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Does Organizational Resilience Provide the Conditions for Preparing Hospitals Against Earthquakes?

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A B S T R A C T

One of the problems that has always threatened the lives of human societies for many centuries is the occurrence of disasters and accidents that, in case of ignorance and lack of preparation, cause irreparable damage to various dimensions of human life, including residential, social, economic, environmental, psychological and so on. Iran is one of the developing countries that, due to its special spatial-spatial structures, has always faced many natural disasters and is among the most vulnerable places in the world to natural disasters. Based on the results, organizational resilience can have a significant impact on the preparedness of hospitals for earthquakes and reducing casualties.

Keywords: Organizational Resilience, Earthquake preparedness, Hospital, Earthquake.

INTRODUCTION

One of the problems that has always threatened the lives of human societies for many centuries is the occurrence of disasters and accidents that, in case of ignorance and lack of preparation, cause irreparable damage to various aspects of human life, including residential, social, economic, environmental, psychological, etc. (O'Brien, Sygna, & Haugen, 2004; Salamatnia & Jozi, 2021). The consequences of earthquakes, both in terms of repetition and in terms of the damage it brings, affect the society (Nasreen, 2012), because on the one hand, the lack or lack of security for the residents at risk of and on the other hand, reduce their risk to achieve sustainable development.

In this regard, urban resilience as a relatively new concept in urban studies and urban planning is necessary and essential in this field (Jabareen, 2013; Yang, Yang, Li, Liang, & Zhang, 2021). Resilience is derived from biological discipline, which determines the ability of an organism of a system to resist and recover from a shock, disaster, disease (Arefi, 2011; Folke et al., 2010). Therefore, the discussion is about an approach that connects all dimensions and to understand the lack of a general definition of urban resilience or "flexibility" from this perspective of urban crisis in general to the ability of a region or an urban system to resist A wide range of shock and tension can be expressed (Chelleri & Olazabal, 2012). In the meantime, urban planning plays a vital role in the formation of flexible cities. For this activity, strategic

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planning and good urban form are necessary to adapt the issue (Olazabal, Chelleri, & Waters, 2012; Olazabal, Chelleri, Waters, & Kunath, 2012).

The most emphasis of the preparation stage is on strengthening capabilities and capacity building in the society at risk, and the first step in this direction is to examine people's awareness, attitude and performance in order to provide a picture of the current situation and its analysis, educational needs and demands on researchers and policy. be enlightened (Farzad Behtash, Keynejhad, Taghi Pirbabaei, & Asgary, 2013; Guo, Shan, & Owusu, 2021). Most of the preparedness programs against natural disasters, including earthquakes, in different countries of the world are based on KAP studies in order to create the most behavioral change in the society at risk. Unfortunately, research has shown that despite the fact that earthquakes are considered a serious threat to the health of members of the society, they are not included in the list of priorities of the society at risk, and this is no different between developed and developing countries or less developed countries. The conducted studies have shown that most of the people were somehow surprised when this phenomenon occurred and could not react properly. Creating awareness and preparation in the general public is very important.

Resilience against earthquakes has different dimensions, one of the most important of which is preparation and awareness. In fact, the level of preparedness and organizational resilience of hospitals regarding earthquakes can have a significant impact on reducing casualties. Therefore, it can be said that preparation and resilience to react to accidents and disasters and having a suitable dream with them is an important principle in managing incidents; A category whose condition and how it is in Iran's hospitals is not clear and needs proper investigation and analysis. Therefore, investigating the relationship between the preparedness and organizational resilience of Iran's hospitals against earthquakes is necessary and necessary.

METHODOLOGY

The research population consisted of 2,500 employees of Iranian hospitals. The data were collected in a simple random manner, and based on this, the research questionnaires were implemented with their consent and ethical principles. Statistical analysis of data was done using multivariate regression and simultaneously.

RESULTS

To describe the earthquake preparedness index, the data collected from Iranian hospital employees were presented through mean and standard deviation.

Table 1. Statistical distribution of earthquake preparedness of hospitals

Variable	Min.	Max.	Mean	Std. deviation
Earthquake preparedness	19	38	28.34	3.669

The evaluation of earthquake preparedness showed that the average index was 28.34 and the standard deviation of the scores was 3.669. In Table 2, organizational resilience and its

dimensions are presented and reported through the collected data.

Table 2. Statistical distribution of organizational resilience of hospitals

Variables	Min.	Max.	Mean	Std. deviation
Situational awareness	11	40	26.83	7.408
Key vulnerabilities	12	40	29	7.048
Adaptive capacity	12	40	29.81	7.341
Organizational resilience	39	120	85.65	20.268

The findings in the evaluation of organizational resilience in hospitals showed that the average of situational awareness is equal to 26.83 and the standard deviation is 7.408, the average of key vulnerabilities is equal to 29 and the standard deviation is 7.048 and the average adaptation capacity. Acceptability was equal to 29.81 and standard deviation was 7.341. In total, the average organizational resilience was 85.65 and the standard deviation was 20.268.

