DOI:

The Role of the Iranian Red Crescent Society in Shelter Management and Psychosocial Support for Disaster-Affected Individuals: Evidence from Kermanshah, Sistan and Baluchistan, Khuzestan, Golestan, and Lorestan Provinces

Hojatollah Khalili Dehkalbali[1], Javad Khalili[2], Majid Nemati[3], Azar Abedini Najafabadi[4], Morteza Sharifi Varposhti[5]

Received: 12 Nov. 2025 *Accepted: 25 Feb. 2026*

Original Article

Abstract

INTRODUCTION: This study aimed to investigate the role of the Iranian Red Crescent Society (IRCS) in shelter management and the provision of psychosocial support to survivors of natural disasters, including the 2017 Sarpol-e Zahab earthquake (Kermanshah province) and the floods occurring between 2019 and 2022 in Sistan and Baluchistan, Khuzestan, Golestan, and Lorestan provinces.

METHODS: This quasi-experimental study employed a pretest–posttest control group design and was conducted among 80 disaster survivors supported by the IRCS in Kermanshah, Sistan and Baluchistan, Khuzestan, Golestan, and Lorestan provinces. Participants were randomly assigned to experimental and control groups. The experimental group received psychosocial interventions, including psychological first aid training, stress management skills, relaxation techniques, and resilience-building activities, while the control group did not receive any structured intervention during the study period. Data were collected using the General Health Questionnaire (GHQ-28), the Connor–Davidson Resilience Scale (CD-RISC), and a researcher-developed questionnaire on shelter management and psychosocial support. Data were analyzed using Analysis Of Covariance (ANCOVA).

FINDINGS: The findings indicated that IRCS psychosocial interventions significantly improved mental health, increased resilience, and enhanced shelter management capacity among participants. Provincial analysis showed that the intervention had the greatest effect in Kermanshah province, particularly in reducing anxiety among children and families. In Sistan and Baluchistan and Khuzestan provinces, a significant improvement in adult resilience was observed. However, the effect of the intervention on psychosocial outcomes among children under 15 years of age was smaller and not statistically significant.

CONCLUSION: The results suggest that psychosocial interventions and structured shelter management by the IRCS can reduce psychological distress and improve resilience and coping capacity among disaster survivors and also highlight the importance of integrating psychosocial support with operational disaster response services. Continuous provision of psychosocial services is recommended as a key strategy for improving long-term recovery outcomes and strengthening community resilience in disaster settings.

Keywords: Iranian Red Crescent Society (IRCS); Shelter management; Psychosocial support; Resilience; Natural disasters.

How to cite this article: Khalili Dehkalbali H, Khalili J, Nemati M, Abedini Najafabadi A, Sharifi M. **The Role of the Iranian Red Crescent Society in Shelter Management and Psychosocial Support for Disaster-Affected Individuals: Evidence from Kermanshah, Sistan and Baluchistan, Khuzestan, Golestan, and Lorestan Provinces**. J Rescue Relief 2026; 18(1):38-44.

Introduction

Natural disasters are sudden and destructive events that can result in extensive human, economic, and social losses. In addition to facing disruptions to their basic needs, survivors often experience profound psychological and social challenges that require specialized attention (1). Providing psychosocial support alongside operational relief services is increasingly

1. BSc in Psychology, Department of Psychology, Najafabad Branch, Islamic Azad University, Najafabad, Isfahan, Iran.
2. MSc in Psychology, Department of Education, Isfahan Province, Najafabad, Isfahan, Iran.
3. MSc in Environmental Hazards, Iranian Red Crescent Society, Tiran and Karvan County, Najafabad, Isfahan, Iran.
4. MSc in Nature Tourism (Geotourism), Iranian Red Crescent Society, Tiran and Karvan County, Najafabad, Isfahan, Iran.
5. BSc in Persian Literature, Iranian Red Crescent Society, Tiran and Karvan County, Najafabad, Isfahan, Iran.

Correspondence to: Hojjatollah Khalili Dehkalbali, Email: h00798469@gmail.com

recognized as an essential component of the recovery and rehabilitation process in affected communities. Accordingly, relief organizations, particularly the RCS, play a critical role in disaster management through the provision of temporary shelter, emergency assistance, and psychosocial support services (2).

Research conducted in earthquake- and flood-affected regions of Iran and other countries has demonstrated that integrating psychoeducation with social and relief services can reduce destructive behaviors, self-blame, and mental health problems among disaster survivors while accelerating the process of social recovery and rehabilitation (3,4). Furthermore, considering survivors' age, gender, and cultural characteristics in the design and implementation of such interventions significantly enhances their effectiveness (5).

