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Research Article

KNOWLEDGE AND ATTITUDE REGARDING DISASTER PREPAREDNESS AMONG THE HEALTH CARE TEAM MEMBERS IN SELECTED HOSPITALS OF PUNE CITY

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ABSTRACT

Introduction: Disaster planning and preparedness is precariously important for individuals, families, organizations and governments. Hospitals are among the first institutions to be affected after a disaster. This creates a heavy burden for the health care team members to physically and mentally prepare to meet the disaster. **Aims:** The aim of the study was to assess the knowledge and attitude regarding disaster preparedness among the health care team members. **Materials and Methods:** Non Experimental Research Design was used, in which Descriptive Survey method was adopted for the study. 200 health care team members were selected by non-probability quota sampling technique. 20 samples from each hospital were selected. A survey was conducted using a self-structured questionnaire, which consisted of 4 sections. Reliability of the tool was found to be 0.83. **Results:** Findings revealed that, out of 200 samples, majority (78.5%) of the health care team members had average knowledge, 152(76%) had average practices and 184(92%) of health care team members had good attitude regarding hospital disaster preparedness. Association of practices and attitude with selected demographic variables was assessed using Fisher's Exact Test. There was a significant association between knowledge of health care team members regarding disaster preparedness and the number of beds and association between the attitude of health care team members regarding disaster preparedness and current position of the ownership of hospitals. None of the demographic variables were found to have significant association with practices. **Conclusion:** The study concluded that the knowledge and attitude regarding disaster preparedness among health care team members is at a satisfactory level. Preparedness and practices are the key assets required in disaster management. Health care team members must respond to both these challenges, if they are to be successful disaster team members.

INTRODUCTION

"Prevention is better than cure" is an old saying which is very appropriate in the context of Disaster Management. India is a vast country and has more than its share of major natural hazards like earthquakes, drought, cyclones and floods throughout its history of civilization. There has been a paradigm shift in the approach to Disaster Management throughout the country [1, 2].

India has been a victim to every form of destruction of nature. To some extent, the exploitation of natural resources by man is also a cause for such calamities. The loss of life and property due to disasters has increased substantially during last two decades. [3]

Natural and man-made disasters have created massive concern across the country for disaster preparedness. There is an urgent need to adopt a multi-dimensional, multi-disciplinary and multi-sectoral approach to reduce the losses. The Government of India in its twelfth 5-year plan have highlighted the need to enhance knowledge, skill and values to reduce the impact of disasters [4].

The International Federation of Red Cross and Red Crescent Societies defined disasters as "A sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental

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losses that exceed the community's or society's ability to cope using its own resources, though often caused by nature. Disasters can have human origins." [5]

Disaster preparedness is a process of ensuring that an organization has complied with the preventive measures and is in a state of readiness to contain the effects of a predicted disastrous event to minimize loss of life, injury, and damage to property. [6]

Disaster preparedness can also provide rescue, relief, rehabilitation, and other services in the aftermath of the disaster, as well as have the capability and resources to continue to sustain its essential functions without being overwhelmed by the demand placed on them. Disaster preparedness is very vital in providing adequate health care and addressing the humanitarian challenges of disasters. Hospitals are the first institutions to be affected after a disaster. This entails a well-documented and tested Disaster Management Plan to be in place in every hospital. The health care team members should have adequate knowledge and practices regarding disaster preparedness [7].

The investigator felt the need that there is no awareness regarding disaster management among health care team members. Henceforth, a need arose to assess the knowledge and attitude of disaster preparedness among the health care team members.

Objectives

1. To assess the level of knowledge regarding disaster preparedness in hospitals among the health care team members.
2. To assess the knowledge of practices of health care team members regarding disaster preparedness.
3. To determine the attitude of health care team members regarding hospital disaster preparedness.
4. To associate the findings with selected demographic variables.

MATERIALS AND METHODS

Research Approach

Research approach used in this study was quantitative approach.

Research Design

Non Experimental Descriptive Survey Design was adopted to assess the knowledge and attitude of disaster preparedness among health care team members.

Setting of the Study

The present study was undertaken in 10 major hospitals in Pune City.

Population

The population for the present study were health care team members.

Sample

In this study, the sample consisted of:

- Medical Officers
- Resident Doctors
- Nurse In-charges
- Staff nurses
- Paramedical Staffs

Sample Size

The total sample size of this study was 200 health care team members.

