

# Emergency Preparedness Issues in Context of Pakistan

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## Abstract

Pakistan is under the exposure of numerous forms of natural and manmade disasters. The Inborn range of disasters extended from earthquakes, floods, droughts, cyclones, landslides, and including sea-level hazards. The relief and response replica for the sake of coping with disasters is our reactive response towards such disasters. Planning is the theme of whole preparedness exercise and for that commitment and resources are relatively assured. This paper highlight that preparation reduces the impacts of a disaster including fear, anxiety and losses that emerged by any disasters. Natural and man-induced disaster increases susceptibility of any community, society, and social setup through direct and indirect impacts. The paper indicates the drawbacks and danger signs of various types of disasters. Pakistan pre-post disaster preparedness planning's have a passive impression. This paper conclusion highlights the need for implementation of such preparedness to save the humanity. For Pakistan, an urge to spread the awareness on every ground in case of emergency, be ready to evacuate your home, and how to treat basic medical problems must be known. It must emphasis on the object, to make ensure people about the usage of disaster insurance in special types like flood insurance. In preparedness planning, its implementation and control over it, government plays a pivotal role. Collaboration and coordination has a great importance during disasters with people and agencies. It helps to make cooperative nexus among organization, government and international support. Different kind of disaster experience by Pakistani community becomes a source of, emotional, economic, social disturbances. Secondary Disasters make the society, community and at last country poorer if the recovery actions will not be taking on immediate time. According to preparedness, Recovery takes time for better results and its overall effects are long lasting.

## Keywords

Preparedness, Disasters, Planning, Awareness, Response and Recovery, Secondary Disasters

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## 1. Introduction

A Country, Tribes, and child welfare agency is complex for developing and implementing emergency response plans process. Comprehensive disaster preparedness plans emphasis on the resources building is very helpful, to protect humanity and decrease vulnerabilities, through developing and responding emergencies quickly and effectively [1]. Fig.1 shows the organized ways of resources are as:

- Preparedness (pre-disaster),

- Response (during-disaster)

- Recovery (post-disaster).

In Pakistan DM managers consider strategies for disasters responses through taking such steps to improve serves systems. According to fig.1 here are some steps:

- Coping and Strengthening Systems With Disasters
- Disaster Preparedness Resource Guide

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- Resources and Tools: Emergency Planning Guide
- Pakistan is still Unprepared to Protect its people/assets
- Passive Disaster Technical Assistance Center
- In Disaster and Non-disaster Situations role of the first responders
- Disasters and Emergencies: Departments of the Health and Human Services of Pakistan



Fig. 1. Organized ways of Resources

### 1.1. Disasters Preparedness and Recovery

A fear, anxiety and losses caused by disasters, is reduced by Preparing for a disaster. The risks and danger signs of different type's pre-post disasters necessary to be know. Disaster preparedness and recovery workshops, training sessions disseminate knowledge about how to keep oneself ready to evacuate your home, how to treat in basic medical problems. To promote the insurance facility, including special types, like flood insurance [2].

It is not necessary that what kind of disaster is going to be strike. Such disasters that cause emotional disturbances is a serious threat which emerged in the form of secondary disaster. There is an urge to understand the impacts of such secondary disasters. After a post-disaster, recovery is a time taking procedure but its effects is long lasting. As In the policy note of World Bank ,Mehtab found that recommendations as established by the policy note, showed, that at federal, provincial and district levels there is no clear consortium between city emergency centers' and current disaster management structures [3,4]. Therefore it is failed to ensure timely response in any natural disasters. Including that, in 2014 Heavy rains, in different parts of the country resulted the death of more than 50 lives. According to the WB policy note study, in disaster risk management, functions of relevant departments is lacking on both sides of coordination and clarity of roles and responsibilities.

