

Assessment of Nursing Staff Knowledge toward Disasters Management in Baghdad City Hospitals

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Abstract:

A disaster is an incident that can causes massive damage and disruption. Disasters are common worldwide event now a day. Nurses role are very important in disaster management and its recovery. The purpose of this study was to assess the nurses' knowledge regarding disaster management and emergency preparedness and to identify the availability of hospital specific plans regarding the disasters management as well as to determine the most important suggestions for improving disaster management. Quantitative cross sectional study design was used in this study. Semi structure Questionnaire was to collect the data. The questionnaires were administered by using convenient sampling. Data were statistically analyzed by descriptive criteria such as number, percentage, mean, median and standard deviation. The results of this study showed that participant nurses have a good knowledge on disaster management. Overall good knowledge was (61%). The conclusion of this study include that nurses knowledge about the disasters were good. There is need to work on the practice and knowledge as well in these two hospitals and in other health care settings. The study revealed that hospitals currently have deficiencies in disasters management. Further, follow up research are necessary for maximizing nursing education and nursing quality.

Keywords: Disasters, Knowledge, Disaster management.

Introduction-

A disaster is an incident that can causes massive damage and disruption. Disasters are common worldwide event now a day. These events can be dramatically impact on many people, to kill and injured them, damage and destroyed their houses, health system, and interrupted their lifeline. This is big loss of any county who face the disaster [1]. World Disasters Report 2015 reported 317 natural disasters worldwide in 2014, affecting 94 countries. About 48% of all disasters occurred in Asia in 2014. Asia had a region that mostly effected by the disasters estimated that 90.13% of worldwide disasters come across the Asia. [2]. Disasters are situation that disorganized the life and cause the many problems to resettle in the influenced area of community [3]. Management process is designed to manage the disasters and emergency situations and helps the people who are at the risk of disaster and to recovered after the situation has been accorded and help the effected people to come out from the bad impact of the disasters [2]. Nurses role are very important in disaster management and its recovery during disaster. These roles include preventing to, prepared for emergency, give responds and provide recovery from the emergency and after the disasters happened [3]. Florence nightingale showed the world that nurses play leading role in front line of the disasters, and public health. The public health nurses bring new skills and knowledge in each phase of disaster like preparedness, response and rehabilitation [4]. Nurses are the key person working in the hospital emergencies and any disasters and prepared a plan to prevent the hazards. During the disaster the first respondent are the nurses, who have enough knowledge and skill related to the disasters and disasters management. Disaster preparedness is very much important for minimize the damaging effects of disasters and emergencies [5]. Emergency preparedness is define as appropriate knowledge, awareness, skills and action which are required to respond and ready for threat which may be actual and suspicions

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[6]. Disaster preparedness planning is a process in which the plan should be written and important elements should be emphasized like triage training, training of the nurses should be done regularly, and plan should be checked routinely and exercised daily. [7]. Nurses play very important role especially for the affected people during the disasters. Therefore nurses should be ready for facing the any emergency situation and after effects of unpleasant event like disasters [8]. The nurses demand are greater than any other health care professional demands. The role of nurses include simply care of the sick and affected patient to include the preparedness, response, recovery and evaluation of the disasters [4]. Mentioned in this study that according to the World Health Organization (WHO) the health care worker especially nurses should be prepared for a disaster management whether the disaster occur often or infrequently. The competencies of nurses during the disaster can be gained through education and training program [9].

In 2009, the World Health Organization (WHO) and the International Council of Nurses (ICN) released the ICN Framework of disaster nursing abilities, which describes the basic skills and knowledge are necessary for the registered nurses to be think competent in disasters management [10].

Discuss in this study that there is need for further researches to determine the current knowledge of nurses regarding the emergency preparedness and should design the educational programs to enhance their knowledge and some educational program should be the part of their nursing curriculum [11]. The knowledge and practices of nurses are also play key role in managing the disasters and in the preparedness of emergency.