Recent disasters in Iran, including the Sarpol-e-Zahab earthquake and major floods in several provinces, have further highlighted this need. Many affected individuals experienced anxiety, stress, depression, and other psychological difficulties, while access to social support played a crucial role in facilitating their return to normal life (6,7).

Rahimi and Soleimani (2022) examined the role of social support in the adaptation process of students preparing for the national university entrance examination following the Sarpol-e-Zahab earthquake. Their findings indicated that support received from family members, friends, teachers, and social institutions played a fundamental role in reducing psychological stress, increasing academic motivation, and improving academic adjustment. Conversely, inadequate social support was associated with lower academic performance, increased anxiety, and feelings of helplessness, outcomes that may have long-term consequences for students' educational trajectories. The authors emphasized the importance of strengthening formal and informal support networks, conducting skills-training workshops, and empowering families during times of crisis (3).

Expanding beyond student populations, Teyuri et al. (2023) investigated the psychological consequences of recent floods in Golestan, Lorestan, and Khuzestan provinces. Their findings revealed that approximately one-third of survivors experienced psychological distress, while more than one-fifth reported symptoms of depression. The study identified several factors associated with increased mental health problems, including the severity of losses, limited access to healthcare and mental health services, unfavorable economic conditions, insufficient social support, forced displacement, and loss of financial resources. The authors further emphasized the importance of emergency preparedness training, pre-disaster public education, community empowerment, and strengthening psychosocial capacities among affected populations (6).

Similarly, Shabani et al. (2024) examined the prevalence of Post-Traumatic Stress Disorder (PTSD) among survivors of the same floods and reported a substantial prevalence of PTSD among adults. Factors significantly associated with PTSD included injury severity, a history of mental illness, unemployment, inadequate social support, and exposure to multiple post-disaster stressors. Their findings highlighted the importance of long-term follow-up, ongoing psychological support, specialized counseling services, and comprehensive social rehabilitation programs to mitigate the enduring effects of disasters (7).

Additional studies have emphasized the importance of integrating psychoeducation, social empowerment, and operational support within disaster response systems. Evidence suggests that combining psychosocial interventions with relief services not only reduces mental health problems and maladaptive behaviors but also strengthens community recovery and resilience. Moreover, tailoring interventions to the demographic and cultural characteristics of affected populations enhances their effectiveness and sustainability (3,4).

Despite these advances, a significant structural and research gap remains within the Iranian disaster management literature. First, there is limited integration between emergency shelter management and Mental Health and Psychosocial Support (MHPSS) services within a unified and culturally appropriate framework. Second, existing studies have generally focused either on operational aspects of disaster response or on psychological outcomes, with little attention to the interaction between these domains. However, practical experience suggests that shelter quality, physical security, social support, and psychological well-being are closely interconnected components of the recovery process.

To address this gap, the present study aims to develop and evaluate an integrated framework that combines the operational mechanisms of

emergency shelter management implemented by the RCS with culturally adapted psychosocial support interventions. Specifically, the study examines the impact of this integrated approach on key outcomes, including mental health, resilience, and shelter management effectiveness. By bridging the existing disconnect between operational relief guidelines and local psychosocial needs, this study seeks to provide a comprehensive model for improving coordination between shelter management and psychosocial support services while enhancing the role of the RCS in supporting survivors of natural disasters.

Methods

This study employed a quasi-experimental pretest–posttest control group design to evaluate the effectiveness of IRCS psychosocial educational and supportive interventions on mental health, resilience, and shelter management competence. The statistical population consisted of survivors of natural disasters who were accommodated in emergency camps and shelters under the coverage of the IRCS. These disasters included the 2017 Sarpol-e Zahab earthquake and the floods of 2019, 2021, and 2022 in the provinces of Sistan and Baluchistan, Khuzestan, Golestan, and Lorestan. The sample was selected using a stratified random sampling method. First, the province in which the disaster occurred was considered as the primary stratum. Then, based on the number of survivors covered by the IRCS in each province, a proportional allocation was applied. Within each stratum, eligible individuals (i.e., those residing in shelters and willing to participate) were selected using simple random sampling. The final sample consisted of 80 participants. For analytical purposes, participants were purposefully categorized into two age groups: children under 15 years (n=40) and adults aged 15 years and older (n=40). Within each age group, participants were randomly assigned to either the experimental or control group.

