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"Effectiveness of Demonstration on Knowledge, Attitude and Practice on Disaster Preparedness Among General Public at Puducherry".

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Abstract: Disasters are greatest threat for human life it may natural and artificial. Natural disasters caused by Flood, cyclone, Earthquake, Tsunami, etc., Artificial disasters caused by auto bombs, mines, etc.., India is affected by many of natural disasters, flood is most common natural disaster in India. Gujarat earthquake and Tsunami in south India are the biggest natural calamities in India. This study aimed to find the level of Knowledge, Attitude and Practice on Disaster Preparedness Among general public at Puducherry. After obtaining formal permission from the medical officer In-charge of urban areas of Puducherry, we recruited 90 general public and collected demographic variables and the level of Knowledge, Attitude and Practice on Disaster Preparedness. Collected data was entered in Excel 365 and analyzed using PSPP. The result revealed that the Mean age was 33.38 ± 7 years, 57.78% of them are females and 42.22% of them are males, 40.01% of them studied Secondary school education, 31.11% of them studied Primary school education and 14.44% of them studied Higher Secondary and Degree and Above. With regards to occupation 37.78% of them are House wife, 24.44% of them are Daily wages, 23.33% of them are Private Employees and 14.45% of them are Government Employees. In regards to religion 62.22% of them are Hindu, 23.34% of the are Muslims and 14.44% of them are Christian. among the participants 92.22% of them seen any one of disaster in their life and 96.67% of them have never underwent any training programme regarding disaster preparedness. Level of Knowledge, Attitude and Practice on Disaster Preparedness result revealed that 76.67% of them had Inadequate knowledge, 61.11% of them had Unfavorable attitude and 90% of them are not practicing in pre-test level respectively. After the Demonstration Level of Knowledge, Attitude and Practice on Disaster Preparedness result revealed that 53.33% of them had Adequate knowledge, 72.22% of them had Favorable attitude and 50% of them are practicing in post-test level respectively. Mean scores of Knowledge, Attitude and Practice on Disaster Preparedness was compared between pre and post-test the result shows that the significant differences with Pre and post Knowledge t-value -5.07 ($p = > 0.001$), Pre and post Attitude t-value -4.01 ($p = > 0.001$) and Pre and post Practice t-value -6.39 ($p = > 0.001$) respectively. Association was done with selected demographic variables and educational status was significantly associated with post-test level of knowledge with chi-square value 7.6 ($p = 0.05$) which reveals that the education plays a major role in changing knowledge.

Index Terms **– Disaster, Disaster Preparedness, General Public, Demonstration, Effectiveness, Level of Knowledge, Level of Attitude, Level of Practice.**

I. INTRODUCTION

Disasters are greatest threat for human life it may natural and artificial. Natural disasters caused by Flood, cyclone, Earthquake, Tsunami, etc., Artificial disasters caused by auto bombs, mines, etc.., India is affected by many of natural disasters, flood is most common natural disaster in India. Gujarat earthquake and Tsunami in south India are the biggest natural calamities in India.

Health and disasters are interrelated. Immediate after the disaster peoples are affected with many health problems including death. So, it is important to consider the disaster in the health concept. "Prevention is Better than cure", disasters are unexpected most of the time. So, people need to be prepared always to save their life. The proper awareness, education and training will help the peoples to protect themselves.

II. NEED FOR THE STUDY

A study was conducted on disaster-preparedness behaviors of the general public and professionals in Sichuan province, China. Using survey data from 327 farmers in rural settlements affected by major earthquakes in Wenchuan and Lushan Counties, independent-sample t-tests and chi-squared tests were used to test for differences in the disaster-preparedness behaviors of professionals and the general public. The results show that there were significant differences in emergency-disaster preparedness, knowledge and skills preparedness and overall disaster-prevention preparedness, and there was no significant difference in physical disaster-prevention preparation. Based on these results, the study suggests policy directions for regional poverty alleviation, disaster prevention and reduction and disaster management

A longitudinal study was conducted with pretest–posttest group design exploring family preparedness and evaluating effectiveness of education on disaster preparedness. 145 participants were employed for the study. The result shows that there was an extremely low level of basic preparedness among the 145 participants (mean 1.16, range 0–5, SD 1.07).

Disaster is the natural or manmade calamities which may happen at any time. Preparing ourself to protect from the disaster is most important life saving activity. Being a community health professional it's our responsibility to create awareness among the general public regarding the disaster and it's preparedness is most important and changing their attitude and practice towards disaster preparedness may improve the quality of life during disaster. This study aims to improve the level of Knowledge, Attitude and Practice on Disaster Preparedness Among general public at Puducherry.

