

RESEARCH ARTICLE



The Psychological Impact of a Flu-like Outbreak on a Post-COVID-19 Community: A Case Study in Magwegwe Suburbs in Bulawayo Metropolitan Province, Zimbabwe

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Abstract

This qualitative case study explored the psychological impact of a flu-like outbreak on a community in Magwegwe Suburbs, Bulawayo Province, Zimbabwe that had previously experienced the COVID-19 pandemic. The study aimed to: 1) examine the community's levels of trauma, resilience and mental health outcomes; 2) investigate the psychosocial effects of health-related anxiety and stigma; and 3) evaluate the utilization of mental health services before, during and after the outbreak. Data was collected through in-depth interviews, focus groups, open-ended Questionnaire and analysis of medical records. The findings indicated that the community exhibited elevated rates of PTSD, depression and health-related anxiety, alongside both community cohesion and interpersonal conflicts. Significant barriers to accessing mental healthcare were also identified. The study provided crucial insights into the long-term psychological toll of compounding public health crises in a low-resource setting. The results informed recommendations for comprehensive, community-based mental health programmes, integrated primary care-based services and continued research engagement with affected populations. Overall, the findings highlight the need for tailored interventions to support community resilience in the face of successive public health emergencies.

Keyword: Psychological impact; Post-COVID-19 community; Flu-like outbreak; Magwegwe Suburbs; Community resilience

Introduction

The COVID-19 pandemic has had profound psychological consequences globally (Smith et al., 2020; Vindegaard & Benros, 2020). For communities that have already weathered the COVID-19 crisis, the emergence of a new flu-like outbreak has the potential to exacerbate mental health challenges and strain coping resources. This is particularly salient in low- and middle-income countries (LMICs) where healthcare systems are overburdened and access to mental health support is limited (Patel, 2017). Magwegwe Community in Bulawayo, Zimbabwe's second-largest city, faced significant hardships during the COVID-19 pandemic, including overwhelmed hospitals, economic disruption and elevated rates of anxiety, depression and traumatic stress (Chikodza et al., 2021; Mangezi et al., 2022). When a novel flu-like illness emerged in the region in 2023, the community was forced to confront renewed public health threats and the psychological toll of an ongoing crisis.

The COVID-19 pandemic has had a profound impact on global mental health. According to the World Health Organization, the pandemic has led to a 25% increase in the prevalence of anxiety and depression worldwide (WHO, 2022). A systematic review and meta-analysis found that the pooled prevalence of depression and anxiety during the COVID-19 pandemic was 31.4% and 27.5%, respectively (Salari et al., 2020). These mental health challenges have been particularly acute in

low- and middle-income countries (LMICs), where healthcare systems are often overburdened and access to mental health support is limited. As Patel (2017) notes that the treatment gap for mental disorders in LMICs is huge, with more than 75% of people with mental disorders receiving no treatment at all. This is also the case in Zimbabwe, where the current study was conducted. During the COVID-19 pandemic, the country's healthcare system was overwhelmed, leading to elevated rates of anxiety, depression and traumatic stress among the population (Chikodza et al., 2021; Mangezi et al., 2022).

The history of influenza

The history of influenza, commonly known as the flu, dates back centuries, with the earliest recorded flu pandemic occurring in 1580 (Taubenberger & Morens, 2006). Throughout history, the flu has been a persistent public health challenge, causing periodic outbreaks and seasonal epidemics (Dawood et al., 2012). The 20th century saw some of the most devastating flu pandemics, including the 1918 "Spanish Flu" pandemic, which claimed an estimated 50-100 million lives globally (Taubenberger & Morens, 2006). In more recent times, the 2009 "Swine Flu" pandemic, caused by the H1N1 influenza virus, affected millions of people worldwide (Dawood et al., 2012). The World Health Organization (WHO) estimated that the 2009 pandemic resulted in 151,700-575,400 global respiratory deaths (Dawood et al., 2012). This was followed by the emergence of the COVID-19 pandemic in 2019, which has had profound global impacts, including significant mental health consequences (Smith et al., 2020; Vindegaard & Benros, 2020). The prevalence of influenza remains high, with the WHO estimating that annual flu epidemics cause 3-5 million cases of severe illness and 290,000-650,000 respiratory deaths globally (WHO, 2021). In low- and middle-income countries (LMICs), the burden of influenza is particularly acute, with limited access to healthcare and vaccines contributing to higher morbidity and mortality

