

The Effectiveness of Mindfulness-Based Stress Intervention on Grief Experience and Social Isolation Among Martyrs' Spouses

Zeynab. Keykha¹, Ali. Arab^{2*}, Fatemeh Soghra. Karbalai Herofteh³

¹ PhD Student, Department of Psychology, Zahedan Branch, Islamic Azad University, Zahedan, Iran

² Associate Professor, Department of Psychology, University of Sistan and Baluchistan, Zahedan, Iran

³ Assistant Professor, Department of Psychology, Zahedan Branch, Islamic Azad University, Zahedan, Iran

* Corresponding author email address: aliarab@edpsy.usb.ac.ir

Article Info

Article type:

Original Research

How to cite this article:

Keykha, Z., Arab, A., & Karbalai Herofteh, F. S. (IN PRESS). The Effectiveness of Mindfulness-Based Stress Intervention on Grief Experience and Social Isolation Among Martyrs' Spouses. *Journal of Assessment and Research in Applied Counseling*.

<http://dx.doi.org/10.61838/kman.jarac.7.x.x>



© 2024 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: This study aimed to examine the effectiveness of a mindfulness-based stress intervention in reducing grief experience and social isolation among martyrs' spouses.

Methods and Materials: This quasi-experimental study employed a pretest-posttest design with a control group. The statistical population included martyrs' spouses in the city of Zahedan, from which 40 individuals were purposefully selected and randomly assigned to an experimental group (20 individuals) and a control group (20 individuals). Data collection tools included the Grief Experience Questionnaire by Bart and Scott (1998) and the Social Isolation Scale by Chalabi and Amir-Kafi (2004). Data were analyzed using analysis of covariance (ANCOVA).

Findings: The results indicated that the mindfulness-based stress intervention significantly reduced the scores of grief experience and social isolation among martyrs' spouses ($p < 0.001$). Specifically, the mean grief experience score in the experimental group decreased from 111.5 to 47.4, and the mean social isolation score decreased from 92.45 to 34.8.

Conclusion: The mindfulness-based stress intervention is an effective method for reducing grief and social isolation in martyrs' spouses. The application of this approach can help improve mental health and enhance the quality of life for this group.

Keywords: mindfulness, grief experience, social isolation, martyrs' spouses, Zahedan

1. Introduction

One of the most significant impacts that many martyr families face is grief, or sorrow over the loss of a loved one. It is likely that the effects of grief are intensified for women who have lost their husbands or for children who experience the absence of their father. In martyr families, women often assume a central role. When a pivotal family member experiences distress, it can more significantly affect the health, welfare, and educational environment of the family than in other cases. In families without a father, children lack a clear image of a father figure to identify with. Given the father's role in the family and the unique role of martyr's spouses in the absence of the husband, as well as challenges such as lack of preparedness and a sense of shock within families, the isolation of these families (unlike the collective solidarity seen during wartime), accusations against martyrs by some individuals claiming they chose this path for material gains, and the disapproval of mourning in some families (while the capacity for grief varies among individuals, and mourning is a natural phase of emerging from grief), martyr families may be vulnerable to grief-related issues (Zibaei Nejad et al., 2019).

The therapeutic characteristics in these families differ from those in others. Counselors believe that healing potential exists within all individuals and that with the support of family, friends, or trained counselors, individuals can develop new ways of thinking about stressful experiences and gain a different understanding of them. In general, individuals' worldviews impact all aspects of their lives (Malik & Perveen, 2023).

Research by Elisabeth Kübler-Ross identifies the stages of grieving: the first stage includes shock, denial, disbelief, and searching behavior; the second stage involves deep sadness and social isolation; and the third stage is acceptance, though individuals may still shed tears over their loss. In most societies, men as heads of households generally assume economic and supportive roles, while household management and responsibilities are often assigned to women (Chen et al., 2023). However, spouses of martyrs, in addition to fulfilling maternal responsibilities, child-rearing, and household management, are also responsible for the family's economic role. Thus, to provide for their families, they are often required to work outside the home. However, as women globally tend to have less favorable and sufficient employment and income, their challenges and issues exceed those of men who head households. In Iranian households, men are generally considered the family heads; however,

following the martyrdom of a spouse, such responsibility is transferred to the martyr's wife (Kohsari, 2021).

In all wars, widows of soldiers killed in action face challenges such as feelings of loneliness, isolation, rejection, and lack of understanding from others. The absence of necessary social support is a primary predictor of adverse outcomes for these women globally. Wives of these individuals who assume family leadership roles experience not only loneliness but also the economic pressure to support their families, which they often lack experience handling (Zhu et al., 2023).

