EFFECTIVENESS OF TOT WORKSHOP ON PSYCHOSOCIAL CARE IN DISASTER MANAGEMENT FOR NATIONAL DISASTER RESPONSE FORCE PERSONNEL

Education

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ABSTRACT

Introduction:

The efficient disaster response will depend primarily on effectiveness of training and re-training of specialized Disaster Response Forces in all dimensions of disaster management that includes psychosocial disaster preparedness. Therefore, NIMHANS and NIDM, collaboratively conducted ToT workshop on psychosocial care in disaster management for NDRF personnel.

Methods:

The study adopted quasi experimental design with post only research design. There were 20 participants who were part of the training program. The content of the program includes the disaster resilience, need, importance and techniques of psychosocial care; and role of the NDRF personnel in provision of psychosocial care in disaster management. A semi structured questionnaire consisting of socio demographic profile, Overall evaluation of workshop, psychosocial aspects in Disaster Management was developed for assessing the effectiveness of the program. Descriptive statistics was carried out to analyze the data.

Results:

Majority of the participants found the content of the program from very good to excellent, very well structured and organized. Overall impression of the program was reported as very good to excellent by most of the participants.

Conclusion:

Integration of psychosocial care services to NDRF personnel in disaster management would equip them to deal with the psychosocial issues effectively. There is also a need to train all the battalions of NDRF as an effective and efficient disaster response force that can deal with the immediate psychosocial impact on survivors of disasters.

KEYWORDS

Capacity building, first responders, psychosocial care, and natural & man-made disaster.

INTRODUCTION

Disasters are unpredictable event which extremely disrupts the functioning of a community or society and causes losses to human, material, and economic or environment that exceed the community's or society's ability to cope using its own resources (IFRC, 2018). Country like India is the high degree of socioeconomic vulnerability which makes it one of the most disaster-prone countries in the world. According to the annual disaster report 2016, there were around (8,733) death due to disaster. However, the number of people affected by natural disasters in 2016 is very high (569 million). Asia tops the list of casualties due to natural disasters (Guhasapir, Hoyois, & Below, 2017). There are multidimensional psychosocial problems faced by the survivors of any disaster such as immediate response to loss, grief, depression, anxiety (Cohen 2002; Reyes and Elhai 2004). The long term impact may cause posttraumatic stress disorder (PTSD), substance abuse and major depression (Leon 2004; World Health Organization 1992). Therefore, the psychosocial care play a major role in enhancing both the restoration of social cohesion and reconstruction of infrastructure. While addressing the psychosocial concerns we must ensure the independence and dignity of individuals and groups. There are studies which clearly states that providing psychosocial care after any disaster serves to prevent developments of major mental illness and further social disruption (Rao, 2006) which warrants for the training of all the stakeholders in disaster management on psychosocial care as part of disaster preparedness.

The Sendai Framework for disaster risk reduction 2015-2030 has four priorities for action and one among them was strengthening disaster risk governance to manage disaster risk through prevention, mitigation, preparedness, response, recovery, and rehabilitation (UNISDR, 2015). Over the last two decades there has been a paradigm shift from relief centered post-disaster management to disaster risk reduction and disaster preparedness aspects. The disaster risk reduction commonly consists of a holistic, multi-dimensional integrated community approach of health promotion, disaster prevention, preparedness, and mitigation. The lessons learned from the varied disaster relief effort were strengthening the knowledge about

the regulation and capabilities of medical and military back-up teams should be widely disseminated (Zhang et al., 2012). Disaster preparedness in the policy level has attained through the enactment and implementation of the disaster management act, 2005. There are various committees in Disaster preparation which consist of multidiscipline professionals like physical, geographical, engineering, environmental, social, health, psychological, management, and economic sciences, and so on (Aitsi-Selmi, Egawa, Sasaki, Wannous, & Murray, 2015).

In India too, National Disaster Response Force (NDRF) has been formed under the statutory provisions of The Disaster Management Act (2005) aiming at specialized response to natural and man-made disasters. Generally, psychosocial care training is provided in post-disaster situation to manage the damage caused by the hazard. For effective provision of psychosocial care post disasters, the forces should be trained in pre-disaster phases as a part of preparedness. National disaster response force are the personnel who are the first responders of any disasters and were involved in all the aspects of an active and effective commanding system, successful coordination between rescue forces and the government agencies, effective treatment, timely and proper public health response, and long-term psychological support are all crucial to scale back mortality and morbidity and promote overall effectiveness of rescue efforts after a major disaster (Zhang et al., 2012). Nevertheless, prevention reduces the expense of resources multiple times than post response. Providing psychosocial care in disaster preparedness and disaster risk reduction is essential as per international and national disaster management guidelines (Baingana, 2008; NDMA, 2017). Therefore, providing psychosocial training to the NDRF personnel would help them in being sensitive to psychosocial problems, and provide effective management at the initial phase of the disaster. This current paper discusses the effectiveness of psychosocial training program.