In that context, World Bank demands from the government of Pakistan to take out a national rapid risk assessment with by means of accessible data and tools. Note clearly indicated ,about the need for collecting disaster risk information in future just to ensure systematic methods are in place [5]. Pakistan is under the hit of increasing such disasters:

### 1.2. Bio-Defense and Bio-Terrorism

The illness or death caused by unintentional discharge of viruses, bacteria's, or germs is called bioterrorism. Such forms of germs often exist in nature. By increasing their ability sometimes can be more harmful, for disease, spread, or resist medical treatment. The agent's spreads through the air, water, or in food are basically biological agents. These agents are difficult to detect and can spread from person to person. These agents not causing illness for several hours or days in affected person but scientists worry such diseases could be used as biological agents, Like "(anthrax, botulism, Ebola and other hemorrhagic fever viruses, plague, or smallpox)". A medical measure to protect people against bioterrorism is known as Bio-defense mechanism, includes medicines and vaccinations. Defend against bioterrorist attack includes medical research and preparations too [6].

### 1.3. Chemical Emergencies

Chemical, from last two decades become more dangerous and hazardous threat, not only affects the human live but also affecting environmental conditions rapidly. Chemical releases are of an industrial accident. There are lots of shapes through which chemicals utilization is going on such as:

- In the case of a terrorist attack with a chemical weapon.
- Some developed by military organizations for use in warfare e.g. nerve agents such as sarin (an organ phosphorus nerve gas produced in II world war) and VX (extremely toxic substance).
- In industry, a huge amount of hazardous chemicals are used e.g. chlorine, ammonia, and benzene.
- Some used in household cleaners.

Disasters are sudden and no guarantee of safety during a chemical emergency, except a need to protect owns life in such situations. For such phases there is a need of practical disaster preparedness plan. It helps to reduce fear, anxiety, and losses.

### 1.4. Earthquakes

Whenever two tectonic plates of the earth suddenly slip or strike sideways and down ways then an earthquake take

place. Day or Night at any time, Earthquakes strike suddenly, violently, and without warning. Populated dense area is more vulnerable towards that disaster as far in concern may cause property damage, injuries, and even deaths. On the other hand living in a coastal area, increase the possibility of a tsunami more. Finally result of earthquakes in developed and developing countries lead to floods or fires. Its affects vary from area to area.

Although this disaster provides a less prepared time otherwise no guarantees of safety during an earthquake. A disaster preparedness plan is used to overcome future losses through involving in some strategic mitigation activities at national and local level. Preparedness in terms of recovery can help reduce fear, anxiety and losses [7].

### 1.5. Floods

In the Pakistan floods are common. Weather such as deforestation, heavy rain, landslide, climate change causes flooding. A river or stream when overflows from its banks it turns into Flood. As far as in concern of levee when it is breached, or a dam when it breaks cause assign of flood. A hazardous wall of thunderous water, barrage having rocks, sludge, and wreckage and remove away most belongings in its passageway, is a form of flash floods. Pakistan needs a preparedness of those specific areas:

- Low-lying region
- in the neighborhood of water
- Downstream from barrier (Dam)

### 1.6. Tsunamis

Huge water waves' series created by the disturbance of underwater is tsunami. Its major reasons include shaking, landslide, volcanic eruptions, or meteorites--chunks of rock from space that strike the surface of Earth. The movement of tsunami in the open ocean is hundreds of miles per hour [8]. Its waves high as 100 feet or more and sign of shocking floods. The common cause of death is drowning.

### 1.7. Volcanoes

It's the movement of Earth's outer layer, blistering sway, mist, toxic gases, and cinders. It appears on the Earth's face as form of volcano erupts. Earthquakes, mudflows and burst floods, sway falls and landslides, acidic rain, fires, and yet tsunamis caused by an eruption. The extreme effect of volcanic eruption is excretion of harmful gases and cinders, it smash up the lungs of small infants, elder adults, and citizens with brutal respiratory illnesses. The cinders of volcanoes are able to affects majority of citizens hundreds of miles away commencing the eruption.

## 2. Coping with Disasters

During and after disasters some kind of dazed or even numb conditions are faced by the affected people. Therefore it indulged into the sad, helpless, or anxious phases. A refreshing feeling that people felt after disaster that they are alive after facing a very traumatic and pathetic tragedy. The various ways to deal with disasters are [9].

