

Psychological Challenges Experienced by Rural Women due to Climate Change in Chimanimani, Zimbabwe

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This research paper examined the psychological challenges faced by women in rural areas of Zimbabwe as a consequence of climate change. The study employed a qualitative research approach, utilising a case study design to explore the experiences of women in Nyanyadzi ward 8 Chimanimani District. Ten participants including a key informant were selected using purposive and convenience sampling methods to ensure diversity in the sample. Data was collected through semi-structured interviews featuring open-ended questions and supplemented with note-taking. Ethical considerations, including honesty, truthfulness, and integrity, were maintained throughout the research process. Thematic analysis was employed to analyse and present the collected data and two themes were revealed; 1) Vulnerability and exposure of women to the effects of climate change and 2) The psychological challenges experienced by women due to climate change. The findings underscore the urgent need for holistic support systems and interventions that recognise and address the psychological well-being of women in rural areas affected by climate change. The study emphasises the importance of integrating gender-sensitive approaches and climate education initiatives to promote resilience, gender equity, and sustainable development in rural communities. The research outcomes have implications for policymakers, practitioners, and researchers working in the fields of climate change adaptation, gender equality, and mental health. The recommendations put forth in this paper provide valuable insights and guidance for implementing initiatives that empower rural women, enhance their mental well-being, and promote gender-responsive climate action.

Keywords: *climate change, psychological wellbeing, resilience, gender norms*

Introduction

Climate change comes with relatively stable changes in the weather patterns like temperature, rainfall as well as increasing the occurrence of extreme weather events like cyclones, droughts, heat waves and floods. The global climate change has impacted the health of people in a negative way, both the physical and mental health. The effects of climate change affect different genders disproportionately and are also felt differently between people living in different economical locations like urban areas and rural areas.

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A Lancet Commission on climate change (Lancet 2018), suggested that climate change is the biggest global health threat of the 21st century. According to (Chaki, 2021; Charlson et.al. 2021), climate change is a long-term significant transformation in temperature and weather patterns, which have resulted in rising of temperatures, erratic rainfall patterns, desertification, disappearance of rivers and extreme weather events like floods, cyclones, glaciers, bushfires. Climate change is not just affecting the weather conditions but its consequences have become a sad reality of millions of people around the world. The Climate and health alliance (Cherry 2022), posits that climate change is expected to affect the psychological wellbeing of people both directly and indirectly. Direct ways include experiencing extreme or traumatic weather events such as cyclones, floods, landslides and indirect ways involve reduction of food security, water scarcity, decrease in places to cultivate, famine and limited resources for a huge population which may trigger depression, anxiety related to the uncertainty of the survival of human, suicidal ideation due to hopelessness and chronic environmental stress. It is also important to note that, according to neuroscience the limbic system consisting of the amygdala which regulates emotions is more active in women which make them experience more worry about the dangers brought by the environment known as eco-anxiety. According to Dominelli (2011), the adverse effects of climate change are felt more by the world's poorest regions and or developing countries whose economies largely depend on natural resources like agriculture. Rural communities in developing countries suffer double impacts of climate change as there are high levels of unemployment, low levels of education and they depend more on natural resources for survival for example subsistence farming, fishing whereas rivers are disappearing because of heavy siltation.

Charlson et al. (2021) note that data from Finland showed that high temperatures were also associated with self-harm and suicide rates, temperature changeability explained more than 60% of the total suicide difference over several decades in Finland. An Australian study found that rural communities experience the threat of floods and drought simultaneously and it contributed to reduced wellbeing starting from stress, anxiety, loss and fear (Charlson et al. 2021). A study from Ethiopia, a low-income country in Africa that has a significantly high reliance on natural resources to secure basic human and animal necessities revealed that seasonal environmental changes which may affect water security, exposes populations to noteworthy emotional distress.