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rates (Lafond et al., 2016). The current study in Magwegwe Suburbs, Bulawayo, Zimbabwe, is particularly relevant in this context, as the community has already experienced the psychological impacts of the COVID-19 pandemic (Chikodza et al., 2021; Mangezi et al., 2022). The emergence of a new flu-like outbreak in this post-COVID-19 setting has the potential to exacerbate mental health challenges and strain coping resources, underscoring the need for this research to inform tailored interventions and support community resilience in the face of successive public health emergencies.

The COVID-19 pandemic

The COVID-19 pandemic has had profound psychological consequences globally. According to the World Health Organization, the pandemic has led to a 25% increase in the prevalence of anxiety and depression worldwide (WHO, 2022). A systematic review and meta-analysis found that the pooled prevalence of depression and anxiety during the COVID-19 pandemic was 31.4% and 27.5%, respectively (Salari et al., 2020). These mental health challenges have been particularly acute in low- and middle-income countries (LMICs), where healthcare systems are often overburdened and access to mental health support is limited (Patel, 2017).

In Zimbabwe, the country where the current study was conducted, the healthcare system was overwhelmed during the COVID-19 pandemic, leading to elevated rates of anxiety, depression and traumatic stress among the population (Chikodza et al., 2021; Mangezi et al., 2022). The Magwegwe Community in Bulawayo, Zimbabwe's second-largest city, was particularly hard-hit, with residents exhibiting significantly higher rates of PTSD, depression and health-related anxiety compared to pre-pandemic levels (Chikodza et al., 2021).

When a novel flu-like illness emerged in the region in 2023, the Magwegwe community was forced to confront renewed public health threats and the psychological toll of an ongoing crisis. This study aims to explore the psychological impact of this flu-like outbreak on the post-COVID-19 community, providing crucial insights into the long-term mental health consequences of compounding public health crises in LMIC contexts.

Flu-like Outbreak on a Post-COVID-19 Community

The Magwegwe Community in Bulawayo, Zimbabwe's second-largest city, was particularly hard-hit by the COVID-19 crisis. As Chikodza et al. (2021) found that residents in urban cities exhibited significantly higher rates of PTSD, depression and health-related anxiety compared to pre-pandemic levels. When a novel flu-like illness emerged in the region in 2023, the community was forced to confront renewed public health threats and the psychological toll of an ongoing crisis. The psychological impact of public health crises has been well-documented globally. Studies from the United States have found elevated rates of depression, anxiety and PTSD among communities affected by infectious disease outbreaks (Galea et al., 2020; Goldmann & Galea, 2014). Similarly, research in Australia has shown that pandemic-related stressors, such as isolation and financial hardship can have long-lasting impacts on mental wellbeing (Fisher et al., 2020). In Europe, a study in the United Kingdom revealed that individuals with pre-existing mental health conditions were particularly vulnerable to the psychological toll of the COVID-19 pandemic (Iob et al., 2020). Conversely, research in Asia has highlighted the importance of community connectedness and social support as protective factors against pandemic-related distress (Jia et al., 2020).

Within the African context, a study in Nigeria found that COVID-19-related stigma was associated with higher levels of depression, anxiety and suicidal ideation (Onyeaka et al., 2021). Additionally, a multi-country investigation in sub-Saharan Africa revealed significant barriers to accessing mental health services during the pandemic, underscoring the need for targeted interventions (Chijioke-Aduaka et al., 2021). The current study aims to build on this existing literature by examining the psychological impact of a flu-like outbreak in a post-COVID-19 community in Bulawayo, Zimbabwe. By

integrating perspectives from diverse global settings, this research will provide crucial insights into the long-term mental health consequences of compounding public health crises in LMIC contexts.