### 2.1. First Aid

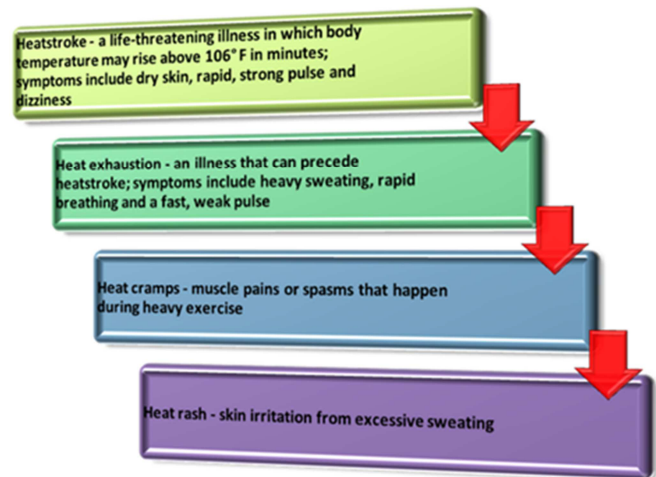


Fig. 2. Heat-related illnesses

The true meaning of first aid is to in the making for help to get there; it will be capable to put aside someone's life.

- life-threatening emergencies
- Cardiopulmonary recovery (CPR) is for community whose hearts or breathing has congested
- Heimlich plan is for community who are harsh
- Be trained to hold ordinary injuries and wounds e.g. should be washed with fresh water. For bring to a close bleeding, be appropriate firm but kind pressure, by means of gauze. If blood soaks all the way through, put in more gauze, maintenance the first layer in position. Go on with appropriate force.
- To contain a first aid things accessible. Stay put it both at house and in automobile too along with a first-aid booklet.
- Understand the booklet and be trained how to make use of the objects, so be prepared during an emergency.

### 2.2. Heat Illness

Sweating is the important mechanism of human body through which the body cools itself. In hot weather, presence of high humidity, sweating is not just enough. Fig. 2 shows heat related illnesses and the reasons of these heat illnesses are:

- body warmth as go up to risky levels that increase a heat

up illness

- Staying out in the heat too long cause heat illnesses
- Excessively Exercising in favor of age and bodily circumstance be major factor
- Most at risk such as older adults, young children and those who are sick or overweight

To prevent from dehydration drinking fluids, restore salt and minerals and limiting time in the heat can help [10].

### 2.3. Disorder of Post-Traumatic Stress

An incident of conflict, a typhoon, sexual harassment, sense of insecurity or a terrible mishap and any kind of disaster can affects the patients in such illness. It is experiencing by living and facing such traumatic event and gets PTSD. It makes the individual to experience under the harassed and frightened following the threat. Directly influences the lives of group of people in surrounding. Fig.3 is the best expression of secondary disaster psychological illnesses. Among 73 nations from 1980-2002, the annual deaths from disasters data showed shocking results. Purpose of concerning with natural disasters measures, paper tests more than a few hypothesis on destructive strengths to mitigate. According to work of Mathew, showed that there is a very clear aspect about richer and poor nations, both facing disasters of same intensities but richer face less suffering instead of poor. Under the preparedness concept, here is a positive forward step towards insurance against disasters and natures shocks in economic development perspective. Due to disaster preparedness planning, governments and nations with higher-quality projects experience less death and other impacts from disaster [11]. The reason is that frequency of natural disasters increases due to climate change such as floods; a major triggering fact is global warming. CDPM (center for disaster preparedness & management) for different people commences by the side of different time. Cipher of CDPM may begin almost immediately following a alarming event and after that continue. CDPM can available to anyone, even children. Medical assistance works in such fields like Treatments e.g. talk therapies and medicines. Its Treatment is 6 to 12 weeks period based.

In favor of a few kind of group of people, time duration is long .e.g. Post-traumatic stress disorder, Traumatic events, Traumatic events and children, Stress, Veterans and Military Health, Mental Health and Behavior. M.ZAIDI study showed “*National Disaster Response Plan (NDRP)* seeks to improve the country’s aptitude to manage with all feasible disasters”. According to his views the corresponding response mechanisms and procedures could be worked out if the nationwide approach for disaster administration in Pakistan should be classifies in small, middle and extensive natural

and synthetic disasters in the realm. It also illustrates that disaster supervision authorities at the central, regional and locality levels it provides operational direction to structures and mechanisms.

