

MIDLANDS STATE UNIVERSITY



FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

**IMPACTS OF FLOODING ON THE LIVES OF THE ELDERLY PEOPLE AND
THEIR COPING STRATEGIES IN TOKWE MUKOSI**

BY

MOREBLESSING S. MANDIPAZA

R114288T

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SUPERVISOR: MRS J. MUTAMBARA

APPROVAL FORM

FACULTY OF SOCIAL SCIENCES

The undersigned certify that they have read and recommended to Midlands State University for acceptance of a dissertation entitled:

Impacts of flooding on the lives of the elderly people and their coping strategies in Tokwe Mukosi.

Submitted by Moreblessing Mandipaza **.Registration Number** R114288T, in partial fulfilment of the requirements of the Bachelor of Science Honours Degree in Psychology.

SUPERVISOR:

CHAIRPERSON:

EXTERNAL SUPERVISOR:

DATE:.....

MIDLANDS STATE UNIVERSITY

RELEASE FORM

NAME OF AUTHOR: MOREBLESSING MANDIPAZA

TITLE OF DISSERTATION: IMPACTS OF FLOODING ON THE LIVES OF THE ELDERLY PEOPLE AND THEIR COPING STRATEGIES IN TOKWE MUKOSI.

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Signed:

Address: 3710 Highlands

Zvishavane

Phone 0775397973

Date: April 2015

DECLARATION

I Moreblessing Mandipaza hereby signs and declares that I am the writer of this dissertation and that this dissertation has never been put before or submitted in any academic institution before by me or anyone else for a degree or any other related achievements

Signature

Date signed

DEDICATION

To all my family members, for their endless support from the beginning till the end and to all Tokwe Mukosi flood victims.

ABSTRACT

The research was concerned on investigating on the impacts of flooding on the lives of the elderly people who have been affected by the Tokwe Mukosi floods and their coping strategies in Masvingo Province. Quite a number of researches had focused on the impacts of floods on people, but little research has been seen focusing on the older adults. The research used a phenomenological research design to find out on the impacts of the flooding on the elderly adults and their coping strategies. Snowball sampling was used to select the number of participants and face to face interviews were done. The results of the study revealed psychological impacts such as anger and frustration, self- esteem and stress affecting the elderly subjects. Social impacts found include loss of crops and livestock, property damage, poor sanitation and health facilities and total change of life. The coping strategies found were slaughtering and selling livestock, going to church and seeking help from other organisations. The researcher concluded that flooding has quite a number of negative impacts on people's lives, particularly, the elderly ones. These impacts are seen as the elderly are left helpless as they lose almost all their life achievements which range from property, livestock and crops. However, the research found out that although they tried to cope with the flooding, the coping strategies were short lived as they could not last for long. The researcher recommended that disaster preparedness is always advisable and should also cover rural areas. Other recommendations include that counselling should be provided to the elderly victims for them to be able to cope with disasters like floods and that the elderly people should be grouped on their own and be separated from other age groups in case of a disasters as they need more attention due to their age than other age groups who are still able bodied.

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CHAPTER ONE

INTRODUCTION

1.1. Introduction

This chapter focuses on the background of the study, statement of the problem, purpose of study, research questions and significance of study, delimitations and limitations of the study. These aspects were clearly revealed in this chapter.

1.2. Background of study

The occurrence and intensity of flooding events has been greater than before around the globe (Afro, 2009). This has caused vast threats resulting in prevalent community distraction and movement, financial losses, damage to possessions, deep emotional distress to humans, creatures and normal setting. Though it is known that the existence of mishaps seem not to disturb individuals in society in the same way, Buckle (1998-9) showed that the elderly also signify a substantial percentage of those who suffer the overwhelming consequences of these mishaps like flooding. This research thus is an effort to reveal the plight suffered by the elderly people during the Tokwe- Mukosi flooding in which took place earlier this year in Zimbabwe.

Zimbabwe is among the countries that have been affected by disasters. Flooding has been an issue for concern as it has caused a lot of misfortunes in the living of people, particularly the rural ones. This has driven the researcher to centre on the extent of flooding that has taken place at Tokwe- Mukosi and the extent of its effects, mostly on the elderly population.

The core of this study was on individuals who stay in villages along the Tokwe-Mukosi basin in the Chivi district, Masvingo province, who now moved to Chingwizi camp. The area received extreme rain, thus 850mm which is higher and over double the usual 400mm which was received for the past years, which was combined by overflow of water from the partial breakdown of the dam wall of Tokwe- Mukosi dam this year. In 2013, water level was 660 meters above sea level. However, this year water level exceeded the 660 meter level and stands on 677meters, which resulted in floods. The area is semi-arid and falls in Zimbabwe's

agricultural regions 4 and 5. Due to this semi-aridness, the area is predisposed to drought. According to New Zimbabwe (15 February 2014), Tokwe Mukosi dam was being built to improve the drought-resistance in the region, which typically receives poor rainfall.

Chivi region typically received poor rains, but in early 2014 the area received severe rains. According to the Chairperson of the Chivi Civil Protection Department, the rains were too much as compared to the previous three years as the area used to receive less than 400 mm of rain per season, which shows that this year the area received excessive rainfall, over double the normal which resulted in 850mm of rain (The Herald, 15 February 2014). This particularly resulted in flooding in this area of research.

This excessive rainfall had adverse effects on the crops, livestock, houses and social networks (Saviours, 2014). The communities all lost their crops as they were entirely water-logged by the floods. The people also lost most of their livestock like goats, sheep and cattle due to the floods. These floods left the villagers with no option than to move away from their ancestral homeland to nearest district of Mwenezi as the floods had left their homes uninhabitable. Thus, these migrations unfavourably impacted on the social capital of the affected individuals.

The substantial rains and consequent floods badly affected twelve villages, explicitly Chekai, Jahwa, Zifunzi, Mharadzano, Chikandigwa and Vhomo in Nemauzhe communal lands; and Tagwirei, Ndove, Matandizvo, Chikosi, Mashenjere and Nongera in Neruvanga communal lands (The Herald, 15 February, 2014). Agriculture was the main livelihood of the inhabitants in the two communal areas of Nemauzhe and Neruvanga. Hence, it can also be claimed that it was their main source of living. Given the magnitude of the danger of widespread flooding, the government of Zimbabwe has stated the flooding in Tokwe –Mukosi a national disaster on the 9th of February 2014, (UNICEF Zimbabwe Co situation Report #2).

Chingwizi transit camp is sited in Masvingo province in Nuanetsi Ranch, 200km South East Masvingo town. This is where individuals who were affected by the flooding are presently living and among them are the elderly people. Being among the helpless group was further worsened taking note of their age, gender and family situation, this all attributed to the extent of their suffering at this camp.

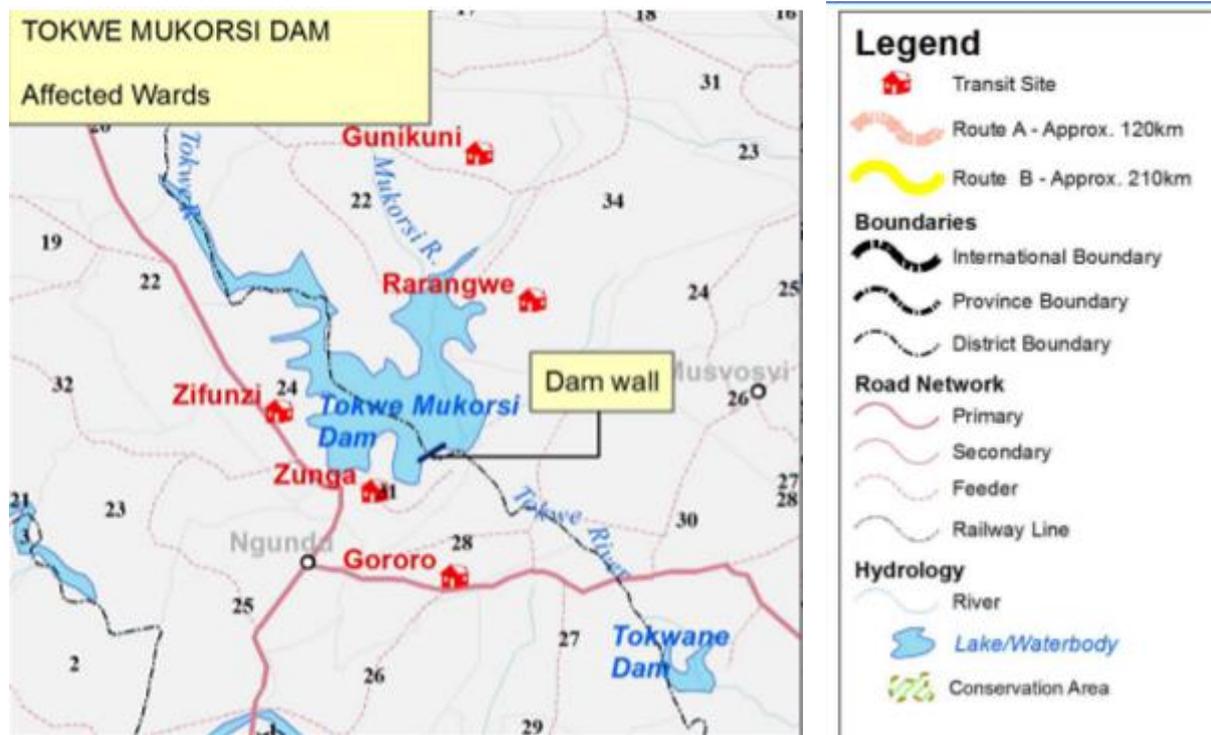
Chingwizi camp is a tough setting, where there are over 3000 families in a very small space and it's a very hot and humid place. Each family was given one tent which fits six to eight people irrespective of the number of the individuals in the family. These are very challenging living environments for these families. Water and health issues are the main problems at the camp. Access to food and water is also tough although some local and international NGOs have come together to provide assistance.