As Mills describes, social relationships in contemporary societies are essential to both individual and social functioning. For this reason, individuals unable to participate in society and incapable of building or maintaining meaningful relationships suffer significant loss. The absence of a personal network may marginalize martyr's wives or lead to their social exclusion, ultimately leaving them without avenues for social participation and without access to functional social networks where they could express their interests and engage meaningfully in society (Alhawtmeh et al., 2022). As their social relationships weaken, their opportunities for engagement also decline, resulting in a process of accumulation and reproduction of social inequality. Martyrs' spouses, consequently experiencing social isolation and reduced social engagement, face limited access to social resources compared to others in society, which in turn leads to a gradual decline in their social status and that of their children (Guendelman et al., 2022).

With these considerations, the issues faced by martyr's spouses include: being in a unique position as a woman without support or protection, restricted social relationships, lack of ability to make friends, preference for distancing from others, society's negative attitudes toward them, concerns about their children's future, role conflicts, receiving minimal social support, and deprivation from establishing emotional and affectionate relationships with others. These circumstances contribute to social inequality and subsequent financial challenges and poverty as consequences of social isolation and lack of social participation among these women (Chalabi & Amirkafi, 2004).

Mindfulness-based stress reduction intervention has been shown to be effective across a range of mood and anxiety disorders, and preliminary research suggests that it may also be beneficial for treating various grief disorders, social isolation, improving emotional cognitive regulation, and reducing social anxiety. In explaining the psychological

mechanisms underlying mindfulness-based stress reduction intervention, multiple authors have examined the effects of mindfulness exercises on metacognitive processes and attempted to explain the efficacy of this method through evidence-based metacognitive theories (Li et al., 2022).

For example, in their studies, Clark and Wells hypothesize that individuals with social isolation develop beliefs about themselves and their social standing based on early experiences, leading them to view social interactions as fearful and negative. Therefore, if individuals with social isolation disorder can observe their assumptions about themselves and their circumstances without judgment through this therapeutic approach, they may find it easier to confront anxiety-inducing situations, ultimately reducing their symptoms (Hosseini et al., 2021).

In cognitive-behavioral approaches, some studies suggest that grief experience disorder manifests as subtle avoidance behaviors, leading to impairment in various aspects of life (e.g., relationships, work, health) for those affected by this disorder. Kabat-Zinn (2008) posits that mindfulness enhances flexibility and broadens individuals' acceptance. Furthermore, acceptance can serve as a mediating factor in the relationship between grief experience disorder and behavioral distress (Momeni & Radmehr, 2019). Higher acceptance levels in individuals with grief experience disorder facilitate acceptance of anxious thoughts and feelings, reducing behavioral distress and disorder. Mindfulness exercises increase flexibility and acceptance in martyr's wives with grief experience disorder. Additionally, mindfulness, through its two fundamental components of attentiveness to the present experience and receptivity, allows for non-judgmental recognition of thoughts, emotions, and feelings without becoming entangled in them or avoiding them. This leads to stable emotional cognitive regulation in martyr's spouses (Issanejad & Azadbakht, 2017). Consequently, this influence reduces symptoms of social isolation and grief disorder and provides a constructive, effective means of managing these stresses. When individuals are mindful of their responses to stressful situations (such as public speaking), they learn to respond in a more constructive and harmonious way (Amiri et al., 2019).

Thus, the main question of this study is as follows: Is mindfulness-based stress intervention effective in addressing grief experience and social isolation among martyr's spouses?

2. Methods and Materials

2.1. Study Design and Participants

The methodology of this study was quasi-experimental, using a pretest-posttest design with a control group. The statistical population consisted of all spouses (women) of martyrs in the city of Zahedan, whose names were registered on the martyr list of the Martyr Foundation and Veterans Affairs of Zahedan. The sample was purposefully selected, and based on the present research methodology, 40 individuals (20 in the experimental group and 20 in the control group) were chosen from the statistical population. The sampling method involved the researcher presenting a university introduction letter to the head of the Martyr Foundation and Veterans Affairs of Zahedan to obtain permission and a list of all martyrs in Zahedan. Contact was then made with each martyr's spouse (if alive), and the research objective and implementation process were explained to them. With their full consent, each participant's details were recorded on the list of research participants. This process continued until the number of participants reached 44 (extra participants were included as reserves in case any participant did not wish to complete the questionnaire or if any responses were invalid). Subsequently, using matched placement considering educational background, age, social status, and the martyr's military rank, the participants were divided into two groups of 20 for the control and experimental groups.