Sampling Technique

Probability Stratified Random Sampling technique was adopted. **20 samples** from each hospital were selected for the study, which was equally distributed as follows:

- Medical Officer: 4
- Resident Doctors: 4
- Nurse in Charge: 4
- Staff Nurse: 4
- Paramedical Staff: 4

Sampling Criteria

Inclusion Criteria

- Health care team members who are willing to participate in the study.
- Health care team members who are present at the time of data collection.

Exclusion Criteria

- Health care team members who had undergone disaster management training program.
- Health care team members who are not willing to participate.

Data Collection Tool

Self-structured questionnaire and attitude scale was felt to be appropriate to assess the knowledge level and attitude of the health care team members.

Description of the Tool

- ***Section A:*** *Demographic data* - All the demographic aspects of the health care team members such as age, gender, current position, department, years of experience, professional education, ownership of the hospital, number of beds, emergency ward present or absent in the hospital, any training obtained in disaster and whether the hospital is having a disaster plan.
- ***Section B 1:*** *Structured questionnaire on knowledge regarding disaster preparedness in hospital* - Multiple choice questionnaire assessing knowledge about disaster preparedness consisting a total of 15 questions were circulated. Score "1" and "0" were awarded to correct and wrong responses respectively. The maximum score in knowledge item was 15.
- ***Section B 2:*** *Knowledge of practices regarding disaster preparedness in hospitals*- Dichotomous questions assessing the knowledge of practices regarding disaster preparedness and consisted of a

total of 14 questions. Score "1" was awarded in 'yes' response and "0" was awarded for 'no' response.

- ***Section C:*** *Attitude regarding disaster preparedness in hospitals*- 5 point Likert Scale was used.

Content Validity

Content validity of the tool was established by 20 experts from various fields of expertise.

Reliability

The structured questionnaire was tested for reliability by administering it to 20 health care team members. The reliability of the tool was established by using Split half technique and correlation co-efficient. Reliability of the tool was 0.83.

Table 1 Frequency and percentage distribution of sample characteristics (N=200)

AGE		
25- 35 years	51	25.5%
35- 45 years	67	33.5%
45-55 years	60	30.0%
55- 65 years	22	11.0%
GENDER		
Male	73	36.5%
Female	127	63.5%
CURRENT POSITION		
Medical Officer	40	20.0%
Resident Doctor	40	20.0%
Nurse In-charge	40	20.0%
Staff Nurse	40	20.0%
Paramedical Staff	40	20.0%
DEPARTMENT		
Emergency Department	72	36.0%
Intensive / Critical Care Units	36	18.0%
Wards	30	15.0%
Operation Theatre	15	7.5%
Out Patient Department	47	23.5%
YEARS OF EXPERIENCE		
Less Than 1 Year	25	12.5%
1- 5 Years	63	31.5%
6- 10 Years	66	33.0%
>10 Years	46	23.0%
PROFESSIONAL EDUCATION		
Diploma	50	25.0%
Graduate	100	50.0%
Post Graduate	50	25.0%
OWNERSHIP OF HOSPITAL		
Private	100	50.0%
Trust	40	20.0%
Government	20	10.0%
Teaching Hospital	40	20.0%
NUMBER OF BEDS		
Less than 100	16	8.0%
100-200	81	40.5%
200- 300	48	24.0%
300 and above	55	27.5%
EMERGENCY WARD		
Present	200	100.0%
ANY TRAINING OBTAINED FOR DISASTER PREPAREDNESS?		
Yes	77	38.5%
No	123	61.5%
DOES YOUR HOSPITAL HAVE A DISASTER PLAN?		
Have a plan	78	39.0%
Disaster Plan under development	57	28.5%
No plan	65	32.5%

Pilot Study

Pilot study was conducted on 20 health care team members. As pilot study did not reveal any major feasibility problems, the study was carried on a large sample.

RESULTS

In order to find out the knowledge and attitude regarding Disaster preparedness, the data gathered were tabulated, analyzed and interpreted using descriptive and inferential statistics.

***Section I*: Description of samples based on their personal characteristics.**

The data presented in **Table 1** reveal that among the 200 health care team members, majority (63.5%) respondents were female health care workers and the rest (36.5%) were male health care workers. The sample distribution shows that most of the samples (33.5%) were in the age group of 35- 45 years, 60 (30%) were in the age group of 45-55 years, 51(25.5%) were in the age group of 25- 35 years and 22 (11%) were in 55- 65 years of age group. It interprets that majority of the health care team members were middle aged group.