Research reveals that the elderly population are mostly affected by disasters such as floods which affected the Tokwe Mukosi area. Tapsell et al (2002) reveals that elderly adults are more prone to the effects of flooding than the other age groups mainly due to their age. Elderly people experiencing psychological difficulties face problems in trying to cope with the stress of flooding (Ramsbottom et al. 2003).

Most of the people who lost their lives in hurricane Katrina were over the age of sixty five (65) and older (Wethington, 2013). Elder adults are usually the most affected group because they are more prone to environmental pollutants due to flooding, thus they are the most affected population during a disaster. Most of the people who died in the Hurricane Katrina were stuck in their houses, had heart attacks and some were drowned. Research also found out that the elderly usually suffer physical problems during a disaster as compared to other population. Older individuals were also 65% of the Japanese tsunami and were over half of the victims in Hurricane Sandy (Campell, 2015), which shows that they are mostly affected by disasters.

Disaster researchers often classify older people as a 'vulnerable' group in disasters such as floods. However, as has been highlighted by many scholars like Fernandez et al, (2002) and Smith et al, (2009) that it is not advancing age alone that makes older people vulnerable. The vulnerabilities of older people are generally due to factors associated with the advancing age, such as 'impaired physical mobility, diminished sensory awareness, pre-existing health conditions, and social and economic constraints' (Fernandez et al, 2002). Older people are considered to be vulnerable to emergency events, from the preparation phase, through the response, and into the recovery phase. Thus the elderly population are the centre of this research and the aim is to find out on the extent of the problems caused by the Tokwe Mukosi floods on this group of people. How has their lives changed as a result of the floods? What type of problems or challenges has they faced due to the floods? What coping strategies have they turned in trying to alleviate their problems?

Map of the affected area



Source:UNOCHA (2014)

1.3. Statement of the Problem

Floods have various impacts on people. Flooding in Tokwe Mukosi had various impacts on individuals, particularly the elderly people. This flooding left the elderly people traumatised and it disturbed their psychological well-being. Their culture was also disturbed due to displacement. This motivated the researcher to carry out this research to reveal the impacts of the flooding, particularly on the elderly people and their coping strategies.

1.4. Purpose of Study

- To examine the extent of psychological damage caused by the floods on the elderly people.
- To identify how the social lives of the elderly people have been affected by the flooding.
- To identify the coping strategies used by the elderly due to the flooding.

1.5. Research Questions

This research was guided by the following research questions:

- What are the psychological effects of flooding on elderly people in Tokwe Mukosi?
- What are the social effects of flooding on elderly people in Tokwe Mukosi?
- What are the coping strategies used by elderly people to cope with the effects of flooding in Tokwe Mukosi?

1.6. Significance of Study

This research may be of benefit to quite a number of groups. These groups include the academia or the academic world, the community and the elderly population.

1.6.1. Academic world

The study is vital to the academic world because it equip on the required information concerning disaster and disaster mitigation in Zimbabwe. It may give relevant information concerning what to do and what elderly people need during and aftermath of a flooding situation. Thus this study may be very helpful to the academic world.

1.6.2. The community

This research may be of great importance to the community as a whole as it will equip them on how to help people who have been affected by disasters. This study might also help in the formulation of effective policies, disaster management system by the government and other relevant stakeholders.

1.6.3. The elderly people

This study may be of great importance to the elderly people as it will help them to identify the challenges they may face during a disaster and after a disaster has occurred. It may also help them how to manage the problems that has been caused by the disaster such as the flooding. Thus this research may be of significance to the elderly population.

1.7. Assumptions

Reasons for failure to participate in this project may be the participants' fear of revealing what they know, rules at Chingwizi which may hinder the researcher's progress and

achievements. Participants may also tell the researcher what they think she wants to know rather than the truth. The participants' age may also be a limiting factor in that they are now older and may not be able to say some of the things that are crucial to the research.

1.8. Delimitation

- The study was carried out at Chingwizi camp where the Tokwe- Mukosi flood victims were temporarily living.
- Age of the participants was 60 years and above.

1.9. Limitations

Some individuals may not give honest responses as they may feel they are being forced to give information that is meant for other purposes rather than studies. Some elderly people may be too emotional to tell their stories as they may have lost almost all their life achievements due to the floods. Rules at Chingwizi camp may hinder the researcher's progress as the researcher may not be able to interview some of the people. The age of the participants may also be a limiting factor on the research as it needs some time for them to explain a point and their experiences.

1.10. Definition of Terms

Elderly

According to United Nations, old age starts and the age of sixty and above (60+). Being elderly can be defined as being past middle age and approaching old age. The research focused on older people ranging from the age of 60 years and above.

Flooding

An overflow of a large amount of water beyond its normal limits, especially over what is normally dry land. Flooding can also be defined as a general and temporary condition of partial or complete, inundation of normally dry land areas from overflow or tidal waters from the unusual and rapid accumulation or runoff of surface from any source.

Psychological

It refers to issues relating to the mind. It also includes issues that have to do with the well-being of the individual and their thinking processes. According to the Oxford dictionary, psychological also has to do with issues affecting, or arising in the mind thus related to the mental and emotional state of a person or individual. Psychological in this study means how the well-being and daily living of the elderly was affected by the floods.

Social

According to the Oxford dictionary, social refers to issues relating to society. Words also related to the word social include communal, community, community-based or collective. It is also defined as having to do with human beings living together as a group in a situation in which their dealings with one another affect their common welfare, thus it relates to, or is occupied with matters affecting human welfare. According to this study, social means the elderly's relations and their normal living.

Coping strategies

Coping strategies are behaviours that help people to function better in given situations. Coping may also refer to the thoughts and actions people use to deal with stress. Coping measures are generally used to assess the mediating behaviour between a stressor and the physical or psychological outcome of an individual (Roth and Cohen, 1986). Coping strategies according to this study means efforts to try to reduce the impact of something.

1.11. Chapter summary

This chapter focused on the background of the research, statement of the problem, research questions, and purpose of study, significance of study, assumptions, limitations, delimitations and the definition of key terms. These were clearly discussed and mentioned in this chapter.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This chapter focuses on the related previous related literature of the study. It reveals the previous literature concerning the social impact of flooding on elderly people, the psychological impacts, their coping strategies, effects of flooding on elderly people's well-being, classification of floods and areas that have also been affected by floods in Zimbabwe.

2.2. Flooding classification

Flooding can be defined as a general and temporary condition of partial or complete, inundation of normally dry land areas from overflow of inland or tidal waters from the unusual and rapid accumulation or runoff of surface waters from any source (Water words dictionary, 2000). Floods can be classified into low risk, moderate risk and significant risk flooding (Environmental Agency, 2014). Low risk floods often show that there is one in two hundred per chance of flooding to take place. Flood organization and preparation is important. Moderate risk floods means there are chances of the occurrence of floods in any given year. This usually applies to areas that have experienced flooding before. People need to have a flood plain in place to ensure their safety (Home Protect, 2014). Finally, significant risk flooding is major to areas in which flooding has taken place floods more often than before. People living in these places should have a plan in place as well as looking for resistance and resilience measures (Environmental Agency, 2014).

Floods are also categorized into short- term and seasonal floods (Pyaskovskyi &Pomeranents, 1982). For example, flooding that took place in Caspian Sea that were as a result of the inundation of coastal land due to the water levels in this Sea can be termed to as short term flooding. Another aspect which is important in the classification of floods is the origin of flood waters (Environmental Agency, 2014). Underground water and precipitation can also result in floods. Precipitation in urban areas can also cause rapid and influential floods. Disastrous floods can be from the melting of glacier waters (Environmental Agency, 2014).

2.3. Social effects of flooding on elderly people

Disasters in the last decade have increased in numbers, rate of recurrence as well as their intensity. This also means that their destructive effects have been felt in almost every part of the world including Zimbabwe, hence and the effects are also seen on the elderly population.

Natural disasters affect people in different groups in different ways, but the most usual and common results are hunger and poverty Nyahuye (2000). Social impacts refer to all changes in the way people live, work, related and organise. Communities which are in socially and economically side-lined have greater vulnerability, hence why effective community based disaster management is limited (Bolin and Stanford 1998; Blaikie et al 1994). In Africa, disasters have serious damage to livelihoods, in February 2000 Mozambique was affected by floods. Red Cross Society reported that approximately 44 000 families were affected by floods, and this resulted in many people depending on food aid as their farms and houses were washed away by the floods. This was probably the worst flood Africa had seen in half a century. This information leads to the desire to find out how some of the people were affected by the Tokwe Mukosi floods, particularly the elderly and how they can be helped in case of a disaster.

