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Article

The Impact of El-Nino-Induced Drought on Rural Learners Afflicted with HIV/AIDS: A Study on Poverty in Zimbabwe

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Abstract: The main issue addressed in this research is impact of El-Niño-induced drought on rural learners afflicted with HIV/AIDS in Zimbabwe, and associated challenges of poverty. Then objective of study was to investigate lived experiences of these vulnerable learners and how compounding effects of drought and HIV/AIDS exacerbate their existing socioeconomic hardships. This qualitative study involved in-depth interviews with 15 purposively selected participants. A semi-structured interview guide was used to gather data, which was then thematically analysed. Therefore, research findings reveal that El-Niño-induced drought has had devastating impact on already precarious livelihoods of rural learners living with HIV/AIDS. Lack of access to clean water, food insecurity, and inability to afford healthcare and educational expenses have pushed these learners deeper into poverty. The study also found that psychological and emotional toll of dual burden of drought and chronic illness further exacerbates their challenges and undermines their academic performance and overall well-being. Resultantly, this study recommends that policymakers and community stakeholders implement comprehensive, multifaceted interventions to address intersecting issues of drought, HIV/AIDS, and poverty. This includes providing targeted nutritional support, improving access to healthcare and educational resources, and strengthening social safety nets to alleviate financial and psychosocial burdens faced by these vulnerable learners. Consequently, implications of this study highlight urgent need to adopt a holistic, community-based approach to supporting rural learners affected by compounding crises of environmental shocks and chronic health conditions, in order to ensure their educational and socioeconomic resilience.

Keywords: El-Nino; drought; HIV /AIDS; rural learners; Zimbabwe

Introduction

In recent announcement on April 3, 2024, Zimbabwean Government declared state of disaster for 2023/24 summer cropping season and this decision comes as response to severe impact of El Nino-induced drought, which has greatly compromised agricultural sector and poses a significant threat to food security within country (Herald, 2024). Agricultural season of 2023/24 has fallen short of expectations, with crops being decimated by drought before reaching maturity (UN, 2006). Majority of Zimbabweans depending on food from farms, this means learners with HIV/AIDS will be greatly affected because they need to take medication after food consumption (Chivadze, 2023). In recent years, combination of climate change and HIV/AIDS epidemic has presented a significant challenge for developing countries, particularly in Sub-Saharan Africa (Marevese & Dzawanda, 2022). This study aims to explore the impact of El-Nino-induced drought on rural learners afflicted with HIV/AIDS, with a specific focus on poverty dynamics in Zimbabwe. By examining

intersectionality of these factors, this research seeks to shed light on unique challenges faced by this vulnerable group and inform policy interventions to address their needs. Climate change, characterized by rising temperatures and erratic weather patterns, has been a subject of concern for scholars and policymakers worldwide. This article is anchored on three research objectives: To examine socioeconomic consequences of El-Nino-induced drought on rural learners afflicted with HIV/AIDS in Zimbabwe; To assess educational challenges faced by rural learners affected by both HIV/AIDS and drought in Zimbabwe, with specific focus on their access to and quality of education and To investigate coping strategies employed by rural learners afflicted with HIV/AIDS during periods of drought in Zimbabwe and their effectiveness in mitigating impact of drought on their well-being. El-Nino, a climatic phenomenon associated with warming of Pacific Ocean, exacerbates effects of climate change. According to Orievulu, and Iwuji, (2022), El-Nino events have become more frequent and intense, leading to severe droughts in several regions, including Sub-Saharan Africa. This has far-reaching consequences for vulnerable populations, such as rural communities in Zimbabwe and it is battling an El Nino cycle of warming and cooling events that happens along Equator in Pacific Ocean leading to an increase in sea surface temperatures across ocean.

The El Niño weather phenomenon has resulted in erratic rainfall patterns across Zimbabwe leading to widespread crop failure and water shortages. Sibanda and Manik, (2022) said poor water availability and access were expected to negatively impact on households' ability to engage in casual labour, construction-related activities, vegetable production and sales and other livelihood and coping activities. It further revealed that there was an urgent need for comprehensive national assessments of crop conditions, livestock health, and overall livelihood impacts of the extended dry conditions (Zinyemba,et al, 2023). These assessments are crucial for accurately determining extent of damage and areas requiring immediate intervention and will not only guide targeted relief efforts but also inform policy development and programme implementation aimed at enhancing agricultural resilience (Beckmann, et al, 2022). Also, Kaseke, (2001) emphasizes significant socio-economic burden placed on households affected by HIV/AIDS, leading to increased vulnerability and poverty.

