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Contents	Page
Psychological and Socio-economic Effects of US AID Freeze on People Living with HIV/AIDS: A Case of Youths in Harare, Zimbabwe *Briges Grizzah*	1
Appendicitis Mimicking Mesenteric Adenitis in Children: A Diagnostic Challenge *E.Y. Mushosho, P. Sibanda, & B. Chinene*	20
Psychological Effects of Instagram Use on Self-esteem among Adolescents in Masvingo Urban, Zimbabwe *Kumbirai Makaruke & Mercy Ncube*	28
Factors Associated with Exclusive Breastfeeding Practice among Formally Employed Mothers: A Case of Mutare, Zimbabwe *P. Majiwa, B. Mutonhodza , P. Chopera & T.M. Matsungo*	44
Navigating the Psychological Sense of Safety in the Face of Military Conflict: A Case of Palestinians Living in the Gaza Strip *Maurice Kwembeya, Allen Mutumwa & Leonah Kwembeya*	59
Caregiver Experiences in Caring for Children with Autism Spectrum Disorder (ASD) in Harare, Zimbabwe *Mildred Sigwadhi, Emmanuel Maziti, Bothwell Matewe & Susan Samantha Joshua*	73
Re-conceptualising Psychological Assessment in Africa: A Critical Analysis of Eurocentric Methodologies and Framing Culturally Informed Psychometric Instruments *Temba Munsaka & Leslie Tawanda Machokoto*	91
Grassroots Psychosocial Factors Affecting Diagnosis and Management of Neurodevelopmental Disorders: A Case of Ward 13 Seke Rural District Zimbabwe *Regina Banda*	112
The Correlation between Increased Frequency of Antenatal Care Visits and Early Registration for Antenatal Care with Positive Birth Outcomes among Women in Hatcliffe Suburb in Harare *Shingai Mudzuri, Prosper Chopera & Tonderayi Mathew Matsungo*	133
Public Awareness and Utilisation of Emergency Medical Services in Nyamhunga: A Case Study of Nyamhunga, Kariba, Zimbabwe *Simbarashe Makonde & Tatenda Kafere*	145
Social Media's Impact on Young Women's Self-esteem and Body Image Satisfaction in the City of Kadoma, Zimbabwe *Sydney Mutawu & Zivanai Samson*	163
Understanding Resilience Development in Teenage Mothers: Insights into Effective Mechanisms and Intervention Programmes *Tinashe Simbarashe, Samson Mhizha & Kudakwashe Muchena*	183

Job Satisfaction in Sub-Saharan Africa: A Scoping Review of Literature from 2004-2024 *Trymore Mudzi, Gwatirera Jabangwe & Edwin Nharirire*	**200**
How Men in Harare Perceive and Engage with Mental Health Support Systems: Insights from an Organisation in Harare, Zimbabwe *W. Kunaka, C.T, Chirombe, S.S. Joshua, M. Soko, L. Dzirikure, R. Nyikadzino, & C.W. Mapfumo*	**219**
Guide for authors	**238**

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Psychological and Socio-economic Effects of US AID Freeze on People Living with HIV/AIDS: A Case of Youths in Harare, Zimbabwe

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Abstract

This case study probes the psychological and socio-economic effects of the USA aid freeze on youth living with HIV/AIDS. A qualitative research approach was used and a sample of four boys and four girls was drawn from Harare (n =8). In collecting data, the researcher used in-depth interviews then followed by thematic analysis. It was found that the youth living with HIV/AIDS in Harare have relevant knowledge about the pandemic. However, they were experiencing psychological challenges, depression, anxiety, grief and substance abuse linked to the impact of the US aid freeze. The foreign aid used to support them in collaboration with the Zimbabwean government. The youths living with the disease were now incurring health care costs. As a result of these changes, the youths were exploring other alternative mental health and funding sources, building relationships with peers who shared similar experiences. Some were connecting with local HIV/AIDS organisations. Based on the findings, the study recommends that the government of Zimbabwe ought to increase funding for HIV/AIDS services, have an emergency fund to cater for unplanned changes in the health system, explore alternative funding sources such as the Global Fund or World Health Organisation (WHO) programmes, strengthen health systems to maximise existing resources and review the HIV/AIDS Strategic Plan 2021 – 2025.

Keywords: youths, human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), US aid freeze.

Introduction

Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) were first identified in Zimbabwe in 1985, reporting started in 1987 when 119 cases were documented (Rembe, 2020). This then led the government of Zimbabwe to declare HIV/AIDS a national emergency in 2002. The pandemic remains a challenge; however, Zimbabwe has made great strides in the prevention of HIV/AIDS, resulting in the decline in its prevalence. Rapid progress must be made during this decade to remain on track to end HIV/AIDS by 2030 and meet the set global targets: 95% of people living with HIV (PLWH) know their status, 95% of PLWH know their status and are on treatment, and 95% of people on treatment are with supressed viral loads (UNICEF Report, 2023). However, youths living with HIV/AIDS are likely to experience psychological distress following the US aid freeze. Furthermore, there are severe socio-economic implications associated with the aid freeze.

Background of study

Zimbabwe's national HIV incidence has declined by over 50% over the past ten years. In 2022, the incidence was at 0.17% and there was a decline in new infections for all age groups. The number of new HIV infections among adults declined by 7% and 9% among children from 2021 to 2022. In the same period, the number of new HIV infections declined by 6% among people aged 10 – 19 and by 7 % among people aged 15 – 24. Similarly, the prevalence among adults aged 15 – 49 has fallen from its peak of 20.5% in 1997 to 11% in 2021. According to the 2022 spectrum estimates, 1 310 438 people are living with HIV (United Nations Development Programme Fact Sheet, 2022). Considering these statistics, World Health Organisation (WHO), United States Agency for International Development (USAID), President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund support for HIV/AIDS prevention services have continued facilitating testing, prevention, management and procurement of medicines. This has contributed to the decline in HIV prevalence in Zimbabwe.

Since independence, the US government has provided more than 15 billion dollars in humanitarian and development assistance to the Zimbabwean people, including more than 1 billion dollars in the past 3 years alone. The US remains the largest provider of development and humanitarian assistance, including through PEPFAR, to Zimbabwe. Current efforts are focused on increasing food security, improving economic resilience and biodiversity conservation, bolstering the response to HIV /AIDS, maternal and child health, malaria and nutrition outcomes, strengthening youth's inclusion and empowerment and promoting democratic governance (Bilateral Relations Fact Sheet, 2025).

Relating to the above mentioned aid, the US has frozen nearly all foreign assistance worldwide, effective immediately a day after President Donald Trump issued a sweeping executive order to pull the plug on such aid for 90 days. The International AIDS Society warned that halting PEPFAR would place millions of lives in jeopardy. This is a matter of life or death. PEPFAR provides lifesaving antiretroviral for more than 20 million people and stopping funding essentially halts their HIV treatment. If that happens, people are going to die and HIV will resurge (Hansler, 2025). Furthermore, the aid freeze was followed by a "stop-work-order".

Foreign aid has historically been a pillar of Zimbabwe's economic framework, supporting health care, food security, infrastructure and social programmes (Chronicle NEWS Paper, 2025). The US aid freeze affects people living with HIV/AIDS psychologically and socio-economically. These factors highlight the complex impact of the aid freeze on youths also living with the disease, underscoring the need for comprehensive solutions to address their unique needs.

Zimbabwe National HIV and AIDS Strategic Plan (ZNASP) 2021 – 2026

The Zimbabwe national HIV plan is outlined in the Zimbabwe National HIV and AIDS Strategic Plan 2021 – 2025. The Strategic Plan aims to guide HIV programming, resource allocation and implementation of HIV/AIDS response in Zimbabwe. Its key objectives include the following: a combination and integration of HIV prevention programmes with sexually transmitted infection prevention and management, prevention of non-communicable diseases and assisting mother to child nutrition programmes. Assisting vulnerable and key populations by implementing programmes targeting vulnerable and key populations such as adolescence girls and young women, children and adolescence with disabilities. Helping social enablers by strengthening social enablers including through legislation, policies and community engagement. Assisting health and community by strengthening health and community systems to support HIV prevention, treatment and care services.

ZNASP is highly relevant to youth living with HIV/AIDS as it includes strategies to address their specific needs such as increasing access to health care services. It also emphasises the importance of providing youth with accurate information about the disease. It further aims to empower them to take control of their health and well-being. Furthermore, the plan seeks to reduce stigma and discrimination against youth living with HIV/AIDS, promoting supportive and inclusive environment.

Aim of the study

The purpose of the study was to probe the psychological and socio -economic effects of the US aid freeze on people living with HIV/AIDS, with special reference to youth in Harare, Zimbabwe.

Objectives

a) Finding out if the youth living with HIV/AIDS have relevant information about the disease.

b) Exploring the reaction of youth living with HIV/AIDS to the US aid freeze.
c) Identifying psychological challenges being experienced by youth living with HIV/AIDS after the US aid freeze.
d) Ascertain the socio-economic challenges affecting the youth living with HIV/AIDS after the US aid freeze.
e) Recommending effective ways to improve HIV/AIDS management for the youth living with the disease considering the suspension of the US aid.

Research questions

a) Does the youth living with HIV/AIDS have relevant information about the disease?
b) How did HIV/AIDS positive youths react to the US aid freeze?
c) What are the psychological challenges being experienced by youth living with HIV/AIDS after the US aid freeze?
d) What are the socio-economic challenges affecting youth living with HIV/AIDS after the US aid freeze?
e) What ways can be adopted to improve HIV/AIDS management in youths living with the disease considering the suspension of the US aid?

Significance of the study

The study ought to help in identifying and understanding specific mental health challenges faced by youths living with HIV/AIDS. This thus lays the foundation for informing the development of targeted support services such as counselling /therapy and peer support groups. Understanding the psychological effects could help identify factors that promote resilience among youth living with HIV/AIDS. On the socio-economic side, the study could help assessing the economic vulnerability of youth living with HIV/AIDS including the impact on education, employment and access to health care. Studying socio-economic effects could inform policy and programming aimed at mitigating the negative impacts of the US aid freeze. To add on that, understanding socio-economic effects could help identify sustainable solutions that address the root causes of vulnerability. The study has enormous practical and theoretical significance, thereby complementing other fields in exploring the topical issues.

Study delimitations

The study focuses only on youth living with HIV/AIDS and based in Harare. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2020) defines youths as those persons between the ages of 15 and 24. It is best understood as a period of transition from the dependence of childhood to the independence of adulthood. Psychological and socio-economic factors linked to the US aid freeze were taken into account. The researcher appreciates that HIV/AIDS is not prevalent in Harare only, but for the purpose of this study only Harare was taken into consideration.