2.2. Measures

2.2.1. Grief Experience

This standardized questionnaire contains 34 items and was developed by Bart and Scott in 1998. Its purpose is to evaluate individuals' emotions after the loss of a loved one across various dimensions (guilt, coping and justification efforts, physical reactions, feelings of abandonment, self-judgment or judgment by others, embarrassment/shame, and stigmatization). The questionnaire uses a five-point Likert scale. The minimum possible score is 34, and the maximum is 170. A score between 34 and 68 indicates a low grief experience, a score between 68 and 102 indicates a moderate grief experience, and a score above 102 indicates a high grief experience. In a study by Mahdipoor et al. (2009), construct validity was assessed using two methods: principal component analysis and convergent validity through correlation with the GHQ and SCL-25. The questionnaire's

reliability, assessed through Cronbach's alpha, was 88% overall, with component reliabilities ranging from 40% to 86% (Zibaei Nejad et al., 2019).

2.2.2. Social Isolation

This questionnaire was designed and validated by Chalabi and Amirkafi (2004) and includes 19 items with closed responses based on a five-point Likert scale. It assesses dimensions of support within social networks (intellectual support, emotional support, high-level support, and service support) and the scope of the social network (network size and type of relationship). The Likert scale ranges from "strongly agree" to "strongly disagree." A score between 19 and 38 indicates low levels of social isolation, a score between 38 and 76 indicates moderate social isolation, and a score above 76 indicates high social isolation. In a study by Mohammadi Joo (2013), Cronbach's alpha coefficient for this questionnaire was 0.78 (Chalabi & Amirkafi, 2004).

2.2.3. Cognitive Emotion Regulation

This standard questionnaire, created by Garnefski and Kraaij in 2006, contains 36 items and includes nine subscales. Each subscale consists of four items, each addressing how individuals think after experiencing a threatening or stressful event. It measures cognitive strategies that define individuals' response styles to stressful events. This self-report questionnaire is applicable for individuals aged 12 and older. Each item is rated on a five-point Likert scale, from 1 (almost never) to 5 (almost always). The score for each subscale is obtained by summing the four items, with a score range of 4 to 20. Higher scores indicate greater use of the specific cognitive strategy. Psychometric properties of the questionnaire are well-documented. Cronbach's alpha is typically above 0.70, and in some studies, exceeds 0.80. Additionally, construct and factor validity are reported to be good. Internal consistency for the subscales ranged from 0.62 to 0.85 in Garnefski and Kraaij's (2006) study (Hosseini et al., 2021).

2.3. Intervention

2.3.1. Mindfulness-Based Stress Reduction Program

The mindfulness-based stress reduction intervention was designed to support spouses of martyrs experiencing grief and social isolation by fostering resilience, emotional regulation, and social reconnection. This intervention aimed to enhance participants' capacity to cope with grief and

social stress through mindfulness exercises that encourage non-judgmental awareness, emotional acceptance, and present-moment focus. Each session included specific mindfulness techniques tailored to address the participants' unique challenges, focusing on alleviating the intense emotions and cognitive patterns associated with grief and social isolation. By cultivating mindfulness skills, the intervention sought to reduce participants' grief symptoms, diminish social withdrawal tendencies, and ultimately improve their mental well-being and quality of life.

Each of the eight weekly sessions, lasting 90 minutes, included a combination of guided mindfulness practices, reflective discussions, and homework assignments. Sessions began with a brief mindfulness exercise to center attention, followed by a review of the previous session and shared experiences. Each session introduced a new technique, such as body scanning, mindful breathing, and mindful movement, aimed at fostering present-moment awareness and emotional regulation. Reflective discussions encouraged participants to explore their thoughts and emotions surrounding their loss in a supportive group setting. Homework assignments, including daily mindfulness exercises and journaling, were provided to help participants integrate mindfulness into their daily lives, with weekly reflections used to reinforce and personalize these skills (Guendelman et al., 2022; Li et al., 2022; Momeni & Radmehr, 2019; Zhu et al., 2023).

2.4. Data analysis

After data collection, validated responses were used to address the research questions and test the research hypotheses. Both descriptive and inferential statistical methods were employed. Descriptive statistics were used to determine demographic characteristics of the selected sample and describe data related to research variables, utilizing measures of dispersion and central tendency indicators. For inferential statistics, the assumptions were examined, and the research hypotheses were tested using covariance analysis.

