Universe International Journal of Interdisciplinary Research
(International Peer Reviewed Refereed Journal)
DOI No. – 08.2020-25662434

© UIJIR | ISSN (O) – 2582-6417
AUGUST 2024 | Vol. 5 Issue 3
www.uijir.com

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING DISASTER MANAGEMENT AMONG INDUSTRIAL WORKERS OF SELECTED AREA OF VADODARA

Author's Name: Dr. Amit Kumar Kumawat[1], Dhruv Varia[2], Divyani Vasava[2], Rushika Vasava[2], Farzana Islam Nadia[2], Vaishali Baria[2]

Affiliation:

1. HOD, Department of child health Nursing, Parul Institute of Nursing, Parul University, Vadodara, Gujarat, India.
2. BSc Nursing students, Parul Institute of Nursing, Parul University, Vadodara, Gujarat, India.

Corresponding Author Name and Email ID: Dhruv Varia, dhruvvaria2002@gmail.com

ABSTRACT

Disasters have been integral parts of the human experience since the beginning of time, causing premature death, impaired quality of life, and altered health status. The main goal of nursing in crisis is to achieve best possible level of health for the individuals and communities affected by crisis. This study was aimed to evaluate the knowledge of workers before and after the Educational. The objective of this study is assess the knowledge of disaster management amongst industrial workers. The study aims to find the knowledge level of industrial workers regarding disaster management. A survey was conducted among 50 workers of the selected industry of Vadodara. Data was collected from Dksortho & Sharma Pharmaceuticals Ltd., Waghodia using Convenience Sampling Technique. Quantitative research Approach was taken and descriptive and inferential statistics was used for data analysis. Results based on the knowledge assessed by the questionnaire format has been analysed and using different socio-demographic variables data has been analysed and concluded. The main aim was to assess the knowledge of the workers. Based on the study findings, it concludes that there is a poor knowledge amongst the industrial workers. Depicts that the frequency and the percentage distribution of level of knowledge about disaster management of industries. On the earlier stages, it was observed that around 30% of the people were having the poor knowledge and rest 60% were having average knowledge about industrial safety and disaster management but as soon after the knowledge.

Keywords: Disaster management, Industrial workers

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

© UIJIR | ISSN (O) – 2582-6417
AUGUST 2024 | Vol. 5 Issue 3
www.uijir.com

INTRODUCTION

India is waking up to the need to establish a disaster management agency that could be activated the moment a disaster strikes anywhere in the country. This matter was debated in Lok Sabha and the Centre has promised to establish a professional organisation that could deal with all sorts emergencies. This is expected to function by the year 2005-2006. A dedicated force of few thousand persons would form the core of such a disaster management team. It is proposed to setup the "National Disaster Management Authority" (NDMA) under the Centre [1]

Disasters have been integral parts of the human experience since the beginning of time, causing premature death, impaired quality of life, and altered health status. The main goal of nursing in crisis is to achieve best possible level of health for the individuals and communities affected by crisis. This study was aimed to evaluate the knowledge of workers before and after the Educational. Intervention programme regarding the disaster preparedness and management in selected areas of Vadodara.

The researcher prepared a structured Educational interventional programme, used variety of teaching methods like Lecture, Discussion, Videos, power point presentation and information

METHODOLOGY

In the present study, a Quantitative approach a descriptive survey research design was used in this study to assess the knowledge regarding disaster management amongst industrial workers selected industry. The study was conducted in DKSORTHO & Sharma Pharmaceutical Pvt. Ltd, Waghodia GIDC Rd, GIDC Industrial Estate, Vadodara. with a sample size of 50. A convenience sampling technique was used in the study. Tools for data collection consisted of Structured Interview schedule which consisted of 2 parts that is, socio-demographic variables such as Age, gender, educational status, religion, marital status, monthly income, living area, safety training. The second part consisted of Knowledge questionnaire to assess the knowledge of workers regarding disaster management which had 30 questions.. After obtaining formal administrative approval from the concerning authorities and informed consent from the samples the investigators collected the data from the workers using the mentioned validated tools.

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

© UIJIR | ISSN (O) – 2582-6417
AUGUST 2024 | Vol. 5 Issue 3
www.uijir.com

RESULTS

The data obtained were analyzed with respect to the objectives of the study by using thedescriptive and inferential statistics

SECTION - I

Table 1: Frequency and Percentage Distribution of Demographic Variables.