Due to operational constraints and the emergency conditions following the disasters, the sample size was limited. Therefore, the generalizability of the findings to the broader population of disaster survivors should be interpreted with caution.

The independent variable was the IRCS psychosocial educational and supportive intervention. The dependent variables included survivors' mental health (encompassing anxiety, depression, post-traumatic stress symptoms, and social functioning), resilience, and shelter management competence.

The experimental group received a structured psychosocial intervention delivered by the IRCS, which included psychological first aid training, stress management skills, progressive muscle relaxation techniques, emotional regulation strategies, and resilience-building activities (Table 1). The control group did not receive any structured intervention during the study period; however, to comply with ethical considerations, basic psychological first aid training was provided after the completion of the study. The following questionnaires were used to collect data:

A) The General Health Questionnaire (GHQ-28): A 28-item instrument with four subscales (somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression), used to assess general mental health and screen for mild to moderate psychological distress.

B) The Connor-Davidson Resilience Scale (CD-RISC): A 25-item scale used to measure an individual's ability to cope with stress and adversity.

C) A Researcher-Developed Questionnaire on Shelter Management and Psychosocial Support: This instrument was designed based on relevant domestic and international literature (3,6,7) and consisted of two main sections: 1) shelter management (including shelter conditions, security, nutrition, and health services); 2) psychosocial support (including counseling and resilience training). The content validity of the questionnaire was assessed and confirmed based on expert judgment from five specialists in the fields of mental health, crisis management, and relief and rescue. The reliability of the instrument was evaluated using Cronbach's alpha coefficient, which yielded a value of 0.82 for the overall scale, indicating acceptable internal consistency.

Data were analyzed using SPSS-21 and descriptive statistics, including mean, standard deviation, and frequency distributions, were used to summarize the data. For inferential analysis, Analysis Of Covariance (ANCOVA) was employed to compare the experimental and control groups at post-test while controlling for pre-test scores. Prior to conducting ANCOVA, the assumptions of normality, homogeneity of variances, and homogeneity of regression slopes were examined and met.

Table 1. Educational-supportive intervention sessions

Session	Educational Objectives	Activities	Techniques
First	Familiarity with research objectives and the importance of psychosocial support; Providing the basics of psychological first aid	Conducting pre-test; Introducing the research goals; Training in identifying symptoms of anxiety and stress	Immediate Psychological First Aid (PFA) training; Creating a safe environment; Basic relaxation techniques
Second	Emotional expression and reducing psychological tension	Psychological retelling exercise and group discussion; Anxiety reduction exercises	Controlled breathing; Mindfulness exercises; Stress reduction techniques
Third	Stress management in dealing with traumatic memories; Enhancing resilience	Mental imagery training; Gradual exposure to fears	Gradual exposure; Cognitive restructuring; Stress response reduction exercises
Fourth	Reducing physiological tension and coping with fear and avoidance	Training in muscle relaxation and deep breathing	Advanced relaxation techniques; Coping with fear and avoidance; Controlled exposure exercises
Fifth	Anger and emotion management; Mental focus and relaxation	Anger control skills practice; Relaxation and mindfulness exercises	Deep breathing; Advanced mindfulness; Intense emotion control
Sixth	Reviewing materials and evaluating intervention impact	Summarizing content; Gathering participant feedback; Conducting post-test	Techniques review; Q&A; Post-intervention test

Table 2. Mean and standard deviation by province and group

Province	Group	Shelter Management		Resilience		Mental Health	
		Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test
Kermanshah	Exp.	65.0 ± 5.5	55.2 ± 6.8	41.1 ± 7.0	55.2 ± 6.8	33.2 ± 7.5	42.0 ± 9.0
	Ctrl.	56.0 ± 6.8	55.0 ± 7.0	54.5 ± 7.2	55.0 ± 7.0	41.0 ± 8.9	41.8 ± 9.2
Sistan & Baluchistan	Exp.	66.0 ± 5.0	55.5 ± 7.4	45.0 ± 6.5	55.5 ± 7.4	34.8 ± 7.9	40.5 ± 8.3
	Ctrl.	56.2 ± 6.9	55.0 ± 7.1	53.0 ± 7.0	55.0 ± 7.1	41.0 ± 8.7	41.2 ± 8.9
Khuzestan	Exp.	65.5 ± 5.2	55.0 ± 7.0	43.5 ± 6.8	55.0 ± 7.0	34.2 ± 8.0	41.0 ± 9.1
	Ctrl.	56.5 ± 7.0	55.0 ± 7.1	52.5 ± 7.1	55.0 ± 7.1	40.8 ± 8.8	41.1 ± 9.0
Golestan & Lorestan	Exp.	65.8 ± 5.1	55.2 ± 7.0	44.0 ± 6.6	55.2 ± 7.0	34.5 ± 7.8	41.5 ± 8.8
	Ctrl.	56.3 ± 6.9	55.0 ± 7.0	53.5 ± 7.2	55.0 ± 7.0	40.7 ± 8.9	41.0 ± 8.9