3. Findings and Results

The results showed that 46.7% of the target population was between 20 and 40 years old, and 53.3% were over 41 years old. Additionally, 60% of respondents had lived with the martyr for more than 16 years, and 53.3% held a bachelor's degree. To conduct inferential analysis of the research hypotheses, descriptive indices for each variable

were first reported for both groups separately for the pretest and posttest, and normality was assessed using the Shapiro-Wilk test. Descriptive indices for the grief experience

variable, including mean and standard deviation for the two groups in the pretest and posttest, are presented in Table 1.

Table 1

Descriptive Indices of Research Variables

Variable	Group	Stage	Mean	Standard Deviation
Grief Experience	Experimental	Pretest	111.5	1.8
		Posttest	47.4	1.14
	Control	Pretest	110.5	2.13
		Posttest	93.3	1.16
Social Isolation	Experimental	Pretest	92.45	1.73
		Posttest	34.8	1.01
	Control	Pretest	88.65	1.78
		Posttest	76.65	1.58

To ensure data normality, the Shapiro-Wilk test was used. The results indicated that the Shapiro-Wilk test's significance level for both groups was above 0.05, confirming the null hypothesis of data normality for the grief experience variable in the experimental and control groups at both stages.

Levene's test was conducted to assess the equality of error variances. The significance level for the grief experience variable was 0.988, which is above 0.05, confirming the

assumption of homogeneity of error variances. Additionally, the significance level for the group by pretest interaction effect was 0.956, which is also above 0.05, indicating that the assumption of homogeneity of regression slopes was accepted. Table 2 is the primary table for interpreting the results of the univariate covariance analysis, showing the significance or non-significance of the effect of the independent variable (group).

Table 2

Covariance Analysis and Linearity of Educational Group Effects

Variable	Effect	Sum of Squares	df	Mean Squares	F	Significance Level	Eta Squared
Grief Experience	Pretest	0.142	1	0.142	0.005	0.943	0.001
	Group	20997.08	1	20997.08	768.547	0.001	0.954
	Error	1010.858	37	27.32			
Social Isolation	Pretest	0.014	1	0.014	0.001	0.985	0.001
	Group	16395.726	1	16395.726	451.459	0.001	0.924
	Error	1343.736	37	36.317			

Table 2 shows that mindfulness intervention has a significant effect on the mean grief experience score, indicating a significant difference between the mean grief experience scores in the experimental and control groups in the posttest phase after controlling for pretest effects. The mindfulness-based stress intervention effectively reduced the grief experience among martyrs' spouses. Additionally, mindfulness intervention had a significant effect on the mean social isolation score, demonstrating a significant difference between the mean social isolation scores in the experimental and control groups in the posttest phase after controlling for pretest effects. The mindfulness-based stress intervention

successfully reduced social isolation among martyrs' spouses.

4. Discussion and Conclusion

This study aimed to assess the effectiveness of mindfulness-based stress intervention on grief experience, social isolation, and cognitive emotional regulation among martyrs' spouses. Results showed that the mindfulness-based stress intervention significantly affected grief experience among martyrs' spouses. These findings align with prior studies (Alhawtmeh et al., 2022; Amiri et al., 2019; Chen et al., 2023; Dolan et al., 2022; Guendelman et al., 2022; Hosseini et al., 2021; Issanejad & Azadbakht, 2017; Li et al.,

2022; Malik & Perveen, 2023; Momeni & Radmehr, 2019; Zhu et al., 2023).

Mindfulness practices enhance present-moment awareness through techniques such as focused breathing and body scanning, impacting cognitive systems and information processing. This approach effectively reduces grief experience (Momeni & Radmehr, 2019; Zibaei Nejad et al., 2019). Mindfulness increases body awareness and self-monitoring, potentially leading to improved physical functioning and self-care. Similar to traditional relaxation training, mindfulness meditation activates the parasympathetic system, promoting deep muscle relaxation and reducing tension and arousal. In fact, non-judgmental acceptance is linked to improved grief experiences, which may address major issues faced by martyrs' spouses. Mindfulness can protect individuals from mood dysregulation related to stress, a contributing factor to grief, by enhancing cognitive coping processes like positive reappraisal and strengthening emotional regulation skills, such as distress tolerance.