Methodology

The researcher adopted a qualitative research approach, which is concerned with feelings, ideas or experiences. Finding insights that could result in testable hypothesis was the main goal of data collection, which was done in a narrative form (Udoka Eze, 2023). The qualitative approach was chosen because of its benefits such as capturing changing attitudes within a target group. It also provides a much more flexible approach such that, if useful insights are not being captured, researchers can quickly adapt questions, change settings or any other variable to improve responses (Vaughan, 2021). Qualitative research is effective in obtaining specific information about behaviours, values, opinions and social contexts of particular populations. It provides information about the “human” side of an opinion, emotions and relationships of individuals (Tschol et al., 2019). Similarly, Corner et al. (2019) states that qualitative research explores and provides deeper insights into real-world issues and problems by gathering a participant’s perceptions, experiences and behaviour. Its limitations are based on potential bias in data interpretation, time consuming data collection and analysis, and challenges replicating the study (Vaughan, 2021).

A narrative research design was also adopted as it pays attention to the ways a story is constructed, for who and why, as well as the cultural discourses it draws from a research inquiry (Bochener, 2007). The foundation of narrative research is the idea that people gain understanding of and meaning from their lives through the stories they tell (Andrew et al., 2013).

Participants and sampling

Participants who took part in the study were youths who were living with HIV/AIDS and also benefiting from the US aid. The sample frame included youths and this frame then became the basis for selecting a small number of the main target population to represent the interests of the overall target population. Having a well-defined and appropriate sampling frame is crucial in research because it ensures that the selected group of participants accurately reflects the actual population being targeted in the study, reduce sampling bias, its cost-effective and have access to contact information of participants (Kayode-Sanni, 2023). As a result, a combination of list-based sampling frame and location –based sampling frame was used.

Eight participants, 4 males and 4 females, were selected and these were based in Harare. The participants gave verbal consent. Their selection was purposely as they were supposed to provide in-depth information linked to the psychological and socio-economic effects of the US aid freeze on them considering that they were living with HIV/AIDS. This would pave way for informed based decisions. It was confirmed that they were HIV positive and on anti-retroviral treatment (ART) through their respective hospitals/clinics where they were being treated. On the other hand, they also confirmed that position and the researcher also checked their medical records. A small sample of 8 was chosen by the researcher due to time constraints and limited funding. The researcher also wanted to gather in-depth insights relating to the matter. Furthermore, the researcher selected a specific group of participants who shared similar characteristics or experience, which means fewer participants were needed to gather meaningful insights.

Convenience sampling was used to identify the participants through the assistance of psychologists, counsellors and social workers in public, private institutions and non-governmental organisations (NGOs). This method, convenience sampling, was chosen because of the geographical proximity of participants, their availability at a given time, and their willingness to participate in the study (Nikolopoulou, 2023).

Educational backgrounds of the participants varied from ‘O’ levels to university. With 2 males and 2 females doing degree programmes, 1 male doing a higher diploma programme and the other 1 male and 2 females confirming sitting for the ‘O’ levels examinations, but did not attain at least 5 subjects. On family status, 2 males and 2 females were from average families whereas the rest came from below average families.

Data collection procedure and instruments

In-depth interviews were conducted at a local clinic and lasted about an hour for each participant. Data collection took one week, this depended on the availability of targeted participants. During the interviews, the researcher let the conversations flow naturally asking spontaneous questions based on issues raised by interviewees. The in-depth interviews are useful when you need the full story. They are rich with personal context about complex issues or brand new-topics where you are not just after what people think, but why they think so. With their minimal structure and high adaptability, in-depth interviews are also great for delving into sensitive depth of personal insights (Delve & Limpaecher, (2024).

The in-depth interview instrument was based on a structured interview guide which was translated to Shona in order to get in-depth data without losing meaning. Structured interviews brings with them standardised questions which enable objective comparisons. They allow the relevance/usefulness of questions to be continually assessed. To add on that, they reduce the potential for bias and can be used to pick a new line of questioning if required, thus moving slightly into a semi–structured format (Beaumount, 2024).

Furthermore, recordings were done and a note book was used to write themes that came during the interviews and note observations during the interviews. To compliment these, follow up telephone calls, with the consent of the participants, were made to gather data that might have been missed during the face to face interviews.

Data cleansing

Data cleansing is described by Bandari (2021) as a process which involves spotting and resolving potential data inconstancies or errors to improve data quality. In this research, the following steps were observed: removing duplicate and incomplete information, removing unreadable data, identifying and reviewing outliers, coding open ended data, checking data consistency and performing final quality assurance (Banardokasi, 2021). Missing responses were also identified and participants were contacted by telephone for clarifications.

Data analysis

Thematic analysis is a method of analysing qualitative data and is usually applied to a set of texts such as interviews or transcripts. The researcher followed the most common six step process: familiarisation, coding, generating themes, reviewing themes, defining and naming themes and writing up. Following this process helped to avoid confirmation bias when formulating the analysis (Clarke & Braun, 2022). To add on that, thematic analysis fits well with any qualitative study which attempts to explore complex research issues. Indeed, it is so flexible that it can be incorporated into an epistemology approach (Chamberlian, 2015). Norris and Moules (2017) further state that a rigorous thematic analysis approach can produce insightful and trustworthy findings.

Ethical considerations

Participation in the study was voluntary; and the aim of the study was explained to each and every participant before the interviews. Informed consent was obtained from all participants who signed consent forms to take part in the study. Confidentiality was observed throughout the study. The right to withdraw from the study was explained and debriefing was done to provide closure and ensure participants well-being.

Findings of the study

Thematic analysis resulted in the following themes:

Knowledge about HIV/AIDS

The youths in Harare living with HIV/AIDS have knowledge about the pandemic; They hold scientific views about it and are also in a position to understand how it is spread, prevented and managed. The participants acknowledged that they get the information from health care providers, community organisations, advocacy groups, support networks and online plate forms and specialised websites on a continuous basis. They appreciated the US aid funding used to supporting them in their treatment programmes.

Psychological problems experienced by the youth living with HIV/AIDS after the US aid freeze

The youths confirmed that they were experiencing persistent sadness, hopelessness, fatigue, low energy, difficulty in concentrating and making decisions. Furthermore, they were also experiencing feelings of danger, racing thoughts and worries, physical symptoms like rapid heartbeat and sweating. They were experiencing grief and loss related to the diagnosis, illness or death of loved ones due to the disease.

Some were venturing into drug or substance abuse as a way to find relief from the effects of the disease. Others also highlighted the issue of fear of disclosing their status to their family, friends or romantic partners.

Socio-economic problems faced by the youth living with HIV/AIDS after US aid freeze

The youths reported that they were already facing health care costs. Without access to free or subsidised HIV/AIDS services, individuals were required to pay out of pocket for health care leading to increased financial burden. They confirmed that, before the US aid freeze, it was easy to get medication and related services such as counselling /therapy free of charge.

However, they now had to pay for such services to private institutions. Government institutions are mostly overwhelmed. Social isolation due to stigma and discrimination based on their medical condition was also highlighted.

Support from responsible authorities after the US aid freeze

The youths living with HIV/AIDS felt that the government should increase funding to facilitate the provision of HIV/AIDS services. They expected the government to be always alert and have plan B options in the event of such related issues. They expressed that existing HIV/AIDS programmes should continue under the government sponsorship and other non-governmental organisations.

Solutions to psychological and socioeconomic challenges being faced by youth living with HIV/AIDS after US aid freeze

The youths suggested that the government should continue with all projects linked to HIV/AIDS programmes which were previously sponsored by various agents of the USAID. They wanted policies to be reviewed to suit the current situation and that all stake holders ought to be consulted.

They also expressed that the government ought to encourage all industries to implement corporate social responsibility to reduce governmental burden.

Coping strategies adopted by youths living with HIV/AIDS after US aid freeze

The youths were accessing mental health services, counselling or therapy to manage depression, stress or anxiety. They were also exploring alternative funding sources such as local non-governmental organisations or community based organisations to access HIV/AIDS services. In addition, they were building relationships with peers who shared similar experiences. Some were connecting with local HIV/AIDS organisations such as the National AIDS Council of Zimbabwe (NAC).

Discussion

The findings suggest that youths had relevant knowledge about HIV/AIDS. It is from this background that continuous education could be conducted in schools, colleges, universities, churches, public and private organisations and community at large. HIV positive and negative people of all age groups to be involved in such educational outreaches. Social, economic and technological changes are always taking place the world over, hence we are witnessing improvements in medications and treatment procedures. So, it is very crucial to continue updating people; thus, continuous education.

Social constructivism states that people construct their own understanding and knowledge of the world through experiencing things and by reflecting on those experiences (Olorode & Jimoh, 2016). Language and culture are the frameworks through which humans experience, communicate and understand reality (Vera Idaresit Akpan et al., 2020). Wine (2004) explains that, when we encounter something new, we have to reconcile it with our previous ideas and experiences, perhaps by changing what we believe or by disregarding the new information as irrelevant. In any case, we are active creators of our own knowledge. To do this, we must ask questions, explore and assess what we know. This explains that learning is an active process which is based on the assumption that knowledge is constructed by learners as they attempt to make sense out of their experiences. This point of view maintains that people actively construct new knowledge as they interact with their environment (Adesanya, 2009).

Youth living with HIV/AIDS are at risk of experiencing depression and anxiety. Symptoms such as persistent sadness, hopelessness, fatigue and low energy, difficulty concentrating and making decisions are linked to depression (DSM -5). Furthermore, feelings of danger, racing thoughts and worries, physical symptoms like rapid heartbeat and sweating are linked to anxiety (DSM -5). Managing depression and anxiety involves a multifaceted approach including seeking professional help, practising self-care, engaging in regular exercise, maintaining a healthy lifestyle and developing coping mechanisms. To some extent, if appropriate, medical options can be considered with the guidance of a doctor.

Being diagnosed with HIV/AIDS brings with it experiences of grief and multiple losses. According to Kubler Rose Model (as cited by Tomasic, 2022), grief stages are as follows: denial, anger, bargaining, depression, and acceptance. This abbreviated as DABDA. Managing grief and loss can be a challenging and individualised process. Strategies include emotional support, self-care, creating meaning and professional help.

HIV/AIDS youths living with HIV/AIDS are renowned for abusing drugs/substances to cope with underlying mental health issues or trauma. The self-medication hypothesis (SMH) maintains that, suffering and not pleasure seeking, is at the heart of addictive disorders such that addictive drugs have an appeal because they relieve painful feelings and psychological distress in the short term. There is also a considerable degree of preference in a person’s drug of choice, but it is not as though a person “chooses” a drug; rather, while experimenting with various drugs, he/she discovers that the effects of a particular drug is a welcome is experience because it changes or relieves feelings of stress that are especially painful or unwanted for reasons special to that person (Khantzian, 2017). Managing drug/substance abuse in youth living with HIV/AIDS requires a comprehensive and integrated approach. Key strategies include early identification, integrated care, family based interventions, counselling/therapy and medication-assisted treatment.