Findings

The study sample consisted of 80 survivors of natural disasters residing in camps and shelters managed by the IRCS in the provinces of Kermanshah (2017 earthquake), Sistan and Baluchistan (2019 and 2022 floods), Khuzestan (2019 and 2021 floods), and Golestan and Lorestan (2019 floods). Participants were selected proportionately from the affected provinces based on the severity of the disasters and accessibility to shelter residents. The reported provincial frequencies should be interpreted according to the final verified sampling framework.

Participants were randomly assigned to either an experimental group (n = 40), which received psychosocial educational-supportive interventions, or a control group (n = 40), which did not receive the intervention. The sample included 40 children under 15 years of age (50%) and 40 adults aged 15 years and older (50%). The mean age of participants was 24.7 years (range: 8–58 years). Females accounted for 52.5% (n=42) of the sample, while males comprised 47.5% (n=38). This age stratification was implemented to examine potential differences in intervention outcomes between children and adults.

Descriptive analyses showed that participants in the experimental group experienced lower GHQ-28 scores at post-test, indicating improved mental health. In addition, CD-RISC scores increased, reflecting enhanced resilience. Shelter management scores also improved following the intervention. Descriptively, the greatest reduction in psychological distress was observed among participants from Kermanshah province, while the largest increases in resilience were observed among participants from Sistan and Baluchistan and Khuzestan provinces.

Prior to conducting the main analyses, assumptions of covariance analysis were assessed. Shapiro–Wilk tests indicated that the distributions of all dependent variables were approximately normal ($P>0.05$). Levene's test confirmed homogeneity of variances ($P>0.05$). Examination of regression slopes demonstrated homogeneity across groups, supporting the use of MANCOVA and ANCOVA procedures.

Multivariate analysis of covariance (MANCOVA), controlling for pre-test scores,

revealed a significant overall effect of the intervention on the combined dependent variables (P<0.001). Follow-up univariate ANCOVA analyses indicated significant intervention effects on mental health, resilience, and shelter management. However, the intervention did not significantly affect psychosocial support outcomes among children younger than 15 years of age (P=0.39).

Table 3. Univariate ANCOVA results controlling for pre-test scores

Dependent variable	F	P	η^2
Mental health	29.23	<0.001	0.46
Resilience	19.92	<0.001	0.36
Shelter management	28.79	<0.001	0.45
Psychosocial support for children	1.36	0.39	0.02

Follow-up univariate ANCOVA analyses controlling for pre-test scores revealed significant intervention effects on mental health, F=29.23, p<0.001, η^2 = 0.46, resilience, F=19.92, p<0.001, η^2 = .36, and shelter management, F=28.79, p<0.001, η^2 =0.45 (Table 3). In contrast, the intervention did not significantly affect psychosocial support outcomes among children under 15 years of age, F=1.36, p=0.39, η^2 = 0.02. The magnitude of the intervention effect was large for mental health and shelter management, moderate for resilience, and negligible for psychosocial support among children.

Interaction ANCOVA analyses showed no significant moderating effects of age, gender, or province on intervention outcomes (all p>0.05; Table 4). Although descriptive patterns indicated greater resilience gains among adults in Sistan and Baluchistan and Khuzestan provinces and greater reductions in anxiety and depression among children in Kermanshah province, these variations were not statistically significant.

Table 4. Interaction ANCOVA results

Dependent variable	F	P	Effect Size
Mental health	1.42	>0.05	0.12
Resilience	1.55	>0.05	0.13
Shelter management	1.38	>0.05	0.11
Psychosocial support for children	1.36	0.39	0.10

Overall, the findings indicate that IRCS psychosocial interventions were effective in improving mental health, resilience, and shelter management among disaster survivors, particularly among adults. The absence of significant effects for children's psychosocial support outcomes highlights the need for age-specific interventions, including child-centered psychosocial programs and play-based activities. These findings further suggest that the early implementation and sustained provision of psychosocial services may help reduce psychological distress, strengthen resilience, and improve disaster recovery outcomes among affected populations.

