



A Qualitative Study Exploring Mental Health Challenges, Coping Strategies, and Social Support Among Flood Victims

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ABSTRACT

Floods, as one of the natural disasters, can lead to significant property loss, disruption of communities, and immense suffering. The recent flood disaster in Pakistan has proven catastrophic, with many structures either washed away or severely damaged, resulting in considerable property loss. Beyond the physical devastation, the psychological impact on the affected individuals is profound; many are struggling with PTSD, depression, anxiety, and other related mental health issues. This investigation aims to identify the challenges faced by flood victims and explore ways to address them. It also seeks to examine strategies that can help individuals cope with the trauma caused by the floods. Data were collected through face-to-face structured interviews with 15 participants—10 males and 5 females—residing in South Punjab's Dera Ghazi Khan (DGK) district. Insights gained from these interviews revealed three major themes and six minor ones. The three primary areas of concern identified were the challenges faced due to the flood, the support systems available to victims, and the coping mechanisms they utilized. The study indicated that the floods contribute to the development of psychological disorders, including PTSD, depression, anxiety, and suicidal thoughts among the affected individuals. Key coping strategies identified included support systems, religious coping, and acceptance, which have all been shown to improve the management of the psychological effects of the disaster for victims. This paper contributes to a limited body of research that focuses on coping mechanisms and mental health factors relevant to flood victims. The study has important implications for policy-makers and higher authorities.

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1. Introduction

During the flood of 2022 in Dera Ghazi Khan (DGK), Pakistan, victims were found to have high degrees of emotional and psychological problems that needed attention. Such problems need to be understood within the context of the setting in which the crisis was taking place in DGK—with its cultural, social, and environmental background. The present qualitative study will explore differences like symptoms reported by victims toward their process of integration and try to probe psychological disorders within the victims. Further, this qualitative study will provide details regarding the way these patients are managing such issues and give insight into the role that a social support system plays in the recovery process. The flood victims had many types of mental health disorders, including PTSD, anxiety, depression, and acute stress. The victims of natural disasters are found to contract several types of psychological disorders even after the disaster has taken place (Kokai et al., 2004), with a particularly high tendency towards depression (Beaudoin, 2007). A meta-analysis conducted by Tang et al. (2014) observed that the prevalence of depression varies sharply among adults and children exposed to natural disasters, from 5.8% to 54.0% among adults and from 7.5% to 44.8% among children. In addition, a meta-analysis of the epidemiological studies carried out among adolescents after hurricanes and similar disasters was also conducted to reflect that one-year prevalence rates for

depression vary between 1.6% and 81% (Wang, Chan, & Ho, 2013). The most researched area of recent years has been social support, which is a valuable resource. According to research, social support can be an important factor in determining how people adjust by promoting health-enhancing behaviors (Cohen, 1985). Communities, families, and friends are expected to support vulnerable individuals so they can better cope with the stress and trauma associated with floods. Besides, Norris et al. (2008) point out that social support can minimize the negative effects of disasters especially if mental and social aid, counseling, and material conditions are available. For instance, Kaniasty and Norris (1993) found out that social support among flood victims regarding their mental health and proper use of coping strategies has a great deal to do with one's connection.

Social support allows the individual to be able to live with their lives and gives an avenue for airing experiences and feelings with others as a means to emotional renewal. It also strengthens interpersonal communication, as indicated by Zhou, Wu and Zhen (2017). This helps survivors in managing traumatic stress by giving the individual a concentration on the traumatic events. This support is an enabling aspect through which the patients are transferred from mere coping to actively processing, assimilation, and preadaptation regarding their traumatic experiences (Carpenter et al., 2010). Through such support, they are facilitated in minimizing the resultant depression. Proper implementation of coping mechanisms can be highly instrumental in building psychosocial resilience and helping in recovery among flood victims. The mechanisms assist individuals in handling and reducing some of the psychological damage that stems from such traumatic events. Coping, therefore, plays a significant role in the post-trauma mental health and overall well-being of flood survivors, particularly those with experience. Religious coping is the major mechanism by which people can cope with stress during disaster times in societies where religion forms the heart of people's life. According to Pargament (2001), multiple religious coping practices such as prayer, meditation, and spiritual rites can be a huge psychological support mechanism for people. It can, in turn, make the community appear more solid for the victims of floods. It provides meaning and direction to the lives of individuals who have suffered the aftermath of a disaster. A very effective coping mechanism to defeat hopelessness. This study is going to be conceptual in the form of how mental health problems are defined through qualitative methods, including interviews and thematic analysis of flood victims. It further attempts to shed some light on the strategies people resort to during difficult times and the role that many peoples' social environment plays in healing and recovery. Therefore, the findings of this study shall be valuable enough to guide critical mental health interventions, policies, and support systems that could be put forward to enhance the resilience and coping of recent flood victims in DGK, Pakistan.