Fear of disclosure of HIV/AIDS status is a significant concern for youths. The fear can steam from stigma and discrimination as well as emotional and psychological factors. Cherry (2023) explains that self-disclosure refers to a concept that emphasise sharing of personal details about one's life. If a person tends to share a lot right away, that person is likely to have a high level of self-disclosure. On the other hand, if a person is more reserved, that person has lower self-disclosure levels. Self-disclosure therefore entails more than how much a person is willing to tell others about himself/herself. It is also a crucial building block of intimacy and absolutely vital to a variety of social relationships.

The current US aid freeze is likely to increase poverty and economic strain. HIV/AIDS exacerbates poverty by causing illnesses and death, leading to lost income and increase health care costs. Humanist theorist Abraham Maslow states that human behaviour is shaped by numerous needs (Heise & Garcia, 2002). Considering the US aid freeze, youth living with HIV/AIDS are the most affected psychologically, socially and economically, thereby automatically compromising their well-being.

In Maslow's hierarchy of needs, human needs are classified into five levels: physiological, safety, love and belonging, esteem and self-actualisation (King, 2024). Maslow's theory states that human actions are motivated by certain physiological and psychological needs that progress from basic to complex (Cherry, 2024). Higher up the hierarchy of needs, the more difficult it is to satisfy the needs associated with that stage because of interpersonal and environmental barriers that inevitably frustrate people. Higher needs become increasingly psychological and long-term rather than physiological and short-term as in the survival related needs (McLeod, 2024).

A patient's physiological needs refer to their physical health and well-being. Patients need to function effectively and recover from illnesses. The foundation for any health care plan is addressing physiological needs, which plays a crucial role in overall patient care. An example of this will be the management of diseases, access to essential medications and treatment of acute or chronic conditions that relate to patients' health (Santhosh, 2023). Health care providers can help by using evidence-based practices, diagnose and treat patients' medical conditions accurately, adjust medications or therapies as needed to achieve optimal patients' response. On the other side, drug manufactures can help by developing and producing effective medicines, providing financial assistance or discounted medication to patients who cannot afford, develop new treatments for unmet medical needs or improve existing ones.

Patients have a right to feel safe, that is, safety needs, both in terms of the environment they are in and the care they receive. The scope of this includes control of diseases, prevention, medication administration, diagnosis and treatment. Furthermore, patients need to feel a sense of emotional safety (Santhosh, 2023). Health care providers can help by communicating clearly and transparently with patients about their medical conditions, treatment options and risks, support and reassure patients, addressing their fears and concerns about their health. To complement that, drug manufactures could help by assisting health care providers with understanding the proper use, dosage and administration of their products by providing comprehensive information or training.

Patients have love and belonging needs. These refer to the psychological and social aspects of their well-being as well as their emotional well-being. This is about feeling connected, supported and cared for by their health care providers, family and friends. Mental health and emotional well-being are important for fostering a positive healing environment; and, love and belonging can make a huge difference (Santhosh, 2023). Health care providers could help by actively listening, empathising and showing compassion to patients, encourage family involvement and support patients care, facilitating visits and providing resources to help family to cope. To complement, drug manufactures can develop and distribute education materials that help patients better understand their medical conditions in collaboration with health care providers, organise and support advocacy groups, online communities and support networks that connect patients with similar conditions so they could share experiences.

Patients have esteem needs too. It is possible that patients lose self-esteem due to medical conditions or treatment limitations. Patients may also experience feelings of vulnerability, frustration or helplessness (Santhosh, 2023). In such related situations, health care providers can help by providing education on medical conditions and self-management strategies to empower patients. They may also encourage and motivate patients to strive for better health outcomes by celebrating progress. To complement this, drug manufactures can educate patients on how to manage their medications effectively. They could do this by providing them with knowledge and tools, inform patients about possible benefits and side effects of the medications by providing accessible easy to understand information.

Some patients have self-actualisation needs. It is common for patients to seek opportunities for personal growth and self-actualisation as they progress through their treatment and recovery process. Patients' self-actualisation needs refer to their pursuit of personal growth, fulfilment and realising their potential. Taking care of patients' self-actualisation needs can significantly affect their well-being, motivation and recovery (Santhosh, 2023). Health care providers can help by establishing realistic treatment and recovery goals, considering the patients unique circumstances, refer patients to rehabilitation services, support groups or counselling to help them overcome challenges. Drug manufactures can come into play by offering resources and services to help patients overcome challenges and achieve their full potential with their help of health care providers or sponsors. They may also partner with organisations that promote overall well-being such as wellness programmes, mental health resources or initiatives focused on improving patients' social, emotional or physical well-being.

When it comes to government support, Zimbabwe ought to scale up its own contributions. The most critical parts of the HIV/AIDS programmes are to ensure that everyone who wishes to be tested as part of other medical arrangements can be tested at an affordable cost and everyone who needs to be on anti-retroviral treatment (ART) can get this promptly so their viral load can be suppressed.

It is important that access to testing and ART is never rationed indirectly through shortages or cost to patients. So, whatever happens, the government ought to find replacement funds. The government therefore has an opportunity, regardless of whether the US maintains PEPFAR or not, to accelerate the administrative processes that are scheduled within a few years to see HIV/AIDS being treated as a normal chronic illness such as diabetics, hypertension and some psychiatric illnesses which require life time treatment as well as preventive measures. This should allow a cutback in administrative costs and some of the special logistics and other programmes as well as in education programmes that can be absorbed in health education work. There is also an argument that ART patients ought to pay the full cost or access the treatment for free depending on economic status. The government would then provide partial support to some patients who have a modest income and full support to those who do not afford.

The growing density of clinic network, upgrading of medical staff and other improvements in health infrastructure seem to allow HIV/AIDS work to be fully absorbed into the general health system. This would allow funds earmarked for HIV/AIDS treatment to be fully assigned to testing and ART supplies and mark an end to the special HIV/AIDS industry that absorbs critical funding. Other programmes already in place, such as the growing enforcement of ban on child marriages whether registered or not, and the growing practical protection for teenagers from sexual exploitation also work to push back HIV/AIDS infections. So, extra special work is needed to be part of expanding ordinary programmes (*The Herald*, 2025).

Corporate social responsibility (CSR) initiatives can play a significant role in supporting youth living with HIV/AIDS. This can be done through providing financial support, resources and services to organisations that cater for youth living with the disease. In addition, this promotes awareness and education about HIV/AIDS among employees, customers and the wider community. Stobierski (2021) highlights that businesses have a responsibility to societies that exists around them. In addition to acting ethically and environmentally friendly, organisations driven by philanthropic responsibility often dedicate a portion of their earning to the community. While some firms donate to charities and non-profit that align with their missions, others donate to worthy causes unrelate to their business. Others go far as to create their own charitable trust or organisation to give back and have a positive impact on society.

The US aid freeze was unexpected and automatically brought change related to coping strategies previously adopted by youths living with HIV/AIDS. To facilitate change, the youths living with HIV/AIDS should identify what they want to change and set specific goals, seek support, take care of physical and mental well-being and celebrate progress along the way.

The protection motivation theory (PMT) explains how people respond to fear-arousing health threat communications or fear appeals. It is usually defined operationally as the intention to adopt the recommended action of the determinants of the intention specified by the model area: vulnerability and severity (equivalent to perceived susceptibility and severity), response efficacy (the belief that the recommended action is effective in reducing the threat) and perceived self-efficacy (the belief that one can successfully perform the recommended action (Soutton, 2001).

A person is motivated to protect himself/ herself, thus having a stronger intention to adopt the recommended action to the extent that he/ she believes that the current threat is likely if the current course of action is continued. The consequences would be serious if the threat occurs, and that the recommended action would be effective in reducing the likelihood of the severity of the threat if he/ she is able to carry out the recommendation (Soutton, 2001).

Carrying out the recommendations is done in stages. Identifying the stage an individual is in helps health professionals to provide targeted interventions. Celestine (2021) states the six stages of change as follows:

i) Pre-contemplation: In this stage, the individual is not intending to change their behaviour, they may be uninformed about the consequences of that behaviour or lack confidence in the ability to change sometimes because of previous failed attempts.
ii) Contemplation: The individual in this stage is intending to change their behaviour and can see the benefits of making change. However, the individual is also aware of the challenges that can keep one stuck in this stage.
iii) Preparation: In this stage, the individual is planning to change their behaviour. He/ she has taken some steps already, such as joining support groups of choice.
iv) Action: The individual in this stage has made significant changes to their behaviour that has led to different outcomes in their health and or well-being.
v) Maintenance: In this stage, the individual continues to change behaviour enough to prevent relapse, but is not putting as much time and effort into this as in the action stage. Relapse could occur at any stage up to and including this one, going back to any of the earlier stages in the model.
vi) Termination: The individual in this stage is no longer tempted to use their old behaviour, but feels confident in their ability to keep this stage.

Recommendations

- Other non-governmental organisations, stakeholders and the government ought to increase funding for HIV/AIDS services.
- All stakeholders ought to have an emergency fund to cater for such related unplanned changes in the health system.
- Stakeholders ought to craft policies that emphasise on cooperate responsibility on companies, both local and foreign.
- Stakeholders ought to explore alternative funding sources such as the Global Fund, World Health Organisation (WHO) or private sector and government partnership to support health programmes.

- Government ought to strengthen health systems, reduce waste and improve service delivery to maximise existing resources.
- Stakeholders and the government ought to put in place well defined healthy insurance systems.
- Non-governmental organisations and the government ought to review their 2021 - 2025 HIV/AIDS strategic plans to suite the current situation.

Future research recommendations

This research case study focused on youths in Harare only; therefore, a broader scope in future could be useful in addressing the psychological and socio - economic effects of the US aid freeze on both the youths and adults. Rural areas should be taken into consideration.

Conclusions

Youths living with HIV/AIDS had knowledge about the pandemic; however, the US aid freeze brought with it psychological and socio-economic problems. The youths felt that the government ought to take full responsibility of HIV/AIDS programmes by facilitating funding and continue with the programmes. Various coping strategies have been adopted by the youths to also counter the effects of the US aid freeze. These include counselling/ therapy, exploring other funding sources and networking with other peers and organisations that specialise in the treatment and management of the disease.

This research emphasises that delaying to act is more likely to start reversing the gains achieved in treatment and management; hence, destroying the future of youths living with the disease in Zimbabwe. Youth are the leaders of tomorrow, and have the power to shape the future and create positive change. By supporting and empowering them, we can unlock their full potential and create a brighter future for the country as a whole.