METHODOLOGY

The National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore is the nodal center for disasters psychosocial

care in India. NIMHANS developed Training of Trainers (ToT) manual to train school teachers, healthcare workers, and community level workers on psychosocial care of the survivors of disasters. This manual consists of 40 sets of sessions from the basic understanding of disaster to working with special populations (Sekar et al. 2004). The Disaster Management Act has statutory provisions for the constitution of the National Disaster Response Force (NDRF) for the aim of specialized response to natural and man-made disasters. At present, National Disaster Response Force contains 12 battalions, three each from the BSF and CRPF and two each from CISF, ITBP and SSB. Each battalion has 18 self-contained specialist search and rescue teams of 45 personnel each including engineers, technicians, electricians, dog squads, and medical/paramedics. The total strength of each battalion is 1,149. All the 12 battalions have been equipped and trained to respond to natural as well as man-made disasters. Battalions also are trained and equipped for response during chemical, biological, radiological, and nuclear (CBRN) emergencies. NIMHANS and National Institute of Disaster Management (NIDM), collaboratively conducted Training of Trainers (TOT) workshop on psychosocial care in disaster management for NDRF personnel.

The objective of the current study was to assess the effectiveness of one such TOT workshop on psychosocial care in disaster management. The study adopted quasi-experimental with post-assessment only research design. 20 participants participated in the ToT program from all the battalions. The duration of the program was five days. The content of the program includes the Disaster resilience and sustainability, impact, needs of the survivors, normal & abnormal psychological reactions, life event, and family life cycle after disasters, vulnerable population, and techniques of psychosocial care and role of NDRF personnel in the provision of psychosocial care in disaster management. A semi-structured questionnaire was used to assess the effectiveness of the TOT workshop. The content of the semi-structure questionnaire includes socio-demographic profile, content, structure, organization, usefulness, applicability, methodology of the workshop. These areas were assessed using a 5 point Likert scale. Data analysis was done using SPSS version 21. Descriptive statistics were carried out to analyze the data.

1. RESULTS

Data of the 20 participants who attended the training program were taken for data analysis. There were only male participants who attended the training program. Table-1 shows the socio-demographic details of the participants. The average mean age of the participants was 42 ± 7.61 (M $\pm$ SD), half the participants (50%) were assistant commandant, and there were participants from all 12 battalions.

Designation	N	%
Assistant commandant / Executive	01	05
Assistant Commandant / MO	01	05
Assistant Commandant	10	50
Deputy commandant	08	40

	Very well (%)	Well (%)	Moderate (%)	Average (%)	Unstructured (%)
Structure & Organisation	17 (85)	3 (15)	-	-	-
	Very much (%)	Much (%)	Moderate (%)	Limited use (%)	Not at all (%)
Program useful in job	18 (90)	2 (10)	-	-	-
	Excellent (%)	VG (%)	Good (%)	Fair (%)	Poor (%)
Overall impression	16 (80)	4 (20)	-	-	-

The overall evaluation of the workshop among the participants was indicated in Table-2. Most of the participants reported that the program was very well-structured and organized (85%) and (90%) felt that the workshop will help them in future jobs. Participants reported overall the training was excellent (80%).

	Strongly agree (%)	Agree (%)	NA/D (%)	Disagree (%)
Program help me in future job	12 (60)	8 (40)	-	-
Practical orientation	16 (80)	4 (20)	-	-
Inspires me to assignment related to DM	11 (55)	09 (45)	-	-
Benefited – interaction with fellow participants.	16 (80)	4 (20)	-	-
Course and material usefulness	18 (90)	1 (5)	1 (5)	-
NA/D= Neither agree nor disagree				

The overall evaluation of the workshop among the participants was indicated in Table-3. More than half of the participants strongly agree (60%) and (40%) agree that the workshop will help me in my future job. (80%) of them strongly agree that they had a practical orientation to the program. Half of the participants strongly agree (55%) that workshops inspire to take assignments related to disaster management. Almost (80%) of the participants strongly agree that they have been benefited in the interaction with the fellow participants and (90%) of the participants strongly agreed that the course and the material were useful.