UN Women Watch (2009), states that women are more vulnerable to outcomes of climate change than men because they constitute the majority of the world's poor population due to gender inequality, they are more dependable on natural resources for their livelihoods like agriculture as it can be noted that in India alone women constitute 65% of the agricultural workforce (Surgitha and Littleflower, 2015). They also suffer social, economic and political exclusion which may affect their coping capacity to respond adequately to the implications of climate change. Furthermore, rural women in developing countries are more vulnerable due to gender norms as the responsibility to secure water for domestic use is placed on them as it is estimated that in developing countries 8 in 10 women are responsible for securing water for domestic use (Phiri, 2020). In some cases women will have to travel miles

in search of water, journeying to far rivers to do the family's laundry. Rural women are also charged with the responsibility to fetch fuel like firewood for cooking and due to desertification women end up travelling to far places in search of firewood. These responsibilities place huge burden on women and will in return affect their psychological wellbeing as they begin to experience minimal stress and distress symptoms to clinical disorders ranging from sleep disturbances which may cause depression, general anxiety, suicidal ideation due to feelings of hopelessness (Lancet, 2018).

Research by Glasgow Caledonian University (GCU) (2022), found that climate change can worsen violence against women thereby impacting their mental health. This was confirmed in a study conducted in Malawi which found out that out of 213 surveyed women 86% testified that their psychological wellbeing and health had been affected by climate change. The participants spoke of emotional stress, expressed feelings of sadness or depressive symptoms, feelings of worry and restlessness, fear, traumatized by physical impacts, being confused and frustrated and more than 5% admitted to having suicidal thoughts due to the stressing experiences brought by climate change. Most women in the study reported that they were more worried about their children and expressed feelings of guilt that they were failing to provide enough food for them or raise them properly. One woman expressed how troubled she was when she lost her baby due to a landside but had to continue caring for her other two kids in the direct aftermath of the disaster.

The livelihoods of 70% women in Zimbabwe is dependable on rain fed agriculture, making their livelihoods vulnerable to droughts, erratic rains experienced and extreme weather events like floods, cyclones caused by climate change (Madzwamuswe, 2010). The Zimbabwean Herald of 12 March (2011) reported that 65% of rural water points had dried up due to changing weather conditions and this had increased the journey to be travelled by rural girls in search for water. This has worsened over the years due to erratic weather conditions. Most of these experiences are causing havoc in the psychological wellbeing of women making it a necessity to explore the issue further and bring out more solutions and coping strategies.

Chaki (2022), states that disasters brought by climate change can trigger psychological and psychopathological distress as compared to normal weather patterns thus making people struggle with adjusting and coping with the implications of climate change. Women's vulnerability to climate change impacts can be attributed to gender inequality, social, economic and cultural values. Women, mostly rural women are the most affected by climate change as they are found to interact more with the environment for their survival for example in Zimbabwe, women rely on farming and gardening and due to climate change their means of survival is sometimes disturbed by the erratic rains being experienced in the country, cyclones with the most recent one being Cyclone Idai which destroyed houses, farms leading to loss of life, reduction of food. In addition these women are also charged with the responsibility of fetching water for domestic or household use. Due to water scarcity women will have to travel to far places in search of water and they also have to secure firewood for cooking or selling. Their situation has been exacerbated by the intensification of desertification which causes these women to travel very long distances in search of firewood. The long journeys have deepened the struggles of

women as they worry a lot about providing for the family, experience sleep disturbances due to fear and worry, emotional turmoil as they have to work extra hard with little time to rest just to provide for the family, hopelessness when crops fail, stress as they struggle to secure water or food and engage in fighting for the little resources in the environment. Women are also known as primary care givers at household level and the impact of climate change has worsened their burden to provide for the family as they have to work extra hard to fulfill their duties leaving little time for them to access healthcare services and practice self-care which is a mental health hygiene technique to care against mental illnesses and promote psychological wellbeing. These experiences clearly indicate that climate change is causing a rise in psychological problems due to the nature of its outcomes and this study sought to tackle the psychological challenges experienced by rural women due to the effects brought by climate change as it has become a major cause for concern.

Aim of the study

To bring under scrutiny the psychological challenges experienced by rural women in Zimbabwe due to the adverse outcomes of climate change.

Research Questions

- How is climate change affecting the psychological wellbeing of rural women?
- What are the psychological challenges experienced by rural women due to climate change?