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Appendicitis Mimicking Mesenteric Adenitis in Children: A Diagnostic Challenge

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Abstract

Acute appendicitis (AA) remains a diagnostic challenge in children, often mimicking mesenteric adenitis (MA), leading to high misdiagnosis rates (28–57%) in ages 2–12. This case report underscores the diagnostic complexities through an 11-year-old boy with recurrent right lower quadrant (RLQ) pain, initially managed as MA based on ultrasound findings of enlarged lymph nodes and a non-dilated (3 mm), non-compressible appendix. Despite antibiotic therapy, symptoms persisted, prompting a follow-up ultrasound four weeks later, which revealed a dilated (8.3mm), micro-perforated appendix with minimal pericolic fluid and hyper-vascularity. This was confirmed by computerised tomography (CT) as chronic appendicitis with micro perforations. An emergency appendectomy confirmed the diagnosis. The case report highlights critical diagnostic pitfalls: (1) Non-compressibility of the appendix, even without dilation, may indicate early pathology; (2) Antibiotic use may mask AA progression; and (3) MA and AA share overlapping sonographic features, necessitating serial imaging. Discordance with established criteria (e.g., Pokhrel's findings for AA/MA. and reliance on imaging without laboratory support further complicated the initial assessment. This report advocates for heightened clinical suspicion, standardised imaging protocols, and multidisciplinary evaluation to reduce diagnostic delays, particularly in paediatric cases where perforation risks are high. This case reinforces the need for dynamic reassessment in equivocal presentations to prevent adverse outcomes.

Keywords: acute appendicitis, mesenteric adenitis, paediatric diagnosis, ultrasound, perforation, chronic appendicitis.

Introduction

Differentiating AA from MA remains a significant diagnostic challenge in paediatric populations despite advancements in resolution of imaging modalities (Al Ghadeer et al., 2025). As the most common cause of emergency abdominal surgery in children and adolescents (Almaramhy, 2017), AA requires prompt and accurate diagnosis to prevent complications such as perforation and peritonitis. However, its clinical presentation often overlaps with mesenteric adenitis (MA), a benign inflammatory condition of the mesenteric lymph nodes (Shahba, 2024). Both conditions commonly manifest with right lower quadrant (RLQ) pain, fever, and gastrointestinal symptoms (including nausea, vomiting, etc), yet their management differs drastically: AA necessitates surgical intervention, whereas MA is typically self-limiting (Aygün, 2011).

This diagnostic overlap contributes to high misdiagnosis rates, ranging from 28% to 57% in children aged 2–12 years and approaching almost 100% in those under 2 years (Hameed, 2017; Gross et.al., 2017; Sanchez et. Al., 2016). Notably, MA is frequently identified in cases of negative appendectomies, underscoring the difficulty in distinguishing between the two conditions preoperatively (Almaramhy, 2017; Al Ghadeer et al., 2025). Misdiagnosis delays critical treatment, increasing the risk of perforation, particularly in younger children with thinner appendiceal walls and underdeveloped omenta (Hameed, 2017).

This case report emphasises the importance of systematic clinical evaluation, judicious imaging, and awareness of atypical presentations to reduce diagnostic errors. Through a paediatric case with confounding features, we highlight key discriminative findings on ultrasound and computed tomography (CT), advocate for standardised diagnostic protocols, and underscore the role of serial assessments in equivocal cases. By integrating clinical suspicion with imaging expertise, clinicians can improve diagnostic accuracy and mitigate the risks associated with delayed AA management.

Case presentation

An 11-year-old boy presented with a 3-week history of recurrent dull abdominal pain in the right lower quadrant (RLQ). A history of mild fever and loose stools was reported, but no blood test results. Initial management included a 7-day course of antibiotics (metronidazole), which temporarily alleviated his symptoms; however, pain recurred two weeks after the completion of treatment. The intermittent discomfort primarily occurred during physical activity (e.g., soccer), but did not restrict the child's mobility or daily activities. This prompted the request for an ultrasound scan of the abdomen 2 weeks after finishing the 7-day course of antibiotics.

Patient [reparation and equipment used

The patient starved for at least 6 hours but was drinking water. A DC6 Mindray machine was used.

Technique

A general abdominal survey was performed, and then a focused assessment of the right iliac region was performed to assess the appendix.

Initial ultrasound findings

An abdominal ultrasound revealed:

i) Enlarged mesenteric lymph nodes, which appeared reactive, with the most prominent lymph node measuring 6 mm in anteroposterior (AP) diameter.

ii) A non-compressible appendix (3 mm in diameter; below the diagnostic threshold of 6 mm for AA) (Images not available), and moderate vascularity.

iii) No rebound tenderness

Given these findings, mesenteric adenitis was the primary suspicion, though subclinical appendicitis could not be entirely excluded.

Follow-up ultrasound (4 weeks later)

Due to persistent mild pain, a repeat ultrasound was performed. The patient was asymptomatic at rest, but reported discomfort post-exertion (especially after school sports). The ultrasound scan was performed using a DC3 Mindray machine. Both the patient preparation and technique were the same as for the first scan.

Imaging findings included:

1) Normal liver, kidneys, pancreas, and spleen.
2) Progressive lymphadenopathy: An increased number and size of mesenteric lymph nodes, with the most prominent lymph node measuring 8.1mm in anterior-posterior diameter (Figure 1), best visualised with a 5 MHz linear probe.
3) RLQ Abnormalities:
    a) A dilated, blind-ended tubular structure (5.9mm to 8.3 mm diameter) with adjacent normal peristalsis Figure 2, 3, 4.
    b) Non-compressibility, focal wall perforations, and minimal pericolic free fluid.
    c) Severe rebound tenderness on palpation.
    d) Hypervascularity surrounding the structure.

These findings raised concern for chronic appendicitis with early perforation, prompting urgent CT confirmation.

CT & surgical outcome

CT corroborated chronic appendicitis with micro perforations (images not available). The patient underwent emergency appendectomy with a successful postoperative recovery.