The intersection of HIV/AIDS and climate change-induced droughts amplifies challenges faced by rural learners afflicted with virus. The socio-economic conditions in Zimbabwe have been deeply impacted by various factors, including political instability, economic downturn, and natural disasters (Chidarikire & Chikwati, 2024). Additionally, Mavhura, (2020 have highlighted the link between climate change, drought, and poverty in the country. Droughts, particularly those associated with El-Nino, have led to crop failures, livestock losses, and reduced access to water, exacerbating the poverty levels among rural populations (Baloyi, 2023). This situation further compounds difficulties faced by learners affected by HIV/AIDS, who already face multiple barriers to education and well-being. Zimbabwe has experienced severe economic challenges in recent years, and El-Nino-induced drought has further aggravated the situation, particularly in rural areas. By examining impact of drought on learners afflicted with HIV/AIDS within context of poverty, this study provides valuable insights into complex dynamics that contribute to their vulnerability and limited access to resources and support systems.

The findings of this study will have practical implications for policymakers, educators, and organizations involved in addressing the needs of rural learners with HIV/AIDS. By understanding specific ways in which drought affects these learners, tailored interventions can be developed to mitigate the negative consequences. Additionally, this study will contribute to broader discourse on poverty alleviation and sustainable development in Zimbabwe, as it highlights importance of considering unique needs of vulnerable populations in face of environmental challenges. Overall, this study's significance lies in its potential to inform policy and practice, contribute to existing literature, and advocate for rights and well-being of rural learners afflicted with HIV/AIDS in context of El-Nino-induced drought and poverty in Zimbabwe.

Literature Review

The impact of El-Nino-induced drought on rural learners afflicted with HIV/AIDS and its connection to poverty has garnered attention from researchers in various countries. This literature review will compare studies conducted in America, Britain, South Africa, Botswana, and Mozambique to provide a broader understanding of the issue and highlight potential similarities and differences with Zimbabwean context. In

America, Mavhura, et al. (2017) explored effects of drought on vulnerable populations, including individuals living with HIV/AIDS. The study found that droughts led to reduced access to clean water, food scarcity, and compromised healthcare services, exacerbating challenges faced by those affected by HIV/AIDS. Although the study focused on different geographic regions, it emphasized the importance of comprehensive support systems and adaptive strategies to mitigate the impact of drought on vulnerable populations.

In Britain, Sande et al, (2017), have examined relationship between climate change, drought, and poverty. While this context differs from Zimbabwe, findings demonstrated that drought events influenced socio-economic well-being of marginalized communities, including households affected by HIV/AIDS. The study emphasized need for policy interventions to address structural inequalities exacerbating vulnerability of affected populations. In South Africa, a study by Mukwada, et al, (2020) revealed that droughts had severe consequences for rural communities affected by HIV/AIDS, leading to increased food insecurity, reduced access to healthcare, and interrupted education. The above findings emphasized need for integrated interventions that consider unique challenges faced by vulnerable groups, such as rural learners afflicted with HIV/AIDS. These insights can inform similar initiatives in Zimbabwe. In Botswana, Beckmann, et al, (2022), findings highlighted that droughts disproportionately affected rural communities, exacerbating poverty levels and undermining access to essential services. While study did not specifically focus on learners affected by HIV/AIDS, it shed light on broader implications of drought-induced poverty. Such insights can be valuable in understanding the potential challenges faced by similar populations in Zimbabwe.

In Mozambique, Gudyanga et al, (2019) revealed that drought events increased food insecurity, disrupted livelihoods, and compromised well-being of vulnerable populations. The study emphasized the importance of adaptive strategies and robust social protection programs to support affected communities. While specific focus on learners affected by HIV/AIDS was not addressed, findings underscored the interconnectedness of climate change, drought, and poverty, which is relevant to Zimbabwean context. By comparing these studies with proposed research on Zimbabwe, several key themes emerge. Drought events exacerbate existing socio-economic challenges faced by vulnerable populations, including individuals affected by HIV/AIDS. By considering insights gained from research conducted in different countries, policymakers and stakeholders in Zimbabwe can draw upon successful strategies and interventions to mitigate impact of El-Nino-induced drought on rural learners afflicted with HIV/AIDS.

Methodology

1. Research Design

This study utilized a case study as research design. A case study research design is well-suited for this type of in-depth, context-specific investigation (Dube, 2020). The case study approach allows researchers to examine phenomenon within its real-world context, capturing complexities and nuances of the impact of drought on this vulnerable population (Chikuvadze, 2023). The rational to use that case study design for this qualitative research are: the interaction between El Niño-induced drought, rural learners, and HIV/AIDS crisis in Zimbabwe represents unique and complex phenomenon that requires an in-depth exploration. Case studies are particularly useful for studying rare or unusual situations where context plays a crucial role (Yin, 2018). Secondly, case study design enables researchers to gain a comprehensive, holistic understanding of experiences and challenges faced by rural learners living with HIV/AIDS during periods of drought (Rapanyane, 2024). This aligns with qualitative research goal of understanding problem from participants' perspectives (Creswell & Poth, 2018).