Among the respondents, 72 (36.5%) were working in the emergency department while 47 (23.5%) were working in the outpatient department, 36 (18%) were working in critical care and intensive units.

Majority (33%) had 6- 10 years of experience of which 100(50%) were graduates in their specialized discipline. 100(50%) of the respondents were working in private hospitals, while equal proportion (20%) of respondents were working in Trusts and teaching in hospitals respectively. 81(40.5%) of the health care team members were working in hospitals having a bed capacity of 100-200 beds. All the hospitals had an emergency ward.

Majority (61.5%) of the participants had no training in disaster preparedness and 78 (39%) responded that their hospital have a Disaster Plan.

SECTION II: ***Analysis of data related to level of knowledge regarding Disaster preparedness in hospitals among the health care team members***

N=200

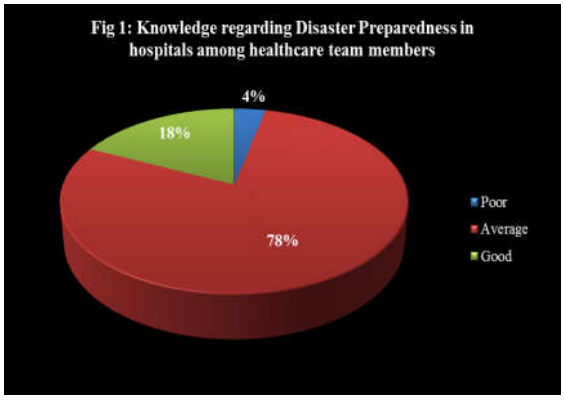

Fig.1 clearly indicates that there is a gross deficiency in the knowledge regarding Disaster preparedness among health care team members.

Section III: ***Analysis of data related to practices regarding Disaster preparedness in hospitals among the health care team members***

N=200

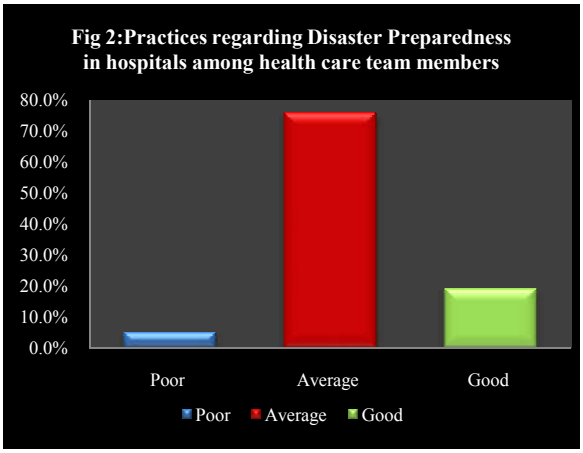

Fig.2 represents that the majority (76%) of the health care team members have average practices regarding Disaster preparedness. It indicates that the hospitals should frequently conduct Disaster mock drills and training for the health care team members.

Section IV*: Analysis of data related to attitude regarding Disaster preparedness in hospitals among the health care team members* ***N= 200***

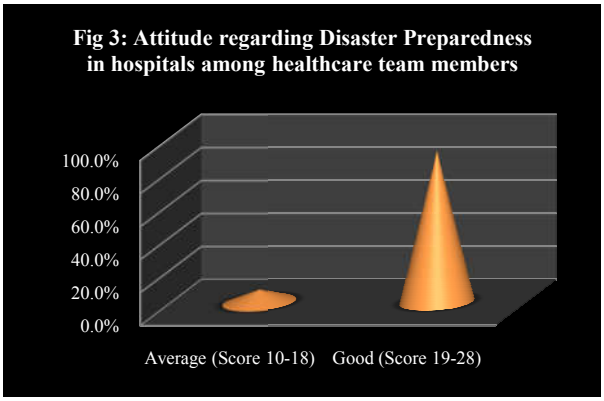

Fig. 3 outlines that the majority (92%) of the health care team members had good attitude regarding Disaster preparedness in hospitals.

Section V: Analysis of data related to the association of knowledge, practices and attitude with selected demographic variables using Fisher's exact test N=200

Table 2 depicts that, since p-value corresponding to number of beds is small (less than 0.05), number of beds was found to have significant association with knowledge of health care team members regarding Disaster preparedness in hospitals.