2. Theoretical Background

2.1. Conservation of Resources (COR) Theory

Conservation of Resources (COR) theory, was developed by Hobfoll (1989), and it explains how the flood victims' experiences are worthwhile. The theory states the reasons behind stress and psychological pressure that people suffer when they face loss trauma or cannot get hold of necessary resources despite their best efforts. According to Hobfoll (1989), a person feels under stress when his resources are depleted or destroyed. However, it also underscores that the lack of access to available resources may be mitigated by social ties in the neighborhood and by religious coping mechanisms.

2.2. Social Support Theory

Social Support Theory states that through social support, one can control the stress and trauma caused by a disaster; it is thus supported by many studies (Cohen, 1985). A person gains emotional, instrumental, and informational support from social networks, decreasing the psychological toll of disasters. Such support yields improved psychological recovery and increases his ability to face the traumatic effects of floods (Norris & Kaniasty, 1996).

2.3. Significance of the Study

The current study presents flood victims residing in DGK, Pakistan who were hit by the event in 2022 they have been looked at to identify issues concerning mental health, coping strategies, and support mechanisms. Thereby, fewer identified complaints related to mental health and adequate coping mechanisms have been identified for flood victims in the research process. This research bridges some of these gaps in this domain, therefore giving a background

on strengths and weaknesses to inform more impactful interventions (Hobfoll, 1989; Norris et al., 2008). An assessment of social support networks gives some details about the status of the community, and information important for restoring and rebuilding from disaster (Kaniasty & Norris, 1993; Patel et al., 1999). The findings of this study may assist governments, mental health care organizations, and non-governmental organizations in designing targeted interventions for flood victims. This approach aims to help the affected population become stronger, more resilient, and supportive in the face of future disasters, as suggested by Norris et al. (2008) and Pfefferbaum et al. (2015).

2.4. Research Questions

1. What are the key mental health issues faced by recent flood victims in DGK, Pakistan, following the disaster?
2. How are recent flood victims in DGK, Pakistan, coping with mental health challenges after the floods?
3. What types of social support do recent flood victims in DGK, Pakistan, find helpful?
4. How do cultural, social, and environmental factors influence recent flood victims' mental health outcomes and coping strategies in DGK, Pakistan?

3. Method

3.1. Method Design Overview

This research is guided by several key objectives, leading to the formulation of specific questions. The study aims to explore these questions in depth. Face-to-face semi-structured interviews were conducted with the participant's consent to record the interactions. Data collection occurred from February to March 2023. Fifteen participants were purposefully selected for the study, consisting of ten males and five females aged between 20 and 70.

3.2. Interview guide

This research is guided by several key objectives, leading to the formulation of specific questions. The study aims to explore these questions in depth. Face-to-face semi-structured interviews were conducted with the participant's consent, allowing for the recording of the interactions using mobile devices.

3.3. Ethical Consideration

All ethical considerations, from design to reporting, were thoroughly addressed throughout the research process. Before conducting the interviews, participants were informed about the study's purpose, nature, and scope. They were also aware that the interviews would be audio-recorded and transcribed. Participants were informed of their right to withdraw consent at any stage without facing any repercussions. Throughout the data collection process, we respected the participants and treated their data as confidential.

3.4. Thematic Analysis

For the data analysis of this study, we employed (Braun & Clarke, 2006) approach to thematic analysis of qualitative data. The data was systematically recorded, and themes were developed from the information gathered. The analysis followed the six steps of thematic analysis outlined by Braun and Clarke (2006):

1. Familiarization with the data: This involved reading and re-reading the transcripts to gain a deep understanding of the content.
2. Generating codes: We organized the data meaningfully and systematically to identify key components.
3. Developing themes: Preliminary themes were reviewed modified, and refined after being defined. This systematic approach facilitated a comprehensive understanding of the collected data.