S. No	Demographic Variables	Frequency	Percentage
1	Age in years		
	a. 18-28 years	11	22
	b. 29-38 years	12	24
	c. 39-48 years	22	44
	d. 49 years & above	5	10
2	Gender		
	a. Male	42	84
	b. Female	8	16
3	Educational Status		
	a. 7^{th} pass	4	8
	b. 8^{th} pass	24	48
	c. 10^{th} pass	22	44
4	Living Area		
	a. Rural	39	78
	b. Semi-Rural	3	6
	c. Urban	7	14
	d. Semi-Urban	1	2
5	Marital Status		
	a. Married	43	86
	b. Unmarried	7	14
6	Monthly Income		
	a. 3,000	3	6
	b. 5,000	7	14
	c. 7,000	19	38
	d. 10,000 & more	21	42

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

© UIJIR | ISSN (O) – 2582-6417
AUGUST 2024 | Vol. 5 Issue 3
www.uijir.com

Table 1 depicts the frequency and percentage distribution of demographic variable of industrial workers. According to their age majority 22(44%) were in 38-48 years of age followed by 12(24%) were in 29-38 years of age, 11(22%) were in 18-28 years of age and 5(10%) were in 48 years & above of age,.

Regarding gender, more than half 42(84%) were male and remaining 8(16%) were female. As per educational status, maximum 24(48%) belongs to 8th pass, 22(44%) belongs to 10th pass, 4(8%) belongs to 7th pass.

Regarding living area, majority 39(78%) were from rural, 7(14%) were from urban, 3(6%) were semi rural and 1(2%) were semi urban.

As per marital status, maximum 43(86%) were married, 7(14%) were in unmarried. As per monthly income, majority were earning 7,000 with the calculation of 19(38%).

With regard safety training on disaster management, majority 48(96%) had undergone safety training and 2(4%) had no safety training.

Table 2: Distribution of Participants distribution according to their Level of Knowledge.

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE (%)
POOR	18	36
AVERAGE	30	60
GOOD	2	4

Table 2 depicts the figure indicating that 18(36%) participants have poor knowledge, 30(60%) participants have average knowledge and 2(4%) have good knowledge.

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

© UIJIR | ISSN (O) – 2582-6417
AUGUST 2024 | Vol. 5 Issue 3
www.uijir.com

Table 4. Association between knowledge of disaster management with selected socio- demographic variables.

Sr.no	Category	Frequency	Percentage	*Chi Square*	*P value*	*Level of significant*
Age						
1	18-28 years	11	22%	5.92	0.592	Significant
2	29-38 years	12	6.67%			
3	39-48 years	22	44%			
4	49-above	5	10%			
	Total	50	100%			
Gender						
1	Male	42	84.%	8.96	0.017	Significant
2	Female	8	16%			
	Total	50	100%			
Education Program						
1	5th class	0	0%	81.20	0.044	Significant
2	7th class	4	8%			
3	8th class	24	48%			
4	10th pass	50	44%			
	Total	150	100%			
Resident area						
1	Urban	8	16%	33	0.932	Non-Significant
2	Rural	42	84%			
	Total	150	100%			
Participants according to Safety Training						

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

1	Yes	48	96%	1.190	0.275	Non-significant
2	No	2	4%			
	Total	50	100%			
Knowledge level						
1	Poor	18	36%	64.627	0.004	Significant
2	Average	30	60%			
2	Good	2	4%			
	Total	150	100%			

Age: The Chi-square test indicated that the age category had a p-value of 0.592, which is above the common threshold of 0.05, suggesting that age is not a significant factor in this regression analysis.

Gender: Gender was found to be a significant factor with a Chi-square value of 8.96 and a p-value of 0.017, indicating a significant difference between male and female participants.

Education Program: The education program category had a significant Chi-square value of 81.20 with a p-value of 0.044, indicating significant differences among different educational levels.

Resident Area: The Chi-square value for the resident area was 33 with a p-value of 0.932, suggesting that there is no significant difference between urban and rural residents in this context.

Safety Training: The analysis revealed a non-significant result for safety training with a Chi-square value of 1.190 and a p-value of 0.275.

Knowledge Level: The knowledge level showed a significant result with a Chi-square value of 64.627 and a p-value of 0.004, indicating a significant difference in the distribution of knowledge levels.

DISCUSSION

The discussion section is devoted to a thoughtful and insightful analysis of the finding, leading to a discussion of their clinical and theoretical utility. This part manages the exchange of the investigation with suitable writing survey, factual examination and discoveries of the investigation dependent on targets of the examination. The present investigation was done to evaluate knowledge and preventive practice on in regards to needle stick injuries among staff nurses working in chosen Hospitals. The discoveries of the investigation have been examined with reference to the targets of the examination and with discoveries of different investigations.