Materials and Methods

Research Approach and Design

The study employed a qualitative research approach which according to Leedy and Ormrod (2015), allows researchers to address participants' perceptions, values and human emotions in a subjective and real-world setting. This helped the researchers to get a clear understanding of the psychological experiences which are being experienced by women in rural areas due to various factors of climate change. A case study was used to provide insights on the psychological challenges which women in Nyanyadzi, Zimbabwe are experiencing due to climate change. A case study brings to scrutiny every aspect of the subject's life and history to seek patterns and causes of behavior in this study to bring under scrutiny how changes in the climate is affecting the psychological wellbeing (Madzwamuse, 2011). This design was particularly important as it offered an in-depth understanding and description of the trends of climate change and how it is affecting the psychological well-being of women in Nyanyadzi.

Participants

Purposive and convenience sampling methods were used to select participants in the study. Purposive sampling was used because it allowed researchers to use their judgment to select a sample that represented the targeted population. In order to facilitate the collection of qualitative data, the researchers selected participants based on geography, relevance, population, demographic information that is single, married, widowed, age, type of employment and participant accessibility. According to Brewis (2014), it is practical to select study participants based on their availability and willingness to participate. A total number of 10 participants were selected including a key informant who is a Village Health Worker (VHW) in Nyanyadzi.

Data Collection

Data was collected using semi structured interviews with open ended questions, consent forms were issued before the commencement of every interview. The researchers engaged in note taking during the face to face interviews as some women were not comfortable with being recorded. Most interviews ranged from 20-25 minutes depending with eloquence of participants. Semi structured interviews also helped the researchers with time keeping by giving direction to the interviews so as to be short and precise, as some participants would wander around various issues. According to Raymond (2012), face to face interviews give the interviewer an opportunity to probe for more clarification with follow up questions and help the researcher to modify lines on inquiry and it facilitates a more in-depth discussion. Interviews helped the researchers to collect as much information for the research for in some cases the responses would unlock new experiences which women are experiencing due to climate change. The researcher also took some time to observe the mentioned distances, nature of water points, mentioned irrigation schemes.

Ethical Considerations

According to Morse and Coulehan (2015), ethics should be considered when gathering knowledge in the field of social sciences. The researchers observed the ethical considerations of honesty and integrity by being truthful that the research was being done for educational purposes only and showed integrity by not manipulating participants to participate in the data collection process through fake promises of cash or recognition. The researcher respected the participants by telling them that they were not going to receive anything from the researchers for it was all for educational purposes. The research also considered the ethical issues of confidentiality by not using participant's real names in the data collection. The researchers discussed issues of consent with participants before the commencement of any interview. A consent form was drafted for the participants to read, understand and sign before participating, only women who had reached the age to consent were approached.

Data Presentation and Analysis

Thematic analysis was used as a method of identifying, analysing and reporting of patterns within data. The researchers identified recurring experiences from the interviews conducted, which were then used as themes to present the data for the larger population to read, (Isaacs, 2014). The researchers utilised this technique in analysing the collected information in a way to identify whether there was any congruence between the themes and also enabled the researchers to display relationships between different themes. In addition, thematic analysis played a pivotal role in the identification of linkages between the themes.

Results

Using thematic analysis three key themes were identified from this study which included women's vulnerability, their exposure to the effects of climate change and the psychological challenges they experienced due to climate change. Almost half of the participants were adult women from the age of 25 to 39 and the other half was shared amongst young adult women from the age of 18-24 and women in the late adult period of 40 to 65. Key informants also turned out to be women as the researchers did not have power to choose a particular gender but work with the available resource persons. Most of the participants were informally employed hence the researchers took note of their source of livelihood as a way to get deeper understanding of how their source of livelihood may impact their experiences. As experiences may vary due to the marital status, the study tried to maintain a fair representation of the women who are married, single, widowed and the divorced. The themes are displayed below along with the direct quotes from participants obtained during the data collection.

Vulnerability and Exposure of Women to the effects of Climate Change

Gender Norms

The study identified some gender norms as one of the factors increasing the vulnerability and exposure of women to the adverse outcomes of climate change. Gender norms are the society's dictated actions of how a male or female is expected to behave. Participants acknowledged that gender norms are persistent and despite what a woman maybe doing they still have to fulfill their duties at home and there are no weekends or off days but rather an everyday responsibility.