	Excellent (%)	VG (%)	Good (%)	Fair (%)	NR (%)
Disaster and development conceptual framework	15 (75)	05 (25)	-	-	-
Evaluation and principles of psychosocial care & Impact of disaster on survivors	17 (85)	03 (15)	-	-	-
Normal and abnormal reaction in disaster	17 (85)	2 (10)	01 (5)	-	-
Identifying circle of support for disaster survivors.	18 (90)	02 (10)	-	-	-
Technique of psychosocial care	18 (90)	02 (10)	-	-	-
Life events and family life cycles coping abilities	18 (90)	02 (10)	-	-	-
Identifying the more vulnerable group	17 (85)	03 (15)	-	-	-
Recalling the child hood events and identifying the impact of disasters on children	20 (100)	-	-	-	-
Principles of providing psychosocial care to children's in disaster	18 (90)	2 (10)	-	-	-
Social discrimination against women	19 (95)	1 (5)	-	-	-
Differential impact of disaster on men and women	17 (85)	03 (15)	-	-	-
Body mapping and identifying of the women in difficult circumstances	17 (85)	03 (15)	-	-	-
Strategies to work with women	16 (80)	03 (15)	01 (5)	-	-
An overview of self-care strategies holistic living	18 (90)	02 (10)	-	-	-
Handling burnout	17 (85)	03 (15)	-	-	-
VG=Very Good; NR=No Response					

Table-4. Indicates the evaluation of the topic covered on psychosocial aspects by the participants. Majority of the participants rated excellent with regard to the topics on disaster and development conceptual framework (75%), evaluation and principles of psychosocial care & Impact of disaster on survivors (85%), normal and abnormal reaction in disaster (85%), identifying circle of support for disaster survivors (90%), Technique of psychosocial care (90%), life events and family life cycles coping abilities (90%), identifying the more vulnerable

group (85%), recalling the childhood events and identifying the impact of disasters on children (100%), principles of providing psychosocial care to children's in disaster (90%), social discrimination against women (95%), Differential impact of disaster on men and women (85%), body mapping and identifying of the women in difficult circumstances (85%), strategies to work with women (80%), an overview of self-care strategies holistic living (90%) and Handling burnout (85%).

Feedback about the content of the training program

Some participants reported that they were are totally unaware of the psychosocial component in disaster management. Some participants reported that in the beginning of the training program they thought, as they are rescuers, it is not their duty to provide psycho-social care, and they may not have time to do it during the rescue operation. But the training has made them to understand the importance of integrating psychosocial care in their services and they understood that, even during the rescue phase they can provide psychosocial care for disaster survivors.

The majority of the participants reported that the content of the training is very useful to psychosocial care in disaster management and the participatory method of training gave better involvement and easy understanding during the course of training. They also reported that the training program will help us better regarding handling psychosocial problems during disaster situations. Participants even felt that training was interesting, and it is useful for both workplace and for our daily life. Some participants like the group activity and some even said that the topic of discrimination against women was influencing. Some participants felt that the course was specially designed for NDRF personnel, which could have included how to extract maximum output from subordinates. Few participants said that the trainers could have finished the sessions on time.

Possible ways of utilizing the training content in their workplace

Participants reported that they can utilize the training content in future disaster situation and can also practice things which they have learned during training. Participants also reported that the training helped to understand the problems of vulnerable population such as children, women, elderly and persons with disability which are generally not visible in a disaster situation.

The psychosocial care techniques can be utilized during their interventions in future disasters. Participants also reported that they can utilize the knowledge and techniques they learnt in this program to train their staff in their respective battalions. They reported that training program can be utilized for dealing with their personnel, and family problems. "Training on stress management can also be used in our workplace".

DISCUSSION

One of the highest priority of the disaster preparedness in PSSMHS is a need for capacity building at various levels since the country needs a huge volume of civic resources to deal with disaster situations (NDMA, 2008). There is a need for effective psychosocial training to all professionals work in the time of disaster will help in addressing the larger psychosocial problems at very early stage (Sekar et al. 2005). In this study we aimed to assess the effectiveness of psychosocial training programme among NDRF personnel. NDRF is the specialized emergency response force in India involved in both natural and man-made disasters. They were also majorly involved in capacity development during the various preparedness activities for providing both sensitizing the community about the psycho-social effects of the disasters and also provide Psycho-social First Aid for the victims of disaster (National Disaster Management Guidelines: Psycho-Social Support and Mental Health Services in Disasters, 2009). On the above, there is a dearth of empirical evidences on psychosocial training effects in the preparedness aspects across the world. The present training program helps to gain the knowledge about psychosocial care in disaster among the NDRF personnel. NIMHANS has been working on the psychosocial care for all most three decades (Sekar et al., 2005). There is a dearth of research paper published on training NDRF personnel on psychosocial care on disaster management. Hence the current paper has been prepared to add evidence to the need for training on disaster preparedness for NDRF personnel.