In order to investigate the relationship between earthquake preparedness and organizational resilience, multivariate regression analysis was used. Validity of the statistical model (normality of error distribution) was investigated using the Kolmogorov-Smirnov test. Considering that the calculated p value was higher than the significance level (greater than 0.05), the assumption of normality of the distribution of errors was not rejected, and as a result, there was no violation of the statistical model, and multivariate regression analysis test can be used.

The main assumption was that organizational resilience plays a role in explaining the preparedness of hospitals against earthquakes; For this purpose, linear regression was used, and the results obtained were as follows.

Table 3. The results of the regression model of the relationship between organizational resilience and earthquake preparedness

General results of the regression model of the role of organizational resilience on earthquake preparedness			
R		0.582	
R^2		0.339	
F		19.136	
P		0.001	
Details of the regression model of the role of organizational resilience in earthquake preparedness			
Predictor variable	Coefficients	t	p
Situational awareness	0.615	7.72	0.001
Key vulnerabilities	0.463	3.652	0.001
Adaptive capacity	0.225	2.805	0.01

The results of the effectiveness of two interventions on the health-related quality of life of patients showed that the significance level (p) is less than 0.01, and as a result, stress reduction treatment based on mindfulness and self-care training with 99% confidence in improving health-related quality of life Patients are effective. Comparing the effectiveness of self-care training with mindfulness-based stress reduction therapy on the health-related quality of life of patients also indicated that mindfulness-based stress reduction therapy is more effective and significant with a significance level of 0.01 compared to Education is self-care and actually there is a difference between the effectiveness of two variables.

CONCLUSION

Natural disasters, which are part of the process of human life and are increasing in number and diversity every day, have been raised as a fundamental challenge in achieving the sustainable development of human societies. Now, knowing the methods of achieving sustainability, through different models of vulnerability reduction in disaster planning and management, has been introduced in order to create favorable conditions for efficient and effective reduction of risks at different levels of disaster management, especially earthquake management, due to create extensive damages and social anomalies, in this, resilience should be seen as a goal, and this goal is a process to adapt to crisis conditions and return to a normal situation. Resilience against crises has been one of the applied concepts in crisis management in recent years. Considering that the resilience of the society depends on having resilient organizations, as a result, it is necessary to pay attention to them. The results of the research hypotheses test showed a positive and significant relationship between the preparedness and organizational resilience of Iran's hospitals against earthquakes.

Based on the results, it is suggested that organizations increase the readiness of employees by training the forces through orientation classes and conducting maneuvers to simulate incidents; It is also possible to strengthen and increase resilience in organizations by raising the awareness of employees about their duties, providing conditions for employee participation and increasing the capacity of internal and external resources.

REFERENCES

Arefi, M. (2011). Design for resilient cities: Reflections from a studio. In *Companion to urban design* (pp. 674-685): Routledge.

Chelleri, L., & Olazabal, M. (2012). *Multidisciplinary perspectives on urban resilience: a workshop report*: BC3, Basque Centre for Climate Change.

Farzad Behtash, M. R., Keynejhad, M. A., Taghi Pirbabaei, M., & Asgary, A. (2013). Evaluation and Analysis of Dimensions and Components of Tabriz Metropolis Resiliency. *Honar-Ha-Ye-Ziba: Memary Va Shahrsazi, 18*(3), 33-42 [In Persian]. doi:10.22059/jfaup.2013.51316

Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., & Rockström, J. (2010). Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and society, 15*(4).

Guo, D., Shan, M., & Owusu, E. K. (2021). Resilience assessment frameworks of critical infrastructures: state-of-the-art review. *Buildings, 11*(10), 464.

Jabareen, Y. (2013). Planning the resilient city: Concepts and strategies for coping with climate change and environmental risk. *Cities, 31*, 220-229.

Nasreen, M. (2012). Disaster research: exploring sociological approach to disaster in Bangladesh. *Bangladesh e-journal of Sociology 1*(2), 21-27.

O'Brien, K., Sygna, L., & Haugen, J. E. (2004). Vulnerable or resilient? A multi-scale assessment of climate impacts and vulnerability in Norway. *Climatic change, 64*(1-2), 193-225.

Olazabal, M., Chelleri, L., & Waters, J. J. (2012). Why urban resilience? *URBAN*(7-18), 7.

Olazabal, M., Chelleri, L., Waters, J. J., & Kunath, A. (2012). *Urban resilience: towards an integrated approach.* Paper presented at the 1st International Conference on Urban Sustainability & Resilience, London.

Salamatnia, A., & Jozi, S. A. (2021). Presenting a conceptual model for urban ecological resilience with a multi-scale approach (case study: Yasuj, Iran). *Arabian Journal of Geosciences, 14*, 1-15.

Yang, Q., Yang, D., Li, P., Liang, S., & Zhang, Z. (2021). Resilient city: A Bibliometric analysis and

visualization. *Discrete Dynamics in Nature and Society, 2021*, 1-17.