Financially disadvantaged older people are mostly stuck in a vicious deficiency circle when affected by floods (Walker et al. 2006). They often do not have funds to protect themselves by means of insurances or by means of flood defence materials. In addition, their properties are often of less valuable quality. As a result, they are exposed to more damage than those who have funds to protect their properties (Werrity et al. 2007). After the floods, they are hit mostly because they have to bear all the costs on their own. Due to inadequate financial capitals, recovery is a long term process (Walker et al. 2006) .In relation to social impacts, financially disadvantaged elder people have problems in coping with the damage to property in the first place, which may even cause poverty. The effect of the loss of individual items appears to be complex than for other income groups. They are more disposed to health effects than higher incomes (Werrity et al. 2007), this is because they live in poor quality homes that are not resilient to floods and because that it is mandatory for them to keep on staying in the poor neighbourhood. Mental health effects are greater to low-income families because shortage of finances is an extra concern as well as the other flood impacts (Werrity et al. 2007). Anxiety is a bit high in this group of people because of the stress due to the floods and

the need to leave home. This may also have an impact on family relations, often causing more conflicts. Moving temporarily is often no option for these individuals. (Walker et al. 2006).

Flooding does not affect the economic livelihoods aspects of the people only, it also affect the surroundings which makes disasters complex according to EMA (2012). When the environment is affected it will result in other disaster following, for example after floods stagnant water will be left on the surface and mosquitoes will breed there resulting in malaria outbreak. The 1974 floods in Bangladesh had more effects on health than any other area, deaths as a result of diarrhoea stated were 0.23% of the 3 109 who died (Abrahams et al, 1976). More than 30 000 individuals were evacuated including older people.

The usual instant source of death as a result of floods is sinking, electrocution or other direct injury (Caldin and Murray, 2011). Thirteen people died as a direct outcome of the floods in the summer of 2007 in England (Pitt, 2005). However, while mortality delivers a clear pointer of the instantaneous health effect of floods (Ahern et al, 2005), relatively few people die instantly in developed countries as an outcome of flooding (Fewtrell and Kay, 2008). Deaths which are directly attributable to the physical effect of floods are usually rare in the UK, although Europe has many documented ones, where floods have been severe (Rosenthal et al., 1998; Rosenthal and Bezuyen, 2000). According to Bye and Horner (1998), five deaths were recorded in the 1998 floods in England and Wales. In Scotland (2005), flooding and storm led to five deaths in the Outer Hebrides, and three people lost lives during the severe floods that took place in northern England. Few deaths are mostly recorded in developed countries due to the presence of early warning systems and disaster preparedness.

The societal distraction caused by overflows can extremely weaken the standard of life of people and affect the material of affected populations (Gordon, 2004). Deaths usually attributable to the physical effect of floods are more familiar in Europe, where flooding has stood both deeper and faster-flowing (Rosenthal et al., 1998; Rosenthal and Bezuyen, 2000). Bye and Horner (1998) recorded five deaths of people from the 1998 floods in England and Wales. In Scotland, the 2005 rainstorm and floods resulted in five deaths in Outer Hebrides, and three deaths during excessive floods that happened in northern England (Johkman and Kelman, 2005). The losses of lives represent a considerable social effect from floods, but one that is very difficult to calculate due to the absence of new longitudinal research.

Flooding has direct effects on both physical and psychological health, with a robust interaction between the two. Physical health effects of floods consist of shock, gastrointestinal illnesses (that is sewage pollutes flood water) and breathing illnesses (Hajat et al., 2003). Financial problems after floods can also be a problem and has some links to psychological health (Green et al., 1985). Impacts of floods on societies are composite and diverse. There is proof that after floods, cohesion can rise with ‘everybody pulling together’, which Gordon (2004) termed social fusion. Floods may ultimately act as a disruptive influence on the particular areas due to its influence on certain individuals or people. This is as a result of the perception that certain groups are chosen by emergency and longer term support even though these individuals might have had more need. Such impacts can dominate social fusion, resulting in ‘cleavage planes’ (Gordon, 2004). Thus floods may have negative effects on the social life of the affected individuals, including the elderly ones.

2.4. Psychological effects of floods

Floods also have effects on the psychological well-being of the elderly people. Flooding and hurricanes in New Orleans which occurred in 2005 resulted in a lot of older adults experiencing mental health problems (Geriatric Mental Health Foundation, 2009). Many felt they had lost their life’s work and savings, and became hopeless (Putman, 1993), a case which is similar to the Tokwe Mukosi one. Families were separated from each other, and health and psychiatric care was usually interrupted. Anxiety problems, depression, memory problems, suicide attempts and insomnia among older people were often seen. High levels of psychosomatic difficulties, that is sicknesses with physical signs that are as a result of emotional or psychiatric distress were seen, with deteriorating health problems and more death rates (Geriatric Mental Health Foundation, 2009).

Mishaps like floods can result in stress to the cognitively affected older adults because the condition may be beyond the individual’s ability to apprehend or deal with (Gumbo.1997). During or after floods, people who look after individuals with cognitive problems may not be available to offer care and support, and thus the danger of wandering may rise if the older person turns out to be distressed, restless, or being under stressful conditions. Thus these elderly people may develop coping strategies as a way of addressing their problems due to flooding.

Previous studies also found that psychological problems of older adults that have been affected by floods include high levels of somatic symptoms, depression and anxiety after the floods and that most impacts of hurricanes on the elderly reduced after some time (Norris and Alegria, 2005). In some studies, individuals aged 55 to 64 tend to be at high risk of psychological signs after flooding. The elderly are more susceptible to physical harm and damage. Approximately 80% of older people have at least one chronic illness which results in them being more susceptible than those who are healthy during a tragedy or a major incident. Chronic illness combined with physical, sensory and intellectual changes experienced as one of the aged processes, often leads to weak older individuals having special needs during disasters.

A lot of research revealed that older persons usually suffer from adverse physical problems (Ahern et al, 2005). This is more likely because the elderly tend to be in poorer health before tragedies and are not able to seek help afterward (Ahern et al, 2005). Several research, have found out that people may be resilient to some psychological signs of disasters like floods with additional frequent exposure, often of comprising the elderly (Afro, 2009). A lot of suggestions have been offered to come to terms with the possible needs of older persons which include involving some organizations and those with prevailing geriatric know-how to scheme disaster plans, coming up with education, communication systems, and cautions for individuals with sensory injury, coming up with new methods for finding, tracing, and following older persons, and coming up with special measures to offer disaster-related aid (Geriatric Mental Health Foundation, 2009).

According to World Health Organisation, (2001), psychological health effects of flooding comprise of stress, anxiety, depression and Post Traumatic Stress Disorder. These effects are worsened in areas that have experienced flooding mostly. The 1997 floods in California revealed signs of stress and increased depression on individuals. Numerous floods in the United Kingdom also resulted in stress and depression on the population, including the elderly individuals (Benet, 1970; Green et al, 1985).

According to World Health Organisation, (2003), psychological health is promoted through support and involvement to minimise mental health problems such as stress and depression. The 1974 Brisbane floods revealed a high level of depression in both men and women. Price, (1978), found that mostly age between 35 and 75 years were most affected by floods, which

shows that the elderly people are also among the vulnerable group if a disaster like flooding looms. Evidence also shows greater suicidal attempts as a result of increased depression due to disasters such as flooding. Flooding also results in cognitive psychological effects to the affected people. According to Beck et al (1985), flooding may increase anxiety among the individuals, including older ones more often as compared to before the occurrence of the flooding. Thus flooding may affect the psychological well-being of the elderly people and other population groups.

2.5. Coping strategies

Quite a number of people turn to coping techniques to help them come to terms with the problems caused by floods. As compared to younger persons, the elderly are most likely to require social support to minimise the effects of stress and to improve emotional welfare and recovery (Geriatric Mental Health Foundation, 2009). It is important to understand that some older adults may be trying to cope with the loss of loved ones plus the loss of physical capabilities and probably independence, so counselling is of more help to them as one of the coping mechanisms.

A lot of older individuals usually express feelings of fear, annoyance or other emotions as a way of trying to cope with the impacts of flooding (Geriatric Mental Health Foundation, 2009). Some older people opt for counselling services as a way of trying to recover and cope with the impacts of flooding on them. Some people tend seek for finances from other people, they also seek emotional and health facilities if there is need as one of their coping techniques. (Blaike et al, 1994). Relaxing is also one of the coping techniques they turn to as a way of relaxing their mind, specifically to forget the flooding and problems they faced. Some older people allow their selves time for grief and healing.

Older persons mostly turn to their own mechanisms to adjust and cope with floods, the adoption of certain procedures depends on the socio economic position of the individuals and the nature of the floods. Studies show that people usually turn to methods that are protective such as placing obstacles round the house, building houses on high places and others as their coping methods to various floods. Blaikie at al (1994) postulates that human lives are usually saved by raising houses to alleviate the negative effects of floods in different parts.

People in Bangladesh constructed their houses on land on high ground to avoid the water entering their homes during and after floods (Adnan, 1991). They also used bamboo, corrugated iron sheet, wood or thatch to make their homes as a coping technique to floods that impacted on the area. Some people also relocated their households to safer areas to be away from the floods as a coping strategy. To minimise outbreak of water borne diseases, some people in the Char area of Bangladesh decided to purify their water for drinking purposes throughout and aftermath of floods (Douglas et al , 2008). Thus water was boiled, there was use of purifying tablets and potassium alum also to purify their drinking water. These are some of the coping mechanisms they adopted to treat their water that has been disturbed as a result of flooding.

Outbreak of diseases such as diarrhoea, dysentery, cholera colds and fever are some of the consequences of flooding. This caused individuals in affected areas to consult their local pharmacies to prevent the outbreak of diseases. People in the villages of Char that was affected by flooding also turned to the use of herbal medicine to cure various diseases that were as a result of flooding (Adnan, 1991). Scarcity of food is another major problem in flood prone areas. Affected individuals or victims practised several techniques such as reduction in the number of meals eaten per day and to depend on less expensive food such as rice as their coping mechanism.

