply that these features have a protective effect against high-risk behaviors, such as suicide attempt. The second part of the study hypothesis can thus be accepted.

In the present study, the abused females had a young mean age; a short mean duration of marriage, a relatively low level of education, and a low mean monthly income. Considering that almost half of the participants' husbands were manual laborers and close to 100% of the fe-

Table 2. Types and Severity of Spouse Abuse Between Suicide Attempters (SA) and Non-Attempters (NA)^a

Type and Severity of Spouse Abuse	SA	NA	Total	P Value ^b
Physical abuse				P = 0.15, NS
Never	1 (2)	8 (8)	9 (6)	
Mild	12 (24)	29 (29)	41 (27.33)	
Moderate	19 (38)	34 (34)	53 (35.33)	
Sever	18 (36)	29 (29)	47 (31.34)	
Psychological abuse				P = 0.64, NS
Never	0	0	0	
Mild	9 (18)	27 (27)	36 (24.0)	
Moderate	14 (28)	35 (35)	49 (32.67)	
Sever	27 (54)	38 (38)	65 (43.33)	
Sexual abuse				P = 0.065, NS
Never	17 (34)	32 (32)	49 (32.66)	
Mild	24 (48)	44 (44)	68 (45.33)	
Moderate	4 (8)	18 (18)	22 (14.61)	
Sever	5 (10)	6 (6)	11 (7.40)	

^aValues are expressed as No. (%).^bMann-Whitney U test.**Table 3.** Comparing resiliency and Coping Styles Between Suicide Attempters (SA) and Non-Attempters (NA)^a

Variable	SA	NA	P Value ^b , 95% CI ^c
Resiliency	55.86 ± 10.62	65.55 ± 9.308	P < 0.001, -13.03 to -6.34
Emotional-focused coping	60.28 ± 7.94	57.62 ± 9.51	P = 0.64, NS, -0.43 to 5.45
Avoidance coping	52.64 ± 10.42	52.32 ± 10.27	P = 0.86, NS, -3.21 to 3.58
Problem-focused coping	53.48 ± 9.17	58.04 ± 8.99	P = 0.004, -7.65 to -1.46

^aValues are expressed as mean ± SD.^bTwo independent samples t-test.^cConfidence interval.**Table 4.** The Effect of Resiliency and Coping Styles on Preventing Suicide Attempt

Variables	Unadjusted Coefficients		Adjusted Beta	Wald Test	P Value ^a
	Beta	Standard Error			
Constant	-6.267	2.474	0.002	6.413	0.011
Resiliency	0.126	0.030	1.134	17.277	< 0.001
Emotional-focused coping	0.006	0.025	1.006	0.061	0.804
Avoidance coping	-0.072	0.026	0.931	7.775	0.005
Problem-focused coping	0.049	0.030	1.050	2.676	0.102

^aConditional logistic regression.

males were housewives, a not so favorable economic status was well expected. In previous studies, the combination of young age with economic problems and crises (21), poverty, and unemployment caused psychological crises, such as depression and aggressive behaviors, such as argument between partners and suicide attempt (22). A high level of education has also been shown to be associated with a reduced incidence of harmful emotions, such as anger and despair and a great success in finding solutions and con-

trolling these factors (23).

Cheng et al. studied the role of cultural factors in marital conflicts and satisfaction among different races and found that stronger racial and cultural ties are associated with lower likelihood of marital conflicts, domestic violence, and divorce compared to couples, who lack these ties (24). Nonetheless, due to the high prevalence of interrelation marriage in the present study's statistical population, the two groups were not significantly different in terms of

these factors.

In line with some other studies (8,12,17), the prevalence of psychological abuse was higher than the other types of spouse-related violence in this study. The results of a systematic review showed that constant exposure to psychological violence alone is sufficient for consequences such as depression, the sense of not being in control of the situation, and suicidal ideations in females (25). Nonetheless, the study results found no significant relationship between the severity and type of violence and suicide attempt.

Moreover, the most common perceived causes of violence in this study included interferences by the spouse's family, followed by financial problems and refraining from having sex due to the experience of chronic violence. Two studies conducted in Pakistan and India showed that the most common predisposing factors of partner's violence include young age, family's poor socioeconomic status, interferences by the spouse's family (26), marital dissatisfaction, and avoiding sexual encounters with the spouse, and the interaction of these factors was found to lead to further violence among the couple (27).

In the present study, those, who attempted suicide were found to have lower levels of resilience compared to the other group, and resilience still predicted suicide attempt in the presence of other variables, such as different styles of coping with stress. Meanwhile, the only coping style that predicted the risk of suicide attempt was the avoidance style. Therefore, resilience is not merely a passive resistance against harmful conditions; rather, a resilient person is able to create a balance between her living conditions and her bio-psychological health (9). In the present study, resilient people mostly used problem-focused behaviors over other coping styles. However, it has been stated that people with emotional-based or avoidance coping as their dominant style, have a lower empathy with their spouse, experience a lack of trust in their partner and have significantly lower marital and sexual satisfaction compared to females with problem-focused coping as their dominant style. The former group also experiences greater interpersonal conflict with others, especially with their spouse, which is itself a powerful factor for weakening resilience (13).

Some studies propose to provide psychological interventions like cognitive-behavioral therapy (CBT) for higher resiliency and using task-based coping strategies. Furthermore, CBT should be provided for females with experience of spouse-related abuse. Studies in other health-related fields have indicated that CBT can significantly promote mental health (28,29). Similar studies are suggested for females with a history of spouse-related abuse in Iran.

The main limitation of this study was reliance on self-

reporting tools, which, given the sensitivity of the subject, leads to overstatement or understatement of certain examples of violence and underreporting for fear of disclosing personal issues.

5.1. Conclusion

The permanent elimination of domestic violence may not be possible, yet introducing people to essential life skills, including problem solving and anger management skills and enabling the use of logical and problem-focused strategies for coping with stressful situations are integral to decreasing interpersonal harms and aggressive behaviors. Nonetheless, these key skills are often neglected in formal education provided to adolescents and young adults and their void becomes clear after marriage when marital conflicts emerge. It is therefore necessary to introduce young adults to these basic life skills, especially through pre-marriage counseling.

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Footnotes

Authors' Contribution: Sepideh Hajian developed the original idea and the study design and supervision, wrote the manuscript, and was the guarantor. Simin Kasaeinia contributed to acquisition of data, and analysis and interpretation of data. Mahboubeh Ahmadi Doulabi contributed to the development of the protocol and critical revision of the manuscript for important intellectual content.

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