Table 1. Gender Norms

Participant	Response
A	<i>"I usually wake up as early as 4 a.m. in the morning to go to the borehole because there are long queues there and I have to get the water before the time for school so that I will not be late. The queues have become so long because the other borehole which people used to go to is drying up"</i>
B	<i>"Sometimes you will realise that you have spent all your time journeying to find water to use at home, as it is your duty as the woman of the house."</i>
C	<i>"The duties are sometimes too much for me, the mountains are too far and because there are no trees for firewood close by I must go there, with the long queues at that borehole I still must go there because I'm the daughter in-law at this house then after all that I still must leave time for my vending because that's how I raise money."</i>
D	<i>"Sometimes we must sleep in the farm as the water may flow in abundance at night, at some point my crops failed because I had a little baby and could not sleep outside in the farms, my husband left for South Africa in search of a job so I am the one responsible for everything here"</i>
E	<i>"It's either you fetch water early in the morning or late in the night because the queues are always long during the day and as the girl child it is your responsibility to fetch the water"</i>
F	<i>"... because of this new trend you'll find that everyday on school days, one or two girls are absent in class and when you ask they'll tell you there was too much work at home, these girls do the house chores... fetching water, firewood, cooking and going to the farms...that's how they're being raised and that's expected of them...they can't escape it"</i>
G	<i>"After the death of my husband his family seized the farm so every development that I may want I have to go through them even for paying the money for the irrigation, I have to give it to them and then they pay it to the offices and when they decide not pay it means that my crops will fail and I will struggle with feeding all these children."</i>
H	<i>"Before going for my normal routine of selling around the area I first face a long distance to fetch water sufficient for the day at home...I'm the elder sister so I must put things in order before leaving."</i>
I	<i>"Sometimes your farm can be sidelined for long without getting irrigation water simply because there is no man to voice up...as a woman they will just trample on you (other farm owners are being supplied by the same irrigation system)."</i>
J	<i>"I go to the mountains very far to search for firewood for selling and household use because in all the close areas people have cut down trees to build their homes and we wake up so early in the morning. For me to be able to get enough firewood to sell for at least 5 USD I will have to work so hard. The money comes from the hand to the mouth and that's how we live"</i>

Source: Primary Data

Gender Inequality

Gender inequality was found to be amongst the contributing factors of women's vulnerability and exposure to the effects of climate change. Gender inequality is the social phenomenon in which men and women are not treated

equally and according the findings it has been increasing women's vulnerability to climate change. The participants complained about how such harsh treatments are making it difficult to have a sustainable source of livelihoods and so they just have to work with what is at least available to them which is the environment although it is now being affected by the changing climate.

Table 2. *Gender Inequality*

Participant	Response
A	<i>"... even at household level parents should also prioritise the education of women because if I had gone to school perhaps I would not have to rely on subsistence farming only... my father suggested that it was a waste of money and resources to send me to school..."</i>
B	<i>"After the death of my husband his family seized the farm so every development that I may want to do, I have to go through them even for paying the money for the irrigation..."</i>
C	<i>"Even when we go to till the land together as a family, after all the fieldwork I am expected to do all the other house chores alone"</i>
D	<i>"As female farmers we demand that there may be an independent board that monitors if water is being shared equally to all farmers regardless of gender, political status or social status..."</i>
E	<i>"Females are not valued here and this puts us at a disadvantage."</i>
G	<i>"I did not get the opportunity to go to school because my father suggested that I was not as bright as my brother in school hence it was going to be a waste of time"</i>
H	<i>"As women we are expected to do a lot at home and in the field, we spend most of our time exposed to these harsh weather conditions."</i>
I	<i>"Society values men, so I think they are better off, as they do not do much of then chores which expose them to harsh weather conditions."</i>
J	<i>"In our community, I see women doing many tasks which expose them to a lot of dangers whilst men play the supervisory roles."</i>

Source: Primary Data

Poverty

Most women reiterated that their livelihood is rooted within the environment and the changes that are coming to the environment is also affecting them and their survival.