III. OBJECTIVES

1. To assess the level of Knowledge, Attitude and Practice on Disaster Preparedness Among general public at Puducherry.
2. To Assess the Effectiveness of Demonstration on Knowledge, Attitude and Practice on Disaster Preparedness Among general public at Puducherry.
3. To find the association between Knowledge, Attitude and Practice on Disaster Preparedness with selected demographic variables.

IV. HYPOTHSIS

H_0: There will be no significant difference in Knowledge, Attitude and Practice on Disaster Preparedness after the demonstration

V. RESEARCH METHODOLOGY

Quantitative approach with descriptive design was used and the study was conducted in Urban areas of Puducherry .

5.1 Population and Sample

Target population of the study includes all general public resides in urban areas of Puducherry. The sample size of the present study was 90.

5.2 Sampling technique

Cluster sampling technique was used to select the samples

5.3 Sampling Criteria

5.3.1 Inclusion Criteria

1. All general public who resides in urban areas of Puducherry.
2. All general public who are willing to participate.

5.3.2 Exclusion Criteria

1. Age less than 20 year are excluded.
2. All general public who are not willing to participate

5.4 Data and Sources of Data

Formal permission was obtained from medical officer in charge in selected urban areas of Puducherry and door to pre-test was conducted to identify the level of knowledge, attitude and practice on disaster preparedness among general public. All the participants were gathered to common community health Centre to give demonstration on disaster preparedness after the demonstration post-test data was collected. All the data's were entered in MS Excel 365 and analyzed using PSPP.

VI. ANALYSIS AND RESULTS

6.1 Descriptive statistics: Frequency, Percentage, Mean and Standard Deviation were used to describe the level of Knowledge, Attitude and Practice on Disaster Preparedness and other demographic variables Among general public at Puducherry.

6.2 Inferential statistics:

- T-Test was used to compare the difference between pre and post-test Knowledge, Attitude and Practice on Disaster Preparedness.
- Chi- Square test was used to determine the association between the level of Knowledge, Attitude and Practice on Disaster Preparedness with selected demographic variables.

Table 6.1: Frequency and Percentage Distribution of Demographic variables among general public at Puducherry

n= 90

S.No	Study Variables	Frequency	Percentage
1	**Gender**		
	Female	52	57.78 %
	Male	38	42.22 %
2	**Educational Status**		
	Primary	28	31.11 %
	Secondary	36	40.01 %
	Higher Secondary	13	14.44 %
	Degree and Above	13	14.44%
3	**Occupation**		
	House Wife	34	37.78 %
	Daily Wages	22	24.44 %
	Private Employee	21	23.33 %
	Government Employee	13	14.45 %
4	**Religion**		
	Hindu	56	62.22 %
	Muslim	21	23.34 %
	Christian	13	14.44 %
5	**Any Disaster witnessed in Life**		
	Yes	83	92.22 %
	No	7	7.78 %
6	**Underwent any Training on Disaster**		
	Yes	3	3.33 %
	No	87	96.67 %

Table 6.1 reveals that 57.78% of them are females and 42.22% of them are males, 40.01% of them studied Secondary school education, 31.11% of them studied Primary school education and 14.44% of them studied Higher Secondary and Degree and Above. With regards to occupation 37.78% of them are House wife, 24.44% of them are Daily wages, 23.33% of them are Private Employees and 14.45% of them are Government Employees. In regards to religion 62.22% of them are Hindu, 23.34% of the are Muslims and 14.44% of them are Christian. among the participants 92.22% of them seen any one of disaster in their life and 96.67% of them have never underwent any training programme regarding disaster preparedness.