Figure 1: Thematic Flowchart

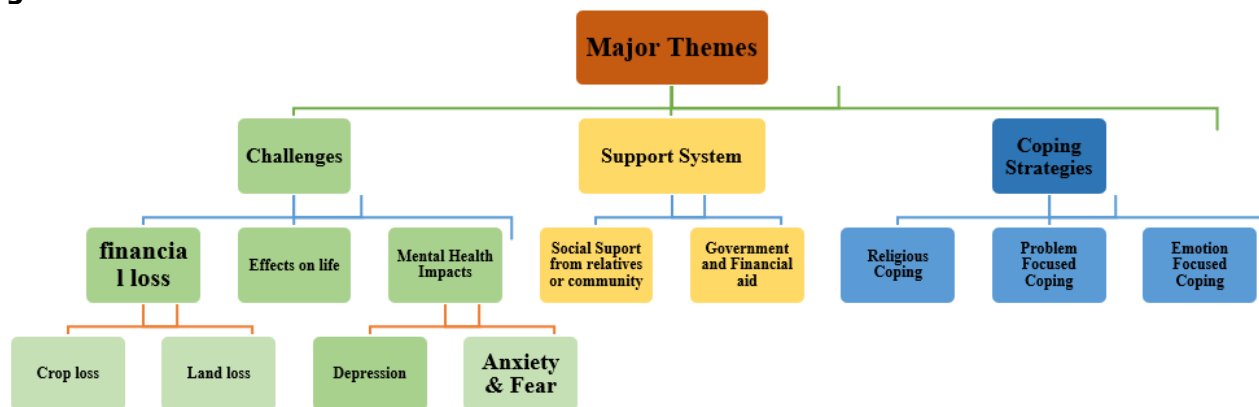


Table 1: Demographic information of Participants (N=15)

Participant	Age	Gender	Education	Area
P1	50 y	Male	No	Basti Wadani District DGK
P2	20 y	Male	No	Basti Wadani District DGK
P3	60 y	Male	No	Basti Wadani District DGK
P4	32 y	Male	No	Basti Wadani District DGK
P5	30 y	Male	No	Basti Wadani District DGK
P6	23 y	Male	No	Basti Wadani District DGK
P7	32 y	Male	No	Basti Wadani District DGK
P8	70 y	Male	No	Basti Wadani District DGK
P9	30 y	Male	No	Basti Wadani District DGK
P10	30 y	Female	No	Mangrotha Tounsa Sharif District DGK
P11	50 y	Female	No	Mangrotha Tounsa Sharif District DGK
P12	23 y	Female	No	Mangrotha Tounsa Sharif District DGK
P13	50 y	Female	No	Mangrotha Tounsa Sharif District DGK
P14	38 y	Female	No	Mangrotha Tounsa Sharif District DGK
P15	70 y	Female	No	Mangrotha Tounsa Sharif District DGK

The table above presents demographic information about 15 respondents, labeled P1 to P15. It includes age, gender, educational background, and geographical area. All participants were illiterate, with ages ranging from 20 to 70 years. Among them, nine were male, and six were female.

Table 2: Themes and sub-themes identified through flood victims

Major-Themes	Sub-themes	Initial-Codes
Challenges	Effects on Life	<ul style="list-style-type: none"> Life disruption Homelessness Forced evacuation
	Financial Loss	<ul style="list-style-type: none"> Loss of agricultural land Damage to property Loss of harvests
	Government Financial Aid	<ul style="list-style-type: none"> Unequal aid distribution Delays in receiving aid Limited to government support
	Mental Health Impacts Anxiety and Fear	<ul style="list-style-type: none"> Fear of future disasters Panic, Sleep disturbances Hypervigilance
	Depression	<ul style="list-style-type: none"> Emotional exhaustion Helplessness Suicidal thoughts Feelings of hopelessness
Support System	Social Support from Relatives/Community	<ul style="list-style-type: none"> Family support Emotional and social support

	Religious Coping	<ul style="list-style-type: none"> • Turning to faith • Praying, Reciting Quran
Coping Strategies	Emotion-focused coping	<ul style="list-style-type: none"> • Trust in Allah • Resilience
	Problem-focused coping	<ul style="list-style-type: none"> • Adjusting to new realities • Moving forward despite challenges

5. Results

The first theme highlights the challenges faced by flood victims. The second theme emphasizes the essential role of support systems. Financial assistance from the Government and social support from friends and family emerged as crucial pillars for survival and recovery during this difficult time. Finally, the third theme focuses on coping strategies, specifically the use of religious coping techniques, emotion-focused coping, and problem-focused coping among the victims. This reflects a reliance on faith and spirituality to overcome their challenges.

5.1. Theme 1- Challenges

The first theme focuses on the challenges individuals face in their lives, highlighting sub-themes such as financial losses due to crop and land devastation, as well as mental health issues like anxiety, depression, and stress. These losses not only affected their livelihoods but also exacerbated mental health concerns, leading to increased feelings of worry, fear, and sadness, which further intensified their trauma.