Table 3. Poverty

Participant	Response
A	<i>"I go to the mountains which are very far to search for firewood for selling and household use because in all the close areas people have cut down trees to build their homes... to be able to get enough firewood to sell for at least 5 USD I will have to work so hard..."</i>
B	<i>"At some point my crops failed because I had a little baby and could not sleep outside in the farms waiting for the irrigation water, my husband left for South Africa in search of a job so I am the one responsible for everything here"</i>
C	<i>"Since birth we have been relying on our land for survival but suddenly the weather has changed and we are struggling to get the yields we used to have in the past."</i>
D	<i>"I think the ancestors are not happy because hey we have been having either dry spells or floods causing us to fail to harvest anything for our families."</i>
E	<i>"I have just been hearing about these changes in weather and since they started we are struggling to survive here."</i>
F	<i>"We value our land and as women and children, one of our key roles is to till the land for survival but changes in climate have affected our survival."</i>
G	<i>"There is poverty here due to climate change and it is affecting us worse as women because we are the ones who decide what to be eaten at the homestead every day."</i>
H	<i>"Changes in season have robbed us of our peace as we no longer have enough food to feed our families."</i>
I	<i>"Our livelihoods have been affected very much by the change of weather leaving us and our animals stranded."</i>
J	<i>"...being a Village Health Worker is something with an allowance yes but farming is the major thing...in this region we barely receive water and the drying up of Odzi river the supplier of our irrigation is reducing our harvest year by year."</i>

Source: Primary Data

Psychological Challenges Experienced by Women Due to Climate Change

Post-Traumatic Stress Disorder (PTSD)

According to the data collected, women in the rural areas of Nyanyadzi display symptoms of PTSD due to the occurrence of extreme weather events which was propelled by climate change from 2019 to 2023.

Table 4. *Post-Traumatic Stress Disorder*

Participant	Response
A	<i>"I no longer feel comfortable due to the events associated with climate change, it's the things we used to watch in movies....it's slowly becoming a reality and I'm just afraid of what will happen."</i>
B	<i>"Cyclone Idai keeps haunting me... I always dream of the heavy rains that killed our relatives and left us in poverty."</i>
C	<i>"Some time ago this year, they were talking about cyclone Freddy, my child, my mind was restless... the news never brings peace but memories of the pain we went through because of Cyclone Idai"</i>
D	<i>"I can't stand the rains as they remind me of Cylone Idai but at the same we need to eat. Ah the experience gives me shivers."</i>
E	<i>"When it rains I cannot sleep during the night for fear that I may wake up washed away like my relatives who died during Cyclone Idai."</i>
F	<i>"When it comes to mental health the government must intervene as mental illnesses are real issues, in some case you realize that you have been given painkillers in the hospitals but what really caused the headache? Sometimes it is because of too much stress because it is not easy to be living in the days we are now living in, days characterised by extreme weather events like cyclones and floods."</i>
G	<i>"We are no longer safe in the environment it is just like we are waiting for the next disaster to come and we don't know what it is going to be like, things will just get worse and worse."</i>
H	<i>"When I receive news about a coming cyclone I do not take it well as my mind does not even rest and even when I sleep I even dream of being swept away by flooding. My mind will only be able to rest when it passes, we saw what happened in Ngangu Chimanimani and it is not far from here."</i>
I	<i>"These changing seasons have exposed us to a lot. I always visualise us waking up one day and there will be nothing to do, nothing to live for"</i>
J	<i>"Many people from this community really need psychological help. The help that they received during the cyclone is not enough as a lot of them show signs of stress related to the cyclone."</i>

Source: Primary Data

Hopelessness

Women in rural areas also displayed signs of hopelessness due to the experiences triggered by climate change. Most women highlighted that they no longer hope for a better tomorrow because their current experiences are difficult and do not see anything changing.

Table 5. Hopelessness

Participant	Response
A	<i>"We are no longer safe in the environment, it is just like we are waiting for the next disaster to come and we don't know what it is going to be like, things will just get worse and worse..."</i>
B	<i>"If the weather has started changing it means there is no turning back not even scientist can stop it, only God can..."</i>
C	<i>"We have been waiting for long for good yields like what it used to be in the past but hey there is no change, nothing good is going to come out of our land as these seasons keep changing for the worst."</i>
D	<i>"I would be lying if I say that I know anything about the climate or why what is happening is happening, but I do know that without my husband's help there is nothing much that I can do for myself or the kids when disasters come"</i>
E	<i>"I see no positive change for our motherland, we are cursed for real."</i>
F	<i>"Our lives are pathetic, there is nothing to looking forward for in the future."</i>
G	<i>"The cyclone destroyed us, our animals and our infrastructure, life is hard and I do not see any change any time soon."</i>
H	<i>"I thought something good was going to come after the cyclone but it seems the situation is getting worse by day."</i>
I	<i>"We are in a fix. The ancestors and God have forsaken us. It is now drought after drought."</i>
J	<i>"When I interact with most of these women they show that they have lost hope. They do not see themselves going back to their levels of survival that they used to have."</i>