2.6. Flooding in rural areas

Flooding in the rural areas has a number of impacts on livelihoods as it also affects other areas. Loss of livestock, personal items, crops, equipment, fencing, machinery and buildings are some of the impacts of floods on rural property owners. Rural loses in terms of damages are usually almost equal to that of urban ones as according to the Australian Water Resources Council. Floods have impacts on rural populations which range from loss of life, loss of crops, damage to buildings and loss of livestock. In 2012, quite a number of hectares of farmland were damaged in by the excessive downpour in the United Kingdom's rural. The 2007 summer floods had also some negative impacts on the rural community as it resulted in damage to farms that costed huge sums of money. Hundreds of acres of farmland were flooded in the floods (Hemsley, 2015). In Bangladesh rural, floods had quite a number of

negative impacts on the population that included the elderly ones as it resulted in diseases such as diarrhoea and respiratory infections.

2.7. Flooding and the elderly people.

The aged population also signify the fragile group as they deal with tough conditions slowly such as floods (Buckle, 1998-9). This has led to elderly persons in Tokwe Mukosi flooding suffering as they could not live in harsh conditions due to their age and failure to adapt. Older people are also considered to be more vulnerable to disaster and mishaps, from the preparation phase up to the recovery phase (Blaikie et al, 1994). This population is generally grouped in a joint of helplessness that recognizes the elderly as the deprived, the largely and considerably inaccessible and are also viewed as the less activate (Buckle, 1998-9). Research studies on disaster control in relating to grown-up people emphasises on the reaction and regaining phases. According to Perry and Lindell (1997), research on older people in mishaps focused on the phase aftermath, that is known as the restoration and regaining phase. Older people with poor pre-flood health conditions are more susceptible to health impacts such as illnesses, loss of lives and problems that related to preparedness, protection and evacuation.

2.8. Effects of flooding on the elderly's well- being

People aged seventy- five (75) or more are susceptible to flood effects because they are less mobile and have reduced hearing and visual capabilities (Tapsell et al. 2002). Moreover, several older individuals would have lost their partners and will be staying on their own. Recovery difficult is a result as they often have limited social networks and resources (Thrush et al. 2005). Poor physical state or heart attacks usually result in the elderly people being vulnerable to physical health effects due to floods. Coping is usually difficult to older people as they usually rate their own losses as larger than of others in their surroundings. Loss of individual possessions also affects this group of people negatively (Walker et al. 2006). The incapability or reluctance to leave the homes before, during and after the flood cause poor living conditions and a poor environment. People who opt not to leave may face health difficulties. Recovery usually tends to be long, because elderly people usually need support from other people to come to terms with the effects of the floods and to talk with insurers and

builders (Walker et al. 2006). Elderly people experiencing psychological difficulties face problems in trying to cope with the stress of flooding. (Ramsbottom et al. 2003).

2.9. Areas that have also been affected by floods in Zimbabwe and their effects

Beitbridge is an area in Zimbabwe which was also affected by flooding. These overflows resulted in people losing their homes where they lived. In Mawale village, more than fifteen homes were affected. Areas also affected include Tshasvingo, Tshitalipasi, and Chikwalakwala (Action Aid International Zimbabwe, 2013). These were as a result of excessive rains that had negative impacts on the area. Temporary shelter was provided to the affected people in Chikwalakwala area, thus they were given tents to help them come to terms with their homelessness. Infrastructure was enormously damaged in the affected areas, which include roads and bridges. Villagers decided to put stones where bridges were so that they are able to pass through (News Day Zimbabwe, January 26, 2013).

Nyanga was also affected by floods. Three hundred and fifty families from Ruchera ward in Nyanga District, Manicaland province were affected by overflows in January, 2013. According to Action Aid International Zimbabwe (2013), Nyan'ombe Bridge which linked the Ruchera rural community to the Nyanga town was eroded away by heavy showers and floods. It was now hard for individuals to get their means of support from the town because the bridge was broken such that people and vehicles could not pass through the bridge. The Ruchera communal fields and gardens were carried away and crops were filled with water and soils were filtered (Action Aid International Zimbabwe, 2013). The community needed flood aid due to the absence of the harvests, a case which is very similar to the Tokwe Mukosi flooding.

Another place which was also affected by flooding is the Muzarabani area, Mashonaland Central Province in the year 2007 to 2008. Quite a number of infrastructures were damaged by these floods. The rains had impacts on several areas including Chadereka, Utete, Machaya, Hoga and Maungaunga making it difficult for villagers get their key social necessities during the rainy season (News Day Zimbabwe, 27 February 2014). Several bridges were damaged and swept away during the floods, for example the Hoya river bridge which links Muzarabani to Mukumbura, Nzoumvunda which bridges Chadereki and Chimoyo as well as the Kadzure river bridge connecting Muzarabani and the Dambakurima

communal area. People in Muzarabani engaged in stream bank cultivation as a coping technique to sustain their hunger. A lot of individuals were selling their livestock at lower prizes as a way of finding money for food and other needs (News Day Zimbabwe, 27 February 2014). This was due to the fact that they lost the crops and harvests due to the rains, which resulted in shortage of food items.

Poor road systems also affected the Muzarabani people. This also had negative influences on business persons as their products could not reach their final places due to absence of transport as a result of damaged roads. Individuals, including the elderly in the affected areas ended up being in fear of crocodiles which runaway the from Musengezi river which was caused by the floods (News Day Zimbabwe, 27 February 2014). Some individuals were attacked by the crocodiles and others managed to escape the deadly reptiles. Villagers also were cut off from health facilities due to the damage of the bridges. This had negative impacts on expecting mothers and other sick people as it was difficult to access the hospitals. Some villagers resorted to using a make shift bridge, which posed fear to a lot of people, mainly the sick who could be carried away by water. People who were in need of a hospital were forced to travel nearly forty five kilometres to St Albert mission Hospital (News Day Zimbabwe, 27 February 2014).

2.10. Protecting and supporting the elderly during and aftermath of flooding.

Elderly adults also need to be protected during and aftermath of flooding just like any other population (EMA, 2005). The elderly need to be protected from harm to their health and well- being which is a very important step. These people usually need support and sometimes counselling in order for them to come to terms with the impacts of the floods on them. Protection of goods and belongings of the elderly is also very crucial after floods (EMA, 2005). This step is done to protect the elderly people's valuables and goods. Moving away from the place of the floods is also advisable as it mitigates the damages caused by the flooding and its impacts such as what was done to the Tokwe Mukosi people who relocated to Chingwizi camp. Boiling water for drinking is also advisable to the elderly persons after floods as several water sources would have been contaminated and dirty (EMA, 2005)

2.11. Theoretical Framework

This research was guided by Mary Anderson's 1990 theory called 'do no harm' which subscribe to caring and assistance whenever a crisis arises, such as flooding so as to uphold and protect the victims' rights. With the set of regulatory values, the theory places emphasis and consideration on susceptible groups which includes older adults to cater for their needs and bring in normality in times of crisis (Anderson, 1999). The theory's obligation is to focus on reducing human suffering in terms of a crisis or disaster as faced in the Tokwe Mukosi flooding.

Thus the theory emphasises on the reduction of human suffering, promoting viable or sustainable initiatives and finds options for coming to terms with different problems (Anderson, 1999). This applies to the flooding situation which has left the Tokwe Mukosi people vulnerable and needing support so as to help alleviate problems they have faced due to flooding. Thus Anderson centres on the emerging community an opportunity to 'do no harm.'

2.12. Knowledge gap

Though there have been researches that have been done before, concerning how flooding affect people in general, there is little research on how disasters like flooding affects the elderly in particular. Thus the concerns and problems of the elderly people in disasters have not being taken into consideration in a lot of researches which have motivated this researcher to centre this research on the elderly people. Thus this research will be a bid to add more information on how disasters affect the elderly people in particular.

Furthermore, little research has been done concerning how the elderly have tried to minimise or solve the problems they face that are due to these disasters. A lot of research has been centered on the effects or impacts of floods and the coping part have been side-lined in most researches. Thus there is little literature concerning how the elderly people have tried to cope with disasters such as flooding. In line with this, the research is a bid to cover this gap concerning the coping strategies that have been used by the elderly in disasters such as floods.

2.13. Chapter summary

This chapter focused on the related previous related literature of the study. It reveals the previous literature concerning the social impact of flooding on elderly people, the psychological impacts, their coping strategies, effects of flooding on elderly people's well-being, classification of floods and areas that have also been affected by floods in Zimbabwe. Thus the literature review answers some of the research questions in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

Methodology refers to instruments and style used to construct and generate research techniques (Christensen, Johnson & Turner, 2011). This chapter focuses on the methods of research that were used in this research. These include the research design, research approach, targeted population, population sample, sampling procedure, research instruments, and data collection procedure and data analysis.

3.2. Research Approach

Birn (2000), explain research approach as the overall plan of how the research would be carried out. The researcher used the qualitative research approach to seek an understanding of how older people have been affected by the Tokwe- Mukosi flooding which has left a lot of people helpless. This research approach uses written, verbal and observed data or behaviour. The qualitative approach tells a story from the participant's point of view (Weinreich, 2006), thus giving significant descriptive data that is essential under this study. Qualitative research methods are normally used for identification, description and explanation (Munikwa et al, 2012), an approach necessary for this study.