n=90

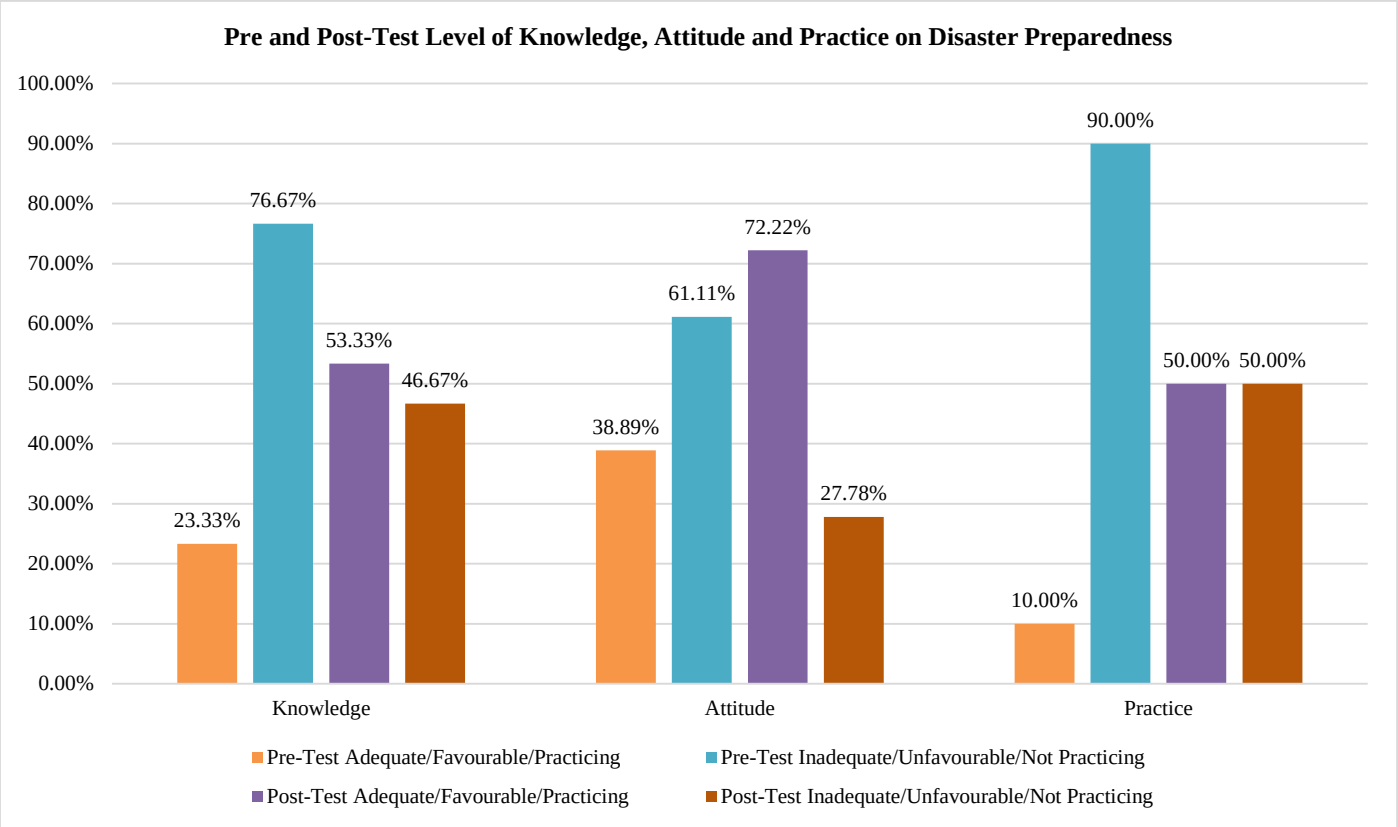

Figure.6.1: Pre and Post-Test Level of Knowledge, Attitude and Practice on Disaster Preparedness among general public at Puducherry.

Figure 6.1 reveals that 76.67% of them had Inadequate knowledge, 61.11% of them had Unfavorable attitude and 90% of them are not practicing in pre-test level respectively. After the Demonstration Level of Knowledge, Attitude and Practice on Disaster Preparedness result revealed that 53.33% of them had Adequate knowledge, 72.22% of them had Favorable attitude and 50% of them are practicing in post-test level respectively.

6.2 Inferential statistics:

Table 6.2.: Mean comparison of pre and post test Knowledge, Attitude and Practice on Disaster Preparedness among general public at Puducherry.

n=90

Variables	Mean	SD	Mean Difference	t-value	p-value
Pre-Test Knowledge	17.17	4.45	2.93	-5.07	>0.001**
Post-Test Knowledge	20.1	5.29			
Pre-Test Attitude	39.77	3.57	1.57	-4.01	>0.001**
Post-Test Attitude	41.33	3.54			
Pre-Test Practice	3.53	2.12	1.78	-6.39	>0.001**
Post-Test Practice	5.31	2.26			

* Paired t-test 2- tailed method was used, **Highly Statistically Significant

Table 6.2. reveals that the mean scores of Knowledge, Attitude and Practice on Disaster Preparedness was compared between pre and post-test the result shows that the significant differences with Pre and post Knowledge t-value -5.07 (p = > 0.001), Pre and post Attitude t-value -4.01 (p = > 0.001) and Pre and post Practice t-value -6.39 (p = > 0.001) respectively. Hence the result rejected the Null hypothesis and demonstration on disaster preparedness among general public at Puducherry was effective.