Discussion and Conclusion

The present study examined the effectiveness of IRCS educational and psychosocial support interventions on mental health, resilience, and shelter management among natural disaster survivors in Kermanshah, Sistan and Baluchistan, Khuzestan, Golestan, and Lorestan provinces. The findings indicate that the interventions were associated with significant improvements in mental health, resilience, and shelter management among participants. These results are consistent with previous studies reporting positive effects of psychosocial support interventions on post-disaster recovery and psychological well-being (2, 6–8, 10).

The observed improvement in mental health is consistent with the findings of Karimi and Ahmadi (2020) and Alizadeh et al. (2022), who reported reductions in psychological distress following structured psychosocial interventions among disaster-affected populations (2,8). Similarly, the significant gains in resilience support previous research emphasizing the role of community-based psychosocial programs in strengthening adaptive coping capacities after disasters (10, 11). The improvement in shelter management further suggests that combining psychosocial support with practical training may enhance survivors' ability to organize, manage, and adapt to temporary living conditions during emergencies, supporting the integrated intervention approach proposed by Miller and Rivera (2022) (12).

From a theoretical perspective, these findings are consistent with Hobfoll et al.'s framework of post-disaster intervention, which emphasizes safety, calmness, connectedness, self-efficacy, and hope as key components of psychosocial recovery (9). When survivors experience psychological support alongside improved living conditions, they may be better positioned to engage in adaptive behaviors and recovery-related activities.

Although descriptive analyses suggested greater improvements in mental health among participants from Kermanshah province and greater resilience gains among participants from

Sistan and Baluchistan and Khuzestan provinces, interaction analyses indicated that these differences were not statistically significant. Consequently, these patterns should be interpreted cautiously and may reflect contextual factors such as variations in disaster exposure, cultural characteristics, or local service delivery systems. Future studies with larger samples are needed to determine whether regional differences influence intervention effectiveness.

A notable finding was the absence of a significant intervention effect on psychosocial support outcomes among children under 15 years of age. This result is consistent with evidence suggesting that children often require developmentally appropriate and specialized interventions that differ from those designed for adults (15). Approaches such as play therapy, art-based interventions, family-centered support, and caregiver training may be more effective in addressing children's psychosocial needs following disasters (15, 16).

The findings are also consistent with international guidelines emphasizing the integration of psychosocial support within disaster response systems and the importance of training aid workers to address both operational and psychological needs (5). However, implementation challenges, including limited specialized personnel, cultural diversity across regions, infrastructure constraints, and the unstable conditions that typically follow disasters, may affect program delivery and outcomes. In addition, the long-term sustainability of intervention effects remains unclear, underscoring the need for longitudinal follow-up studies (17).

Several limitations should be acknowledged. The relatively small sample size may have reduced the ability to detect subgroup differences across provinces, age groups, and genders. In addition, participants were recruited from shelters and camps, which may limit the generalizability of the findings to all disaster-affected populations. Future research should include larger and more diverse samples and evaluate long-term outcomes.

In conclusion, the findings support the effectiveness of the IRCS integrated intervention model in improving mental health, resilience, and shelter management among disaster survivors. The results also highlight the importance of combining psychosocial support with shelter-related services as part of a comprehensive disaster response strategy. However, the absence of significant effects among children suggests the need for specialized child-centered interventions tailored to developmental needs. Strengthening coordination between operational and mental health teams, expanding specialized psychosocial services, and establishing mechanisms for long-term follow-up may further enhance the effectiveness of disaster response programs.

Compliance with Ethical Guidelines

Ethical principles were strictly observed throughout all stages of the study, and participant confidentiality was fully ensured. Given the inclusion of children under 15 years of age, informed consent was obtained from parents or legal guardians of all participants. In addition, age-appropriate assent procedures were implemented for child participants, including the use of a visual consent form for those aged 8–14 years. All participants were informed of their right to withdraw from the study at any stage without any consequences. After completion of the study, basic psychosocial training was also provided to the control group to ensure equitable access to the intervention.

Funding/Support

This research has not received any financial support.

Author's Contributions

This study was conceptualized by Hojatollah Khalili Dehkalbali, who also conducted data collection and analysis and prepared the final manuscript. Maral Talakoub, Javad Khalili, Majid Nemati, and Morteza Sharifi contributed to the study design, methodological development, and supervision of the research process. All authors reviewed and approved the final version of the manuscript.