Table 2 Association of knowledge with selected demographic variables		Knowledge			p-value
Demographic Variables		Average	Good	Poor	
Age	25- 35 years	40	10	1	0.656
	35- 45 years	52	13	2	
	45-55 years	49	8	3	
	55- 65 years	15	5	2	
Gender	Male	54	15	4	0.510
	Female	102	21	4	
Current position	Medical Officer	32	8	0	0.366
	Resident Doctor	30	10	0	
	Nurse In-charge	31	7	2	
	Staff Nurse	33	5	2	
	Paramedical Staff	30	6	4	
Department	Emergency Department	59	13	0	0.135*
	Intensive / Critical Care Units	27	6	3	
	Wards	22	8	0	
	Operation Theatre	13	1	1	
	Out Patient Department	35	8	4	
Years of Experience	Less Than 1 Year	18	6	1	0.300
	1- 5 Years	49	10	4	
	6- 10 Years	57	8	1	
	>10 Years	32	12	2	
Professional Education	Diploma	41	6	3	0.623
	Graduate	78	19	3	
	Post Graduate	37	11	2	
Ownership of hospital	Private	77	18	5	0.226
	Trust	27	12	1	
	Government	17	3	0	
	Teaching Hospital	35	3	2	
Number of beds	Less than100	15	1	0	0.009*
	100-200	62	15	4	
	200-300	29	16	3	
	300 and above	50	4	1	
Any training for Disaster preparedness	Yes	57	18	2	0.245
	No	99	18	6	
Does your hospital have a Disaster plan?	Have a plan	59	16	3	0.868
	Disaster plan under development	46	8	3	
	No plan	51	12	2	

p<0.005, Statistically significant

None of the demographic variable was found to have significant association with practices of health care team members regarding Disaster preparedness in hospitals as p-values are large (greater than 0.05).

means that majority of health care team members had a low level of knowledge. Ibrahim and El Hosany revealed that about one - fifth of nurses had satisfactory knowledge related to classifications of disasters [8].

Table 3 depicts that since p-value corresponding to current position and ownership of hospital are small (less than 0.05), current position and ownership of the hospital were found to have significant association with attitude of health care team members regarding Disaster preparedness in hospitals. **N=200**

Table 3:Association of Attitude with selected demographic variables		Attitude		p-value
Demographic Variable		Average	Good	
Age	25- 35 years	7	44	0.082
	35- 45 years	6	61	
	45-55 years	1	59	
	55- 65 years	2	20	
Gender	Male	7	66	0.592
	Female	9	118	
Current position	Medical Officer	2	38	0.028*
	Resident Doctor	4	36	
	Nurse In-charge	1	39	
	Staff Nurse	1	39	
	Paramedical Staff	8	32	
Department	Emergency Department	3	69	0.051
	Intensive / Critical Care Units	2	34	
	Wards	2	28	
	Operation Theatre	0	15	
	Out Patient Department	9	38	
Years of Experience	Less Than 1 Year	1	24	0.679
	1- 5 Years	7	56	
	6- 10 Years	4	62	
	>10 Years	4	42	
Professional Education	Diploma	4	46	0.410
	Graduate	6	94	
	Post Graduate	6	44	
Ownership of hospital	Private	3	97	0.009*
	Trust	8	32	
	Government	2	18	
	Teaching Hospital	3	37	
Number of beds	Less than 100	0	16	0.136
	100-200	10	71	
	200- 300	1	47	
	300 and above	5	50	
Any training obtained for Disaster preparedness?	Yes	4	73	0.295
	No	12	111	
Does your hospital have a Disaster plan?	Have a plan	7	71	0.760
	Disaster plan under development	3	54	
	No plan	6	59	

p<0.005, Statistically significant

DISCUSSION

Disasters are unpredictable catastrophic events that kill and affect people, disrupt the environment and demolish properties. Health care team members are the largest group of committed personnel, often working in difficult situations with limited resources, play vital roles in dealing with the victims and when disasters strike, serve as the first responders, triage officers and care providers, coordinators of care and services, providers of information or education, and counsellors.

The present study included 200 health care team members. The majority of the health care team members had their age ranged from 25 - 65 years, and the majority working in the emergency department and intensive/ critical care units of the hospital. As regards the educational level; the majority of the health care team members were graduates in their specialized discipline and their experience were more than 6- 10 years, and had not obtained any training for Disaster preparedness.