Statement of the Problem

The COVID-19 pandemic has had significant psychological consequences globally, particularly in low- and middle-income countries where healthcare systems are overburdened and access to mental health support is limited. When a novel flu-like illness emerged in the Magwegwe community in Bulawayo, Zimbabwe in 2023, the community was forced to confront renewed public health threats and the psychological toll of an ongoing crisis. This qualitative case study aimed to examine the psychological impact of this flu-like outbreak on a community that had previously experienced the COVID-19 pandemic, in order to inform interventions to support community resilience in the face of compounding public health crises.

Purpose of Study

The purpose of the study was to gain an in-depth understanding of the psychological impact of the flu-like outbreak on a community that had previously experienced the COVID-19 pandemic, in order to inform interventions to support community resilience in the face of compounding public health crises.

Research Objectives

This study objected:

1. To examine the Magwegwe community's levels of trauma, resilience and mental health outcomes following the flu-like outbreak.
2. To investigate the psychosocial effects of health-related anxiety, stigma and Magwegwe community dynamics during the outbreak.
3. To evaluate the utilization of mental health services before, during and after the flu-like outbreak.

Research Questions

The following questions were asked in this study;

1. How did the flu-like outbreak impact levels of trauma, resilience and mental health disorders within the Bulawayo community?
2. What were the psychosocial consequences of health-related anxiety and stigma and how did they affect community cohesion?
3. To what extent did residents utilize mental health services and what barriers impeded access to care during the outbreak?

Theoretical Framework

This study was situated within the theoretical perspectives of ecological systems theory and the stress and coping framework.

Ecological Systems Theory

Bronfenbrenner's (1979) ecological systems theory provided a valuable lens for understanding the multi-level factors influencing the psychological impact of the flu-like outbreak on the Magwegwe community. This theory posits that an individual's development and well-being are shaped by their interactions with various interconnected systems, including the microsystem (immediate environment), mesosystem (connections between microsystems), exosystem (external environments), macrosystem (cultural and societal influences) and chronosystem (life events and transitions) (Bronfenbrenner, 1979).

In the context of this study, the flu-like outbreak was conceptualized as a significant life event and environmental stressor that interacts with the various systems influencing the Magwegwe community. The microsystem, including family and

social relationships, can shape individual and collective coping mechanisms. The mesosystem, encompassing the connections between community institutions and services, may impact access to mental health support. The exosystem, such as the healthcare system and government policies, can constrain or enable the community's resilience. The macrosystem, including cultural values and societal attitudes, can influence the stigmatization of mental health issues and health-related anxiety. Finally, the chronosystem, which considers the timing and sequencing of events, highlights the unique challenges faced by a community navigating the psychological aftermath of the COVID-19 pandemic and a subsequent flu-like outbreak.

Stress and Coping Framework

The stress and coping framework, as outlined by Lazarus and Folkman (1984), provides further theoretical grounding for this study. This model posits that individuals' appraisal of a stressful event, such as a public health crisis and their subsequent coping strategies, shape their psychological and behavioral responses. Within this context of the Magwegwe community, the flu-like outbreak was viewed as a significant stressor that required adaptive coping mechanisms. Residents' cognitive appraisals of the threat, their perceived ability to manage the situation and the availability of social and institutional resources may all influence their mental health outcomes and resilience. The stress and coping framework also underscores the importance of understanding the community's utilization of mental health services and the barriers they face in accessing care. By integrating ecological systems theory and the stress and coping framework, this study provided a more comprehensive understanding of the multifaceted factors shaping the psychological impact of the flu-like outbreak on the Magwegwe community, including individual, relational, community and societal-level influences.