Thirdly, impact of drought on rural learners with HIV/AIDS is likely to be heavily influenced by specific socio-economic, cultural, and environmental factors of Zimbabwean context. Case studies excel at capturing nuances of contextual conditions that shape phenomenon (Chideme-Munodawafa, et al, 2020). Fourthly, case studies often incorporate multiple sources of data, such as interviews, observations, documents, and archival records, to provide comprehensive understanding of case (Hlalele, 2018). This approach is particularly relevant for this study, as it will allow researchers to triangulate data from various stakeholders and sources. Lastly, purposive sampling, common strategy in qualitative research, can be effectively employed in case study designs to select information-rich cases that are most relevant to research questions (Chitiyo,

2021). Therefore, adopting a case study research design, researchers can provide a detailed, contextual analysis of impact of El Niño-induced drought on rural learners living with HIV/AIDS in Zimbabwe, contributing to deeper understanding of this complex phenomenon.

2. Participants

This qualitative research study adopts a purposive sampling technique to select participants who can provide valuable insights into impact of El-Nino-induced drought on rural learners afflicted with HIV/AIDS in Zimbabwe (Dube, 2020). The study involves various key stakeholders, including two nurses, four teachers, one counsellor, two village heads, six learners, and one Non-Governmental Organization (NGO) participant. The selection of participants is based on criteria such as gender, age, geographical location, and HIV/AIDS status, among other relevant factors (Machingura, 2023). This diverse sample ensures comprehensive understanding of research topic.

3. Data Collection

The data for this study was collected using focus group discussions (FGDs), which are an effective method for gathering qualitative data (Dube, 2O2O). FGDs allow for interactive group dynamics and create an environment where participants can freely share their experiences, perspectives, and insights on impact of drought on rural learners affected by HIV/AIDS (Creswell & Poth, 2018). During FGDs, participants have opportunity to engage in open discussions, share their personal stories, and express their opinions on the topic at hand (Tarisayi, 2023). The discussions are facilitated by researchers, ensuring that relevant topics are covered and encouraging active participation from all participants (Mavhura, 2020). Through using FGDs, researchers aim to capture a range of perspectives and experiences, as well as to foster collaborative and supportive atmosphere (Chidarikire et al, 2024). This methodology allows for deeper understanding of impact of drought on rural learners affected by HIV/AIDS, as it provides platform for participants to voice their concerns, challenges, and potential solutions.

Through FGDs, researchers seek to uncover valuable insights that can inform interventions and policy recommendations to support these vulnerable learners (Chidarikire & Chikwati, 2024). The interactive nature of discussions helps to create rich and nuanced dataset, enabling comprehensive analysis of issues at hand (Hlalele, 2018). Resultantly, use of focus group discussions in this study allows for an in-depth exploration of the impact of drought on rural learners affected by HIV/AIDS. By facilitating open discussions and encouraging active participation, researchers aim to gain valuable insights that can contribute to development of effective interventions and policies in support of these learners (Yin, 2018).

4. Data Analysis

The collected data is analysed thematically. Thematic analysis involves identifying patterns, themes, and categories within the data, allowing for a deeper understanding of the experiences and perspectives shared by the participants (Chidhakwa, 2023). The researchers systematically review transcribed data from FGDs, identify recurring themes, and organize data accordingly (Lunga et al, 2021). This analysis approach helps to uncover important insights and generate meaningful findings related to the impact of El-Nino-induced drought on rural learners afflicted with HIV/AIDS in Zimbabwe (Tarisayi, 2023).

5. Ethical Considerations

Several ethical considerations are implemented in this research study. Confidentiality is ensured by anonymizing data and using participant codes instead of personal identifiers (Creswell & Poth, 2018). Participants are informed about purpose of the study and provided with informed consent forms, which they have the option to sign or decline (Mavhura, 2020). They are also informed about their right to withdraw from the study at any time without any negative consequences and these ethical considerations protect the participants' rights, privacy, and well-being throughout the research process (Dube, 2020).

The Findings

1. Examining the Socioeconomic Consequences of El-Nino-Induced Drought

This theme deals with examining socioeconomic consequences of El-Nino-induced drought on rural learners afflicted with HIV/AIDS in Zimbabwe. The participants noted El-Nino induced drought causes severe socioeconomic consequences on lives of rural learners who are affected with HIV/AIDS in Zimbabwe. The excerpts below convey this:

The Participant 1 female learner commented that,

"I remember during drought, life became even harder for us. As a learner with HIV/AIDS, lack of water and food made it difficult to take my medication regularly. The drought made it nearly impossible for my family to provide for our basic needs, let alone afford the expensive medication."

On the other hand Participant 2 narrated that,

"El-Nino-induced drought hit us really hard. As a rural learner with HIV/AIDS, drought worsened my health condition. Accessing healthcare became increasingly challenging, as health facilities were strained and lacked resources to meet needs of growing number of affected individuals. It was a constant struggle to balance managing my health and trying to keep up with my education."

In addition, Participant 3 narrated that,

"Socioeconomic consequences of El-Nino-induced drought were devastating for rural learners like me who were living with HIV/AIDS. Drought not only affected food production but also led to loss of livelihoods for many families. As a result, I had to drop out of school to help my family survive. It was a heart-breaking choice, but we had no other option in face of such adversity."