Mindfulness appears to influence grief experience through multiple mechanisms. First, mindfulness fosters the view that thoughts and emotions are transient, allowing individuals to see cognitions and emotions as "just thoughts" or "just feelings." This perspective may reduce rumination and automatic thoughts, which in turn alleviates unpleasant states and reactions and promotes effective management of these states. Second, mindfulness requires acceptance of the present state, which enhances martyrs' spouses' satisfaction with their current situation without persistent focus on past or future concerns. Finally, mindfulness can improve physical and cognitive health by enhancing muscle relaxation and reducing physiological responses to stress, thereby reducing grief experience. Mindfulness training, which reduces threats to mental and emotional health like depression, anxiety, and stress while increasing positive psychological components like well-being, happiness, and resilience, leads to increased enjoyment of life, an aspect often neglected by martyrs' spouses. Mindfulness-based cognitive therapy, combining vitality with clear experience perception, can facilitate positive changes in individuals (Li et al., 2022; Momeni & Radmehr, 2019; Zibaei Nejad et al., 2019). Thus, mindfulness skill practice improves clients' ability to tolerate negative emotional states, enabling them to cope effectively, which may also enhance happiness.

Mindfulness exercises, such as breath focus, body scanning, and seated meditation, raise awareness of one's body, emotions, and thoughts. Participants learn to

recognize all types of thoughts, feelings, and emotions as they arise.

This result suggests that grief is a complex, multidimensional process that disrupts survivors' intrapersonal, interpersonal, and social dimensions. Grief leads to symptoms like depression, hopelessness, anxiety, restlessness, decreased focus, and impaired concentration, reducing functional quality in various life areas and diminishing family happiness. The study results also indicated that multiple factors influence grief experience after losing a family member, including family, personal, cultural, and attitudinal contexts. Therefore, mindfulness-based stress intervention, by reducing stress in martyrs' spouses, can alleviate depressive symptoms, hopelessness, anxiety, and restlessness, improving their functional quality across life domains.

The results showed that mindfulness-based stress intervention had a significant effect on social isolation among martyrs' spouses. These findings align with prior studies (Guendelman et al., 2022; Issanejad & Azadbakht, 2017; Kohsari, 2021).

Mindfulness involves conscious, non-judgmental attention to the present moment. This technique helps individuals better connect with their emotions and thoughts and prevent automatic, negative responses. The mindfulness-based stress intervention includes exercises that help individuals focus on their breathing and bodies, recognize and accept their emotions and thoughts, and avoid negative judgments. Mindfulness-based stress intervention can be an effective tool for reducing social isolation among martyrs' spouses. Given the unique circumstances of this group, creating supportive spaces and providing opportunities to practice mindfulness can improve their quality of life (Issanejad & Azadbakht, 2017).

Following the imposed war, some of Iran's policies focused on compensating for the war's damage and reducing harm to martyrs' families. One method of evaluating any system's policies, especially in social welfare, is to consult the target group. From martyrs' spouses' perspective as the target group, the policies of the Islamic Republic of Iran regarding martyrs' families have been inadequate, failing to address issues like welfare in old age, recreational and social needs, counseling, and social work. Regarding the needs of martyrs' spouses, policies have been insufficient to meet current needs or adapt services to the aging and elderly conditions of the target group, leading to dissatisfaction and anxiety about their future and that of their children, fostering a strong sense of social isolation. Thus, mindfulness-based

stress intervention, by reducing stress and increasing self-esteem, can improve martyrs' spouses' functional quality across life domains.

5. Limitations & Suggestions

This study was conducted with martyrs' spouses in Zahedan, so generalizing the results to other populations should be done cautiously. Additional limitations include the small sample size and reliance on self-report questionnaires, which can introduce response bias. Some respondents may have provided inadequate responses due to lack of patience, fatigue, or concentration problems stemming from their own disorders, which may affect the study's results. Martyrs' spouses may have been reluctant to participate due to concerns over the recognition of their hardships and disclosure of personal information about themselves and their martyr spouse. Based on the results, it is recommended that relevant organizations prepare and provide scientific methods for implementing mindfulness-based stress training to family counselors in centers related to the Martyr and Veterans Affairs Foundation. It is also recommended that these organizations conduct mindfulness-based stress training workshops for martyrs' spouses, veterans, and the injured.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors equally contributed in this article.