The result revealed that the program was very well-structured and felt workshop will help them in future jobs. Further, participants reported

that they had a positive impact on practical orientation to the program and benefited in the interaction with the fellow participants. Thus, finding suggested the five days training programme was well planned. Some of the topics covered in the training like technique of psychosocial care, life events and family life cycles coping abilities, identifying the more vulnerable group, recalling the childhood events and identifying the impact of disasters on children, principles of providing psychosocial care to children's in disaster, social discrimination against women and self-care strategies holistic living were excellent as reported by the participants. Therefore, the topics covered will help the participants to understand that Disaster-affected people experience various psychological reactions. There are enough evidence to show that these psychological reactions instantly follow the event while socio-economic impacts like lack of employment; homelessness, environmental destruction and disorganization emerge as a consequence, following the devastation caused by the disaster (Sujata 2009). Hence, the capacity building training programmes will help the disaster intervention worker to support the psychosocial needs of the survivors after any major calamity (Sekar et al. 2005). There were few newspaper article on organizing training and capacity-building programme on psychosocial care in disasters for NDRF and SDRF personnel conducted by NIDM in several occasions (Express News Service, 2018). Another training programme at Lok Nayak Jaiprakash Airport, Patna was conducted on handling airport emergencies to respond to CBRN (Chemical, Biological, Radiological, and Nuclear) emergencies, medical first aid and initial psycho-social support from 23rd - 27th April, 2018. A total of 200 personnel was trained which will include one-week training of 50 participants representing various agencies responsible for operations & maintenance, emergency handling, and sensitization of 150 working-level staff in a half-day programme (Corporate Communications Directorate, 2018). The National Disaster Management Authority (NDMA) has conducted the training programme on enhancing the preparedness of airport emergencies at Bengaluru from 12th to 17th of November 2018. The specialized training programme concludes with a mock drill alongside the sensitization of over 200 working staff of the Kempegowda International Airport, Bengaluru. The programme consists of live demonstrations of detection and decontamination, including the utilization of private Protective Equipment (PPE) and Airport Emergency Handlers was trained to supply first-aid and initial psycho-social support for the victims (The Hindu, 2018). However, there is not enough evidence to substantiate how many personnel has been trained on Psycho-social care in disaster and equipped to handle the psychological distress during the time of crisis.

Results of the effectiveness of the school safety training program conducted (Rajamanikandan, Hari Krishnan, Ranjith, Aravind, 2018) among school teachers, Asha workers, Community level workers shows (pre-test score 1.93 (SD=1.75), post-test score 11.13 (SD=1.99) significantly improved the participant's knowledge. Other training program conducted among the 375 undergraduate medical college students in Madhya Pradesh (Sinha, Pal, Kasar, Tiwari, & Sharma, 2008) had a pre-test and post-test design structured questionnaire which was administered for assessing the current level of knowledge, attitude and practice about disaster preparedness and mitigation. Results show that the post-test mean score on the knowledge level was 8.77 percentage, which is highly significant. Though the current study does not have a pre and post-test results as shown in the above studies, it clearly indicates the participant's perception of the content and usefulness of the training program. Since it is the first of its kind program for the NDRF personnel on psychosocial care, this can be considered as a step forward in the integration of psychosocial services through NDRF personnel.

CONCLUSION

Providing psychosocial care to survivors of disasters is dealing with the emotions and feelings of human beings due to the impact of calamity. As we know that needs of the survivors are very specific to each groups hence the intervention should be appropriate. The mental health services or psychosocial intervention should be tailored made to each communities. Therefore, training on psychosocial care is very essential to address the distressed person. The training of Trainers workshop would help in imparting knowledge and changing the attitude of the responders towards the disaster survivors which would result in effective delivery of post disaster services. Preparing NDRF personnel on integration of psychosocial care services in disaster management would equip them to deal with the psychosocial issues

effectively. It also helps in making the services available within the community and end in reducing the psychosocial impact on survivors of disasters.