According to Neuman (2000), qualitative research has larger richness and complexity and it allows the researcher to understand the meaning of a particular phenomenon. Qualitative research also permits direct citation of word from the individuals to be questioned like key informants (Wolcoit, 1990). Qualitative research also conveys an open inquiry and its characteristic is based on what people accept as true (Giddens, 2008). It also enabled the researcher to obtain participants' perceptions and attitudes. It is fast and allows the person doing the research to have a representation of what is taking place in the people (Dyer, 1995). Qualitative procedures also have reputable content validity (Baron, 1996).

3.3. Research Design

It is a systematic plan to study a scientific problem (Patton, 1990). This research used the phenomenological research design. It encompasses understanding the essence of a

phenomenon by looking at the views of people who have experienced that phenomenon. Phenomenology is concerned about the separate experiences of people, thus experiences after the flooding in this research (Boyd, 2003). It offers a very rich and in depth description of the human involvement and the results emerge from the data gathered. It also usually involves long, in-depth interviews with subjects and sometimes researchers will interview the same subject several times to get a detailed picture of their experience with the phenomenon. Phenomenological research looks for the common nature of an experience. This research design clearly helped to find on the impact of the Tokwe Mukosi floods on elderly people and their well- being (Boyd, 2003).

3.4. Targeted Population

Target population refers to the total group of people or objects to which the researcher wishes to generalize the study findings. According to Waterhouse et al, (1976), target population include the physical area of the study covered by the population, that is Chingwizi camp and the gender of the respondents, in this case both males and females. The target population was fifty elderly people (age of 60 years and above) who are living at Chingwizi camp. The target population is important as it will provide relevant material which is related to the topic, thus impacts of flooding on the lives of the elderly people in Tokwe Mukosi.

3.5. Population Sample and Sampling procedure

Population sample refers to the selected elements (people or objects) chosen to take part in a study; thus the subjects or participants. A population sample is also a subset of subjects that is representative of the entire population (Baron, 1996). The researcher interviewed six elderly participants which relied on data saturation. The researcher approached the chief of the area to seek for permission to conduct the research. After that, the researcher used snowball sampling to select the six study participants that were used in this research and used face to face interviews to collect the data.

3.6. Sampling Procedure

Snowball sampling was used in this research. This is an approach used for locating data and rich key informants on a certain issue. It helps to find people with particular knowledge, skills or characteristics that are needed as part of a consultive process (Patton, 1990). It also

includes asking the participants to nominate other individuals with the same traits as the next participant thereby being able to be in contact with as many elderly people as possible. Castillo (2009) asserts that, this type of sampling technique works like chain referral. Snowball sampling is a type of non- probability sampling and a form of purposive sampling. Advantages of using snowball sampling include that it helps to provide information that is not known to the researcher. It may also help to show potentially unknown traits that are of interest to the researcher. Another significance of this type of sampling in this research is that it helps to identify significant units in a research, in this case it was helpful in identifying the elderly population who were affected by the Tokwe Mukosi flooding.

3.7. Research Instruments

Research instruments are tools used for gathering information and data required (Coolican, 2004). Interviews were used in this research to gather relevant information and data required by the research. Sidhu (2004) defines an interview as a two way technique which allows exchange of ideas. Kvale (1983) also defines an interview as a two way in which its purpose is to gather descriptions of the life- world of the interviewee with respect to interpretation of the meaning of the described phenomena. Face to face interviews were used in this research. Face to face interviews are characterised by synchronous communication in time and place. This helped the researcher to gather relevant information pertaining to how the elderly have been affected by flooding. They enable to see the social cues such as voice, body language of the people being interviewed giving the interviewer extra information that can be added to the verbal answer of the person being interviewed on a question (Emans, 1986).

In face to face interviews, there is no significant time delay between question and answer; the interviewer and interviewee can directly relate to what the other says or does (Wengraf, 2001). They are relevant in this research because the answer of the interviewee is more spontaneous, without an extended reflection. The synchronous communication of time and place in a face to face interview also has the advantage that the interviewer has a lot of possibilities to create a good interview ambience. In other words the interviewer can make more use of a standardisation of the situation. Explaining or clarifying questions increases the accuracy of the data collected (Mahoney and Colleen, 1997), which clearly shows that interviews were very relevant for this researcher to gather relevant information. Face to face interviews also allows participants to explain what is meaningful or important to them in their

own words and the person conducting the research may gain information that is “sensitive” due to the conversational tone an interview can have (Kvale, 1996).

The interview was made up of four sections or parts. The first section consisted of demographic information of the participants. The second part was made up of questions which are centered on the psychological impacts of flooding on the lives of elderly people, the third part addresses the social impacts of flooding, and the last part of the interview was centered on the coping strategies used by the victims to address the problems faced due to the flooding.

3.8. Pilot Testing

Pilot testing of the interview was performed before the research was done to the actual participants. Thus the researcher did pre-testing of the research on other people who are not the actual participants. This pre-test ensured the researcher and allowed her to see if the interview will go on well and see if the participants will understand the contents of the interview. After this pre-testing, then the actual interview was done to the actual participants.

3.9. Data Collection Procedure

The researcher first obtained an approval letter from Midlands State University. After getting the approval letter, the researcher asked for permission from the officials at Chingwizi camp to carry out the research. After that, the researcher told the participants the aim of the research and then collected the data, thus through asking the participants about the impact of the floods on them. After data collection, the researcher checked all the collected data that has been recorded for irregularity, unrelated responses and omitted information.

3.10. Data Analysis

According to Johnson (2011), data analysis is a procedure that involves cleaning, transforming and remodelling the data in order to reach a solution to a problem. It also refers to qualitative techniques and processes used to increase productivity. Data is extracted and categorised to identify and analyse the behavioural data and patterns.

Thematic analysis was used to find out on the impact of flooding on the lives of the elderly people. Thematic analysis is a qualitative analytic method for finding, analysing and

reporting patterns within data. It is also aimed to gain an understanding of older people's insights of fall prevention advice and how best to design communications that will help older people to prevent fall (Braun and Clark, 2006). Thematic analysis is one of the cluster of approaches that focus on finding patterned meaning across a dataset. Purpose of thematic analysis is to categorise patterns of meaning across a dataset that provide an answer to the research questions being addressed, which was very useful in this study on elderly subjects. . According to Braun and Clarke (2006), this form of analysis is highly inductive, thus the themes develop from the information and are not imposed upon by the person conducting the research. Patterns are identified through a rigorous process of data familiarisation, data coding and theme development (Braun and Clark, 2006). It was very suitable for this study in that it is flexible, thus it can be used within different frameworks to answer different research questions. It was also useful in that it suited questions related to people's experiences, views and perceptions. Thus thematic analysis helped on the analysis of data gathered in this research on the impacts and experiences of the elderly in the Tokwe Mukosi floods.

3.11. Ethical considerations

Neuman (1991) defines ethic as what is legitimate to do or what a moral research involve. The research took legal steps needed in accessing information.

3.11.1. Informed consent

The researcher made it clear to the research participants on the purpose of the study. Thus the participants were informed that their participation was not by force, but should be voluntary. They were also told that they all had the right to withdraw from their participation whenever they felt like.

3.11.2. Confidentiality

The right to privacy was one of the things the researcher took into consideration in this research. This was mainly due to the fact that the researcher was conducting the research with older participants who normally need to be respected and does not want their private life to be violated. Pseudo names were also used to protect the privacy of the research participants. This enabled the researcher to gain valuable information needed in this research.

3.11.3. Fairness

The researcher also took into consideration the issue of treating all participants with fairness no matter their age, background or gender. Thus all participants were treated equally without being in support of other participants or sidelining other participants in the research. This enabled the researcher to obtain fair results on this research.

3.11.4. Cultural diversity

Avoiding violation of the participant's cultural values was one of the things the researcher took into consideration on data collection in this research. This was due to the fact that the participants were older people who usually consider their cultural values to be followed and not violated. This enabled the researcher to find valuable information on the research as the participants were willing to reveal information due to the issue that they were respected and their culture not violated.

3.12. Chapter summary

This chapter focused on research methodology. It gave detail concerning the research approach, research design, targeted population, population sample, sampling procedure, data collection procedure, research instruments, data analysis and the ethical consideration considered during the research. Thus the chapter reveals on how the research data was collected.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.1. Introduction

This chapter focuses on the presentation and analysis of data gathered. Data gathered is presented according to the themes noted in the collection of data and according to the research questions which guided the study. The themes revealed what challenges were faced by the elderly due to the Tokwe Mukosi floods and how they tried to cope with the problems. Pseudo names were used by the researcher to ensure the participants' privacy.

4.2. Characteristics of respondents

Face to face interviews were conducted with six participants in this research. These elderly participants ranged from sixty four (64) to seventy two (72). Both of these participants revealed that their lives have never been the same after these floods as they faced a number of problems. Both of the participants have families, were married and some had already lost their partners, thus were now widows.

Participant 1: Mr Chasi – 64 years - married – six children – Christian

Participant 2: Mrs Nare – 66 years – widow – four children – Christian

Participant 3: Mrs Moyo – 68 years – married – five children – Christian

Participant 4: Mr Nago – 64 years – married – five children – Christian

Participant 5: Ambuya Chari – 72 years - widow – seven children – African Tradition

Participant 6: Mr Makaya – 69 years – married – six children – Christian

4.3. Flooding impacts on the elderly and how they cope with the impacts

Data is presented according to the themes noted during the research. The themes are based on the data that was revealed by the participants during the research. Ten themes were revealed in this research during the thematic analysis of the gathered data. These themes fall under the research questions which guided the research. The themes noted were self- esteem, stress,

anger and frustration, loss of crops and livestock, loss of household property, poor sanitation and health facilities, change of daily living, selling and slaughtering livestock, seeking help and going to church. These themes will be presented under the research questions, thus each research question has themes under it.