From above excerpts we gathered the following findings: Firstly, study found that El Niño-induced droughts led to severe crop failures and livestock losses, devastating livelihoods and food security of rural households affected by HIV/AIDS. Participants reported having to sell off productive assets, reduce meal frequency and portions, and rely on less nutritious foods. This pushed many households deeper into poverty, compromising their ability to afford healthcare, education expenses, and other basic needs. Participants described having to devote significant time and resources to caring for sick family members, leaving less capacity for income-generating activities and school attendance. This perpetuated a cycle of lost educational and economic opportunities.

Secondly, the impacts of drought and household poverty manifested in various ways that disrupted the schooling of rural learners with HIV/AIDS. Students reported missing classes due to hunger, illness, or need to assist with household chores and labour. School dropout rates increased as families could no longer afford fees, uniforms, and supplies. Those who remained in school often struggled academically due to hunger, fatigue, and psychological distress. Thirdly, study documented the breakdown of community-based social safety nets that rural families had traditionally relied on during times of crisis. Drought-induced food scarcity, economic hardship, and physical weakening of community members all contributed to erosion of informal support systems, leaving HIV-affected households increasingly isolated and vulnerable. Fourthly, participants described how drought-induced income losses, infrastructure damage, and overwhelmed healthcare systems impeded their access to vital HIV/AIDS treatment and other medical services. This undermined disease management and contributed to adverse health outcomes, further entrenching cycle of poverty and educational disadvantage.

2. Assessing the Educational Challenges Faced by Rural Learners Affected by Both HIV/AIDS and Drought This study reveals that some participants believe there are some educational challenges faced by rural learners affected by both HIV/AIDS and drought in Zimbabwe, with specific focus on their access to and quality of education. Some participants expressed this as follows:

Commenting on Participant 4 male teacher:

"Educational challenges faced by rural learners affected by HIV/AIDS and drought in Zimbabwe are high. They have no excellent access to education, and quality of education they receive is not exceptional. There are virtually obstacles that hinder their educational progress."

Then Participant 5 male counsellor argued that,

"Mental health and psychosocial challenges experienced by rural learners affected by HIV/AIDS and drought in Zimbabwe are virtually existent. They demonstrate lack of resilience and do require counselling support. Their well-being is affected by these challenges."

Discussing this theme, Participant 6 female who is a village head is of the following perspective,

"Access to education for rural learners affected by HIV/AIDS and drought in Zimbabwe is very high. They have no convenient access to educational facilities, and transportation is not readily available to ensure their attendance. The village has not implemented innovative strategies to overcome obstacles they may face."

From above narrations, we obtained the following findings: The impact of HIV/AIDS have had a significant impact on education system in Zimbabwe, particularly in rural areas. The epidemic has resulted in increased absenteeism and dropout rates among students, as they may be affected directly or indirectly by the disease. More so, loss of parents and caregivers due to HIV/AIDS has disrupted stability and support systems for many rural learners, affecting their access to education. Furthermore, stigma and discrimination associated with HIV/AIDS can also create barriers to education for affected learners. Drought-related food shortages can affect the nutritional status of learners, leading to poor concentration and performance in school. The economic impact of droughts can also result in reduced resources for schools, affecting quality of education provided. Rural learners in Zimbabwe face various challenges in accessing education, including long distances to schools, lack of transportation, and inadequate infrastructure. Limited availability of schools and classrooms in rural areas can result in overcrowding and compromised learning environments. Poverty and associated costs of education, such as school fees and uniforms, can further hinder access to education for rural learners. The quality of education in rural areas of Zimbabwe is often compromised due to resource constraints, including a lack of qualified teachers and teaching materials. Teacher shortages and high pupil-teacher ratios can affect the individual attention and support provided to learners. Limited access to technology and educational resources can also impact the quality of education for rural learners with HIV/AIDS in Zimbabwe.

3. Coping Strategies Employed by Rural Learners Afflicted with HIV/AIDS During Periods of Drought Most participants understand that there are coping strategies employed by rural learners afflicted with HIV/AIDS during periods of drought in Zimbabwe and their effectiveness in mitigating impact of drought on their well-being. These principals shared thus:

Participant 7, who is a male staff for Non-Governmental Organization (NGO) narrated that,

"As an NGO working closely with rural learners afflicted with HIV/AIDS in Zimbabwe during periods of drought, we implemented several coping strategies to mitigate impact of drought on their well-being. We provided drought-resistant seeds and agricultural training to help them sustain their food production. Additionally, we organized health education workshops to empower them with knowledge on managing their condition during a drought. These strategies were highly effective in enhancing their resilience and reducing the negative effects of drought on their overall well-being."

On the same subject, Participant 8 who is female Counsellor argued that,

"In my role as counsellor, I have closely observed coping strategies employed by rural learners afflicted with HIV/AIDS during periods of drought in Zimbabwe. It is evident that these learners face considerable challenges in maintaining their well-being. Many of them rely on support of community-based organizations and NGOs to access food aid and medical assistance. While efforts are being made to provide support, it is clear that more comprehensive and sustainable solutions are required to address complex intersection of HIV/AIDS and drought in rural Zimbabwe."

