



Mental health status and effectiveness of psychological interventions program after landslide and flood in relief camps

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Abstract: Landslide and flooding has happened in southern areas of Kerala on august 2020. Various studies has revealed that disaster always predispose mental health issues to humankind. The present study is an attempt to evaluate the effectiveness of psychological interventions administered to the disaster victims, who suffers from mental health issues and also to assess the competence and satisfaction of the therapist. The study sample consists of 256 victims of landslide and following flood with psychological disturbance by themselves or by camp authorities and 55 therapists. (15 clinical psychologist and 40 psychologist). The tools used for the current studies were socio –demo graphic and clinical data sheet. Wide range of mental health issues were reported and marked improvement was noticed after administering psychological interventions on cases. Thus psychological interventions on victims who is suffering from mental illness is found to be effective also the competence and satisfaction of the therapist was assessed as very good

Key words: Mental health, Psychological interventions, Disaster

I. INTRODUCTION

A natural disaster is a catastrophic event generated by the natural forces of earth. It is defined by the World Health Organization as “a sudden ecological disruption or threat that exceeds the adjustment capacity of the affected community and requires external assistance (Verduzco et al ,2018) disasters are known to have substantial effect on both physical and mental health of the affected population(Kim et al, 2018) disaster victims may experience emotional instability , distress , depression etc. Studies conducted over suicide after natural disaster revealed that – suicidal rate increased after the disasters and signifies the need of mental health support after disaster (Krug et al ,1998)

Massive rain has triggered deadly flooding and landslides in the southern state of Kerala on august 2020. Landslide happened in Rajamala in Idukki district, which results in the death of 52 people and 19 were reported missing. . Landslides occurred at Mundakkai in Meppadi by 9 in the morning. Though some families were evacuated already following landslide warnings, some other (Mathrubhoomi, 2020) Devasting flood and landslide also happened in the last 3 years in Kerala (BBC News, 2020)

Studies conducted over the topic mental health after disaster is very less in number and also there is no much studies available focusing on the effectiveness of psychological intervention administered to the victims of the disasters. Disaster mental health services are based on the principles of ‘preventive medicine’(Math et al ,2008) This principle of ‘prevention’ has necessitated a paradigm shift from relief centered post-disaster management to a holistic, multi-dimensional integrated community approach(Sundram,2008) More recently, there has been a revived interest in ‘psychological first aid’ (PFA). It was initially described by Raphael (1986) for use in the civilian domain.(Raphael,1986) The main goal of this is to relieve immediate distress and to prevent or minimize the development of pathological sequelae.[Vernberg, 2008] The concept of psychological first aid for individuals exposed to highly traumatic events has been used in the field of crisis management and disaster mental health for many years.[Reyes,2006] The psychological first aid was developed to reflect current best practices in disaster mental health based on research, expert consensus, and practical experience. However, there are no systematic studies to answer the efficacy and usefulness of the PFA.

A recent study reported that the existence of complicated grief in more than two-thirds of the survivors of the disaster. (Ghaffari , 2007)Abnormal grief reactions can be grossly classified into delayed, absent, oscillating and exploding grief responses. (Math & Chandrasheka, 2003)Grief is the response to any loss. Grief reactions are normal responses to abnormal situations. Its intensity is directly proportional to the severity, duration and intensity of exposure to the disaster. Grief process occurs through various stages (Küble, 1969) Abnormal or complicated because they interfere in the process of healing and also interfere in the biological, social and occupational functioning.(Freedman,& Blumenfield ,1985] Resolution of abnormal grief reaction can be facilitated in these groups by fostering the cultural-religious rituals of grieving. Hence, the mental health professional needs to liaison with the disaster relief administration, educate them regarding proper closure of the missing people and to facilitate the mass grieving through cultural-religious death rituals of grieving. Many of the survivors may require trauma/grief-focused interventions, within a comprehensive disaster recovery program.(Goenjian et al ,2001)

The purpose of this study is to find out the prevalence of various types of mental illness followed by disaster, also to evaluate the effectiveness of psychological intervention applied for disaster victims along with assessment of the competence and satisfaction of the therapist by the researcher. This study reveals how much it is important to provide mental health stability to a person who suffered from disaster.

II. NEED AND SIGNIFICANT

Disasters are always a problem to mankind; it results in stigma against mental health. Studies conducted over the natural and man-made disaster suggest that disaster causes negative impact on mental health. Even though studies on disaster and mental health are available, providing adequate mental health support to the sufferers of disaster are very less in India. Thus it is essential to conduct a study over it to provide a proper guideline for the assessment and interventions for the mental health issues that result from disaster. This study can help us to understand the effectiveness of psychological interventions that aim to prevent or reduce symptoms of mental illness among disaster victims and also get to know the competence and satisfaction of therapist who involved in this project. Concurrently this study open ups the prevalence of mental illness results from disaster.