Source: Primary Data

Anxiety

Anxiety was found to be amongst the psychological challenges which some women are experiencing due to climate change.

Table 6. Anxiety

Participant	Response
A	<i>"Even when it starts raining heavily the fear that falls on me is extreme I will only be thinking of the worst things that happened in Chimanimani during the days of Cyclone Idai and gives me no peace"</i>
B	<i>"Sometimes I fail to control my worry because I cannot stop thinking of what tomorrow looks like, we used to live in harmony with nature but now we had Cyclone Idai, COVID-19 where we had to stay at home."</i>
C	<i>"Mental health is an important aspect because it is difficult to make better decisions or even perform better in school when you are not ok psychologically"</i>
D	<i>"I'm always worried about the food security of this family, I'm afraid one day I will fail to provide food for these little ones if the droughts persist and crops die...what will I do? I don't even know"</i>
E	<i>"Sometimes we hear about heat waves and especially around here we experience extreme temperatures and will be forced to stay home in a"</i>

	<i>shade, now I cannot stop thinking about my future or my grandkids here's future. I am so worried about our lives."</i>
F	<i>"Before I got married, in 2019 with my family we experienced that drought...it was hard...I become so anxious when it is the farming season and it doesn't rain, I can't help it but remember how hard it was."</i>
G	<i>"We should not only get counseling when we go for HIV testing, but even when one goes to get treated for a headache because, hey sometimes this uncertainty makes me nervous."</i>
H	<i>"Sometimes I fail to control my worry because I cannot stop thinking of what tomorrow looks like we are no longer at peace with nature... now I cannot stop thinking about my future or my grandchildren's future."</i>
I	<i>"These shifts in seasons are worrisome, I really dread thinking about what is going to become of us."</i>
J	<i>"In the Out-Patient Department (OPD) cases of women reporting to be having stomach pains or headaches which are persistent but may not be finding any source of cause when we ask them follow up questions, these cases have been on the rise over the past five years, some women report that they experience the unsettling of the stomach.... it is not in all cases like those do we give them medicines"</i>

Source: Primary Data

Suicide Ideation

Most participants highlighted the magnitude of how their thoughts are preoccupied with death or dying as well as suicide ideation. The researchers noticed that they may not be having a plan on how they wish to execute the task but they sometimes find themselves imagining about dying. Most of the remarks about dying were mentioned in passing or in very subtle ways that one may even miss the point of dying that was there because most people in rural areas believe that those issues are not allowed to be spoken of openly.

Table 7. *Suicide Ideation*

Participant	Response
A	<i>"The natural disasters of today make you assume that life would be better off out of this world. We cannot continue living like this, one can even go crazy when they start thinking about everything going on with the climatic environment"</i>
B	<i>"If this is now the way of living then it is better for those who are dead and resting"</i>
C	<i>"Living with the memories of my relatives who were marooned by the cyclone makes me fail to see any meaning in life."</i>
D	<i>"Sometimes the poverty becomes too much that you wish you were dead. Just imagine looking at your own children crying for food yet you cannot provide because there is drought and the economy is poor. All this suffering because of the changing climate."</i>
E	<i>"I think we are cursed, there are times when I think its better to die than face these adversities."</i>
F	<i>"There is no rest here on earth worse with these weather conditions."</i>

