



Review Article

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The investigation on characteristics of local voluntary aiding forces

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ABSTRACT

Hospitals are the most important centers reducing injuries in the emergence of health crisis. The management of human resources and aiding volunteers is of particular importance to ultimate the efficiency of the scientific, practical and technical potential of these forces. The present study is a systematic review assessing the patterns of voluntary forces in English and Persian language studies. Firstly, data sources were identified. Then according to the research criteria, related studies were selected and required data were gathered. The results showed that 7 Persian language and 21 English language studies were evaluated. The public participation and absorption characteristics showed the highest frequency in Persian language studies. There has been no assessment on volunteers` needs or their aiding performance efficiency. Relief performance evaluation had the highest frequency and needs assessment showed the lowest frequency in English language studies. Also both studies have emphasized on the local aspects of aiding patterns.

Keywords: Volunteers, Pattern, Characteristic, Systematic Review

INTRODUCTION

In time of health crises, hospitals and medical centers are the first units playing a pivotal role to save lives and reduce injuries through efficient and timely health services. Moreover, a well-organized management of human resources of hospitals and health centers greatly affect on the best-possible efficiency of these centers. Hospitals would immediately undergo outcomes of a crisis. Such health crises create unique problems which need more specified programming compared with daily routine performance at hospitals (Sajjadi et al., 2006).

In time of crisis and unexpected events, human resource management is very important in medical centers and hospitals. Crises negatively impact on public health and the welfare of the affected people. Lack of appropriate preparations by healthcare organizations to deal with the crisis, damages the whole crisis stricken community. Therefore, hospital care as the front-line therapy receiving the most health investment has become the most valuable part of the healthcare system (Zaboli et al., 2006).

In some critical situations, gaining access to the health department personnel is not possible and even hospitals and medical centers staff might face several problems in crises. So it is necessary to have voluntary forces for aiding. The Incident Command System mainly plans over trained forces and specialized personnel disregarding the fact that these prepared forces might also get in trouble in time of crises and need an urgent help in hospitals. In such a

situation, employing relief volunteers and organizing them play a significant role in reducing injuries and fatalities. Furthermore, timely and appropriate reactions of volunteers could prevent the upcoming events such as the spread of fire or explosion around health centers. Therefore, recruitment and preparation of local voluntary forces have been found to be highly effective on hospitals in unforeseen circumstances (Hajavi *et al.*, 2009).

Organizing volunteers in relief-medical teams and proper management of these valuable human resources in order to ultimate the effectiveness of their scientific, practical and technical potential is considerable. Critical situations would irreversibly damage the society when there is no proper management of relief forces. To prevent such heavy costs that we have paid over the years, developing researches on the role of human resources, particularly local volunteers is certainly needed.

The purpose of this systematic review was the evaluation of models and studies in the field of volunteers in health crisis. The main research question was to investigate the main characteristics of volunteer patterns in Iranian and non-Iranian studies. Participants were voluntary forces who were studied regarding seven main characteristics.

EXPERIMENTAL SECTION

Review articles were divided into two groups: narrative review and systematic review. Systematic articles included three main categories 1) systematic review with meta-analysis 2) systematic review 3) systematic review with a brief report. The present study was the second type of systematic review.

In a systematic review, an accurate, regular and planned identification of all relevant studies helps to investigate the research questions. If the original studies, narrative reviews and opinions of the authors had not approved of each other, a systematic review would have solved the problem (Egger, 2001). In addition, systematic review clarifies the incompatibility among the existing research evidences (Cook *et al.*, 1997). The main advantage of a systematic review is that data weights impede the personal idea and prejudice of the author (Hall, 2003). In fact, this method summarizes the main studies` results with minimum bias and error strategies (Cook *et al.*, 1995, Mulrow, 1987). Although systematic review is difficult, it is accurate in which a team consisting of an expert and several colleagues is needed to perform an ideal study (Hall, 2003).

Indeed, a systematic review is an observational study on available researches and like other studies (Cook *et al.*, 1997) it includes:

- Determining the exact aim of study
- Data collection and analysis
- Interpretation of results

Authors not only need to be proficient in the field of study, but they also should be thoroughly aware of the research method (Hall, 2003). In order to approach a correct and valid study, an accurate and precise protocol is undoubtedly essential.

Identification of data sources

To identify the related studies and references, international literature databases such as Google Scholar, Elsevier, Springer, ISI web of science and the electronic library of universities abroad and some Iranian literature databases such as SID, IRANDOC and Magiran were searched. The list of keywords was crisis management, unforeseen events, hospitals, volunteers, organizing, selection and preparation of forces, human resource management, comprehensive model, crisis in Tehran, hospitals affiliated with universities of medical sciences, volunteer management, NGO (people-oriented activities) and crisis. All found studies were conducted within the last 20 years, 1995 to 2013. The studies used in this investigation were in English and Persian languages. The majority of the studies were full texts and a small number of them were abstracts.

