



PERCEIVED KNOWLEDGE, SKILLS, AND TRAINING REQUIRED IN DISASTER MANAGEMENT AMONG STAFF WORKING IN PANCHAYATS: A STUDY OF NALGONDA DISTRICT OF TELANGANA STATE

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Abstract

Background: The disaster management agencies lack funds to provide general public training on how to deal with disasters before and after the event. Every training requires a sufficient amount of funds in order to ensure a smooth distribution of the training materials. Exchanging information at all levels of society through symposiums, workshops, seminars, and training can increase the intensity of awareness and participation of the communities in prevention and preparedness. Information sharing can retain the skills learned and will make us ready when facing disaster. Therefore, the current study aimed to assess the skills and knowledge among the staff working in panchayat and their required training in disaster management. **Methods and Materials:** The study adopted a descriptive research design with a quantitative approach. The multistage sampling technique of the probability sampling method was used to obtain the data and the total sample size of the study is 363 it was calculated based on the sample size determination of Krejcie and Morgan's table. The tools of data collection were prepared by the researcher and validated by the experts and consent was obtained from the study participants and confidentiality was maintained. **Results:** The results showing that majority of the respondents reported that they have satisfactory level skills and knowledge on disaster management and the finding of t-test and one way ANOVA reveals the statistically significant differences $p=0.05$ found in training required in disaster management between gender categories, age categories and educational categories. **Conclusion:** The study findings are indicating the importance of training sessions in various areas of disaster management among the staff working in panchayats. Through conducting various training programs and capacity building programs would enhance the skills and knowledge among the staff members and as well as in the community members. Providing IEC materials, various equipment's, allocating special budget and proper monitoring would enhance the skills and knowledge to mitigate the future disasters.

Keywords: Perceived Knowledge, Skills, Training, Disaster management, Staff, Panchayats.

Introduction: Training is the systematic acquisition of knowledge and skills with the goal of developing competencies necessary for effective performance in work environments. Training can also be defined as steps involved to prepare and mitigate (Kuepper, n.d.). According to the Human Resource Development Act 1992, it is compulsory for every employer to provide training for the staff, either in manufacturing or service industries. Through the training, employees can interact, communicate and share ideas, experience, and knowledge with other skilled employers. This will also increase their confidence level and also motivation to work. The disaster management agencies lack funds to provide general public training on how to deal with flood disasters before and after the event (Mahmud, Shattri, Ghazali, & Billa, 2006). Various tools, references, and equipment need to be distributed during the emergency relief training as

preparation for the workers and public to familiarize themselves with them before the rainy season starts. Every training requires a sufficient amount of funds in order to ensure a smooth distribution of the training materials. Exchanging information at all levels of society through symposiums, workshops, seminars, and training can increase the intensity of awareness and participation of the communities in the prevention and preparedness program (InterWorks, 1998). Information sharing can retain the skills learned (Jasper et al., 2013) and will make us ready when facing disaster. Therefore, the current study aimed to assess the skills and knowledge among the staff working in panchayat and their required training in disaster management.

Methods and Materials: The current study aimed at assessing the knowledge, skills and training required in disaster management among the staff working in panchayats. The study adopted a descriptive research design with a quantitative approach and it was conducted in the Nalgonda district of Telangana state. The study population was the staff who are working in gram panchayats and involved in disaster management activities were included in the study and the staff who are employed permanently in the panchayat were included. The multistage sampling technique of the probability sampling method was used to obtain the data and the total sample size of the study is 363 it was calculated based on the sample size determination of Krejcie and Morgan's table. The tools of data collection were prepared by the researcher and validated by the experts, tools which include the sociodemographic profile of the respondents it consisting of basic details of the respondents such as age, gender, education, domicile, and years of experience, etc., and the tool for assessing the knowledge, skills, and training required in disaster management was prepared by the researcher based on the extensive review of literature, which was validated by the experts. Consent was obtained from the study participants and confidentiality was maintained. The data were analyzed by using SPSS (Statistical Package of Social Sciences) software version 21.0.

Results: Sociodemographic data were analyzed using descriptive statistics to assess the frequencies, percentages, mean, and standard deviation. The Shapiro-Wilk test has been performed to see the normal distribution of the data since the p-value of the Shapiro-Wilk test is $p > 0.05$ it was interpreted that the data has been normally distributed and performed various parametric tests to assess the comparison of skills, knowledge, and training required in disaster management between the background variables. In the current study, the researcher has performed an independent sample t-test, one-way-ANOVA, and Pearson correlation tests. The confidence interval is 95% and the significance level will be considered as $p < 0.05$ for the current study.