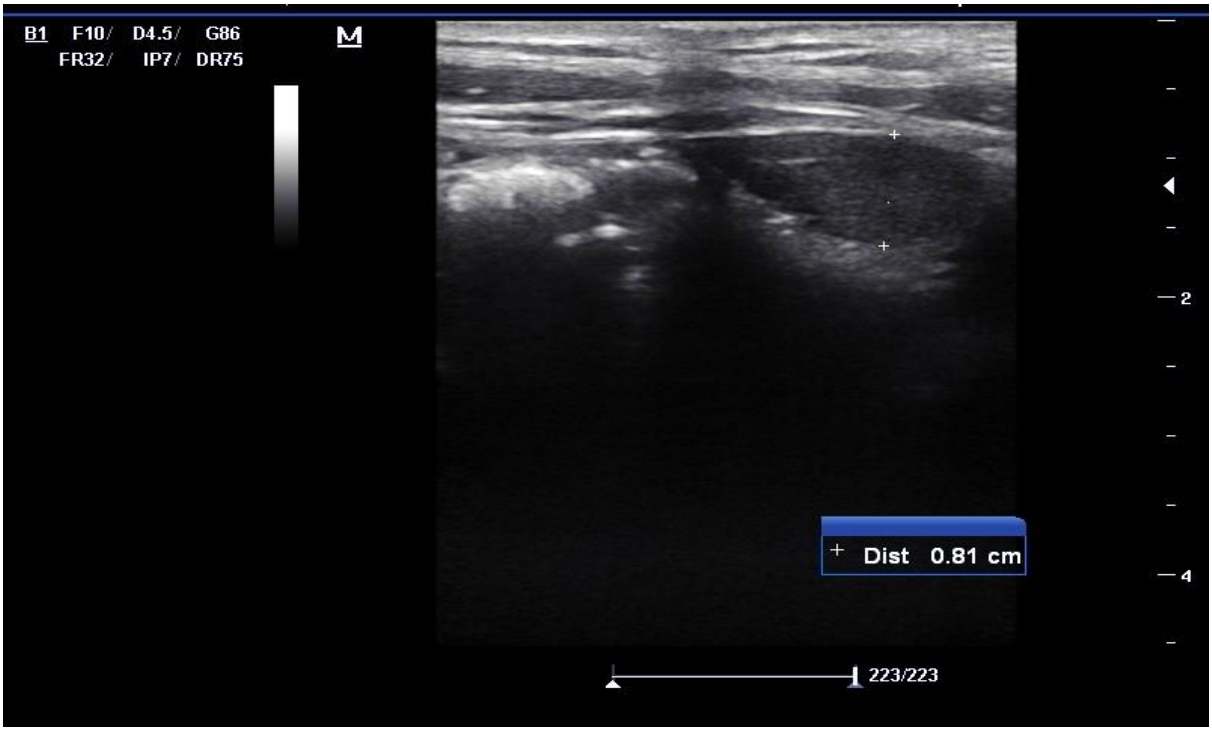

Figure 1: Enlarged mesenteric lymph nodes

Figure 2: Blind ended dilated non-compressible bowel

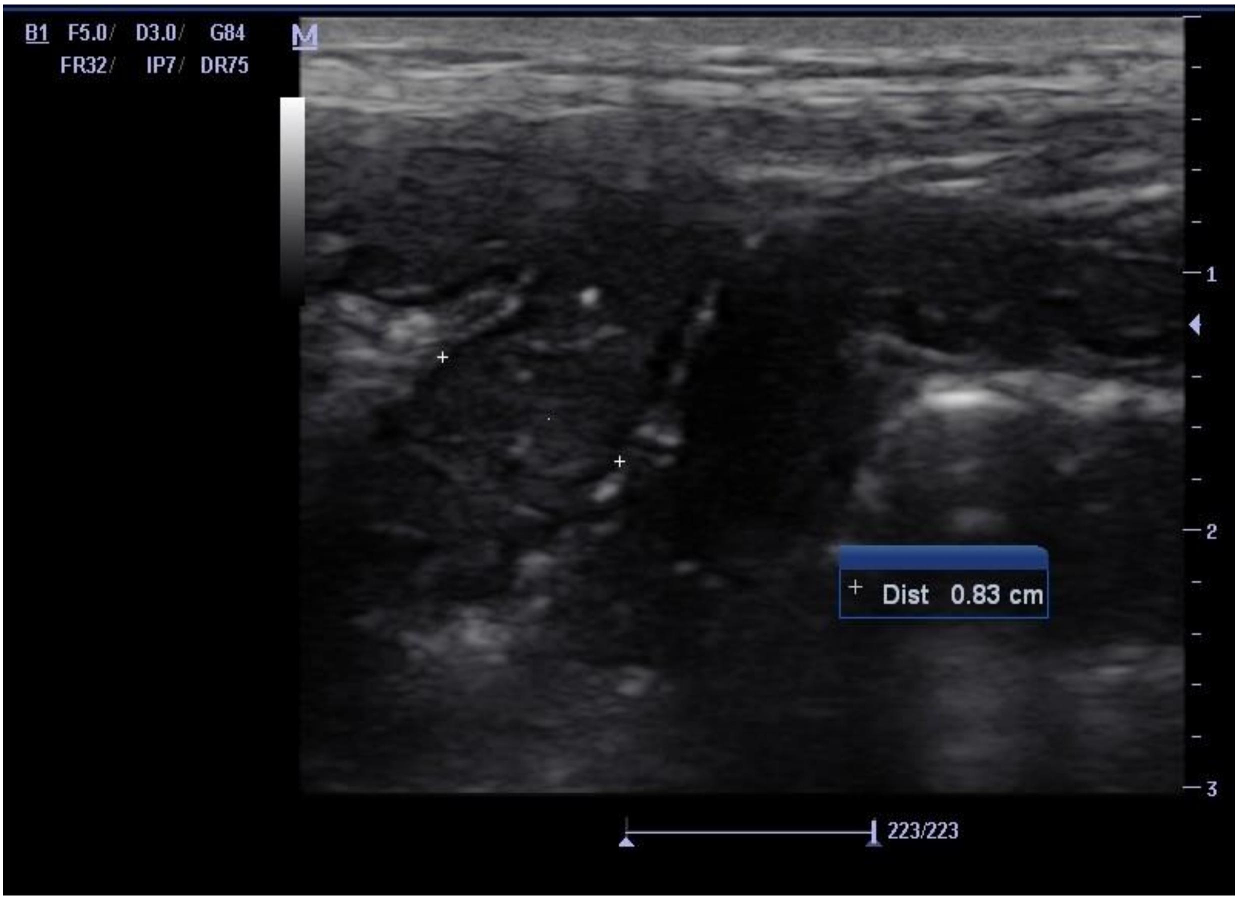

Figure 3: Longitudinal section of dilated bowel with perforations

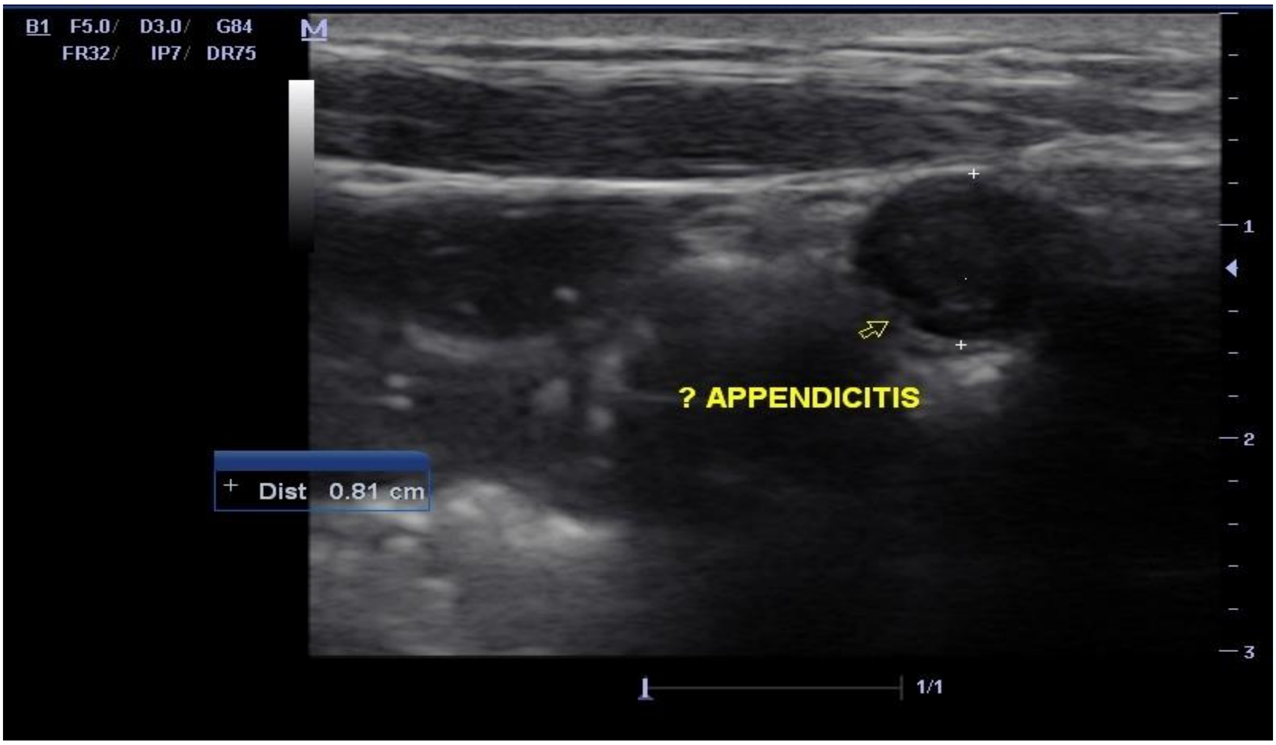

Figure 4: Transverse section of dilated appendix

Discussion

This case illustrates the diagnostic challenges in differentiating AA from MA in paediatric patients. In this case, the initial ultrasound findings: a non-compressible but normo-calibre appendix (3 mm) and enlarged lymph nodes suggested MA, aligning partially with Pokhrel's (2020) criteria for MA (≥3 lymph nodes, short axis >5 mm). However, the non-compressibility of the appendix, though below the 6 mm diagnostic threshold for AA (Park et al., 2011), raised concern for early pathology. As highlighted by surgical consultation, a non-compressible appendix, even without dilation, may indicate fibrosis and loss of elasticity, predisposing to rupture (Quigley & Stafrace 2013). This underscores the limitation of relying solely on diameter-based criteria and emphasises the need for dynamic sonographic assessment (e.g., compressibility, vascularity).

The initial antibiotic therapy may have masked appendiceal dilation, delaying a definitive diagnosis during the first ultrasound scanning procedure (Yadao, Lamture & Huse 2022). Follow-up imaging revealed progression to a dilated (8.3mm), perforated appendix with pericolic fluid, meeting Pokhrel's (2020) criteria for acute appendicitis (blind-ended tube >7 mm, target sign, pericolic fluid). The concurrent lymphadenopathy further complicated the situation, as MA and appendicitis often coexist, while simultaneously increasing the suspicion of appendicitis (Shahba, 2024). Notably, perforation rates in paediatric appendicitis range from 9% to 76%, with higher risks in younger children due to delayed presentation and thinner appendiceal walls (Withers, 2019).

Chronic appendicitis, as seen here, presents additional diagnostic challenges due to nonspecific symptoms and variable imaging findings (Brodzisz et al., 2022). While imaging is crucial, overreliance on it without complementary laboratory tests (e.g., CRP, WBC) may delay diagnosis (Saeedi & Langarizadeh, 2016). In this instance, the patient did not provide any laboratory tests to the ultrasound scan department. This case emphasises the importance of serial evaluations and multimodal assessment in equivocal presentations.

Conclusion

This report underscores the diagnostic pitfalls in paediatric AA, particularly when overlapping with MA and when initial imaging is inconclusive. Key lessons include: 1. Non-compressibility of the appendix is an early sign of appendiceal pathology, even without dilation. 2. The need for serial imaging in persistent symptoms, as findings may evolve. 3. The value of standardised protocols integrating clinical, laboratory, and sonographic criteria to reduce misdiagnosis.

Vigilance and a low threshold for re-evaluation are critical to prevent perforation and optimise outcomes in paediatric abdominal emergencies.

Clinicians should also utilise the Appendicitis Score and/or Alvarado Score, which are established clinical assessments. Since such assessments are not conducted in the ultrasound department, they were not included in the case report.

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Psychological Effects of Instagram Use on Self-esteem among Adolescents in Masvingo Urban, Zimbabwe

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Abstract

This study examined how using Instagram affects self-esteem among adolescents in Masvingo Urban, Zimbabwe. Guided by the social comparison theory, the research addressed gaps in understanding Instagram's impact on youth mental health within a Zimbabwean setting. A mixed-methods approach applied surveys with 68 participants selected through stratified purposive sampling from five residential areas in Masvingo Urban. Semi-structured interviews with 10 participants (5 male, 5 female) representing diverse Instagram usage patterns were also utilised. Quantitative analysis revealed a weak negative correlation between Instagram use and self-esteem ($r = -0.24, p = 0.051$). Gender differences emerged, with females showing stronger negative correlations between social comparison and self-esteem ($r = -0.42, p < 0.01$) compared to males ($r = -0.22, p = 0.243$). Qualitative findings highlighted social comparison, validation seeking, and cultural conformity pressures embedded in unhu/ ubuntu values as key mechanisms. The study emphasised the need for culturally appropriate interventions that include media literacy programmes, community awareness campaigns, and approaches grounded in local communal values to support adolescent mental health in digital environments.

Keywords: adolescents, Instagram, self-esteem, social comparison, Zimbabwe, *unhu/ ubuntu*

Introduction

Adolescence represents a critical developmental period characterised by rapid identity formation and heightened sensitivity to peer evaluation (Meca et al., 2023). During this developmental stage, social interactions play a pivotal role in shaping self-perception. This is particularly so when using social media platforms such as Instagram. Instagram is a predominantly visual social media platform that was launched in 2010 and has rapidly become central to adolescent social interaction (Rogers, 2021). Unlike text-based social platforms such as X and WhatsApp, Instagram's in-built emphasis on curated visual content, filtered images, and idealised self-presentation creates unique psychological challenges for developing adolescents. The platform's core features, including photo sharing, visual filters, likes, and comments, directly engage with appearance-based social comparison processes that are fundamental to adolescent self-evaluation (Yang, 2021). Research consistently demonstrates that visual social media platforms pose greater risks for body dissatisfaction and self-esteem issues compared to text-based platforms, as they facilitate direct appearance comparisons and promote unrealistic beauty standards (Roy et al., 2021).

The theoretical foundation for understanding Instagram's impact lies in Festinger's (1954) social comparison theory, which argues that individuals evaluate themselves through comparisons with others. Instagram provides an ideal environment for such comparisons, particularly upward comparisons with seemingly superior others, which can diminish self-worth. For adolescents, whose identity formation is still developing, these comparison processes can have profound implications for self-esteem and mental health.

This study addresses two primary objectives. First to examine the relationship between Instagram usage and self-esteem among adolescents in Masvingo Urban; and, secondly, to investigate gender differences in Instagram's impact on self-esteem.

The research holds significant relevance for both the academic community and the broader society. Adolescence is a formative period, making young people vulnerable to factors impacting their self-esteem (Ciampo et al., 2020). Low self-esteem is a known risk factor for various negative outcomes, including depression, anxiety, eating disorders, and academic underperformance (Arul & Rajkumar, 2014). Understanding Instagram's specific psychological effects is crucial for developing appropriate interventions and promoting mental well-being.

Furthermore, this research addresses a critical geographical and contextual knowledge gap. Although global research on social media's impact on adolescent mental health is growing, there is a notable scarcity of studies specifically focusing on the Zimbabwean setting, especially within smaller urban areas such as Masvingo. The experiences of adolescents in this specific cultural and socio-economic environment may differ from those in Western or other developing nations. This study contributes valuable localised data, offering insights into how cultural practises, resource availability, and local societal pressures might facilitate the relationship between Instagram use and self-esteem.

The findings of this research can serve as a critical evidence base for parents, educators, school counsellors, healthcare professionals, and policymakers. It can inform psycho-educational programmes, counselling approaches, and national guidelines for safe social media use.