According to the present study findings, the knowledge of the health care team members was found to be satisfactory. This

Zhang *et al*. found that 32% of the hospital nurses are aware of Disaster nursing knowledge before training, and 51.7% of them know it after training. Hokrani showed a signi cant difference between the mean pre- test score and the mean post test score on knowledge among 26 nursing students regarding disaster preparedness [9, 10].

In the present study, majority of the study participants had low awareness regarding the components of disaster preparedness. In the same line Abd Elazeem *et al*. revealed that the majority of the study subjects had low awareness about all components of the disaster plan preparedness. Olivia *et al*. revealed that nurses in Hong Kong are not adequately prepared for disasters, which was also supported by Yang *et al*. They reported that nurses were inadequate and ill prepared for disasters [11, 12, 13].

From the researcher's point of view, this lack of awareness about the hospital Disaster preparedness plan, and all items that are related to the lack in the required knowledge lead to inability to manage Disasters in hospitals.

Chimenya found that high proportion of workers at the hospital who did not know about the plan, and who did not know what a hospital disaster plan should contain. The results is in agreement with Collander *et al* who showed that an increase in awareness of health care workers related to the principles of hospital Disaster by participation in hospital disaster life support training course, and the average score on the pre-test was 69.1 ± 12.8 for all positions, and the post-test score was 89.5 ± 6.7 [14, 15].

The present study signifies that health care team members had only average practices regarding disaster preparedness. The study supported by Abd Elazeem *et al*. showed that lack of hospital preparedness related to hospital drills, and training. The result agrees with O'Sullivan *et al* where it was recommended that more training and information were needed to increase disaster preparedness for health care workers [11,16].
In the present study, it revealed that the health care team members had a good attitude regarding disaster preparedness. However, these findings are in relation with another study which showed that most nurses (97.97%) showed positive attitudes towards Disaster relief work, and Ahayalimudin *et al*. reported that nurses had positive attitude towards Disaster Management. Chimenya reported that despite the poor knowledge about the disaster plan, the health care workers had the right attitude towards hospital emergency and disaster preparedness [14, 17].

The present study has also examined the association between knowledge related to disasters hospital preparedness plan and selected demographic variables. The result is in agreement with Sinha *et al*. reported that the knowledge, attitude and practices of the undergraduate medical students about disaster preparedness and mitigation are very poor. This knowledge and awareness can be improved through exposing the students in terms of orientation workshops and mock drills and similar practical exercises, which could develop an interest in the topic [18].

Ahayalimudin *et al*. found that nurses had inadequate knowledge, but portrayed positive attitude towards Disaster Management. Also, as regards the relation between nurses' attitude and awareness scores, the highest percentage of nurses who had a negative attitude regarding Disaster management plan had unsatisfactory awareness, and the relation was statistically signi cant. Conversely, the highest percentage of nurses who had positive attitude regarding Disaster management plan had satisfactory awareness. This was supported by Lai *et al*. Which reported that disaster nursing protocols provide health care personnel knowledge essentially to increase disaster awareness, preparation, response, and rehabilitation. The study in fact enhanced the need for disaster preparedness among the health care team members in the hospitals [17, 19,20].

CONCLUSION

The Government of India should bring about initiatives for training the health care professionals to be competent and ready to face the disaster. Further studies are recommended so as to increase the knowledge and practice among the health care team members regarding disaster preparedness.

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Conflict of Interest

The researcher does not have any conflict of interest.

References

1. Arya AS, Padmanabhan G, Karanth A. School Safety, Ver. 1.0. (Online). Available from: www.ndmindia.nic.in.
2. Arya. S. Recent developments towards earthquake risk reduction in India. Current Science. 10 Nov 2000. 79 (9). 1270-77.
3. Park K. Park's Text book of Preventive and Social medicine. 22nd edition. New Delhi: Banarsidas Bhanot publishers. 2014.
4. Ganpatrao JS. Knowledge and practices of school teacher regarding Disaster management. Int J Health Syst Disaster Manage [serial online] 2014 [cited 2016 May 3]; 2:98-102. Available from: http://www.ijhsdm.org/text.asp?2014/2/2/98/139055
5. International Federation of Red Cross and Red Crescent Societies. World Disasters Report 2015. Geneva, Switzerland. 2015. Available from: http://ifrc-media.org/interactive/world-Disasters-report-2015/-in-a-Hospitals
6. Dorsey MD. ICN framework of Disaster nursing competencies. 2009. Available from: https://www.scribd.com/doc/250672428/Disaster-Nursing-Competencies
7. Mehta S. Disaster and mass casualty management in a hospital: How well are we prepared?. J Postgrad Med [serial online] 2006 [cited 2016 May 26]; 52:89-90. Available from: http://www.jpgmonline.com/text.asp?2006/52/2/89/25148
8. Ibrahim SA, El Hosany WA. Nurses Awareness Regarding Disasters' Preparedness at Suez Canal University Hospital, Zagazig Nursing Journal. 2010 January; 6(10): 18-27.
9. Zhang M, Yu G, Cheng S, *et al*. Training investigation of hospital nurses on Disaster nursing, IT in Medicine and Education (ITME), International Symposium. 2011; 2: 144-147.
10. Hokrani B. "Effectiveness of structured teaching program on knowledge of students regarding Disaster preparedness at selected pre university colleges of Hassan Karnataka." 1st year M.Sc nursing community health nursing, Rajiv Gandhi University of health sciences, Bangalore, Karnataka. 2011.