Methods

This study adopted an interpretive research philosophy, which seeks to understand and interpret the subjective experiences and meanings that individuals ascribe to a phenomenon (Creswell & Poth, 2018). A qualitative research approach was employed to gain an in-depth understanding of the psychological impact of the flu-like outbreak on the Magwegwe community (Denzin & Lincoln, 2011). Specifically, the study utilized a qualitative case study design, which allows for a comprehensive and contextual examination of a complex real-world issue (Yin, 2018). The case study design used in this research was an instrumental case study, which focuses on providing insights into a broader issue or phenomenon beyond the specific case (Stake, 1995). This approach enabled the researchers to explore the psychological impact of the flu-like outbreak within the Magwegwe community, while also generating findings that could inform interventions in similar post-COVID-19 settings. A purposive sampling strategy was used to recruit 30 adult residents of Bulawayo who had experienced both the COVID-19 pandemic and the subsequent flu-like outbreak. Participants were selected to ensure diversity in age, gender, socioeconomic status and pre-existing mental health conditions (Patton, 2015).

In-depth semi-structured interviews or open-ended questionnaire were conducted with all 30 participants to explore their personal experiences, perceptions and psychological responses to the flu-like outbreak (Brinkmann, 2013). Additionally, four focus group discussions were held with community members to gain insights into shared experiences and collective coping mechanisms (Kitzinger, 1995). Medical records from local healthcare facilities were also reviewed to supplement self-reported data on mental health service utilization (Bowen, 2009). All interviews and focus group discussions were audio-recorded, transcribed verbatim and analyzed using thematic analysis (Braun & Clarke, 2006). Transcripts were coded to identify recurring themes, patterns and salient narratives. Triangulation of data from multiple

sources (interviews, focus groups, medical records) was employed to enhance the credibility of the findings (Patton, 2015). The study also used open-ended questionnaire for participants who were not comfortable with responding to the questions in the presence of the researcher.

Results and Discussion

The following findings emerged in the study:

THEME 1: Trauma, Resilience, and Mental Health Outcomes

Participants reported elevated levels of post-traumatic stress, depression, and anxiety in the aftermath of the flu-like outbreak. Many individuals described experiencing flashbacks, hyper-vigilance and emotional numbing – symptoms reminiscent of their experiences during the COVID-19 pandemic. However, the community also demonstrated remarkable resilience, drawing on collective coping strategies and religious/spiritual beliefs to navigate the ongoing crisis. One of the participants, a female participant aged 42 said,

"The outbreak just brought back all the fears and anxiety from COVID-19. I felt like I was reliving that trauma all over again. But we've learned to support each other, to pray together, to find strength in our community."

Another participant, a male aged 55, expressed,

"Despite the hardships, our community has come together in ways I've never seen before. We look out for one another and find comfort in our shared faith. This has been a source of strength during these difficult times."

THEME 2: Psychosocial Effects of Health-Related Anxiety and Stigma

Participants reported heightened health-related anxiety, including fears of contracting the illness and concerns about the wellbeing of family members. This anxiety was exacerbated by perceived stigma towards those affected by the outbreak, leading to social isolation, interpersonal conflicts, and disruptions to community cohesion.

"People were so scared of getting sick that they started avoiding anyone who had symptoms. It created a lot of tension and mistrust in the community. We couldn't even visit our own neighbours without being judged." – Male participant, age 29

A female participant, aged 38, shared her experience,

"The stigma was so harsh. People would cross the street to avoid us if they heard someone in our family was sick. It was like we were being punished for something we couldn't control."

THEME 3: Utilization of Mental Health Services

Barriers to accessing mental health services were widespread, including financial constraints, limited availability of providers, and cultural stigma surrounding seeking psychological support. Participants expressed a desire for more community-based interventions and increased integration of mental health care into primary healthcare settings. Another female participant aged 35 expressed that:

"When I tried to get help, the clinic said they didn't have any counsellors available. And I couldn't afford to go to a private therapist. I just felt so alone in dealing with all of this."

A male participant, aged 42, added,

"The government needs to do more to make mental health services accessible and affordable for everyone in our community. We're already struggling with so much, and not being able to get the support we need only makes it harder to cope."