4.4. Psychological effects of flooding on the elderly

4.4.1. Stress

These elderly people who participated in this research revealed that they faced quite a number of stresses due to the floods. This was mainly due to the fact that they left behind their homes they had invested in and they did not have any sources of income to live with their families. They revealed that the dam resulted in a lot of problems for them. This is revealed in the following statements:

*“...takangozouyiswa kuno zvekukasira nekuda kwedhamu irori.
izvi hazvina kumbounza mufaro muupenyu hwedu nekuda
nekufungisisa kuti upenyu hwedu huchazodii” (Mr Chasi, 64)*

(We were hurriedly relocated from our original homes which posed a lot of stresses into our lives).

*“ dhamu irori rakaunza kutambudzika kukuru muupenyu hwedu
pachinzvimbo chekuti ritiunzire mufaro...iyezvino takasiya
misha yedu yakanaka zvikuru tichiuya kuno” (Mrs Nare, 66)*

(The Tokwe Mukosi dam resulted in a lot of problems and misery for us and it did not benefit us in any way which led us leaving our desirable homes).

*“ nemakuriro angu iwaya ndikanzi nditange kuvaka musha
patsva ndinotangira papi....simba handichina kana mari
yacho zvinova zvinokonzera kudzama nekutambudzika
mupfungwa kuti saka takangovakira misha yedu pasina” (Mrs Moyo, 68)*

(How can you expect me at my age to restart a new life again...we no longer have the energy considering the fact that we left all our life achievements being swallowed by the waters).

4.4.2. Self- esteem

Both participants revealed that the disaster lowered their self- esteem due to the fact that they ended up not being able to provide for their families and living in tents instead of living in proper shelter. It was also due to the type of living they now experienced after relocating from their original homes. Being left with nothing after the floods also reduced these participants into nothing:

*“ unhu hwedu hwakadzikisirwa nemagariro atakaita kuno...
kugara kunge mhuka mutende rimwe uye hatichakwanisi
kunyatsoriritira mhuri dzedu sanababa chaivo” (Mr Chasi)*

(We are no longer ourselves... this tragedy left us in a position not being able to provide for our families, depriving us of our roles as fathers).

*“...ndaarombe risingaite...handisisina kana chandinacho ndangove
munhu handichinawo kana chinhu chinoratidzawo kuti uri munhu.”
(Mr Nago, 64)*

(The flooding left me with nothing which a normal human being should possess reducing our self- esteem).

Mrs Nare revealed the same point:

*“ tikupiwa chikafu , ehe hatirambi asi chokwadi hatizi huku
dzinofarira kukandirwa chikafu...todawo kunyatsonzwa kuti
tirivanhu vanozviitira...kungogara uchingomirira kupiwa
chikafu zvakangooma...zvinotidzikisira zvikuru”*

(We are receiving food aid but we are not happy just to sit all day long waiting to be fed by some people...it really affects us...we need to do some things on our own).

*“ chokwadi mwanangu unhu chaihwo kuno hakuchina...unoti
zvinoita here kuti ndingagare mutende rimwe zvoise navana
vakomana navasikana...kudzikisirwa chaiko” (Mrs Moyo)*

(We have been reduced to nothing due to the fact that we are now sharing the same tent with our children which is not right at all).

4.4.3. Anger and frustration

Most of the elderly participants revealed anger and frustration which was as a result of this tragedy. This was mainly due to the way they are now living and the loses they had due to the flooding in which there was no compensation at all. Being left with nothing and no source of income also resulted in these people being frustrated:

*“ ivo vakadana dhamu, vadana dhamu vobva vadzinga vanhu
kumisha ndozvinhu zvinorwadza...hazvina kana kumbotifadza
kungosiya misha yedu yataive nayo...”(Mrs Moyo)*

(They are the ones who implemented this dam and now they are relocating us from our ancestral homes which hurt us so much).

Mr Chasi also revealed his anger through the following statement:

*“...mombe dzikarasika dzinoenda dzonodya kuminda yevanhu vagara
varikuno dzobva dzasungwa miromo kusvika wabhadhara mari
asi tobhadhara nei...tobhadhara nematende here isu” (Mr Chasi)*

(Our cattle flee to find food in other people’s fields and they are not released up until we pay ransome...but we have nothing to pay with).

*“ dai vakanga vari vanhu vanoziwa vakati isu chembere navadhara
hativaisei pavo vachitipa chikafu nenhumbi... zvino havana
kuzviziva vakangotitora semhuka vachitiuyisa kuno” echoed*

(Ambuya Chari.72)

(It was better if they selected us the elderly and place us in a separate place where they would give us food and clothes, but they did not consider that and just placed us together).

*“ toda misha chaiyo yakaita seyataive nayo kwatakabva kwete
kuramba tichigara mumatende umu...mapepa aya haagarike”*

(Mr Makaya, 69 revealed his anger).

(We want proper and descent homes like we used to have back home, not living in these tents).

Mr Makaya continued:

*“ unotoisa keteni vamwe vorara uko vamwe uko...nokuti masagazve
hadzisi dzimba dzingagarwe nevanhu..”*

(We use curtains to separate where we would sleep with the family because these are not proper homes to live in).

*“ takatosiya makuva ehama dzedu kumisha yedu...asi vakafa
vakatozorora havaoni nhamo yakaita seyatiri kuona kuno...
unogona kurara nayo nzara” (echoed Mrs Nare).*

(We left behind our relatives' graves, but they have rested and they are no longer suffering as we are because some days we sleep on empty stomachs).

4.5. Social effects of flooding on the elderly

4.5.1. Loss of crops and livestock

The participants revealed that they were left with few or no livestock as a result of the floods. Some died during transportation from their original homes and some died at the camp. Back home they were expecting a bumper harvest but all crops were swallowed by the waters of the dam. This resulted in them sleeping with no food eaten as they had nothing to eat and food became a problem:

*“ ndaarombe risingaite, mbudzi, mombe, madhongi zvakatsakatika
uye dzimwe dzongotsikwa nemota dzapano...huku dzose dzakapera
kuti hwaa...” (Mr Chasi)*

(I no longer have any livestock, cattle, goats and donkeys...some were hit by trucks here and that is how we lost them...all chickens just perished).

Mr Nago also revealed that he lost quite a number of cattle due to the disaster:

*“mombe dzangu dzinokwana gumi dzose dzakafa pataidzitakura
kubva kumusha kuGunikuni kuuya kuno uye chinondirwadza
ndehekuti hapana kana chandakapiwa mushure mokunge mombe
dzangu dzafa...ndinotanga upenyu patsva sei ndisina kana chasara
...zvinorwadza zvikuru”*

(I lost all my ten cattle during transportation from Gunikuni and I did not get any compensation for the loss of my cattle which pains me a lot).

*“ kumisha yedu taive tarima huye taitotarisira kuti tichakohwawo asi
zvose takazvisiya uye zvimwe zvakakanganiswa nemvura...tairima
zvirimwa zvakawanda asi kuno hakuna pekurima...mombe dzacho
dzekurimisa hatichina kana... tofa nenzara chaiyo” (Mr Makaya)*

(Back home we had cultivated our crops and expected a bumper harvest but we lost all our crops, now we have nowhere to farm, we have no cattle to help us in the fields and we sleep on empty stomachs).

*“ ndakararikirwa nemasaga mapfumbamwe echibage uyezve masaga
matatu ezviyo handisisina kana chandinacho...kungomirirawo kupiwa
chikafu...” (Mrs Moyo)*

(I lost nine bags of maize and other three bags of sorghum and now I have nothing, I only depend on food aid).

4.5.2. Loss of household property

Quite a number of household properties were lost due to the floods as revealed by the participants. Property lost ranges from beds, tvs , chairs, sofas and many others. This brought stresses to the participants as they revealed while being interviewed. This left them with nothing and nowhere to start from, considering the participants' age, thus are no longer active to restart their lives again. This is revealed in the following statements:

*“ ndaive ndine mubhedha, headboard, solar, wadrobe, macheya...
zvose zvakafa nekuda kwemvura , handisisina kana mudziyo wasara”*

(Mr Chasi)

(I once possessed a bed, headboard, solar, tv, wadrobe and a pair of chairs but they were all destroyed leaving me with nothing).

*“ chinhu choga chandoverenga kuti ndasara nacho vana, midziyo yose
yakatsakatika handichina kana chimwe chinhu chinoratidza kuti
ndirimunhu...madoor atakabva nawo atosakara ave madhende” (Mrs Nare)*

(I have no property left with me, I only has family as my only possession, we brought our doors here but they are all damaged).

*“...handichina kana mudziyo wasara, midziyo yose kungosakara iri
panze...handichina kana pekutangira kuti ndiwanewo kurarama
nevana...” (Mrs Moyo)*

(All my property was damaged due to the fact that they stayed outside the tent; I have no property left with me now).

*“...masofa angu akafa uye haakwani mutende sezvo riri diki saka
ndakatomasiya panze...nemvura ikunaya anotowedzera kufa”
(Mr Makaya)*

(My pair of sofas was damaged and cannot fit in the tent, they are now outside where they are damaged by the rains).