5.1.1. Effects on life

Participants in the study reported significant losses of land and valuables during the flood, resulting in much of the land becoming unsuitable for crop harvesting. Additionally, many animals were swept away by the floodwaters. Overall, the 2022 floods in DGK have severely impacted daily life, causing considerable economic and psychological hardships.

"We have never experienced such heavy rain and flooding before. The disaster we faced was unlike anything we have ever seen. Look at the 50-foot hole in the ground; this land is now unsuitable for growing crops or building houses," said one participant (P6).

"Due to the flood, we lost everything—food, water, utensils—nothing was left. Even the dowry belongings of my daughters were washed away. When the rains intensified, an announcement was made in the mosque urging everyone to vacate their homes immediately as the floodwaters were approaching. We had no time to gather our belongings and were forced to leave without supplies. We women hurried to escape with the children. The entire area was engulfed in muddy water; people's homes, fields, and shops were all affected," another participant recounted (P11).

5.1.2. Financial Lose

Respondents highlighted the significant loss of land resulting from the recent floods in DGK, Pakistan. They expressed the pain and practical challenges stemming from the devastation of their land, which is vital for their livelihoods (Cutrona, 1990; Morrow, 1999). This loss left them feeling confused and profoundly dislocated (Norris et al., 2008). The destruction included agricultural land and the income it provided, leading to increased poverty and financial hardship.

One participant noted, "Everyone's land was adjacent to each other. I had three Bighas of land; at that time, the price of one Bigha was about 10 to 15 lakhs. As a result, I lost approximately 60 lakhs. My house was also destroyed." (P4).

"We are labor farmers. Our lands, homes, and crops have all been destroyed. The flood affected my animals—including goats, cows, and chickens. I had 2 bighas of land, and at that time, the price for one bigha was about 10 to 15 lakhs, resulting in a total loss of around 40 lakhs." (P5).

"At that time, I had sown cotton on 22 acres and other crops like til on 3 acres. Due to a disease outbreak, I lost 40 lakhs." (P2).

"I had two crops: millet and sesame. Both were nearly ready for harvest. Due to the flood, both will be destroyed, resulting in an estimated loss of about 40 to 50 lakhs. I would have made a significant profit if these crops had been sold." (P6).

5.1.3. Mental Health Challenges

Respondents reported experiencing significant mental health issues, including feelings of anxiety, fear, disturbing sleep, and severe psychological and physical strain, leading to depression. The trauma from the disaster profoundly affected their daily lives, underscoring the critical need for mental health care and coping strategies (Kar & Bastia, 2006; Norris et al., 2008).

"Every time we look at the pit in the ground, our hearts feel heavy as if our breath has been taken away and our spirits are sinking. We used to grow crops on this land. I no longer feel like eating, and I am overwhelmed with anxiety that keeps me awake at night, constantly reminding me of my house, my land, my crops, and the loss of electricity."

"Yes, I feel fear when I think about this accident. For two months, I have relied on tranquilizers and sleeping pills to cope. Life feels like a mountain I must somehow climb. As soon as I fall asleep, those same sounds return: the flood is coming, and it will destroy everything."

5.2. Theme 2- Support System

Flood survivors were devastated, having lost their homes and livelihoods while grappling with poverty and insecurity. However, support from family members, far relatives, and the community has helped them through this difficult time.

5.2.1. Support from Relatives

Neighbors and distant relatives provided essential food, clothing, and shelter. Other bereaved relatives stepped in to help despite their losses, highlighting the community's resilience and solidarity during this challenging period (Hikichi et al., 2016; Norris & Kaniasty, 1996).

"Our neighbors and relatives sheltered us. The intensity of the flood was very low here. Everyone has been incredibly kind. They supported us greatly during this difficult time by providing clothing, food, and other essentials. We are truly thankful for their help. People from two or three organizations also came and provided us with tents, rations, clothing, and some financial assistance" (P4)

"Some individuals came to the affected area and offered us tents, food supplies, bedding, sheets, and money. They also provided us with mattresses. Some of the relatives who came to help were affected by the flood and lost everything they had" (P12).

5.2.2. Lack of Financial Aid from the Government

The inequality in the distribution of government assistance was evident among flood victims in DGK, Pakistan. Some individuals reported receiving no support despite official assessments, while others obtained aid from unauthorized sources. This discrepancy in aid distribution exacerbated the distress of those overlooked in the relief efforts, worsening their challenges in the aftermath of the floods (Hikichi et al., 2016; Kaniasty & Norris, 1993).