Objectives of the Study-

1. To assess the general and overall knowledge of the nursing staff toward the disasters management in Baghdad City Hospitals.
2. To determine the most important suggestions toward improving disasters management.

Methodology-

To conduct this study the Quantitative descriptive cross sectional study design was adopted to assess the knowledge of nurses about management toward hospital disasters.

The research is conducted in two teaching hospitals in Baghdad city which covered Medical city teaching hospital and Al-Yarmook teaching hospital. Sample Size under study was 240 which include head nurses and staff nurses who are working in the above mentioned 2 hospitals. Data was collected through questionnaire which was distribution among 240 participants. The data was collected by using interview (face to face) technique with study sample to answer the items which was prepared for this purpose. The data was analyzed by using descriptive statistical analysis which included tables, frequencies and percentages to assess the results of the study.

Results and Discussion-

Table (1) Socio-demographic and Personal Characteristics among the Study Sample

No.	Characteristics	Frequency	Percentages
1.	Sex	F	P
	Male	156	65
	Female	84	35
	Total	240	100
2.	Age	F	P
	20-29 year	148	62
	30-39 =	56	23
	40-49 =	36	15
	Total	240	100
3.	Educational status	F	P
	Post graduates	16	7
	Nursing college	90	38
	Nursing institute	76	32

	Preparatory nursing	58	23
	Total	240	100
4.	Social status	F	P
	Single	100	42
	Married	132	55
	Divorced	8	3
	Widowed	0	0
	Separated	0	0
	Total	240	100
5.	Residency	F	P
	Urban	188	78
	Rural	52	22
	Total	240	100
6.	Economic status	F	P
	Enough	114	48
	Enough to some extent	88	37
	Not enough	38	15
	Total	240	100
7.	Years of experience	F	P
	1-10 year	188	78
	11-20 =	52	22
	Total	240	100

Table (2) General Information about Nursing Staff Knowledge toward Disasters Management

No.	Knowledge Questions	Frequency	Percent
1.	What is disaster?		
	Yes	220	92
	No	14	6
	Don't know	6	2
	Total	240	100
2.	What is disaster plan?		
	Yes	154	64
	No	81	34
	Don't know	5	2
	Total	240	100
3.	What is disaster preparedness?		
	Yes	147	61
	No	74	31
	Don't know	19	8
	Total	240	100
4.	Are there previous preparations for dealing with disasters		
	Yes	120	50
	No	78	33
	Don't know	42	17
	Total	240	100
5.	Are there any kinds of training courses for nursing staff about dealing with disasters?		
	Yes	140	58
	No	80	33
	Don't know	20	9

	Total	240	100
6.	Is there continuing education programs related to the issue?		
	Yes	94	39
	No	80	33
	Don't know	66	28
	Total	240	100
7.	There is a periodic update of disaster management plans		
	Yes	88	37
	No	98	41
	Don't know	54	22
	Total	240	100
8.	Disaster plan periodically updated?		
	Yes	18	11
	No	97	63
	Don't know	41	26
	Total	156	100
9.	Have you ever faced any disaster in the hospital		
	Yes	98	41
	No	132	55
	Don't know	10	4
	Total	240	100
10.	Have you ever been a worker for disaster management team?		
	Yes	110	46
	No	108	45
	Don't know	22	9
	Total	240	100
11.	Do you know about the latest Disaster in which your hospital involved?		
	yes	102	42
	No	112	47
	Don't know	26	11
	Total	240	100
12.	Do you believe your experience for disaster preparedness is insufficient?		
	Yes	134	56
	No	54	23
	Don't know	52	21
	Total	240	100

Table-3: The Overall Knowledge of the Study Participants

	Frequency	Percent
- Poor knowledge of the participants	94	39
- Good knowledge of the participants	146	61