Table 6.3: Association between the post-test Level of Knowledge and Educational Status among general public at Puducherry.

n=90

SI.NO	Demographic variables	post-test Level of Knowledge		Chi-square test value	p value
		Adequate	Inadequate		
1	**Educational Status**			7.6	0.05*
	Primary	9	19		
	Secondary	22	14		
	Higher Secondary	8	5		
	Degree and Above	9	4		
	TOTAL	**48**	**42**		

*Significant at p<0.05 level

Table 6.3 shows that the educational status was significantly associated with post-test level of knowledge with chi-square value 7.6 (p = 0.05) which reveals that the education plays a major role in changing knowledge among general public, Puducherry.

VII. DISCUSSION

OBJECTIVE I: To assess the level of Knowledge, Attitude and Practice on Disaster Preparedness Among general public at Puducherry.

The findings of the present study revealed that 76.67% of them had Inadequate knowledge, 61.11% of them had Unfavourable attitude and 90% of them are not practicing in pre-test level respectively. After the Demonstration Level of Knowledge, Attitude and Practice on Disaster Preparedness result revealed that 53.33% of them had Adequate knowledge, 72.22% of them had Favourable attitude and 50% of them are practicing in post-test level respectively.

The similar study was conducted on effectiveness of an awareness programme on knowledge and practices of disaster preparedness among residents of low-lying flood prone areas of Udupi. The study found that the awareness programme was effective in improving the knowledge and practices of disaster preparedness among the residents of flood prone areas. The residents of flood prone areas have to be educated regarding disaster preparedness so that vulnerability to the consequences of floods can be reduced. As we are witnessing dramatic climatic changes these days, it is necessary to equip the vulnerable people with knowledge that can be reduce the ill effects of disasters, particularly floods.

OBJECTIVE II: To Assess the Effectiveness of Demonstration on Knowledge, Attitude and Practice on Disaster Preparedness Among general public at Puducherry.

The findings of the present study revealed that the mean scores of Knowledge, Attitude and Practice on Disaster Preparedness was compared between pre and post-test the result shows that the significant differences with Pre and post Knowledge t-value -5.07 (p = > 0.001), Pre and post Attitude t-value -4.01 (p = > 0.001) and Pre and post Practice t-value -6.39 (p = > 0.001) respectively. Hence the result rejected the Null hypothesis and demonstration on disaster preparedness among general public at Puducherry was effective.

The similar study was conducted on Effectiveness of Training Program on Community Based Psychosocial Disaster Preparedness for Community Volunteers. The results show that there is a significant difference in the mean score of the participants before and after the intervention (t=8.893, df = 117, p<0.05). The mean score in the post assessment (22.32) was significantly higher than the mean score of the pre assessment (18.80). which reveals training programmes are effective in improving the community disaster preparedness.

OBJECTIVE III: To find the association between Knowledge, Attitude and Practice on Disaster Preparedness with selected demographic variables

Association was done with selected demographic variables and educational status was significantly associated with post-test level of knowledge with chi-square value 7.6 (p = 0.05) which reveals that the education plays a major role in changing knowledge.

VIII. RECOMMENDATIONS

- A similar study can be conducted in detail to have more literature support
- Regular Training and awareness programmes on various disaster preparedness should be conducted to the general public to improve the readiness and able to manage the situation during disaster.

IX. REFERENCE

1. Futamura M, Hobson C, Turner N. Natural Disasters and Human Security - United Nations University [Internet]. Unu.edu. 2021. Available from: https://unu.edu/publications/articles/natural-disasters-and-human-security.html.
2. W. Z F, S S. he role local initiatives in community based disaster risk management in Kemijen, Semarang City. IOP Conference Series: Earth and Environmental Science [Internet]. 2017;Volume 70(Issue 1):pp. 012047 (2017).
3. Yong Z, Zhuang L, Liu Y, Deng X, Xu D. Differences in the Disaster-Preparedness Behaviors of the General Public and Professionals: Evidence from Sichuan Province, China. International Journal of Environmental Research and Public Health. 2020;17(14):5254.
4. Quadras R, Shashidhara Y, Nayak S. Effectiveness of an Awareness Programme on Knowledge of Disaster Preparedness in Low Lying Flood Prone Areas of Udupi. Indian Journal of Public Health Research & Development. 2017;8(2):321.
5. Bora D, Manjunatha h, Aravind Raj l, Sekar K, Kutti John M. Effectiveness of Training Program on Community Based Psychosocial Disaster Preparedness for Community Volunteers. National Journal of Professional Social Work (NJPSW). 2017;Volume-18(Issue 1-2, January - December 2017).
6. Jamshidi E, Majdzadeh R, Saberi Namin M, Ardalan A, Majdzadeh B, Seydali E. Effectiveness of Community Participation in Earthquake Preparedness: A Community-Based Participatory Intervention Study of Tehran. Disaster Medicine and Public Health Preparedness. 2016;10(2):211-218.