Moreover, the study's exploration of culturally appropriate interventions, particularly those incorporating *unhu/ ubuntu* values, which emphasise interconnectedness and communal responsibility offers a unique contribution (Museka & Taringa, 2014).

The scope of this research was strictly limited to investigating the psychological effects of Instagram use on self-esteem among adolescents aged 13-19 years residing in Masvingo Urban, Zimbabwe. The study specifically explored the influence of exposure to idealised and filtered images and social comparison on self-esteem. Furthermore, the research did not extend to other social media platforms, nor did it encompass adolescents living outside of Masvingo Urban or those outside the defined age range. This study was limited to examining the general psychological impact of Instagram use on self-esteem.

Literature review

Social comparison theory was the key concept used in understanding the psychological effects of Instagram on self-esteem. It argues that individuals evaluate their own opinions, abilities, and characteristics by comparing themselves to others (Festinger, 1954). Instagram, with its highly visual and curated content, provides an abundance of opportunities for both upward social comparison (comparing oneself to someone perceived as superior) and downward social comparison (comparing oneself to someone perceived as inferior). Upward comparisons are prevalent on platforms showcasing idealised lives, bodies, and achievements, and are frequently linked to diminished self-esteem and body dissatisfaction (Roy, et al., 2021). The concept of problematic social media use or "addiction" is also relevant, describing excessive or compulsive engagement with platforms that can lead to negative consequences, including impaired psychological well-being. This can aggravate existing vulnerabilities and intensify the negative effects of social comparison.

Research consistently demonstrates Instagram's negative impact on adolescent self-esteem, primarily through social comparison mechanisms. Yang (2021), for instance, found a significant association between problematic Instagram use and diminished self-esteem, as well as body dissatisfaction, among American adolescents. This effect was particularly pronounced among females, highlighting the platform's visual emphasis and the prevalence of filtered, idealised images that worsen existing vulnerabilities in adolescent self-perception.

Verhoeven et al. (2019) demonstrated that Instagram use correlates with increased social comparison tendencies and decreased well-being among Dutch adolescents. Their research identified the passive consumption of others' content as particularly harmful, suggesting that it provides ample comparison opportunities without the reciprocal social benefits of active engagement. Similarly, Fidan et al. (2021) found that problematic Instagram use among Turkish adolescents was mediated by loneliness and social comparison.

Gender differences consistently emerge across global studies. Adolescent girls are more vulnerable to Instagram's negative effects due to greater engagement with appearance-focused content and a higher tendency toward upward social comparisons (Charmaraman et al., 2021). This vulnerability stems from societal pressures around female appearance and Instagram's visual nature, which put more emphasis on appearance-based evaluation.

Limited but growing research from Africa reveals similar patterns. Boateng et al. (2025) found significant associations between social media use and adolescent sexual behaviours, suggesting that platforms such as Instagram influence identity formation beyond self-esteem. Peace and Ajike (2016) demonstrated links between social media engagement and mental health challenges, including depression and anxiety, often stemming from social comparison and cyberbullying experiences.

Within Zimbabwe, research by Museka and Taringa (2014) in Harare examined social media's impact on adolescent moral development. Their findings revealed predominantly detrimental effects of social media interactions on moral development, which correlates strongly with self-esteem. They also advocated for culturally grounded approaches incorporating *unhu/ ubuntu* values to mitigate negative effects. This research highlights the potential of indigenous value systems to inform intervention strategies. *Unhu/ ubuntu* values, emphasizing interconnectedness and communal responsibility, may offer protective factors against individualistic social comparison tendencies promoted by Instagram (Museka & Taringa, 2014).

The literature, therefore, strongly supports the notion that Instagram use can negatively impact adolescent self-esteem, largely driven by social comparison processes. The platform's highly visual nature, coupled with the prevalence of idealised and often unrealistic content, creates an environment ripe for upward social comparisons, leading to feelings of inadequacy, body dissatisfaction, and diminished self-worth (Roy, et al., 2021). This effect appears to be particularly pronounced among adolescent girls, who are often subjected to greater societal pressures regarding appearance and tend to engage more with appearance-focused content (Zheng et al., 2024).

The concept of problematic Instagram use further compounds these negative effects, indicating that excessive or uncontrolled engagement intensifies the psychological damage. Although much of the foundational research originates from Western countries, emerging studies from Africa demonstrate similar trends. However, the African context also introduces the crucial element of cultural background, which can potentially moderate these effects. The emphasis on communal values, as highlighted by *unhu/ ubuntu* in Zimbabwe, offers a unique lens through which to explore potential protective factors or mediating influences not typically found in Western individualistic societies (Museka & Taringa, 2014).

Despite growing global awareness of Instagram's psychological effects, significant gaps remain in understanding these impacts within specific cultural settings, particularly in Zimbabwe. First, the vast majority of existing research focuses primarily on Western populations, potentially missing culturally specific issues and protective elements that may be present in non-Western settings. Even though some African studies exist, detailed research on Instagram's specific effects on self-esteem, separated by specific platforms and within particular demographics, remains limited.

Secondly, Masvingo Urban, with its blend of traditional and modern influences, represents an ideal, yet under-researched setting for examining how cultural values interact with Instagram's effects on the self-esteem of adolescents. Existing Zimbabwean research studies often provide a broader view of social media effects rather than a targeted examination of Instagram's specific impact on self-esteem. This study aims to directly address these identified gaps by providing localised, platform-specific insights into the psychological effects of Instagram use on self-esteem among adolescents in Masvingo Urban, Zimbabwe.

Methodology

This study employed a mixed-methods design to provide comprehensive understanding of Instagram's effects on the self-esteem of adolescents. The quantitative component examined relationships between variables, while qualitative data explored underlying mechanisms and cultural influences. This approach was selected to capture both statistical patterns and rich contextual understanding necessary for culturally appropriate interventions.

The target population comprised adolescents aged 13-19 residing in Masvingo Urban who actively used Instagram. Active use was defined as accessing Instagram at least three times weekly and maintaining a personal account for a minimum of six months.

Stratified purposive sampling was employed to recruit 78 participants from five residential areas in Masvingo Urban, namely Rujeko, Runyararo, Rhodene, Eastvale and Mucheke. Stratification ensured location representation as well as age distribution across the adolescent spectrum. Sample size was determined through power analysis (α=0.05, β=0.80, medium effect size r=0.30), indicating minimum requirement of 64 participants.

Ten participants (5 male, 5 female) were purposively selected from the quantitative sample to represent diverse Instagram usage patterns with light users (1-2 hours/day, n=3), moderate users (3-4 hours/day, n=4), and heavy users (5+ hours/day, n=3). This approach ensured diverse perspectives across usage intensity levels.

Data collection instruments

Quantitative instrument

A structured questionnaire comprising three sections, namely demographic information, Instagram usage patterns, and self-esteem, was used. Social comparison tendencies were measured using a composite scale incorporating items on appearance comparison, lifestyle comparison, and validation seeking behaviours.

Qualitative instrument

Semi-structured interview guides explored Instagram usage motivations, social comparison experiences, cultural influences on online behaviour, and perceived impacts on self-worth. Questions were designed to elicit rich narratives about personal experiences while maintaining cultural sensitivity.

Data collection procedures

Data collection occurred over four weeks in September 2024. Quantitative surveys were administered with researcher supervision. Qualitative interviews were conducted individually in private settings, lasting 30-45 minutes each. All interviews were conducted with consent and in participants' preferred language of either English or Shona.

Data analysis

Quantitative analysis

Data was analysed using R software. Descriptive statistics characterised sample demographics and Instagram usage patterns. Pearson correlations examined relationships between Instagram use, social comparison, and self-esteem. Gender-specific analyses were conducted to identify differential effects. Statistical significance was set at $p < 0.05$.

Qualitative analysis

Interview transcripts underwent thematic analysis following Braun and Clarke (2006) guidelines. The process involved familiarisation, initial coding, theme development, and refinement. Discourse analysis examined language patterns reflecting self-perception and cultural influences. Inter-coder reliability was established through independent coding by two researchers with 87% agreement.

Ethical considerations

Informed consent was secured from all participants, with parental consent for those under 18. Participants received comprehensive information about study purposes, procedures, risks, and benefits. Confidentiality was maintained through pseudonyms and secure data storage. Participants were notified that they could withdraw at any time without penalty.

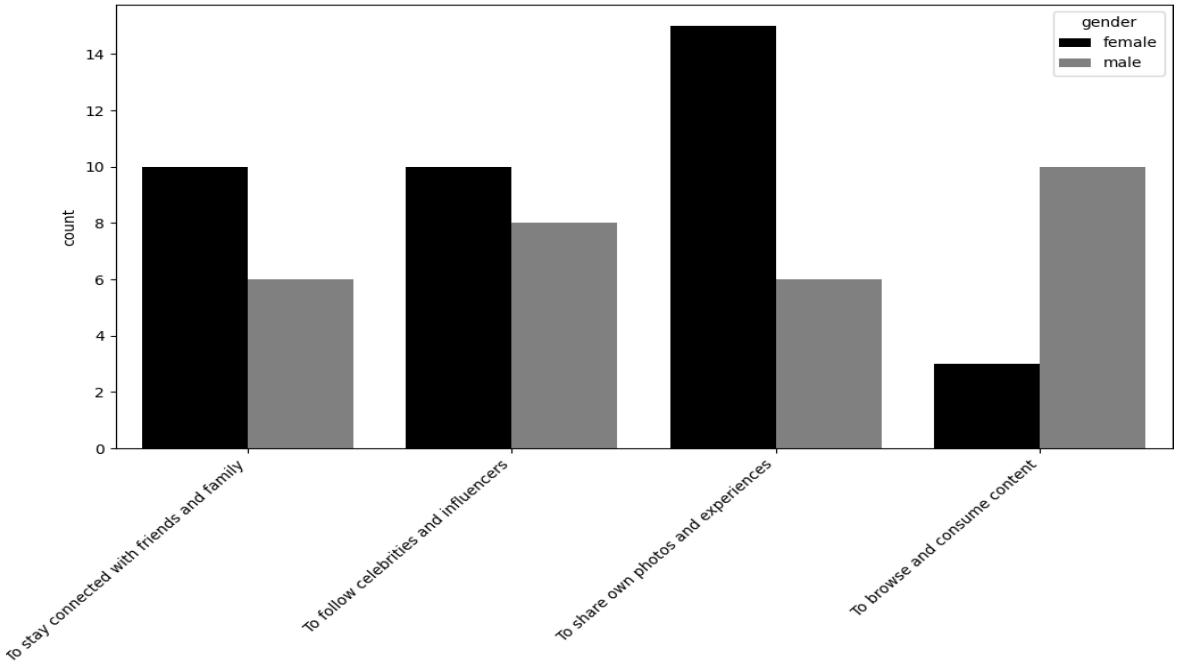
Results

Sample characteristics

The final sample comprised 78 adolescents across quantitative (n=68) and qualitative (n=10) components. Ages ranged from 13-19 years (M=17.38, SD=1.58), representing late adolescence, a critical period for identity formation and social media engagement. The age distribution was relatively normal, with the majority of participants (64%) falling within the 16-18 year range, indicating representation of mid-to-late adolescence when social comparison tendencies typically peak. Gender distribution was 54.5% female (n=43) and 45.5% male (n=35).