Sl. No.	Socio-Demographic Variables	Categories	Frequency n=363	Percentage %
1.	Age	18-35	145	39.9
		36-60	218	60.1
2.	Gender	Male	237	65.3
		Female	126	34.7
3.	Level of Education	High schooling	54	14.9
		Intermediate	135	37.2
		Graduation and above	174	47.9
4.	Years of Experience	< 1 Year	25	6.9
		1-5 years	92	25.3

		6-10 years	81	22.3
		11-15 years	103	28.4
		More than 15 years	62	17.1
5.	Knowledge and skills in Disaster Management	Excellent	53	14.6
		Good	79	21.8
		Satisfactory	109	30.0
		Poor	82	22.6
		Less Than Adequate	40	11.0

Table number one depicts the results of the sociodemographic details of the respondents. The results show that the majority of the respondents 60.1% (n=218) belong to the age group of 36-60 and the least majority of the respondents 39.9% (n=145) belong to the age group of 18-35. More than half of the respondents 65.3% (n=237) are male and the remaining respondents 34.7% (n=126) are females. Nearly half of the respondents 47.9% (n=174) studied graduation and above. Subsequently, about 37.2% (n=135) members of the respondents studied up to Intermediate, and the least majority of the respondents 14.9% (n=54) completed their high schooling. The majority of the respondents 28.4% (n=103) are having 11-15 years of experience and about 25.3% (n=92) of respondents is having 1-5 years of experience. Following that 22.3% (n=81) of the respondents have 6-10 years of experience similarly 17.1% (n=62) of the respondents have more than 15-year experience. The least majority of the respondents 6.9% (n=25) have less than 1 year of experience. The majority of the respondents 30% (n=109) reported that staff of the disaster management had satisfactory knowledge and skills. Subsequently, about 22.6% (n=82) number of the respondents reported that the knowledge and skills of the disaster management staff are poor. About 21.8% (n=79) of respondents reported that their skills and knowledge are good in disaster management. Similarly, 14.6% (n=53) of the respondents reported that the skills and knowledge of the staff are excellent in disaster management.

Table: 2

Comparison of training required in disaster management between the categories of background variables								
Variables		Age		Gender		Education		
		18-35	36-60	Male	Female	High School	Intermediate	Graduation or above
Emergency coordination	Mean \pm SD	1.25 \pm .74	2.87 \pm 1.20	1.70 \pm .90	3.18 \pm 1.40	1.00 \pm .00	1.36 \pm .48	3.27 \pm 1.11
	Test statistics	t=-14.439		t= -12.188		f=271.120		
	p-value	<0.001		<0.001		<0.001		
Preparedness	Mean \pm SD	1.24 \pm .74	2.81 \pm 1.20	1.67 \pm .88	3.14 \pm 1.42	1.00 \pm .00	1.26 \pm .44	3.27 \pm 1.05
	Test statistics	t=-13.873		t=-12.062		f=325.840		
	p-value	<0.001		<0.001		<0.001		
Relief and Rehabilitation	Mean \pm SD	1.20 \pm .61	2.54 \pm 1.13	1.58 \pm .80	2.80 \pm 1.30	1.00 \pm .00	1.23 \pm .42	2.92 \pm 1.03

	Test statistics	t=-12.993		t=-10.975		f=243.097		
	p-value	<0.001		<0.001		<0.001		
vulnerability and risk assessment	Mean \pm SD	1.33 \pm .70	2.83 \pm 1.06	1.79 \pm .88	3.05 \pm 1.26	1.00 \pm .00	1.46 \pm .50	3.21 \pm .93
	Test statistics	t=-14.872		t=-11.104		f=324.375		
	p-value	<0.001		<0.001		<0.001		

Table 2 results represent the findings of the t-test and f-test to find out the differences between training required in disaster management and background variables. It is statistically significant differences found in training required in emergency coordination during disasters between the categories of age (t=-14.439, df=361, p=<.001), gender (t=-12.188, df=361, p=<.001), and education (f=271.120, df=2, p=<.001). There is a statistically significant differences found in training required in preparedness between the categories of age (t=-13.873, df=361, p=<.001), gender (t=-12.062, df=361, p=<.001), and education (f=325.840, df=2, p=<.001). There is statistically significant differences found in training required in relief and rehabilitation between the categories of age (t=-12.993, df=361, p=<.001), gender (t=-10.975, df=361, p=<.001), and education (f=243.097, df=2, p=<.001). There is a statistically significant difference found in training required in vulnerability and risk assessment between the categories of age (t=-14.872, df=361, p=<.001), gender (t=-11.104, df=361, p=<.001), and education (f=324.375, df=2, p=<.001). It is inferred from above findings that the age group between 36-60, female respondents and respondents studied up to graduation or above were reported that they require training in emergency coordination, preparedness, relief and rehabilitation and vulnerability and risk assessment.

Conclusion: The study findings are indicating the importance of training sessions in various areas of disaster management among the staff working in panchayats. However, staff working in panchayats were working in gross root level and they would be the front-line workers to create awareness on preparedness among the community members to handle a disaster. Through conducting various training programs and capacity building programs would enhance the skills and knowledge among the staff members and as well as in the community members. Providing IEC materials, various equipment's, allocating special budget and proper monitoring would enhance the skills and knowledge to mitigate the future disasters.

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