4.5.3. Total change of daily living (lifestyle)

The participants revealed in this research that their lives are no longer the same due to the floods. Their daily living had completely changed; they now sit all day long helpless without anything to do. Back home they used to cultivate their fields, go for irrigation and do a lot of things for themselves. This is revealed in the following statements:

*“ magariro atakaita kuno anokonzera zvirwere zvakawanda...
vanhu vakawanda varikutambudzika kuno, upenyu hwedu
hwatochinja isu taimbogara zvakana kumisha yedu” (Mr Nago)*

(The way we are living here is not good which results in outbreak of diseases, our lives have completely changed but we once lived happily at our homes).

Ambuya Chari elaborated on the same point:

*“...kungoswerawo takagara tichifunga kuti tichazoisei mumuromo..
hakuna chekudya, kumisha yedu taigona kudya nzungu, mengo
kana maputi asi kuno hakuna izvozvo...”*

(We sit all day long wondering what we will eat, back home we used to eat groundnuts, mangoes or roasted maize, but here there is nothing like that).

*“dai kuri kare tainorima mumindaa yedu, mai vaienda kumairigation ini
ndichitsvagawo zvekuita...asi tiri kumatende kuno hauna zvaungaite kuti
uriritire mhuri, upenyu hwedu hwatochinja nekuuya kuno kwatakaita”
(Mr Chasi)*

(Back home we used to cultivate in our fields and irrigations, but here there is nothing we can do to help our families, things have changed).

4.5.4. Poor sanitation and health facilities

The researcher noted that almost all participants were complaining about unfavourable living conditions which posed risks of contraction of diseases like cholera and diarrhoea due to poor sanitation. Shortage of water also posed problems for us. Limited health facilities also resulted in a big problem for us if our families need medical attention.

*“...mvura kuno idambudziko hombe izvo zvinokonzera zvirwere
zvakaite semanyoka...tinongori nezvibhorani zvitanzhatu chete
nemawandiro edu zvinokonzera dambudziko guru” (Mr Nago)*

(Water is a big problem here, which results in outbreak of diseases like cholera and diarrhoea, we only have six boreholes here which does not provide sufficient water for us due to our numbers).

He continued:

*“ dambudziko remvura kuno ratiomera...hembe dzedu zhinji
dzatotsvuka nokuda kokushaya mvura yakanaka yokuwacha”*

(Shortage of water here has posed a lot of problems such that we do not have even clean water to wash our clothes).

*“...zvimbuzi kuno zvisihoma nokuda kwekuti kune vanhu vakawanda...
izvi zvinokonzera kuti tsvina iwanikwe kwese kwese zvinova zvisina
kunaka kuutano hwedu” (Mr Chasi)*

(There are few pit latrines here due to the fact that there are a lot of people which results in human waste being found anywhere which is not good for our health).

*“...zvipatara kuno zvisihoma, kana tikawirwa nedambudziko kana
urwere zvinotiomera zvikuru...nekukura kwedu hatikwanise kufamba
kuenda kune zvimwe zvipatara sezvo, pane mufambo” (Ambuya Chari)*

(There are few health facilities here which create problems and we cannot walk long distances to get access to other health facilities due to our age).

4.6. Coping strategies used by the elderly due to the flooding

4.6.1. Slaughtering and selling livestock

Some of the participants revealed that they ended up selling their livestock so that they could find money to survive with their families. Some ended up slaughtering their few livestock left so that they could have food to eat with their families as food was a big problem for them. What is sad about this is that those who opted to sell some of their livestock sold them at very low prices as they were desperate.

“...takatopedzisira totengesa zvimwe zvezvipfuwo zvedu kuti tiwane pokutangira nemhuri dzedu nokuti takabva tisina kana chatinacho...” (Mr Chasi)

(We ended up selling some of our remaining livestock since we did not have any source of income to provide for our families).

“...mbudzi ndakasara neimwechete ndikati regai ndichipedzisawo ndidye nevana kuti zvimbotibatsira sezvo chikafu chichiri chishoma...”

(I was only left with one goat and I slaughtered it to eat with my family since food is a problem here).

“...mbudzi nemombe dzedu takapedzisira todzitengesa nemitengo iri pasi pasi yakaita se\$15 kumbudzi kuti tiwane mari yekuchengeta mhuri sezvo panga pasina zvokuita” (Mr Nago)

(We ended up selling our goats for as little as \$15 and cattle at give -away prizes so that we can have money for us to survive here).

4.6.2. Seeking help from people and organisations

Due to quite a number of problems faced by the participants due to the floods and relocation, they sometimes seek help from other people so that they can manage their lives. Relevant stakeholders and other NGOs also supported and help these people in their time of need. This is shown through the following statement:

*“nokuda kwenhamo huru yataive tatarisana nayo takaedzawo
kutsvaga rubatsiro kubva kuvanhu vakasiyana siyana...
izvi zvakatibatsirawo padambudziko rechekudya nekupfeka” (Mrs Nare).*

(Due to the problems we faced, we decided to seek help from different individuals which helped us a bit to solve some of our problems).

4.6.3. Going to church

Going to church also played a role in helping this group of people to cope with their problems as they revealed in this research. This helped the participants not to lose hope about their situation as they had hope that things will return to normal. This is revealed by this:

*“...kuenda kuchurch kwakatibatsirawo zvikuru kuti tive nekuvimba
kuti zvinhu zvichanaka zvakare sezvataive takamboita.
Hatina kurasa tariro huye tichine kuvimba kukuru maari” (Mrs Nare)*

(Going to church also helped us not to lose hope and that things will return back to normal. We have not turned back on the creator and we still believe in him.)

*“ kuenda kusvondo kwakatibatsira kudzora ndangariro maererano
nedambudziko ratakatarisana naro...” (Mr Makaya)*

(The church played a big role in this crisis as it helped us to cope with our present problems).

4.7. Chapter summary

This chapter focused on data presentation and analysis. From the analysis of the data gathered, it showed that the flooding had quite a number of impacts on the psychological and social life of the participants considering their old age. The research also shows that these elderly people had few coping strategies to cope with their problems which were as a result of the floods. This shows that the Tokwe Mukosi floods had quite a number of negative impacts on the lives of the elderly people who now reside at Chingwizi.

CHAPTER 5

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the discussion of the findings of the research, conclusions and the recommendations. Thus the researcher provides the discussion of the results and provides possible recommendations to the study.

5.2. Discussion of results

The discussion of the results was guided by three main aspects of the research. These aspects are psychological effects of flooding on elderly people, social effects on this group of people and the coping strategies used by the elderly due to flooding. The discussion will be mainly based on these aspects.

Participants in this research revealed that the flooding had quite a number of effects on their lives. These effects as noted by the researcher are stress, self- esteem, anger and frustration, loss of crops and livestock, loss of household property, poor sanitation and health facilities, change of daily living, selling and slaughtering livestock, seeking help and going to church. Thus the Tokwe Mukosi floods had quite a number of negative impacts on the lives of the elderly people as they revealed in this research.

5.2.1 Psychological impacts of flooding on the elderly

The Tokwe Mukosi floods proved to have affected some of the elderly subjects' psychological and mental well- being. Stress was found to be the major impact of this flooding situation on the elderly. This has been reinforced by the fact that the elderly people are no longer able bodied and the psychological pressures of relocating and restarting their lives especially after investing. Other psychological impacts also found in this research were low self- esteem and the change in temper due tom the negative events that was taking place in their lives. Norris and Alegria, (2005) also supported this as they revealed that disasters like floods results in the affected population being at high risk of psychological signs after flooding.

The findings of this study also revealed that the type of living faced by the participants resulted in stresses for them. This was mainly due to the fact that this group of people was vulnerable and could only depend on aid from other people as they no longer could do anything on their own. This in turn posed quite a number of stresses into their lives, being worsened by their age. The World Health Organisation, (2001), is in line with this finding as it revealed that psychological health effects of flooding comprise of stress, anxiety, depression and Post Traumatic Stress Disorder. Benet (1970) and Green et al, (1985) echoed the same sentiments as they revealed in their study that floods in the United Kingdom also resulted in stress and depression on the affected population, including the elderly individuals.

The study also discovered that flooding and relocation also affected the participants' temper. The participants revealed anger and frustration due to the events that were happening in their lives that were as a result of the floods. This anger was also due to shortage of food items, living in tents which they referred to as "inhabitable" and loosing quite a number of household properties that was as result of the floods. Putman (1993) was also in line with this finding as he revealed that many people may feel that they had lost their life's work and savings, which result in anger and being frustrated. Living in tents brought misery in their lives as they felt like they were living like animals and not proper human beings which resulted in their anger and frustration. Gumbo (1997) also supported this when he revealed that the condition may be beyond the individual's ability to apprehend or deal with, which may result in a change of temper.

5.2.2. Social effects of flooding on the elderly

The research revealed that the social life of the participants was adversely affected by the flooding. The major finding in this research revealed that the flooding resulted in quite a number of loses, ranging from crops, livestock and household property. Shortage of health facilities and poor sanitation was also a cause for concern. Moving to Chingwizi area also resulted in a total change of their daily living as they no longer did what they used to do back home before the floods.