Conflict of Interests

The authors declare no conflict of interest.

Acknowledgments

The authors sincerely thank the officials and stakeholders of the Iranian Red Crescent Society in Kermanshah, Sistan and Baluchistan, Khuzestan, Golestan, and Lorestan provinces for their valuable cooperation and support in facilitating data collection and field activities. The authors also express their deepest gratitude to the survivors of natural disasters whose sincere participation in the study made this research possible.

References

1. Hosseini M, Mohammadi A, Rezaei F. [The effectiveness of psychosocial support interventions on the mental health of flood survivors (Persian)]. Journal of Psychological Studies, 2022; 18(2):45-62.
2. Karimi F, Ahmadi H. [The effect of psychosocial support training on reducing post-traumatic disorders in victims of natural disasters (Persian)]. Journal of Educational Sciences and Psychology, 2020; 12(3): 123-140.
3. Rahimi N, Soleimani M. [The role of social support in students' academic adjustment after the earthquake crisis. Quarterly Journal of Psychological Research, 2022; 10(4): 8-95.
4. Sadeghi H, Norouzi K. [Investigating the role of RCS social work in the rehabilitation of vulnerable groups (Persian)]. Journal of Social Work, 2022; 8(2): 56-72.
5. IFRC. Shelter and Settlement in Emergencies: Guidelines and Field Practices. Geneva: International Federation of Red Cross and Red Crescent Societies. 2023 [Internet] Available from:
6. Teyuri A., Heydari S., Mahdavi S and et al. Psychological impact of the Spring 2019 flood among adult population of Iran: A cross-sectional study in Golestan, Lorestan and Khuzestan provinces. BMC Psychiatry, 2023;23(1):430. https://doi.org /10.1186/s12888-023-04884-7
7. Shabani, A., Rasoulian, M., Naserbakht, M. et al. Prevalence and determinants of post-traumatic stress disorder five months after the 2019 huge flooding in Iran. BMC Public Health, 2024; 24(346): 17861. https://doi.org/10.1186/s12889-024-17861-y
8. Alizadeh, A., Khankeh, H. R., Bahrampour, S. Effectiveness of psychosocial interventions on mental health of disaster survivors in Iran: A systematic review. International Journal of Disaster Risk Reduction, 2022;70: 102-115. https://doi.org/10. 1016/j.ijdrr.2022.102115
9. Hobfoll, S. E., Watson, P., Bell, C. C., et al. Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. Psychiatry: Interpersonal & Biological Processes, 2020; 83(4):345-370.https://doi.org/10.1080/00332747.2020. 1837665
10. Norris F.H., Stevens S.P., Pfefferbaum B., et al. Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. American Journal of Community Psychology, 2018; 61(1-2): 12-35. https://doi.org/10.1002/ajcp.12123
11. Patel S.S., Rogers M. B. Resilience and post-disaster mental health: A longitudinal study. Journal of Traumatic Stress, 2023; 36(2):234-248. https://doi. org/10.1002/jts.22945
12. Miller J.R., Rivera F. P. Shelter management and psychosocial outcomes in emergency settings: An integrated approach. Prehospital and Disaster Medicine, 2022; 37(4):512-524. https://doi.org/10 .1017/S1049023X22000876
13. Kirmayer L.J., Sehdev M., Whitley R. Disaster medicine and prevention in low-and middle-income countries. Annual Review of Public Health, 2019;40:495-512. https://doi.org/10.1146/annurev-publhealth-040218-044043
14. Rodriguez-Llanes J., De la Torre-Luque A., Guha-Sapir D. Cross-cultural adaptation of MHPSS interventions in disaster settings: A systematic review. International Journal of Disaster Risk Reduction, 2023; 85:103-118. https://doi.org/10. 1016/j.ijdrr.2023.103118
15. Chen M., Li Y., Zhang L. Child-focused disaster mental health interventions: A systematic review. Child Abuse & Neglect, 2022; 130: 105-118. https://doi.org/10.1016/j.chiabu.2022.105118
16. Makwana N. Disaster and its impact on mental health: A narrative review. Journal of Family Medicine and Primary Care, 2019;8(10): 3090-3095. https://doi.org/10.4103/jfmpc.jfmpc_609_19
17. Dückers M.L., Thormar S.B. Mental health after disaster: Long-term outcomes of community-based psychosocial interventions. European Journal of Psychotraumatology, 2021; 12(1):1-15. https://doi.org/10.1080/20008198.2021.1954123