G	<i>“Cyclone Idai did more harm to us than good. Being given a choice between death and life, I am sure some people here would choose death.”</i>
H	<i>“Effects of this changing climates are worse than death especially when we have some relatives who lost their lives due to the cyclone.”</i>
I	<i>“Sometimes when you face this poverty and how the rains are not coming you really think that it is better to die that to struggle like this.”</i>
J	<i>“As a healthcare worker I suggest the full implementation of a healthcare system that helps the whole person both psychologically, physically even social. A psychosocial approach where there is a department in every hospital even rural clinics...a department that asses all aspects of a person. This can help prevent some cases of suicide and suicide attempts which are on the rise.”</i>

Source: Primary Data

Discussion

The study established that climate change is affecting the psychological wellbeing of women in rural areas. Findings reflect that women’s vulnerability and exposure to adverse climatic conditions had a bearing on their mental health. Most participants reported gender norms, gender inequality and poverty as some pressing issues which make women in rural areas more vulnerable and exposed to the effects of climate change. In most rural communities accessing education is considered a privilege for men; women are often deprived of the opportunity to build careers which might have a positive effect on their current socio-economic status (Phiri, 2020). In Zimbabwe women still hold the lowest positions in the society especially in rural areas where there is strict observation of the old societal rules which propels gender inequality. This therefore concurs with what this study found, that women and men in rural areas do not have equal access to land for farming and due to climate change women were found to be more prone to the effects of climate change than men.

Gender norms are most influential in most rural areas. According to the Borgen Project Zimbabwe (Madzwamuse 2011), women by tradition hold lower positions in Zimbabwean cultures which are often patriarchal and this leads them to engage in unpaid care work in the home or subsistence agriculture. Engaging in unpaid care work or working jobs with low wages contributes to women being poor and makes it difficult for them to resort to other means of survival except for relying on the environment. USAID (2018), highlighted that in a usual day in rural areas of Zimbabwe, a woman must fetch water, search for firewood to use as fuel, make a fire, cook and wash the dishes, repeating this cycle for every meal throughout the day and then spare time for the farm. The change in climate affects how women must fulfill these gender roles assigned to them on daily basis.

Furthermore, the findings of the study indicated that women experience mental health conditions like PTSD, anxiety, hopelessness, and suicide ideation due to their experiences with climate change. Most women displayed symptoms of PTSD when asked about how they react when they receive news of the coming of an imminent weather event like a cyclone and because of the proximity to Ngangu where Cyclone

Idai in 2019 hit ward 8 of Chimanimani district which is Nyanyadzi and women were the hardest hit. Most survivors are still in fear and have been affected psychologically. According to Phiri (2020), explains that people living closer to a disaster-prone area may develop psychological distress as a response to their worry of living close to an area posing as a danger to them. Any traumatic event can trigger a stress disorder like PTSD like announcing the coming of a similar disaster.

Surviving women also displayed symptoms of depression, anxiety and suicidal ideation due to their day to day experiences in the midst of climate change like droughts which cause desert like features, high temperatures, cyclones, unpredictability of farming seasons. Most women showed concern over the changes and how it is affecting their livelihoods for example travelling long distances in search of firewood or for water, crop failure due to insufficient distribution of the water in the irrigations which are affected by drying rivers and heavily silted rivers. Due to the changes brought by climate change some women reflected that they no longer have hope for a bright future but a future full of catastrophe and they perceive that they have little to no power to be able to adapt. This may be because of lack of knowledge on climate change adaptation and mitigation measures.

Conclusions

This study concluded that climate change is not only an environmental crisis but a mental health crisis too and that there is a close link between psychological wellbeing and changes in climate conditions. The effects of climate change are felt disproportionately amongst men and women due to high exposure and vulnerability of women. Based on the study's findings the vulnerability of women in rural areas is propelled by poverty, strict observations of gender norms and gender inequality. The experiences which women in rural areas face on day to day basis due to the changing climate were found to be affecting their mental wellbeing causing them to experience psychological challenges like PTSD, depression, anxiety, hopelessness and suicide ideation.

Recommendations

This study recommends the following:

- Skills enrichment programs targeting women as a way of enabling them to adapt to the dictates of climate change.
- The government should ensure that mental health services can be accessed by everyone at their local clinics even in rural areas.
- Gender equity to open doors for the inclusion of women in major decision processes, in climate change task force and the valuing of women which will help in reducing the vulnerability and exposure of women to the effects of climate change.
- Climate change education to raise awareness on adaptation and mitigation measures

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