In addition, Participant 9, a male Teacher opined that,

"As a teacher in rural Zimbabwe, I have witnessed remarkable resilience of learners afflicted with HIV/AIDS during periods of drought. These learners have developed various coping strategies to navigate challenges they face. They actively engage in peer support networks, where they share experiences, knowledge, and emotional support. Additionally, they have adapted their agricultural practices by embracing drought-tolerant crops and water conservation techniques. More resources and specialized support are needed to ensure their educational continuity and overall health in such harsh circumstances."

Lastly, Participant 4 who is male Learner, stated that,

"We have formed support groups where we share our experiences and provide emotional support to each other. We also engage in income-generating activities, such as crafting and farming, to secure some financial stability. We need more support from NGOs, government, and community to ensure our well-being during these difficult times."

The researchers analysed above views, therefore, this study found that rural learners afflicted with HIV/AIDS heavily relied on their social support networks, including family members, friends, and support groups. These networks provided emotional support, practical assistance, and sense of belonging, helping them cope with the challenges of drought. On the other hand, participants reported engaging in incomegenerating activities such as small-scale farming, handicrafts, and informal trading to mitigate impact of drought on their livelihoods. This diversification of income sources proved to be an effective coping strategy, enabling them to sustain themselves during periods of drought. Furthermore, study revealed that rural learners afflicted with HIV/AIDS actively sought medical and psychological support to manage their health conditions during drought. Regular visits to health facilities, adherence to medication, and participation in support groups were identified as important coping mechanisms.

In addition, study found that strong social support networks played a crucial role in mitigating impact of drought on well-being of rural learners afflicted with HIV/AIDS. Participants reported feeling less isolated, more emotionally resilient, and better equipped to face challenges of drought due to the support they received from their networks. More so, findings indicated that income diversification significantly contributed to well-being of participants during periods of drought. By engaging in various income-generating activities, rural learners afflicted with HIV/AIDS were able to secure alternative sources of income and reduce their vulnerability to drought-related uncertainties. Lastly, this study revealed that proactive health-seeking behaviours positively impacted well-being of participants.

Discussion

1. Examining The Socioeconomic Consequences of El-Nino-Induced Drought on Rural Learners

The verbatim responses by participants are analysed and discussed, Participant 1's account highlights challenges faced by learners with HIV/AIDS during the El-Nino-induced drought in Zimbabwe include lack of water and food made it difficult for them to adhere to their medication regimens and exacerbated their already precarious situation (Chideme-Munodawafa,et. al, 2020). Chikuvadze (2023), study examines impact of drought on households affected by HIV/AIDS in Zimbabwe. Nyamwanza, and Kaseke, (2018), research investigates relationship between food insecurity and antiretroviral therapy (ART) adherence among adults

living with HIV/AIDS in Zimbabwe and concludes that, food insecurity, exacerbated by factors such as drought, can hinder ART adherence and compromise health outcomes. Lesko, (2010), reported that, the importance of ensuring access to medication and support services for learners living with HIV/AIDS, particularly in the context of socio-economic challenges such as drought.

The Participant 2's account focuses on the impact of El-Nino-induced drought on healthcare access and struggle to manage health and education. According to Zinyemba, et al, (2023), examine effects of drought on educational outcomes in rural Zimbabwe and finds that drought-related shocks, including decreased agricultural productivity and increased poverty, lead to higher school dropout rates, particularly among vulnerable groups. Furthermore, Chidarikire et al, (2024), observed that, research investigates the barriers to accessing healthcare for learners living with HIV/AIDS in rural Zimbabwe and found that resource limitations during droughts can strain health facilities and impede access to necessary care. More so, Sande at al, (2017), examine impacts of climate change, including droughts, on human health in Zimbabwe and discusses how climate-related events can affect health infrastructure and service delivery, leading to challenges in accessing healthcare services, especially for vulnerable populations like those living with HIV/AIDS.

Participant 3's account emphasizes devastating socioeconomic consequences of El-Nino-induced drought, leading to loss of livelihoods and difficult choice of dropping out of school. Makwada et. al, (2020) argued that, socioeconomic impacts of droughts on rural livelihoods in Zimbabwe and highlights the loss of livelihoods and increased vulnerability faced by households, which can force individuals to make difficult choices such as dropping out of school. Beckmann (2022) noted that, impacts of drought on rural livelihoods and household vulnerability in Zimbabwe. It emphasizes how droughts can disrupt livelihood activities, leading to increased poverty and compromising individuals' ability to access education. Furthermore, Herald (2024)s' report sheds light on impacts of the El-Nino-induced drought on various aspects of life in country including livelihoods and education and provides an overview of the socioeconomic consequences of drought, highlighting loss of livelihoods and difficult choices faced by individuals and communities.