Selection of studies

At first two reviewers assessed titles and abstracts of the studies. Then after relevant studies were identified and selected using inclusion and exclusion criteria. Study inclusion criteria were as follows: 1) relevant to crises management and human resources 2) presenting a determined pattern 3) relevant to voluntary forces. If one article had not met the aforementioned criteria, it would have been excluded from our study. The excluded studies were then archived. The included full texts were prepared and submitted to reviewers. All selected papers were along with the present research in terms of subject and purpose. Finally they were controlled and confirmed by an expert. The author's name, institution, and the journals of articles were provided for reviewers.

Data extraction and analysis

For extracting data, research items were determined and useful data were collected. In order to approach this idea, summarizing the pattern of the research question, study design, methodology, sample size, the accuracy and validity of the results were used. Then, data were evaluated, identified and analyzed.

RESULTS

Totally, 563 studies were obtained from literature databases of which 13 Persian language and 29 English language studies were relevant to the research question and were selected for further investigations. Considering the evaluation criteria of the present study, 7 Persian language and 21 English language studies were selected. The following characteristics were then evaluated:

- The study was conducted at Hospital
- Local for a particular area of study
- Needs assessment part
- Selection part
- Preparation part
- Performance evaluation of volunteers
- Having volunteers involved and absorbed in aiding process

The result of Persian language studies is shown in Table 1. According to the results, one study (14.28%) has been investigated at hospitals and other studies have been evaluated outside the hospital or in relief organizations such as the Red Crescent. 6 studies (85.71%) were related to a particular area. No studies have neither discussed the needs assessment nor evaluated the performance of aiding forces. This stems from the limit performance of volunteers in Iran and up to now there have been no studious researches evaluating the performance of people-oriented aids. Volunteers' selection and preparation have been investigated in two studies (28.57%). Participation and absorption parts have been analyzed in seven studies. In fact all selected Persian language studies have discussed these characteristics revealing the necessity of absorbing people as aiding forces in crisis. Iran has not been active in the field of voluntary forces so far. Further studies in the field of invaluable human resources are recommended. Therefore, there has been no investigation on needs assessment and performance evaluation among Persian language studies. Participation and absorption have been the most frequent characteristics (85.71%).

Table 1. Persian language studies and identified characteristics

Author (s)	Year	characteristic						
		Hospital	Locality	Needs Assessment	Selection	Preparation	Performance Evaluation	Participation and Absorption
Adib and Nakhsaz	2006		*		*	*		*
Jahangiri et al.	2008		*			*		*
Najafi et al.	2009		*					*
Ramazaninejad and Alaaddin	2009		*					*
Rahnavard et al.	2009		*					*
Safabakhsh	2009		*		*			*
Ahmadi et al.	2012	*	*					*
Total	7	1	6	-	2	2	-	7
Percentage (%)	-	14.28	85.71	0	28.57	28.57	0	100

Source: research findings

The result of English language studies is shown in Table 1. 8 studies (36.36%) have been investigated at hospitals. 6 studies (66.66%) were related to local researches. Needs assessment has been investigated in 3 studies (13.63%); this assessment was performed at hospitals. Selection and preparation characteristics have been investigated in 5 studies (22.72%) and in 9 studies (42.85%) respectively. Also 10 studies have evaluated volunteers' performance. Participation and absorption characteristics have been investigated in 4 studies (18.18%). The local characteristic investigated in 14 studies showed the highest frequency (66.66%). Studies have been developed in different parts of the world based on local patterns and specific features. Other characteristics that had a high frequency were preparation and performance evaluation. This indicates that English language studies have had considerable progress in the field of voluntary forces and have concentrated on preparation and performance evaluation characteristics. The lowest frequency was related to needs assessment, preparation, participation and absorption.