REFERENCES:

1. Aitsi-Selmi, A., Egawa, S., Sasaki, H., Wannous, C., & Murray, V. (2015). The Sendai Framework for Disaster Risk Reduction: Renewing the Global Commitment to People's Resilience, Health, and Well-being. *International Journal of Disaster Risk Science*, 6(2), 164–176.
2. Baingana, F. (2008). A Public mental health perspective: the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings. *Intervention*, 6(3), 236–238.
3. Cohen, R. E. (2002). Mental health services for victims of disasters. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 1(3), 149–152.
4. Corporate Communications Directorate. (2018). Airports Authority of India Press Release. Retrieved from [https://www.aai.aero/sites/default/files/press_release_news/Press Release for airport emergencies at Patna airport.pdf](https://www.aai.aero/sites/default/files/press_release_news/Press%20Release%20for%20airport%20emergencies%20at%20Patna%20airport.pdf)
5. Guha-sapir, D., Hoyois, P., & Below, R. (2017). Annual Disaster Statistical Review 2016: The numbers and trends. *Review Literature And Arts Of The Americas*, 1–50.
6. IFRC. (2018). What is a disaster? <https://doi.org/2018-05-16>
7. Leon, G. R. (2004). Overview of the psychosocial impact of disasters. *Prehospital and Disaster Medicine*, 19(1), 4–9.
8. Ministry of Home Affairs Government of India. (2009). Disaster Management of India.
9. NDMA (2009). National Disaster Management Guidelines: Psycho-Social Support and Mental Health Services in Disasters. National Disaster Management Authority, Government of India. ISBN 978-93-80440-00-2, December 2009, New Delhi.
10. Rajamanikandan, S., Harikrishnan, U., James Ranjith, P., Aravindraj, E., Sekar, K., & Kutty, M. (2018). Effectiveness of Training of Trainers Workshop on School Safety Program among School Teachers and Community Level Workers. *Shanlax International Journal of Arts Science and Humanities*, 5(3), 22.
11. Reyes, G., & Elhai, J. D. (2004). Psychosocial interventions in the early phases of disasters. *Psychotherapy*, 41(4), 399–411.
12. Sekar, K., Bhadra, S., Jayakumar, C., Aravindraj, E., Henry, G., & Kishore Kumar, K. V. (2005). Psychosocial Care in Disaster Management Facilitation Manual for Trainers of Trainers in Natural Disaster. NIMHANS, Bangalore & CARE India, New Delhi.
13. Sinha, A., Pal, D. K., Kasar, P. K., Tiwari, R., & Sharma, A. (2008). Knowledge, attitude and practice of disaster preparedness and mitigation among medical students. *Disaster Prevention and Management: An International Journal*, 17(4), 503–507.
14. Sujata, S. (2009). Psychosocial care in disaster management: a training of trainers (ToT) Module (1 st). New Delhi: National Institute of Disaster Management.
15. The Express News Service. (2018). NIDM training on coastal community resilience from today- The New Indian Express. Retrieved March 6, 2019, from <http://www.newindianexpress.com/states/andhra-pradesh/2018/feb/07/nidm-training-on-coastal-community-resilience-from-today-1769541.html>
16. Cohen, Raquel E. 2002. "Mental Health Services for Victims of Disasters." *World Psychiatry : Official Journal of the World Psychiatric Association (WPA)* 1 (3): 149–52. <http://www.ncbi.nlm.nih.gov/pubmed/16946836> <http://www.ncbi.nlm.nih.gov/pubmed/16946836> <http://www.ncbi.nlm.nih.gov/pubmed/16946836>
17. Leon, Gloria R. 2004. "Overview of the Psychosocial Impact of Disasters." *Prehospital and Disaster Medicine* 19 (1): 4–9. <https://doi.org/10.1017/S1049023X00001424>
18. Reyes, Gilbert, and Jon D. Elhai. 2004. "Psychosocial Interventions in the Early Phases of Disasters." *Psychotherapy* 41 (4): 399–411. <https://doi.org/10.1037/0033-3204.41.4.399>
19. Sekar, K., Subhasis, Bhadra, C. Jayakumar, E. Aravindraj, Grace, Henry, and K.V. Kishore Kumar. 2005. Psychosocial Care in Disaster Management Facilitation Manual for Trainers of Trainers in Natural Disaster. NIMHANS, Bangalore CARE India, New Delhi.
20. Sujata, Satapathy. 2009. "Psychosocial Care in Disaster Management: A Training of Trainers (ToT) Module." 1 st. New Delhi: National Institute of Disaster Management.
21. World Health Organization. 1992. "Psychosocial Consequences of Disasters : Prevention and Management." http://apps.who.int/iris/bitstream/10665/58986/1/WHO_MNH_PSF_91_3_REV.1.pdf