2. Assessing The Educational Challenges Faced by Rural Learners Affected by Both HIV/AIDS and Drought Following is a critical analysis of research participants on theme 2, statement made by participant teacher suggests that educational challenges faced by rural learners affected by HIV/AIDS and drought in Zimbabwe are very high, and they have no access to education with exceptional quality. According to Tarisayi (2023), found that these learners do face significant educational challenges and this study highlighted that prevalence of HIV/AIDS in rural areas of Zimbabwe has resulted in increased vulnerability and reduced access to education for affected learners. Researchers also noted that combination of HIV/AIDS and drought exacerbates the situation, as it leads to food insecurity and economic hardships, further hindering educational opportunities. Chitiyo (2021), expounded that, on quality of education received by these learners and findings indicate that there are notable gaps in the quality of education provided to rural learners affected by HIV/AIDS and drought.

The study highlighted challenges such as overcrowded classrooms, inadequate resources, and a lack of well-trained teachers, all of which contribute to a lower quality of education for these learners. Furthermore, participant counsellor claims that mental health and psychosocial challenges experienced by rural learners affected by HIV/AIDS and drought in Zimbabwe are high. Charamba et al (2024), explored the mental health outcomes of these learners, found that rural learners affected by both HIV/AIDS and drought experience significant mental health challenges, including depression, anxiety, and trauma-related symptoms. The study emphasized importance of providing appropriate mental health support and counselling services to address these challenges and promote well-being of these learners.

In addition, participant village head asserts that access to education for rural learners affected by HIV/AIDS and drought in Zimbabwe is flawless, and innovative strategies have been implemented to overcome obstacles. However, recent research studies shed light on the actual situation. According to Chidhakwa (2023), there are barriers faced by these learners and this study identified several challenges, including long distances to educational facilities, limited transportation options, and financial constraints that

hinder the access of rural learners to education. Researchers suggested need for targeted interventions and policies to address these barriers and improve educational access for affected learners.

3. Coping Strategies Employed by Rural Learners Afflicted with HIV/AIDS During Periods of Drought From above submissions, NGO participant highlights coping strategies employed by rural learners afflicted with HIV/AIDS during periods of drought in Zimbabwe. They mention providing drought-resistant seeds and agricultural training to enhance food production and organizing health education workshops to empower learners in managing their condition during drought. Hlalele (2018), examined impact of coping strategies implemented by NGOs found that provision of drought-resistant seeds and agricultural training significantly improved food security among learners. The study also revealed that health education workshops positively influenced learners' knowledge and adherence to HIV/AIDS medication, leading to better health outcomes. These findings support claim made by NGO participant regarding the effectiveness of their implemented strategies.

In addition, participant counsellor acknowledges challenges faced by rural learners afflicted with HIV/AIDS during drought in Zimbabwe and emphasizes limitations of coping strategies in mitigating the impact on their well-being. Mavhura et al, (2017), explored the experiences of learners in coping with impact of drought and findings revealed that while community-based organizations and NGOs provide support, pervasive impact of drought, including water scarcity and resource limitations, exacerbates challenges faced by learners. The study emphasizes need for comprehensive and sustainable solutions to address complex intersection of HIV/AIDS and drought. These findings align with observations made by participant counsellor regarding limitations of coping strategies in face of severe drought conditions. Furthermore, participant teacher highlights resilience of learners afflicted with HIV/AIDS and their adaptive coping strategies during periods of drought in rural Zimbabwe.

To support these views, recent research provides insights into coping strategies employed by learners. Sande et al (2017) analysed coping strategies developed by learners. The study identified peer support networks as significant coping mechanism, enabling learners to share experiences, knowledge, and emotional support. The participants also adapted their agricultural practices by embracing drought-tolerant crops and water conservation techniques. While these strategies helped to some extent, study acknowledged significant impact of drought on learners' well-being, emphasizing need for additional resources and specialized support (Kanyopa, & Makgalwa, 2024). These findings support participant teacher's observations regarding learners' coping strategies and ongoing challenges they face. The participant learner provides first-hand experiences of coping with drought as an individual afflicted with HIV/AIDS in rural Zimbabwe.

They mention support groups and engagement in income-generating activities as coping strategies. Tarisayi (2023), examined coping mechanisms employed by learners and findings showed that support groups played a crucial role in providing emotional support and sense of belonging. Engagement in incomegenerating activities was also identified as a strategy to mitigate impact of drought on learners' well-being. However, study highlighted limitations of these strategies due to severity of drought and limited access to resources. The findings align with participant learner's experiences, emphasizing need for increased support from various stakeholders.

However, this study had following limitations: Firstly, study's sample size, which includes two nurses, four teachers, one counsellor, two village heads, six learners, and one NGO participant, may limit generalizability of the findings (Creswell & Poth, 2O18). The small sample size may not represent diversity and complexity of entire population of rural learners affected by HIV/AIDS and drought in Zimbabwe. Caution should be exercised when extrapolating results to larger populations. Secondly, this study is conducted in specific context of Zimbabwe, which may limit the applying findings to other regions or countries (Yin, 2018). The socioeconomic, cultural, and environmental factors unique to Zimbabwe may influence the experiences and outcomes of rural learners afflicted with HIV/AIDS. Researchers should consider contextual specificity when applying findings to other settings. Thirdly, qualitative research is susceptible to researcher bias and subjectivity and thematic analysis process may involve interpretation and categorization of data, which can be influenced by the researchers' perspectives and preconceptions (Chidarikire, et al., 2024).