One individual stated, "A dozen soldiers came here and recorded our names and ID cards. They had tools and checked the map of this area, saying that we belonged to a different settlement. They couldn't find our location on Google and left without providing us with anything." (P1)

Another person mentioned, "The government requested records. Army personnel came, asked for identity cards, and took pictures, but no aid has arrived yet. However, some people have come here and provided money and food." (P14)

5.3. Theme 3- Coping

Most respondents indicated that religion is crucial in providing support during their experiences with floods. They primarily find comfort by accepting their reality with a heavy heart, praying to Almighty Allah, and engaging in religious activities. This reliance on spirituality helps them cope with the overwhelming challenges the disaster poses and builds their resilience.

5.3.1. Religious Coping

Flood victims in DGK, Pakistan, find solace through religious coping mechanisms. Respondents shared that they gained courage and confidence from prayers and the recitation of the Quran, viewing the disaster as a divine test. During the crisis, they participated in communal religious activities, trusting in divine protection and seeking solidarity through collective prayers to express their faith in Allah's kindness and provision.

One individual stated, "Now I pray and read the Quran regularly. I believe what we endured on flood day was a test from Almighty God. It belonged to no one but the Lord. We read the Holy Book regularly. When it was raining heavily, the village started calling the adhan, followed by a collective plea to Allah Almighty to avert this calamity."

Another respondent reflected, now I feel closer to Allah and believe He will save us from these challenging times.

6. Discussion

The study indicates that victims of the flood in Dera Ghazi Khan (DGK), Pakistan, experienced various psychological issues, including PTSD, anxiety, and depression. These challenges were worsened by the financial and personal impacts they faced (Tang et al., 2014). This finding aligns with research from Beaudoin (2007) and Guo et al. (2017), which suggests that significant losses in both human lives and material resources are major contributors to psychological challenges such as depression and anxiety. Evidence points to traumatic events and their prolonged nature as predictors of increasing depression severity over time, consistent with the findings of Tracy et al. (2014). The current study highlights the importance of family and community support groups in the psychological recovery of victims. In addition to providing emotional support, such assistance helps alleviate symptoms of depression and can even offer material aid. These findings support the social support deterioration deterrence model proposed by Norris and Kaniasty (1996), which states that maintaining strong social support networks is the most effective way to prevent or reduce psychological distress following disasters. The current study revealed that community and family-centered support significantly contributed to psychological recovery. This perspective differs from the existing literature, which often emphasizes individual coping strategies in response to disaster consequences. For instance, Norris et al. (2008) noted that while social support is central to disaster relief and recovery, there is a disproportionate focus on individual psychotherapy and formal mental health services. A notable example is the response to the 2011 earthquake and subsequent tsunami in Japan, where the secular nation prioritized support from government agencies and NGOs over family and community support. The study further emphasized the role of coping during disasters. The participants confirmed the findings by utilizing religious coping strategies and viewing their challenging circumstances as a test from Almighty God. This aligns with Pargament (2001) assertion that religion is vital in disaster coping. Our results diverge from global literature, which often promotes structured psychological interventions post-disaster. In contrast, our participants did not receive formal interventions; instead, they coped by accepting their situation and seeking support from close friends. This underscores a cultural difference in adaptive strategies. The differences observed may be linked to each region's religious and cultural characteristics. Exploring the coping mechanisms utilized in various areas is crucial to identify the most effective strategies. These findings suggest that addressing post-disaster mental health cannot adopt a one-size-fits-all approach. The effectiveness of coping mechanisms and interventions can vary significantly depending on cultural, social, and individual factors. Therefore, Indigenous studies should concentrate on understanding communities' specific challenges, enabling relevant actions for improvement.

6.1. Limitations

The study is confined to flood victims in specific communities of Pakistan. Therefore, the findings may not be generalized for regions with diverse socio-economic settings or cultural environments. Furthermore, the sample size of 15 participants is quite small and does not

represent the varied experiences and coping mechanisms of flood victims in huge populations. Besides, self-reported data may be more vulnerable to recall and social desirability biases than reported data. Therefore, the validity of the mental health conditions reported and coping strategies may be compromised in such a way.

6.2. Suggestions

There should be a longitudinal study with regard to the tracing of difficulties, coping measures, and aid mechanisms by those who suffer due to a calamity. Generalization concerns of this sort are best answered using a mixed methodology by quantitatively gauging mental problems in affected communities.

7. Conclusion

The present study probed the specific challenges that flood victims face in certain areas of Pakistan. It may be mentioned that the results coincide with the literature available from such areas. The role of religion in coping with disasters might require further exploration. In general, the present study points out the necessity of culturally appropriate interventions that can address both psychological and spiritual needs in the community across the country that are affected by natural disasters.

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