The findings of this study revealed that the Tokwe Mukosi flooding resulted in quite a number of loses which include loss of household property as revealed by the participants. These elderly people lost property they had cherished and worked for all their lives. Hemsley

(2015) is in support with this finding as he revealed that a lot of property is damaged as a result of floods. The loss of property and individual items left this group of people with few belongings they could call their own. RPA (2005) in their study in England and Wales also revealed that damage and loss of possessions and individual items was also found to be a major impact by participants. This finding proved that disasters like floods can result in a number of losses on the affected population.

The study also discovered that the participants lost their crops and livestock due to the floods. The rains and the partial collapse of the Tokwe Mukosi dam resulted in the loss of quite a number of crops, both in the fields which were about to ripe and those they had harvested. This resulted in the shortage of food when they now resided at Chingwizi as they were not able to bring some of their harvest as they were destroyed by the rains. This resulted in the shortage of food items and having to depend on food aid and donations. Hemsley (2015) is also in line with this finding as he revealed that floods resulted in loss of a number of livestock and crops due to the presence of flood waters. Gordon (2004) is also in line with this as he found that the social disruption caused by floods can seriously undermine the quality of life of individuals and impact negatively on the affected communities due to the losses after the floods. However, Pedizzi (2006) contrasted with this as he revealed that floods may have positive benefits such as fishing, vegetable collection, flood-related agriculture and advantages of rice crop cultivation. Thus they may have negative impacts but however may have some positive benefits.

The findings of this study also revealed that communication barrier was among the social problems faced by the elderly due to the Tokwe Mukosi flooding. This was mainly due to the fact that when some of the people relocated from their homes to Chingwizi, they lost contact with some of their relatives and when they were there, they could not get in touch with some of the relatives they came with due to the fact that they were a distance from each other. This adversely negatively impacted on their social life. This was also supported by Evans et al (2004) when he revealed that flooding in Scotland resulted in financial damage to property and disruption to communications.

5.2.3 Coping strategies used by the elderly due to flooding

This research revealed that due to the Tokwe Mukosi flooding, the elderly people had few coping strategies to help them to cope with their problems. Some of the coping strategies they turned to include slaughtering and selling livestock, seeking help and going to church. These

at least helped them to solve some of their problems although these coping strategies were few and some short lived.

The study found out that slaughtering and selling livestock was one of the coping strategies the elderly used to try to solve shortage of food problem. Some of the participants revealed that they turned to their remaining livestock for food purpose as there was shortage of food which could sustain them at Chingwizi. This finding is supported by Blaikie et al (1994) as he revealed in his study that older people mostly turn to their own mechanisms to adjust and cope with floods, such as selling individuals items to solve the financial difficulty.

Seeking help from other people or organisations also remained as an option for these people. This resulted in a number of organisations such as Red Cross and UNICEF offering help. These helped them with food, clothing and temporary shelter. Green et al (1985) is in line with this as he revealed in his study that financial problems after floods can also be a problem which mainly lead the affected population to seek and receive aid from other people. Blaikie et al (1994) also supported this as he mentioned that some people tend to seek finances from other people. The theoretical framework which guided this research is also in line with this as it emphasises on the mitigation of human suffering during a disaster which may include being offered help (Anderson, 1999).

Going to church is another finding the researcher noted which the participants mentioned as one of their coping strategies. They revealed that going to church helped them to cope as they did not lose hope and believe that all their problems will be over, thus uplifting them spiritually. They also mentioned that they did not turn their back on the Lord and they could comfort each other and give each other ideas that could help when they met at church. Going to church was one of the new strategies the researcher noted which was not evident in other researches as other researches mentioned going for counselling as a coping strategy.

5.3. Conclusions

The following conclusions were made in this research:

5.3.1. Psychological impacts of flooding on the lives of the elderly

The psychological impacts of flooding on the elderly people in this study were congruent with the experiences of others in other studies. Their mental well-being was affected mainly

due to their age which usually leaves them vulnerable and helpless in case of a disaster affecting them. This research mainly found that the psychological impacts ranged from stress, anger and frustration and low self-esteem that was as a result of their living when they were temporary relocated to Chingwizi area. Thus the researcher concluded that floods have negative impacts on the psychological well-being of the elderly people as evident in other researches.

5.3.2. Social impacts of flooding on the lives of lives of the elderly

The researcher found out in this research that flooding also impacted negatively on the social life of people as evident in other previous researches. Flooding as in other previously affected areas resulted in destruction of furniture and crops and this is exactly the same as what the researcher found out in this research. Furniture was damaged by the floods and during relocation to Chingwizi. Poor sanitation and health facilities were also evident in other researches such as the previous Bangladesh flooding and this was also evident in this particular research. The researcher concluded that the social disruption caused by floods can seriously undermine the quality of life of individuals and impact negatively on the affected communities.

5.3.3. Coping strategies

This research found that due to this flooding, people had to employ some coping strategies to help them solve the problems they faced. This led these people to seek help from other people, selling individual items like livestock and going to church. Thus these people really needed help from other people as they could not solve some of their problems on their own. Turning to individual items and seeking help which was evident in this research is also a case which was evident in other flooded communities such as Bangladesh and Scotland. Going to church was a finding which was a bit new in this research as many researches revealed going for counselling where there was provision of professional counselling as compared to the church where there is counselling at a lower level.

Depending on food and clothing hand-outs which were evident in this research was always a case in other flooded communities and areas. This is mainly due to the fact that the affected individuals will not be able to provide for their families as a lot of their livelihoods would

have been affected by the flooding. This is a very typical situation in many flooded communities as food and clothing will be a problem to the affected individuals.

5.4. Recommendations

- Counselling sessions should be organised mainly to help the affected victims as disasters usually have negative impacts on individuals, particularly the elderly which is worsened by their age. This will help them to cope with some of their problems. All healthcare agencies should be aware of the distress that flooding may cause people who are affected.
- In case of a disaster such as flooding, elderly people who are affected should be grouped on their own and being taken care of as a separate group rather than being mixed with other people who are still able bodied. This is mainly because they usually will not be able to do things on their own and need to be taken care of.
- Risk reduction is always advisable. Flood impacts can be reduced through favourable service delivery to the affected people and proper environmental management.
- Preparedness - Early warning systems should make sure that all at risk population are aware of the danger and are hurriedly evacuated before the actual disaster affect them. This helps to minimise the damages and dangers to the at risk population.
- Recovery - recovery procedures must be put in time to ensure that all affected groups obtain appropriate recovery aid and that preference should be given to the most affected populations.
- A policy should be made which compel communities particularly in rural areas to build their homes using strong materials and far from flood prone areas.
- Government and other parties must engage the public and local authorities and let them be aware of the risk of flooding in light of the climate changes.
- Communal initiated reduction measures should be encouraged so as to build community resilience.

5.5. Suggestions for further research

- The research focused on how flooding affects the elderly, however further research should be done to focus on a particular gender, thus either should focus on elderly males or females and see which gender is mostly affected by disasters like floods.
- Further research should also concentrate more on the coping part during disasters like floods rather than giving more emphasis on the impacts only. Thus more information can be provided on coping strategies due to disasters like floods.
- There is also need to research on the elderly's contributions and capacities during and after disasters like floods. This will in turn help in reducing their vulnerability during mishaps as there will be an understanding of their capacities and contributions.

5.6. Chapter summary

This chapter was focusing on the discussion of the results, conclusions and the recommendations. Recommendations in this research were mainly cantered on trying to address and alleviate the impacts of flooding in affected communities. Thus this chapter is a winding up of this research on the impacts of flooding on the lives of the elderly people in Tokwe Mukosi.

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APPENDIX A

INTERVIEW GUIDE

IMPACTS OF FLOODING ON THE LIVES OF THE ELDERLY PEOPLE AND THEIR COPING STRATEGIES IN TOKWE MUKOSI.

My name is Moreblessing Mandipaza. I am a fourth year student studying psychology at Midlands State University, conducting a research on the topic: Impacts of flooding on the lives of the elderly people and their coping strategies in Tokwe Mukosi. I do hereby ask for your participation in this research and your participation in this research should be voluntary. Please feel free to withdraw whenever you feel like. This information will be used for educational purposes only and not for other purposes. Your participation in this research will be greatly appreciated. Thank you.

SECTION A

Demographic information

1. Age

60- 65yrs

66- 70yrs

71 + yrs

2. Marital status

Married

Single

Widowed

Divorced

3. Gender

Male

Female

4. Religion

Christianity

Moslem

African tradition

Other

5. Number of children

1- 3

4- 6

7 +

SECTION B

What are the psychological effects of flooding on elderly people?

6. How did the flooding affect your daily living?
7. Did you have any stresses due to this flooding?
8. Did you experience any sleeping disturbances due to this flooding?

SECTION C

What are the social effects of flooding on elderly people?

9. Did your lives change due to this flooding and moving away from your homes?
10. To what extent were your social life affected by the flooding, especially by shifting?
11. Did the flooding affect your sources of income and how you managed your living?
12. Was there any disruption in the access of health facilities?
13. Was there any increase in disease outbreak due to this flooding?
14. How can you rate your loses due to this flooding, for example livestock and crops?
15. Were your communication with other family and relatives affected by shifting to Chingwizi?
16. Did you lose any relatives or family members due to this flooding?

SECTION D

What are the coping strategies used by the elderly people to cope with the effects of flooding?

17. What coping strategies did you turn to in trying to alleviate your problems?
18. What sources did you mainly depend on after the flooding?
19. Did you receive any aid from other stakeholders to help you cope with the situation?
20. Did you seek any help on your own from other individuals?
- 21. What measures did you see as necessary for you to cope with the impacts of flooding?**