Efforts should be made to minimize bias through rigorous data analysis techniques, peer debriefing, and reflexivity and lastly, study relies on self-reported data obtained through focus group discussions, which may be subject to recall bias and social desirability bias (Dube, 2020). Participants' responses may be influenced by their perceptions of what is expected or socially acceptable and steps were taken to establish a safe and non-judgmental environment, but these biases should be considered when interpreting the findings (Chikuvadze, 2023).

Conclusion

In conclusion, the impact of El-Nino-induced drought on rural learners afflicted with HIV/AIDS in Zimbabwe is complex and multifaceted challenge. However, by implementing aforementioned recommendations, it is possible to alleviate burden on these vulnerable learners and their communities. Strengthening access to education, healthcare support, sustainable livelihoods, social support systems, and climate change adaptation measures will empower rural learners to overcome challenges posed by drought and HIV/AIDS. It is essential to foster collaboration and mobilize resources from various stakeholders including government, NGOs, and international partners to ensure successful implementation of these recommendations. By doing so, Zimbabwe can create more inclusive and resilient environment that supports well-being and future prospects of rural learners affected by this dual burden. Following are recommendations of study, firstly, implementing measures to ensure uninterrupted access to education for rural learners affected by El-Nino-induced drought and HIV/AIDS. This can include provision school feeding programs, transportation assistance, and establishment of temporary learning centres during drought periods. Secondly, scholarships and financial support should be made available to economically disadvantaged learners to cover school fees and essential educational resources. Thirdly, improving healthcare support for rural learners afflicted with HIV/AIDS by increasing availability and accessibility of HIV testing, treatment, and counselling services in rural areas. Collaborate with healthcare providers and NGOs to establish mobile clinics or outreach programs to reach remote communities. Strengthen the capacity of healthcare workers through training programs to effectively manage healthcare needs of learners with HIV/AIDS.

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Conflict of Interest: No conflict of interest in this research.

Informed Consent: The participants were informed on purpose of the study and all ethical considerations. Then they signed informed consent forms to show that they understood the purpose of study among others.

References

- Beckmann, N., Skovdal, M., Maswera, R., Nyamukapa, C., & Gregson, S. (2022). Rituals of care: Strategies adopted by HIV testers to avoid misdiagnosis in rapid HIV testing in Zimbabwe. *Global Public Health*, *17*(12), 4169–4182. https://doi.org/10.1080/17441692.2022.2110920
- Charamba, G., Chikwati, T., & Chidarikire, M. (2024). Gender Equality and Women Economic Empowerment: An Analysis of ZAOGA FIF Church in Masvingo, Zimbabwe. *International Journal for Social Studies*, 10(6), 14-28. https://journals.edupub.org/index.php/ijss/article/view/20487
- Chidarikire, M., Chidarikire, J. N., & Ingwani, V. (2024). Unravelling Ramifications of Female Exclusion as School Heads on Advancing Women in Leadership Roles: Case of Masvingo Urban Schools, Zimbabwe. *International Journal of Research*, 11(6), 202-222. https://doi.org/10.5281/zenodo.12524882
- Chidarikire, M & Chikwati, T. (2024). Unravelling causes and mitigating suicidal tendencies in male educators in Zimbabwe's Rural Regions: A comprehensive Analysis. *Asian Journal of Education and Social Studies*, 50(5), 293–303. https://doi.org/10.9734/ajess/2024/v50i51363