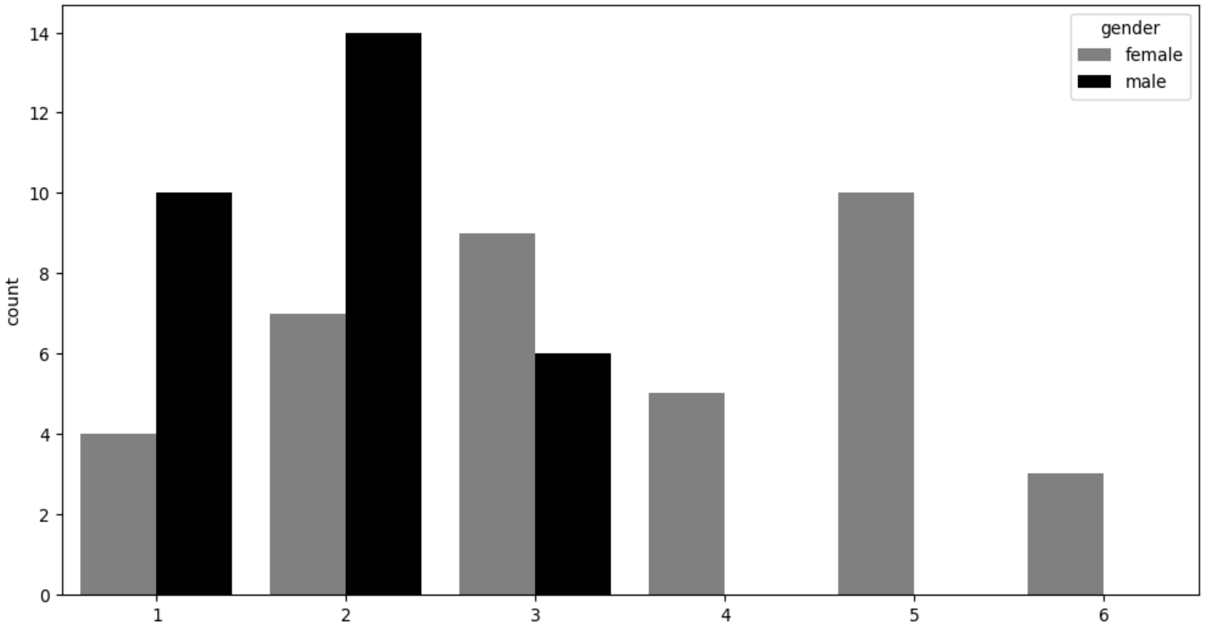
Instagram usage patterns

Gender differences emerged in Instagram usage reasons (Figure 1). Females primarily used Instagram for sharing personal photos and experiences (n=15), maintaining social connections (n=10), and following celebrities/influencers (n=10). Males predominantly engaged in passive content consumption, browsing memes and entertainment content (n=12), followed by celebrity/influencer following (n=8) and social connection (n=6).



Reason

Figure 1: Reasons for using Instagram among adolescents in Masvingo Urban (Authors, 2025)



Time spent (hours per day)

Figure 2: Time spent on Instagram per day among adolescents in Masvingo Urban (Authors, 2025)

Frequency of Instagram use

Females demonstrated significantly higher daily Instagram usage compared to males (Figure 2). Female usage peaked at 5 hours daily, with broader distribution across 1-6 hours. Males clustered toward lower usage (1-3 hours daily), suggesting more sporadic engagement patterns.

Quantitative findings

Table 1 shows the findings from Pearson correlation tests to examine the relationship between Instagram usage and self-esteem scores. Time spent on Instagram showed weak negative correlation with self-esteem (r = -0.24, p = 0.051). Frequency of use showed weak non-significant correlation with self-esteem (r = -0.18, p = 0.12)

Table 1: Results of Pearson correlation tests

Variable	**Correlation (r)**	**p-value**	**Interpretation**
Time Spent (hours/day)	-0.24	0.051	Weak negative correlation; slightly significant.
Frequency of Use (often)	-0.18	0.12	Weak negative correlation; not significant.

To examine the relationship between social comparison and self-esteem scores by gender, Pearson correlation tests were conducted and the results are shown in Table 2.

Table 2: Summary table of correlation results

Group	Correlation (r)	p-value	Interpretation
Combined	-0.36	< 0.01	Moderate negative correlation; significant
Males	-0.22	0.243	Weak negative correlation; not significant
Females	-0.42	< 0.01	Moderate negative correlation; significant

A moderate negative correlation was found between social comparison scores and self-esteem scores in the combined sample (r = -0.36, p < 0.01). For the male subgroup, the correlation between social comparison scores and self-esteem scores was weak and not statistically significant (r = -0.22, p = 0.243). Among females, there was a moderate negative correlation between social comparison scores and self-esteem scores (r = -0.42, p < 0.01). This relationship was statistically significant, indicating that higher levels of social comparison are strongly associated with lower self-esteem in female adolescents.

Qualitative themes

Theme 1: Social comparison

Participants consistently reported comparing themselves with Instagram content creators and peers. Female participants particularly emphasised appearance-based comparisons: "When I see people posting perfect pictures, I feel like I'm not good enough" (Female, 17). Male participants showed less intense comparison experiences, focusing more on lifestyle rather than appearance.

Theme 2: Validation seeking behaviours

Participants described reliance on likes and comments for self-worth validation. "If my post doesn't get enough likes, I feel like people don't care about me" (Male, 15). This external validation dependency was evident across genders, but appeared more pronounced among heavy users.

Theme 3: Cultural conformity pressures

Participants reported feeling obligated to maintain appropriate online personas due to family oversight and cultural expectations. "Because my elder brothers are on Instagram, I feel obligated to post only appropriate and decent pictures" (Female, 18). This reflects *unhu/ ubuntu* values emphasising communal responsibility and appropriate behaviour.

Theme 4: Authenticity tensions

Participants struggled between authentic self-expression and curated self-presentation. Many described maintaining "fake" or idealised online personas while feeling disconnected from their authentic selves. This tension was particularly acute among females engaging in heavy usage patterns.

Summary of key findings

The study revealed weak to moderate negative correlations between Instagram usage and adolescent self-esteem. Social comparison processes emerged as more influential than simple usage frequency. Gender differences were pronounced and consistent across quantitative and qualitative measures, with females demonstrating significantly stronger negative correlations between social comparison and self-esteem (r = -0.42 vs. r = -0.22 for males). Cultural factors, particularly *ubuntu/ unhu* values, emerged as important influences that both shield and complicate social media experiences among Zimbabwean adolescents. The integration of traditional cultural values with contemporary digital platforms creates unique tensions around authenticity, family expectations, and peer approval that distinguish this population from Western samples typically studied in social media research.

Discussion

The weak negative correlation between Instagram use and self-esteem (r = -0.24, p = 0.051) suggests that, while Instagram usage may negatively impact self-esteem, the relationship is modest and marginally significant. This finding aligns with social comparison theory (Festinger, 1954), where females engage in upward comparisons with idealised profiles, potentially harming self-esteem, while males may prioritise humour or non-personal content, buffering negative effects (Charmaraman et al., 2021; Avci et al., 2014). The marginal significance level indicates that the relationship exists, but varies considerably across individuals, supporting person-centred rather than platform-centred approaches to understanding social media impacts.

The stronger correlation between social comparison tendencies and self-esteem (r = -0.36, p < 0.01) suggests that how individuals engage with Instagram matters more than mere usage frequency. This supports theoretical predictions that comparison processes, rather than platform exposure alone, drive negative psychological outcomes (Avci et al., 2014).

Gender differences reveal important distinctions. Females showed significantly stronger negative correlations between social comparison and self-esteem (r = -0.42, p < 0.01) compared to males (r = -0.22, p = 0.243). This suggests that social comparison has limited impact on self-esteem among male adolescents in this sample, whereas girls appear more vulnerable to appearance-based comparisons (Charmaraman et al., 2021).

The qualitative data provides crucial context for understanding these gender differences. Female participants' detailed descriptions of appearance-based comparison processes, systematic self-evaluation against idealised images, and elaborate content curation behaviours suggest that Instagram engagement involves more intensive psychological processing among females. Male participants' focus on lifestyle comparisons and more compartmentalised evaluation processes may explain their relative resilience to self-esteem impacts.

These findings have important implications for intervention development, suggesting that gender-specific approaches may be necessary. Interventions targeting female adolescents should focus particularly on appearance-related comparison processes and media literacy skills, while approaches for males might emphasise general critical thinking about social media content and lifestyle comparison awareness.

The emergence of cultural conformity as a distinct theme highlights how *unhu/ ubuntu* values shape Instagram experiences in Masvingo Urban. *Ubuntu/ unhu* values appear to provide some protection against excessive individualistic comparison by emphasising communal identity and shared responsibility. Participants' descriptions of family oversight and community expectations suggest that traditional Zimbabwean socialisation patterns create natural boundaries around self-presentation and social comparison. However, these same values also create pressures for appropriate self-presentation that can restrict authentic expression and intensify authenticity tensions.

The integration of traditional cultural values with contemporary digital platforms creates unique psychological challenges not captured in existing Western-based research. Adolescents must navigate between authentic self-expression, peer approval, family expectations, and cultural appropriateness.

These findings highlight the importance of cultural context in Instagram and wider social media research. They suggest that theories developed in Western contexts may require some modification for non-Western populations. The role of *ubuntu/ unhu* values demonstrates that communal cultural backgrounds can fundamentally alter social media experiences, creating both protective factors and unique vulnerabilities not present in individualistic cultures.

Future research should examine how different cultural values systems interact with social media platforms to produce varying psychological outcomes. The assumption that social media impacts are universal may be a generalisation, and culturally-adapted theories and interventions may be necessary for effective support of diverse adolescent populations.

Limitations of the study

The study's relatively small sample size (n=78) may limit generalisation to wider adolescent populations. Rural adolescents, or those in other Zimbabwean regions may experience different relationships between social media usage and psychological wellbeing. The urban based sample limits understanding of how factors such as rural/urban residence might affect these relationships.

The study's focus on Instagram limits generalisation to other social media platforms, which may have different features, user demographics, and psychological impacts. TikTok, X, Facebook, and other platforms popular among adolescents may produce different patterns of usage and psychological outcomes.

Recommendations

Results suggest the need for targeted interventions addressing social comparison tendencies, particularly among female adolescents. Media literacy programmes should focus on critical evaluation of idealised Instagram content and recognition of filtering/editing techniques. Community-based approaches incorporating *unhu/ ubuntu* values could provide culturally appropriate frameworks for healthy social media engagement.