References

- Alhawatemeh, H., Alshammari, S., & Rababah, J. A. (2022). Effects of mindfulness meditation on trait mindfulness, perceived stress, emotion regulation, and quality of life in hemodialysis patients: a randomized controlled trial. *International journal of nursing sciences*, 9(2), 139-146. <https://doi.org/10.1016/j.ijnss.2022.03.004>
- Amiri, N., Habi, M. B., Dehaghani, V., Agha Amiri, M. S., & Mousavi, S. A. (2019). The effectiveness of mindfulness-based cognitive therapy on cognitive flexibility in the spouses of veterans. *Military Psychology Journal*, 39, 51-64. https://jmp.ihu.ac.ir/article_204911.html
- Chalabi, M., & Amirkaifi, M. (2004). A multi-level analysis of social isolation. *Iranian Sociology Journal*, 5(3), 30-31. <https://www.sid.ir/paper/67441/fa>
- Chen, L., Liu, X., Weng, X., Huang, M., Weng, Y., Zeng, H., & Chen, C. (2023). The Emotion Regulation Mechanism in Neurotic Individuals: The Potential Role of Mindfulness and Cognitive Bias. *International journal of environmental research and public health*, 20(2), 896. <https://doi.org/10.3390/ijerph20020896>
- Dolan, N., Grealish, A., Tuohy, T., & Bright, A. M. (2022). Are Mindfulness-Based Interventions as Effective as Cognitive Behavioral Therapy in Reducing Symptoms of Complicated Perinatal Grief? A Systematic Review. *Journal of Midwifery & Women's Health*, 67(2), 209-225. <https://doi.org/10.1111/jmwh.13335>
- Guendelman, S., Bayer, M., Prehn, K., & Dziobek, I. (2022). Towards a mechanistic understanding of mindfulness-based stress reduction (MBSR) using an RCT neuroimaging approach: Effects on regulating own stress in social and non-social situations. *NeuroImage*, 254, 119059. <https://doi.org/10.1016/j.neuroimage.2022.119059>
- Hosseini, Z. S., Ahmadi, V., & Mami, S. (2021). The effectiveness of mindfulness-based cognitive therapy on cognitive emotion regulation strategies and happiness in methamphetamine users. *Family Therapy Quarterly*, 2(5), 177-199. https://www.aftj.ir/article_131270.html
- Issanejad, O., & Azadbakht, F. (2017). The effectiveness of two approaches, acceptance and commitment, and mindfulness-based cognitive therapy, on the psychological well-being of veterans' spouses with post-traumatic stress disorder. *Veterans' Medicine Journal*, 37, 218-223. <https://doi.org/10.29252/acadpub.ijwph.9.4.217>
- Kohsari, Z. (2021). Social welfare policies of the Foundation of Martyrs for the spouses of martyrs (Qualitative study). *Shahed Andisheh Journal*, 3, 63-84. https://www.shahedeandisheh.ir/article_135494.html?lang=en
- Li, J., Yuan, E., Zhu, D., Chen, M., & Luo, Q. (2022). Effect of mindfulness-based stress reduction on stigma, coping styles, and quality of life in patients with permanent colorectal cancer stoma: A protocol for systematic review and meta-analysis.

- Medicine*, 101(1).
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8735794/>
- Malik, S., & Perveen, A. (2023). Mindfulness and anxiety among university students: Moderating role of cognitive emotion regulation. *Current Psychology*, 42(7), 5621-5628.
<https://doi.org/10.1007/s12144-021-01906-1>
- Momeni, K., & Radmehr, F. (2019). The effect of mindfulness-based stress reduction on marital adjustment, sense of coherence, and psychological flexibility of veterans' spouses. *Military Medicine Journal*, 21(2), 12-21.
https://militarymedj.bmsu.ac.ir/article_1000797.html?lang=en
- Zhu, P., Liu, X., Shang, X., Chen, Y., Chen, C., & Wu, Q. (2023). Mindfulness-Based Stress Reduction for Quality of Life, Psychological Distress, and Cognitive Emotion Regulation Strategies in Patients With Breast Cancer Under Early Chemotherapy-a Randomized Controlled Trial. *Holistic Nursing Practice*, 37(3), 131-142.
<https://doi.org/10.1097/HNP.0000000000000580>
- Zibaei Nejad, M., Borjali, A., Esmaili, M., & Kalantar Hormozi, A. (2019). The effectiveness of dynamic initiation training with a cognitive-behavioral approach on the grief experience of martyr defenders' spouses in Tehran province. *Women and Family Cultural-Educational Journal*, 53, 7-25.
https://cwfs.ihu.ac.ir/article_206020.html?lang=en