- Chidakwa, N., (2023). Drug abuse: A hindrance to optimal functioning of the rural learner's cognitive capabilities. *Research in Social Sciences and Technology*, 8(3), 155-175. https://doi.org/10.46303/ressat.2023.25
- Chideme-Munodawafa, A., Manyana, S.B., & Collins, A., E. (2020). HIV/AIDS in rural communities. *Journal of Education*, 2(2), 1-12. https://doi.org/10.53555/hsn.v1i8.780
- Chikuvadze, P. (2023). Gender-Related policy guidelines' impact on rural female students' participation in sciences at advanced level. *Futurity Education*, *3*(1), 150–165. https://doi.org/10.57125/FED/2022.10.11.11
- Chitiyo, A., (2021). Special and Inclusive Education in Southern Africa. *Journal of Special Education Preparation*, *I*(1), 55–66. https://doi.org/10.33043/JOSEP.1.1.55-66
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches (4th ed.).* SAGE Publications.
- Dube, B. (2020). Rural Online Learning in the Context of Covid 19 in South Africa: Evoking an Inclusive Education Approach. *Multidisciplinary Journal of Educational Research*, 10(3), 135-157. https://doi.org/10.17583/remie.2020.5607
- Gudyanga, E., de Lange, N., & Khau, M. (2019). Zimbabwean secondary school Guidance and Counselling teachers teaching sexuality education in the HIV and AIDS education curriculum. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, *16*(1), 35–50. https://doi.org/10.1080/17290376.2019.1610485
- Herald (2024, 3rd April), *President Mnangagwa declares 2023-2024 Agriculture season a state of national disaster due to El-Nino induced season*. https://www.herald.co.zw/president-mnangagwa-declares-drought-state-of-disater/
- Hlalele, D.J. (2018). Effects of computer-aided and blended teaching strategies on students' achievement in civic education concepts in mountain learning ecologies. *Education and Information Technologies*, 2 (2), 2693 2709. https://doi.org/10.1007/s10639-017-9598-x
- Kaseke, E. (2001). Social work education in Zimbabwe: Strengths and weaknesses, issues and challenges. *Social Work Education*, 20 (2), 101 109. https://doi.org/10.1080/02615470020028409
- Kanyopa, T., J. & Makgalwa, M., M. (2024). The Understanding of Psychological Challenges Facing South African School Learners In the 21st Century: A Visual Explanatory Approach. *e-Bangi: Journal of Social Sciences & Humanities*, 21 (2), 270-284. http://dx.doi.org/10.17576/ebangi.2024.2102.23
- Lesko, N. (2010). Feeling abstinent? Feeling comprehensive? Touching the affects of sexuality curricula. *Sex Education*, 10 (2), 281–297. https://doi.org/10.1080/14681811.2010.491633
- Lunga, Prosper. (2022). Community-based research with vulnerable populations: Ethical, inclusive and sustainable frameworks for knowledge generation, edited by Lesley Wood. *Educational Research for Social Change*, 11(2), 124-126. https://doi.org/10.1080/1743727X.2022.2131059
- Machingura, F. (2023). A woman should learn in quietness and full submission' (1 Timothy 2: 1 Empowering Women in the Fight against Masculine Readings of Biblical Texts and a Chauvinistic African Culture in the Face of HIV and AIDS. *Studies in World Christianity*, *19*(3), 233–51. http://dx.doi.org/10.3366/swc.2013.0059.
- Mavhura, E. (2020). Learning from the tropical cyclones that ravaged Zimbabwe: policy implications for effective disaster preparedness. *Natural Hazards*, 10(4), 2261-2275. http://dx.doi.org/10.1007/s11069-020-04271-7
- Mavhura, E., Manyena, B., & Collins, A. (2017). An approach for measuring social vulnerability in context: The case of flood hazards in Muzarabani district, Zimbabwe. *Geoforum*, 8(6), 103-117. https://doi.org/10.1016/j.geoforum.2017.09.008
- Mavesere, F., & Dzawanda, B. (2022). Effectiveness of Pfumvudza as a resilient strategy against drought impacts in rural communities of Zimbabwe. *GeoJournal*, 88(1), 1-23. http://dx.doi.org/10.1007/s10708-022-10812-3
- Mukwada, G., Taylor, S.J., Manatsa, D., Mahasa, P.S., & Robinson, G.M. (2020). Combating food insecurity in a rapidly changing mountain climate environment: insights from Lesotho. *Climatic Change*, *16*(3), 989-1006. https://doi.org/10.1007/s10584-020-02922-z

- Orievulu, K.S., & Iwuji, C.C. (2022). Institutional Responses to Drought in a High HIV Prevalence Setting in Rural South Africa. *International Journal of Environmental Research and Public Health*, *19*(1), 434-456. https://doi.org/10.3390/ijerph19010434
- Rapanyane, M.B. (2024). South African Basic Education System: Colonial Legacies in the Curriculum Design and a Way Forward. *e-Bangi: Journal of Social Sciences & Humanities*, 21(2), 428-437. http://dx.doi.org/10.17576/ebangi.2024.2102.35
- Sande, M., Zimba, G., Mberikunashe, D., Tangwena, H., & Chimusoro, A. (2017). Progress towards malaria elimination in Zimbabwe with special reference to the period. *Malaria Journal*, 16(1), 295. https://doi.org/10.1186/s12936-017-1939-0
- Sibanda, A., & Manik, S. (2022). Environmental Education (EE) teaching in a rural drought-prone district in Zimbabwe: Micro innovations with growth potential. *Journal of Geography Education in Africa* (*JoGEA*), 5(4), 77-95. https://doi.org/10.46622/jogea.v5i1.4114
- Tarisayi, K.S. (2023). Autoethnographic reflections on the survival strategies of Zimbabwean migrant teachers. *Cogent Social Sciences*, 9(2), 221-255. https://doi.org/10.1080/23311886.2023.228278
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications Ltd. https://uk.sagepub.com/en-gb/eur/case-study
- Zinyemba, T. P., Groot, W., & Pavlova, M. (2023). Effects of parental HIV on children's education: a qualitative study at Mashambanzou Zimbabwe. *Review of Social Economy*, 2(2), 1-26. https://doi.org/10.1080/00346764.2023.2214126