11. Abd Elazeem H, Adam S, Mohamed G. Awareness of Hospital Internal Disaster Management Plan among Health Team Members in a University Hospital. Life Science Journal. 2001; 8(2): 42-52. [26].
12. Fung OWM, Loke AY, Lai CKY. Disaster preparedness among Hong Kong nurses. J Adv Nurs [Internet]. Blackwell Publishing Ltd; 2008; 62(6):698–703. Available from: http://dx.doi.org/10.1111/j.1365-2648.2008.04655.x.
13. Yang YN, Luo Y, Liu XN, *et al*. Research of Disaster response capabilities and its in uencing factors of community nurses in Chongqing municipality. *Journal of Nursing Administration*. 2010; 10: 698-699.
14. Chimenya GT. Hospital Emergency and Disaster Preparedness: A Study of Onandjokwe Lutheran Hospital, Northern Namibia, Submitted in partial ful llment of the requirements for the degree Masters in Disaster Management. In the Disaster Management Training and Education Center for Africa. 2011.
15. Collander B, Green B, Millo Y, Shamloo C, Donnellan J, DeAtley C. Development of an "all-hazards" hospital disaster preparedness training course utilizing multi-modality teaching. Prehosp Disaster Med. United States; 2008; 23(1):63–9.
16. O'Sullivan TL, Dow D, Turner MC, Lemyre L, Corneil W, Krewski D, *et al*. Disaster and emergency management: Canadian nurses' perceptions of preparedness on hospital front lines. Prehosp Disaster Med. United States; 2008; 23(3):s 11–8.
17. Ahayalimudin N, Ismail A, Saiboon IM. Disaster management: a study on knowledge, attitude and practice of emergency nurse and community health nurse. BMC Public Health [Internet]. 2012; 12(2):1. Available from: http://dx.doi.org/10.1186/1471-2458-12-S2-A3.
18. Sinha A, Pal DK, Kasar PK, Tiwari R, Sharma A. Knowledge, attitude and practice of disaster preparedness and mitigation among medical students. Disaster Prev Manag An Int J [Internet]. Emerald; 2008 Aug 29; 17(4):503–7. Available from: http://www.emeraldinsight.com/doi/abs/10.1108/09653560810901746
19. Lai .FC, Lei HM, Fang CM, *et al*. Disaster nursing and primary school teachers' Disaster-related health care knowledge and skills. Hu Li Za Zhi. The journal of nursing. 2012; 59(3): 16-22. Available from: http://www.ncbi.nlm.nih.gov/pubmed/22661028
20. Moabi. R. M. Knowledge, Attitude and Practices of health care workers regarding Disaster preparedness at Johannesburg Hospital in Gauteng Province, south Africa: A Research Report.
21. Al Khalaileh MA, Bond E, Alasad JA. Jordanian nurses perceptions of their preparedness for disaster management. Int Emerg Nurs [Internet]. Elsevier; 2016 May 26; 20(1):14–23 Available from: http://dx.doi.org/10.1016/j.ienj.2011. 01.001
22. Jiang L, He H-G, Zhou W-G, Shi S-H, Yin T-T, Kong Y. Knowledge, attitudes and competence in nursing practice of typhoon disaster relief work among Chinese nurses: A questionnaire survey. Int J Nurs Pract [Internet]. 2015 Feb 1; 21(1):60–9. Available from: http://dx.doi.org/10.1111/ijn.12214.

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