Section – I: -Description of demographic characteristics of the workers

Section – II: - Assessment of knowledge scores regarding knowledge of disaster management

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

Section – III: - Association between knowledge scores with selected Demographic variables among workers

I- Description of demographic characteristics of the workers

Program: Emergency and Disaster Management: Capstone-Thesis: Master of Arts (MA)

Awarded: August 2016

Abstract: The low income of Haiti and Nepal inherently make them more likely to experience a catastrophic incident compared to wealthy nations with robust emergency and disaster management capabilities. Both of these nations have experienced a catastrophic event in the last decade and the speed of the international responses were significantly different. Part of the difference in the response can be contributed to logistics and the ability of the affected nation to open their airports for international aid and first responders. Airports are vital to the response phase of catastrophic incidents because speed can mitigate impacts. This thesis analyzes the preparedness of Haiti's Toussaint Louverture International Airport and Nepal's Tribhuvan International Airport to support the influx of humanitarian aid during the response phase of the emergency management cycle, utilizing the 2010 Haiti earthquake and 2015 Nepal earthquake as case studies. It recommends that developed nations increase investments into the preparedness of airports of low income nations in order to set the environment necessary to quickly open the basic logistical support necessary for international aid and assistance to enter into the country. Globalization has ensured that catastrophes anywhere in the world impact every other nation in some way and it is on the international community to work together to mitigate these impacts.

II: - Association between knowledge scores with selected Demographic variables among workers

Program: Emergency and Disaster Management: Capstone-Thesis: Master of Arts (MA)

Awarded: 2016August

Abstract: While the argument continues regarding the reasons behind climate change, the fact remains that the climate is indeed changing. These changes are projected to impact the frequency and intensity of storms in the future. This case study investigates current and predicted changes in the intensity of hurricanes, flooding, tornadoes, drought, and wildfires and how those changes affect the profession of emergency management. Specifically, current decision making regarding planning, mitigation, and adaptation is based on a historical perspective though many of those decisions have impact 50 – 100 years into the future. As natural disasters including hurricanes, tornadoes, drought, floods and wild fires increase in intensity and frequency due to anthropogenic climate change, they will exceed current protection methodologies in mitigation and adaptation thereby increasing vulnerability for people and property to future hurricanes, tornadoes, drought, floods, and wild fires. The tools and methods must be updated to incorporate future change as well as historic trends while policy makers and emergency

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

© UIJIR | ISSN (O) – 2582-6417
AUGUST 2024 | Vol. 5 Issue 3
www.uijir.com

management professionals need to incorporate potential changes in their decision making regarding planning, mitigation and adaptation. Failure to incorporate these changes may lead to more deaths and higher costs associated with more intense and more frequent storms in the future.

CONCLUSION

Based on the study findings, it concludes that there is a poor knowledge amongst the industrial workers. Depicts that the frequency and the percentage distribution of level of knowledge about disaster management of industries. On the earlier stages, it was observed that around 30% of the people were having the poor knowledge and rest 60% were having average knowledge about industrial safety and disaster management but as soon after the knowledge gain the people were having the knowledge boost that concluded that around 80 percent of people have average knowledge.

CONSENT AND ETHICAL APPROVAL

Approval from the institutional research and ethical committee (PUIECHR/PIMSR/00/081734/6010) was obtained, along with specific informed consent fromthe , before conducting the study.

CONFLICT OF INTERESTS

The authors have affirmed that they have no competing interests to declare.

AUTHORS CONTRIBUTION

Author 1- Approval and finalization of the study's conception and design, as well as manuscript drafting.
Author 2- Collection and analysis of data, as well as interpretation of results. Funding:
This research is self-funded, with no financial support provided by internal or external organizations.

ACKNOWLEDGMENT

The authors extend their gratitude to all the participants involved in this study.

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR

© UIJIR | ISSN (O) – 2582-6417
AUGUST 2024 | Vol. 5 Issue 3
www.uijir.com

REFERENCES

1. Baldini, G., Oliveri, F., Braun, M., Seuschek, H., & Hess, E. (2012). Securing disaster supply chains with cryptography enhanced RFID. Disaster Prevention and Management: An International Journal.

2. Beerens, R.J.J., & Tehler, H. (2016). Scoping the field of disaster exercise evaluation-A literature overview and analysis. International Journal of Disaster Risk Reduction, 19, 413-446.Gupta.

3. Shaluf, I.M., Ahmadun, F.R., Mat-Said, A., Mustapha, S.A., & Sharif, R. (2002). Technological man-made disaster precondition phase model for major accidents. Disaster Prevention and Management: An International Journal.

4. Shen, Y., Wang, Q., Yan, W., & Wang, J. (2015). A transportation-location problem model for pedestrian evacuation in chemical industrial parks disasters. Journal of Loss Prevention in the Process Industries, 33, 29-38.Sonavane, M. M., & Bhondawe, M. R. K. (2013). Effectiveness of SIM on knowledge of parents regarding prevention of domestic accidents among the under five children. Sinhgad e-Journal of Nursing.

5. Simpson, D.M. (2008). Disaster preparedness measures: a test case development and application. Disaster Prevention and Management: An International Journal, 17(5), 645-661.

6. Taber, N., Plumb, D., & Jolemore, S. (2008). “Grey” areas and “organized chaos” in emergency response. Journal of Workplace Learning, 20(4), 272- 285.

DOI Link https://doi-ds.org/doilink/08.2024-98515821/UIJIR