Discussion

The findings of this study align with the existing literature on the psychological impact of public health crises, particularly in low- and middle-income country (LMIC) contexts. Consistent

with the background provided, the elevated rates of trauma, mental health disorders, and health-related anxiety observed among participants in the Magwegwe community reflect the profound and long-lasting consequences of compounding public health emergencies, as documented in various global settings (Galea et al., 2020; Goldmann & Galea, 2014; Fisher et al., 2020; Iob et al., 2020).

The study's focus on the Magwegwe community in Bulawayo, Zimbabwe, builds on previous research highlighting the acute mental health challenges faced by urban populations in the country during the COVID-19 pandemic (Chikodza et al., 2021; Mangezi et al., 2022). By examining the psychological impact of a flu-like outbreak in this post-COVID-19 community, the current research provides vital insights into the long-term mental health consequences of successive public health crises in LMIC settings, as emphasized in the background.

The findings also underscore the complex interplay between individual, interpersonal, and community-level factors that shape psychological responses to public health emergencies, as theorized within the ecological systems and stress and coping frameworks. The study's exploration of the psychosocial effects of health-related anxiety, stigma, and community dynamics aligns with global research on the role of these factors in shaping pandemic-related distress (Jia et al., 2020; Onyeaka et al., 2021).

Importantly, the study's identification of significant barriers to accessing mental health services in the Magwegwe community corroborates the background's emphasis on the treatment gap for mental disorders in LMICs, as noted by Patel (2017) and Chijioke-Aduaka et al. (2021). By highlighting the need for culturally responsive, community-based interventions and the integration of psychological support into primary healthcare, the current research provides valuable insights to address this critical gap.

This study contributes to the growing body of literature on the mental health consequences of infectious disease outbreaks, particularly in LMIC contexts. By adopting a qualitative, community-engaged approach, the research provides rich, contextualized insights that can inform the development of culturally appropriate strategies to support the psychological wellbeing of populations facing compounding public health challenges. The current study's findings confirm and expand upon previous research, while also establishing new knowledge regarding the long-term mental health impacts of successive public health crises in resource-constrained settings like Bulawayo, Zimbabwe.

Conclusion

This study sought to examine the psychological impact of a flu-like outbreak on the Magwegwe community in Bulawayo, Zimbabwe, a population that had already weathered the COVID-19 pandemic. The findings revealed the profound and long-lasting consequences of these compounding public health crises. The study found elevated levels of trauma, depression and anxiety among community members in the aftermath of the flu-like outbreak. Participants described experiencing symptoms reminiscent of their COVID-19 experiences, highlighting the cumulative psychological toll. However, the community also demonstrated remarkable resilience, drawing on collective coping strategies and religious/spiritual beliefs to navigate the ongoing crisis.

This study explored the psychosocial effects of health-related anxiety and stigma, which led to social isolation, interpersonal conflicts and disruptions to community cohesion. The findings underscore the complex interplay between individual, interpersonal and community-level factors that shape psychological responses to public health emergencies. Hence, the study identified significant barriers to accessing mental health services, including financial constraints, limited availability of providers and cultural stigma. Participants expressed a strong desire for more community-based interventions and increased integration of mental healthcare into primary care settings.

Recommendations

Based on these findings, the study recommends the following:

1. Policymakers and public health authorities in Zimbabwe should invest in comprehensive, community-based mental health programmes that address the long-term psychological needs of populations affected by successive public health crises. These programmes should incorporate culturally responsive, trauma-informed approaches that build on the community's existing coping mechanisms and strengths.
2. Healthcare providers and mental health professionals should work closely with local community leaders and organizations to develop integrated, primary care-based mental health services that are accessible, affordable and destigmatized. This will help ensure that residents in need can receive timely and appropriate psychological support.
3. Researchers and implementers should continue to engage with the Magwegwe community and other LMIC populations to further understand the long-term mental health impacts of compounding public health emergencies. Longitudinal, mixed-methods studies could provide valuable insights to inform the design and evaluation of mental health interventions in these settings.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available due to the sensitive nature of the information collected from participants, which could compromise the privacy and confidentiality of the educators and parents involved in the study. Any requests for data access will be subject to review and approval by the ethics committee that oversaw the original study to ensure compliance with the informed consent and data protection protocols.

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