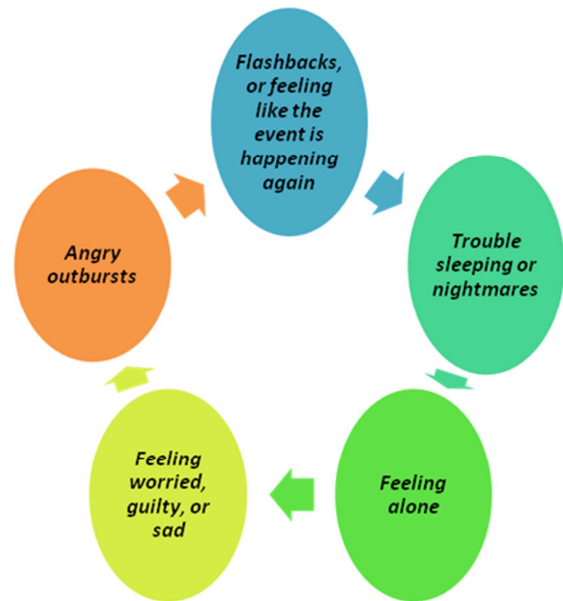


Fig. 3. Pre-Post Secondary Disasters Results Psychological Illness (PTSD)

At the local, provincial and national levels, plan touched all aspects of Emergencies be evidently define, accordingly by way of procedure of clarifying every point of urgent situation and reaction mechanisms including procedures. NDRP is

- Coverage disasters,
- Provide assessments
- Creating recommendations to the prime minister
- Chief ministers intended for aid operations

Sunlight is the big source of Radiation and it is a type of energy. Everyday People are exposed to small amounts of radiation. At this radiation emergency, preparedness should involve at micro and macro level. The Figure shows the human induced radiators. Clear the increasing aspects of secondary disasters. Burns or radiation sickness is caused by a lot of radiation over a short period. A premature aging or even death is caused by the large exposure. During a radiation emergency, no guarantee of safety is given. Results of secondary disasters are very pathetic as in Fig.5.

Health and safety challenges are closely related extreme changes in weather. You may have to cope with

- Frostbite and hypothermia are cold related health problems,
- From space heaters and fireplaces convert harmful carbon monoxide



- On icy roads Unsafe driving conditions
- Failures of power
- After snow and ice melt immense floods



Fig. 4. human-induced radiators enhances the effects of secondary disasters

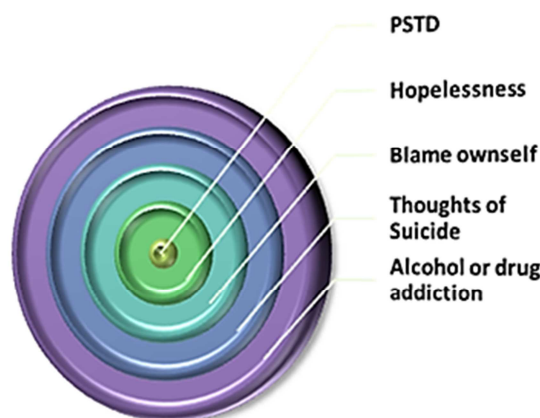


Fig. 5. Reactions Emerged in a Psychological Result of Secondary Disasters

### 3. Conclusion

As far as Pakistan concern, it is concluded that every department of emergency preparedness, response and recovery have fully plans but they are not adequately implemented. These plans are not fulfilling the requirements of pre-post disaster threats that adequately affects on both grounds of destruction. Pakistan has approximately largest population in the world and got a sixth rank due to population density. It has nearly one of only over fifteen countries to have an older population of over 10 million. So it has the vulnerability ratio in that sense is much more regarding pre-post disaster threats. Pakistan have a proper institutional system but the working of that institutions affiliated with disaster management activities is very slow. The triggering effects of speed up the working proficiency of these institutions are the training on technical grounds and finance.

Disaster preparedness educations also introduced at micro and macro level through establishing education curriculum. It makes the preparedness plan effective on every ground of country. The concern is about to increase disaster risk reduction and improve the livelihood of poorer and poor

people in pre-post disasters. There is a need to ensure better emergency planning and emergency response. On such disaster related issues continue to provide evidences and research for better preparedness. Need to raise awareness that will overcome vulnerability and the damages in disaster phase due to timely preparedness.

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