Table 4 –Suggestions to Develop Staff Knowledge toward Disasters Management

No.	Suggestions	Frequency	Percent
1.	Disasters management should be adequately prepared when a disaster occur. <ul style="list-style-type: none"> - Agree - Undecided - Disagree 	204 30 6	84 13 3
	Total	240	100
2.	Disaster management should be implemented for only emergency department's physicians and nurses in the hospital <ul style="list-style-type: none"> - Agree - Undecided - Disagree 	174 20 46	73 8 19
	Total	240	100
3.	Training on disasters management is necessary for all health workers <ul style="list-style-type: none"> - Agree - Undecided - Disagree 	216 22 2	90 9 1
	Total	240	100
4.	It is necessary to have a disaster plan in the hospital <ul style="list-style-type: none"> - Agree - Undecided - Disagree 	212 18 10	88 8 4
	Total	240	100
5.	Disaster plans need to be regularly updated. <ul style="list-style-type: none"> - Agree - Undecided - Disagree 	194 40 6	81 16 3
	Total	240	100
6.	Disaster simulations should implement frequently in the hospital <ul style="list-style-type: none"> - Agree - Undecided - Disagree 	180 38 22	75 16 9
	Total	240	100

Discussion-

Increasingly frequent global disasters are posing threats to human health and life. The World Health Organization has called for countries to have detailed plans at all levels in order to be prepared for disasters that may arise. Nurses and midwives are frontline workers under stable conditions, but more so during situations of emergencies and crises. In order to contribute to saving lives and promoting health under such difficult conditions, they need to have the right

competencies [12]. The present study was aimed to investigate nurses' knowledge regarding disasters management and emergency preparedness. In overall view of the present study findings; the results show in percentages as that the participants of this study were head nurses and staff nurses. Table (No.1) shows that the majority of the study sample (65%) were male and their ages were ranges between 20-29 (62%).The experience of the participants are matter a lot to handle any kind of disaster and management. The work experience for most of the participants were (78%) who was working in the hospital for a period of 1-10 years followed by (22%) who was working for the period of 11-20 years. (78%) of participants were living in the urban areas. This result was supported by Hammad et al (2011) in that he found in his study the age, residency, marital status and years of experience have an impact on the knowledge of nurses toward disasters management. Most of the participants who take part in this study were married (55%) and (42%) were unmarried. The qualifications of the participants were (38%) of them had finished nursing college followed by (32%) had graduated from nursing institutes.

The knowledge of the participants was good as shown in the Table (No.2). Results show that (92.%) of participants were known that what disasters are and only (6%) were didn't know about the disaster. Sixty four percent of participants were responding positively that they know what disaster plan is while (34%) didn't know about this. Half of the studied sample (50%) mentioned that there are previous preparations for dealing with disasters in their settings and more than half of them (58%) stated that there are some kinds of training courses for nursing staff about dealing with disasters. More than half of them (55%) never ever faced any disaster in the hospital before as well as (56%) of participants doesn't believe their experience for disaster preparedness is sufficient. The result of the current study is supported by moabi study, (2009) in that he stated the preparation training courses for nursing staff about dealing with disasters, periodic update of disaster management plans, plan of Disaster simulations to be implemented frequently in the hospital is important and affecting the management toward disaster.

The overall knowledge of the study participants was good. Table (No.3) indicates that (61%) (n=146) participants were respond positively regarding the knowledge questions and (39%) (n=94) were did not gave the correct answer about the knowledge questions.

In regard to the suggestions that provided by the researcher to develop nursing staff knowledge toward disasters management, majority of them agreed with the suggestions that presented by all items as shown in table (No.4).

Conclusions-

Based on the results of the study, the researcher concluded that almost majority of the participants reported positive information about their knowledge and awareness toward disasters management. Majority of the studied sample were trained on disasters management and recommended that training is necessary for all health care providers as well as agreed to have a disaster plan in each hospital and they should be periodically updated as it is necessary for disasters management.

Recommendations-

1. There should be adequate training of all nurses in both public and private health care setting in order to provide knowledge on how to prepare and handle any emergency situations.
2. Disaster plan should be placed in every hospital where nurses and other staff should easily access them and Plan should be available and updated when needed.
3. Every member of staff e.g. head nurses and staff nurses should know their roles,

responsibilities and their function during the disaster.