III. OBJECTIVE OF THE STUDY

- To study the mental health status of the disaster victims.
- To evaluate the effectiveness of psychological interventions administered to the disaster victims, who suffer from mental issues.
- To assess the competence and satisfaction of the therapist in psychological intervention to the victims of disaster

IV. METHODS

Sample

The study sample consists of 256 Victims of landslide and following flood and who have any of the psychological disturbances reported by themselves or by Camp authorities and 55 Therapist (15 Clinical psychologists 40 psychologists) who has taken part in the Psychological intervention team for victims. Purposive sampling methods were used for this present study.

Tools

1. Socio-Demographical and Clinical data sheet.
2. Semi-structured interview for Victims.
3. Semi-structured interview for therapist.

PROCEDURE

The incidence of flood and landslide happened in Kerala on 2020. On this incident a study has been conducted to evaluate the effectiveness of psychological interventions on mental health issues impacted by the disaster. Study has been conducted in disaster relief camp settled in Kozhikode Wayanad and Malappuram district.

Department of Clinical Psychology, Composite Regional Center Skill Development and Rehabilitation and Empowerment of Person with Disabilities- Kozhikode(CRC-K) in association with Department of Clinical Psychology ,Institute of Mental Health

and Neuroscience (IMHANS) have conducted a training program on the management of and Empowerment of Person mental health issues caused by disaster to the voluntary pool consist of 15 clinical psychologist and 40 psychologist. The objectives of the program were to understand and resolve the challenges occurring while implementing psychological interventions on disaster victims and also to improve the knowledge on mental health issues arising from disaster. After this training program members were divided into 3 groups. Each group includes clinical psychologist and psychologist. These groups were assigned to visit disaster relief camp settled in Kozhikode , Wayanad and Malappuram districts. Permission for the study has taken from concern authorities. Socio demographical and clinical data were collected from the affected individuals. According to icd criteria diagnosis were made then as per the need group, individual and play psychotherapy were administered to the victims by therapist. After the completion of administration of psychological interventions on victims by the therapist, researcher assessed effectiveness of psychological interventions and satisfaction of client and also the competence and satisfaction of the therapist through a semi structured interview. All the procedures followed ethical norms

V. RESULTS AND DISCUSSIONS

Table-1 Show the Socio demographical Details of the Victim

Domain		F	%
Gender	Male	102	39.84
	Female	154	60.15
Age	<12	46	17.96
	12-18	15	5.85
	18-30	70	27.3
	30-45	30	11.71
	45-60	35	13.67
	60<	60	23.43
Socio Economic status	Upper class	0	0
	Middle class	70	27.3
	Lower class	186	72.7
Educations	Up to 10	154	60.15
	XII	40	15.625
	Under graduation	30	11.71
	Post-Graduation	32	12.5
	Professional Degree	0	0
	Daily workers	156	60.93
	Private job	100	39.06
	Govt. Job	0	0
	Professionals	0	0

We identified 256 disaster victims , they were reported with psychological disturbances. Among them 154 (60.15%) were females and 102 (39.84%) were males.

The subjects comes under the age group of more than 60 years old (23.43%), 45- 60 age group (13.67%) , 30-45 age group (11.71%) , less than 12 age (17.96%) and 12-18 age groups (5.85%). Thus majority from more than 60 years old and least from in the age group of 12-18.

Over all, 186 (72.7%) of the subjects were of lower socio economical status and 70 (27.3%) were from middle class. No one from the study group belonged to upper class.

Considering educational status of the participants, most of them were studied up to 10th standard (60.15%) followed by plus two (15.625%) . 32 (12.5%) subjects were having the status of post graduation and remaining 30 (11.71%) were reported in the category of under graduation.

156 participants were daily workers whereas 100 having private jobs

Table -2 Show the Clinical Details of the Victim

Category	F	%
Relapse of mental Health issues(Psychosis)	20	7.81
Relapse of mental Health issues(Neurosis)	46	17.96
Acute Stress Disorders	72	28.12
Depression	50	19.53
Anxiety Disorders	63	24.6
Deterioration of mental health issues(Psychosis)	10	3.90
Deterioration of mental health issues(Neurosis)	58	22.65
Chronic Medical illness	60	23.43

The study report revealed wide range of mental issues , in those acute stress disorder category was the highest (72) , followed by anxiety disorder (63) . The other conditions included in this list were ; deterioration of mental health issues [psychosis] (10) , relapse of mental health issues [psychosis] (20), relapse of mental health issues [neurosis] (46) , depression (50) , deterioration of mental health issues [neurosis] (58) and chronic medical illness (60) in succeeding frequency. Nikunj (2019) said along with the social and economic losses, the individuals and communities experience a mental instability which might precipitate Post Traumatic Stress Disorder (PTSD), Anxiety and Depression in the population. Generally, the disasters are measured by the cost of social and economic damage, but there is no comparison to the emotional sufferings a person undergoes post-disaster. According to Emily & Sndro (2013) Studies of post-disaster psychopathology face substantial logistical and methodological challenges owing to the unexpected nature of disasters and the population displacement and service disruption that often follow these events.