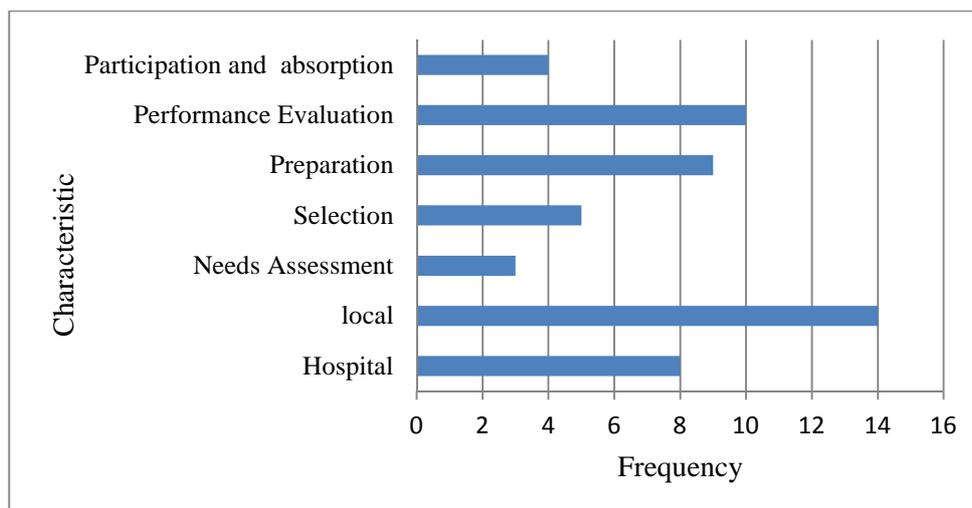


Diagram 1. The frequency of characteristics in Persian language studies

Table (2): English language studies and identified characteristics

Author (s)	Year	characteristic						
		Hospital	Locality	Needs Assessment	Selection	Preparation	Performance Evaluation	Participation and Absorption
Fridman	1995		*			*		
Yodmanis	2001					*		
Buckle	2001	*		*		*		
AHACV ¹	2003	*	*	*	*			*
CCP ²	2004	*		*	*	*	*	
Fernandez et al.	2006		*				*	
Suzuki	2006		*				*	
Danielson	2006		*				*	
Laverick et al.	2007	*					*	
Hotchkiss	2007	*	*				*	
Roberts	2008		*					*
Chapman & Arbon	2008	*	*			*		
PHAC ³	2010		*		*			*
Appleby	2011		*				*	
Nivolianitou&Synodinou	2011		*		*	*		
Pascuet et al.	2012	*					*	
Falkowski	2013	*					*	
Ocak et al.	2013		*			*		
Barraket et al.	2013		*					*
Rogstadius et al.	2013				*	*		
Haraoka et al.	2013		*			*	*	
Total	21	8	14	3	5	9	10	4
Percentage (%)	-	36.36	66.66	13.63	22.72	42.85	45.45	18.18

Source: research findings

¹American Hospital Association Committee on Volunteers²Canadian Centre for Philanthropy³The Public Health Agency of Canada

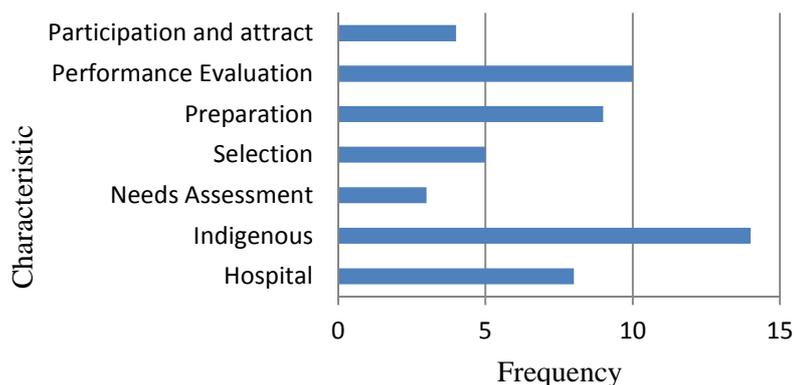


Diagram 2. The frequency of characteristics in English language studies

CONCLUSION

This systematic review assessed the patterns of voluntary forces in time of health crises. Studies were categorized into two groups; English and Persian language studies. Seven characteristics of volunteer patterns have been studied. Local characteristic was observed in both studies. This means that studies have emphasized on local models. The results of Persian language studies showed that participation and absorption characteristics had the highest frequency. Organizing volunteers is a novel issue in Iran and there is no specific institution managing these forces. The only organization in the field of volunteers is the Red Crescent Society and other aiding agencies such as hospitals have not employed these human resources in Iran yet. For this reason, Persian language studies have concentrated on the participation and absorption of relief forces.

English language studies have produced different results. Characteristics revealing the highest frequency were preparation and performance evaluation. Most English language studies were performed in advanced stages of modeling volunteer management. More topics of English studies were related to the final part of the model.

In fact, it can be concluded that characteristics such as needs assessment, selection, participation and public absorption are the primary characteristics and other characteristics such as performance evaluation and preparation are the final ones. It is notable that Persian language studies have investigated the primary characteristics, whereas English language studies have concentrated on the final ones.

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