4. Training program should be made regarding the emergency management and disaster preparedness by the management people.
5. Some educational program and training practice about the disaster and emergency

preparedness should be places in the nursing curriculum in order to their learning and training preferences.

6. Nursing research in disaster is necessary in order to provide information to make Evidenced-based decisions regarding practice and education.

7. Regular meeting should be continued to check the plan and proper implementation of the plans.

8. Further researches should be made for maximizing the nursing knowledge and quality of care in these critical situations in the health care setting.

References-

1. Babaie, J., Ardalan, A., Vatandoost, H., Goya, M. M., & Akbarisari, A. (2015). Performance assessment of communicable disease surveillance in disasters: a systematic review. *PLOS Currents Disasters*.
2. Singhal, Y. K., Bhatnagar, R., Lal, B., & Paliwal, B. (2016). Knowledge, attitudes, and practices of medical internship students regarding disaster preparedness at a tertiary-care hospital of Udaipur, Rajasthan, India. *International Journal of Medical Science and Public Health*, 5(8), 1613-1616.
3. Labrague, L. J., Yboa, B. C., McEnroe-Petitte, D. M., Lobrino, L. R., & Brennan, M. G. B. (2016). Disaster preparedness in Philippine nurses. *Journal of nursing scholarship*, 48(1), 98-105.
4. Bella Magnaye, R., Muñoz, M. S. L. M., Muñoz, M. A. F., Muñoz, R. G. V., & Muro, J. H. M. The role, preparedness and management of nurses during disasters. *Indexing*, 269.
5. Jakeway, C. C., LaRosa, G., Cary, A., & Schoenfisch, S. (2008). The role of public health nurses in emergency preparedness and response: A position paper of the association of state and territorial directors of nursing. *Public Health Nursing*, 25(4), 353-361.
6. Baack, S., & Alfred, D. (2013). Nurses' preparedness and perceived competence in managing disasters. *Journal of nursing scholarship*, 45(3), 281-287.
7. Moabi, R. M. (2009). Knowledge, attitudes and practices of health care workers regarding disaster preparedness at Johannesburg hospital in Gauteng Province, South Africa.
8. Ismail, A., & Saiboon, I. M. (2012). Disaster management: a study on knowledge, attitude and practice of emergency nurse and community health nurse. Paper presented at the BMC Public Health.
9. Diab, G. M., & Mabrouk, S. M. (2015). The effect of guidance booklet on knowledge and attitudes of nurses regarding disaster preparedness at hospitals. *Journal of Nursing Education and Practice*, 5(9).
10. Fung, O. W., Loke, A. Y., & Lai, C. K. (2008). Disaster preparedness among Hong Kong nurses. *Journal of advanced nursing*, 62(6), 698-703.
11. Peoples, K., Gebbie, K., & Hutton, A. (2016). An exploration of perceptions of disaster nursing and disaster preparedness among Australian nursing undergraduates. *Health emergency and disaster nursing*, 3(1), 28-35.
12. Garbutt, S. J., Peltier, J. W., & Fitzpatrick, J. J. (2008). Evaluation of an instrument to measure nurses' familiarity with emergency preparedness. *Military medicine*, 173(11), 1073-1077.
13. Aziz, A., Memon, A., Shaikh, A., & Mahar, J. (2015). Disasters in Pakistan: An Overview and Assessment. *Sindh University Research Journal-SURJ (Science Series)*, 47(2).
14. Hammad K, Arbon P, Gebbie K. emergency nurses and disaster response: an exploration of south Australian emergency nurses' knowledge and perceptions of their roles in disaster response. *Austral as emerge Nurs J* 2011;14: 87-94. Doi: 10. 1016 /j. aenj. 2010.

15. Moabi, R. M. (2009). Knowledge, attitudes and practices of health care workers regarding disaster preparedness at Johannesburg hospital in Gauteng Province, South Africa.