Table -3 Show the effectiveness and satisfaction of Psychological intervention on victim and primary care giver of a child's in relief camps .

Questions	Yes (%)	N(%)
Do you think confidentiality was protected throughout the session ?	184(71.87)	72(28.12)
Do you think whether time allotted for the therapy was adequate ?	220(85.93)	36(14.06)
Whether therapist involved you to make a solution for your problem ?	196(76.56)	60(23.43)
Do you felt significant improvement in your/ your child's mental health status through the sessions ?	240(93.75)	16(6.25)
Are you / your child is confident enough to follow the recommendation suggested by the therapist ?	230(89.84)	26(10.15)
After each session do you felt better ?	250(97.65)	6(2.34)

To find out the effectiveness and satisfaction of the psychological intervention in victims and primary care giver of a child certain questions were asked to them. Most of them answered in positive aspect.

71.87% felt that their confidentiality was protected throughout the session and 28.12% were felt it was not protected. Most of the participants (5.93%) were satisfied with the time allotted for the therapy but some felt (14.06%) time allotted for the therapy was not adequate. Majority of them agreed that they have taken a part in finding out solution for their problem with the help of therapist but 23.43 % of the total samples said they have not taken any part in it. 93.75% participants felt significant improvement in their or their child's mental health status through this psychological interventions, and least of them (6.25%) reported with no any improvement. 89.84% were confident enough to follow the recommendation suggested by the therapist .most of them (97.65%) agreed that after each session they felt better, only 2.34% disagreed. Non-specific community based interventions plays major role in fostering the healing process. hese non-specific interventions not only help the high-risk population but also the affected disaster general population.(Suresh et al , 2015)

Table 4 shows the competence and satisfaction of therapist

	Clinical psychologist		Psychologist	
	Yes (%)	No (%)	Yes(%)	No (%)
Are you confident in your competence while administering psychological interventions to disaster victims ?	13(86.66)	2(13.3)	25(62.5)	15(37.5)
Are you comfort while administering Psychotherapy in Community settings and relief camps	10(66.66)	5(33.33)	20(50)	20(50)
Do you think your intervention was effective in relief camps	15(100)	0	35(87.5)	5(12.5)
Are you satisfied in your intervention that applied on Community settings and relief camps	13(86.66)	2(13.3)	25(62.5)	15(37.5)
Do you have interest to improve your skill for administering psychological intervention to disaster victims ?	15(100)	0	40(100)	0

To assess the competence and satisfaction of the therapist after the session researcher has put forward some questions to them. The first question was regarding the competence while administering psychological intervention to the disaster victims. For this question 13 clinical psychologist were answered yes and only 2 has told they were not and among psychologist 25 said yes to that questions and 15 were replied that they not enough competent for applying therapy to the disaster victims.

10 out of 15 clinical psychologists reported that they were in their comfort zone while doing the therapy but 5 said they were disturbed, and in psychologist team only half of them felt comfort while administering the intervention.

All clinical psychologists agrees that their interventions were effective in relief camps, and 35 psychologist also agrees with same, but 5 were not sure about its effectiveness.

Even though all clinical psychologist approved psychological interventions were effective, 2 were not fully satisfied with the intervention administered on community setting and relief camps. 25 psychologist said that they were satisfied with the intervention but 15 denied.

All therapist involved in the trial opined that they were interested to improve their skills for administering psychological intervention to the disaster victims.

Many mental health professionals have poor understanding of their role in a disaster response team. They are neither part of a pre-existing or post- disaster response team. They have to play a multi-dimensional role from educating, training, negotiating, administrative, fund raising, collaborative, skill transferring, treating, advocating and rehabilitating

VI. CONCLUSION

Various studies conducted over the topic disaster , its impact on mental health and management of it revealed so many mental health issues arise from disaster and many mental health professionals have poor understanding of their role in a disaster response team . But present study says the psychological interventions are effective on disast victims who were having psychological disturbances and also the competence and satisfaction of the therapists who administered the interventions on cases also found good. Even though the therapist team assigned for this trial (15 clinical Psychologist and 40 psychologist) priorly neither a part of pre existing or post disaster response team still we got positive result from trial. This might be due to the training program conducted for them before the trial. All the therapists involved in this study shown interest to improve their skills in disaster management. Thus menta health professionals have to play multi dimensional role from educating , training , negotiating, administrative, fund raising, collaborative , skill transferring , treating , advocating and rehabilitating.

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