These findings underscore the importance of addressing social comparison tendencies, particularly among female adolescents, when designing interventions to mitigate negative social media effects. Evidence-based approaches should incorporate cognitive-behavioural techniques to help adolescents recognise and challenge social comparison thoughts, develop realistic self-evaluation standards, and build self-esteem from internal rather than external sources.

Media literacy programmes should focus on helping adolescents understand the curated nature of social media content, the use of photo editing and filtering technologies, and the strategic presentation involved in Instagram and other social media posts. Skills training should include critical evaluation of social media content and recognition of comparison triggers.

Given the significant role of family oversight and cultural values identified in this study, interventions should incorporate family-based components. Parent education programmes should address appropriate social media monitoring, communication about online experiences, and support for healthy digital citizenship.

Community-based interventions should make use of *ubuntu/ unhu* values to promote positive social media usage. Programmes emphasising communal responsibility, mutual support, and collective wellbeing could help channel traditional Zimbabwean values toward protective rather than restrictive influences on social media experiences.

Schools should integrate comprehensive digital citizenship and mental health curricula that address social media's psychological impacts. Educational programmes should be developmentally appropriate, culturally sensitive, and gender-informed, recognising the different vulnerabilities and usage patterns identified in this research.

This study demonstrates that Instagram's impact on adolescent self-esteem is facilitated by social comparison processes rather than usage frequency alone. Gender differences are significant, with females showing greater vulnerability to negative effects. Cultural values, particularly *unhu/ ubuntu* principles, play a crucial mediating role in how social media affects Zimbabwean adolescents. Future interventions must address both individual psychological processes and cultural contexts to effectively support adolescent wellbeing in digital environments.

Conclusions

This study provides important insights into Instagram's effects on the self-esteem of adolescents in Masvingo urban. The weak negative correlation between Instagram use and self-esteem, combined with stronger relationships between social comparison and self-worth, suggests that engagement quality matters more than quantity. Gender differences highlighting female vulnerability to comparison-based effects require targeted intervention approaches.

The unique contribution of cultural conformity pressures rooted in *unhu/ ubuntu* values demonstrates how local cultural contexts shape social media experiences. This finding emphasises the need for culturally grounded interventions that make use of traditional values while addressing contemporary digital challenges.

Proposed interventions include implementing media literacy programmes in educational institutions, developing community awareness campaigns about healthy social media use, and creating culturally appropriate frameworks incorporating *unhu/ ubuntu* values to promote authentic self-expression while maintaining communal responsibility. Future research should examine intervention effectiveness, explore rural-urban differences in social media impacts, and expanding research to Zimbabwean adolescents in rural areas.

These findings contribute to growing evidence that social media impacts are neither universally positive nor negative, but depend on complex interactions between individual characteristics, usage patterns, cultural contexts, and platform features. Understanding these relationships is crucial for developing effective approaches to support adolescent wellbeing in our increasingly digital world.

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Factors Associated with Exclusive Breastfeeding Practice among Formally Employed Mothers: A Case of Mutare, Zimbabwe

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Abstract

Although there is growing evidence on the benefits of exclusive breastfeeding (EBF) for both mothers and infants, EBF levels remain low among working mothers. This study explored the predictors of EBF among employed mothers from Mutare urban in Zimbabwe.

A cross sectional workplace survey was conducted amongst formally employed mothers conveniently sampled from the city company registry list. An interviewer administered questionnaire based on World Health Organisation (WHO) and FAO Infant and Young Child Feeding (IYCF) guidelines was used to collect data on breastfeeding knowledge and practice. Pearson's Chi-square and binary logistic regression analysis was used to explore the predictors of EBF. Ethical approval was obtained from the Medical Research Council of Zimbabwe (MRCZ/B/1394).

The average age of the participants was 33±5.6 years. Mothers were highly knowledgeable (88%) of the recommended EBF practices. EBF rate was low (46.9%). Almost half of the mothers (40.6%) introduced solid foods to their children before 4 months. High education level (p=0.001), early breastfeeding initiation (p=0.042), reduction in daily working hours (p=0.048) were positively associated with EBF practices. The provision of a breastfeeding room (p=0.013) and low income (<$487) (p=0.019) were the only significant negative predictors of EBF. This means mothers with low income and mothers with access to private rooms at work were less likely to practice EBF most likely due to logistical challenges or misunderstandings of the concept.

The prevalence of EBF was low in this setting. The findings from this study highlight the multifaceted barriers to exclusive breastfeeding among formally employed mothers in urban Mutare. While Zimbabwe's national EBF rates are commendable, the challenges faced by urban working mothers demand targeted interventions. Policies such as workplace breastfeeding support, improvements in income levels, and flexible maternity arrangements could bridge the gap, ensuring that infants receive optimal nutrition during their first months of life despite the demands of modern employment.

Keywords: EBF, working mothers, breastmilk, IYCF, Zimbabwe

Introduction

The Global Strategy for Infant and Young Child Feeding recommends that children should be given breastmilk from birth up to 6 months of age without any additional supplements such as water or drink (WHO, 2017). There is evidence that EBF contributes to improved growth and development, including reduction of morbidities and mortality in children (Motee & Jeewon, 2014). Despite the established benefits of breastfeeding for both the mother and the child, it is no longer a norm in many communities (Nduna, Marais, & van Wyk, 2015). Global breastfeeding rates remain far below international targets (UNICEF, 2024).

Exclusive breastfeeding rate is approximately 48% globally (UNICEF, 2023). Many low-income and middle-income countries with data have shown a modest increase in exclusive breastfeeding rates of 10% since 2017 (UNICEF, 2023). In Zimbabwe, the current national EBF rate is 42% (ZIMSTAT, 2024c), which is below the World Health Assembly (WHA) target of 50% by 2025 (UNICEF, 2023). The indicator used by the Zimbabwe Demographic Health Survey 2023-2024 was "… Percentage of children age 0–5 months who were fed exclusively with breast milk during the previous day". When defined as "percentage of children born in the last 2 years who were fed exclusively with breast milk for the first 2 days after birth", the prevalence was much higher at 83% (ZIMSTAT, 2024c). Studies have demonstrated that this high prevalence decreases over the months as a result of many factors such as cultural practices (Muchacha & Mtetwa, 2015), lack of support for continued breastfeeding, and the return of mothers to the workforce (Apara et al., 2024). This makes work a possible major barrier to EBF for a third of women and a potential driver of low exclusive breastfeeding rates; however, this remains to be proven.

Formally employed women face unique challenges in maintaining exclusive breastfeeding practices due to the demands of modern workplaces such as fixed schedules, limited maternity benefits, and inadequate breastfeeding facilities (Ahmad, Sulaiman, Nik Hussain, & Mohd Noor, 2022). These obstacles often result in premature cessation of breastfeeding or early introduction of complementary feeding, compromising the infants' nutritional and developmental outcomes (Daelmans et al., 2013; Motee & Jeewon, 2014; WHO, 2016). Addressing these barriers within this group is critical for designing targeted interventions that align with their professional commitments while promoting optimal infant feeding practices.

In Zimbabwe, women make up approximately 36.8% of the national labour force, while in Manicaland, the province where Mutare is located, this percentage is 30% (ZIMSTAT, 2024a). This indicates that a third of the workforce may face challenges related to exclusive breastfeeding practices.

Regrettably, national statistics on breastfeeding practices are not disaggregated by socio-economic characteristics. Consequently, we can only hypothesise that the prevalence is lower among formally employed women due to fixed schedules, compared to women in the informal sector. Nevertheless, efforts to increase breastfeeding rates within this group could significantly contribute to the overall prevalence of exclusive breastfeeding (EBF), thereby aiding Zimbabwe in achieving the World Health Assembly (WHA) target of 50%. This study was therefore designed to examine predictors of exclusive breastfeeding in formally employed women in the fourth largest city in Zimbabwe, Mutare.

Materials and methods

Study setting and design

A community-based retrospective cross-sectional study was carried out in Mutare, the capital of Manicaland province, and the fourth largest city in Zimbabwe. Mutare has an urban population of 224,804 and is situated at coordinates 18.9758° S, 32.6504° E (ZIMSTAT, 2024b).

Participants and sampling

The sample size was calculated using the Dobson formula for descriptive studies taking care of a 5% for non-responders to give a total sample size of 100 (Dobson, 1984). The initial step involved randomly selecting public sector entities, which are establishments owned by the Government of Zimbabwe. These entities were chosen due to their status as major employers in many cities (ZIMSTAT, 2024c).

Selection of these establishments was done using the random generation function on Microsoft excel from a list from Mutare City Registry. Participants were then purposively sampled from the selected institutions (1 per establishment) by asking if there was a female with a child between the ages of 6 months and 2 years. If there was no eligible participant the next establishment on the replacement list was selected. One participant was considered appropriate as the individual could demonstrate the workplace breastfeeding culture. If there was more than one participant meeting the inclusion criteria, random selection was used to choose only one person for the interview.

Mothers who had children with birth defects and chronic diseases were excluded from the study as their infants may have experienced feeding problems, or had extended hospital stays and procedures that could have affected breastfeeding (Hookway, Brown, & Grant, 2023).

Data collection and tools

An interviewer administered a questionnaire adapted from WHO (FAO, 2014a; WHO & UNICEF, 2021) and similar studies (Mundagowa, Chadambuka, Chimberengwa, & Mukora-Mutseyekwa, 2019). This was used to collect data on the demographics, socio-economic factors, mother's knowledge, attitudes, practices (KAPs) on EBF and work-related policies regarding breastfeeding from January 2023 to June 2023 .

WHO has published definitions for infant and young child feeding (IYCF) indicators (WHO, 2014) and FAO has published validated tools for assessing nutrition related knowledge attitudes and practices (FAO, 2014b). The adaptations were retrospectively asking about EBF if the child was older than 6 months, addition of questions on knowledge about work place breastfeeding related policies such as: *Does the establishment you work for contain a breastfeeding policy? What is the duration of maternity leave? What provisions are present on return from maternity leave*? The knowledge questions assessed the mother's knowledge of what breastfeeding was, health benefits of exclusive breastfeeding, if breastmilk satisfied the energy and other nutrient requirements for a child from birth up to six months of age.

Percentages were used as indicators of knowledge and were determined from the percentage of respondents who knew the correct answer to a question (FAO, 2014a). The breastfeeding knowledge prevalence was categorised based on the FAO knowledge criteria, according to the FAO guidelines thresholds suggestive of a nutrition intervention, a knowledge prevalence of ≤ 70 % is considered urgent for nutrition intervention. Therefore, all mothers who scored > 70 % in the knowledge test were considered to have a high level of knowledge; and those scoring ≤ 70 % were considered as having a low level of knowledge (FAO, 2014b).

The questionnaire underwent pretesting in a similar sample population in Harare to evaluate its clarity and address any ambiguities. Based on the results, necessary adjustments were implemented. Research assistants with expertise in survey methodology received training in the administration of the questionnaires using the local language. The research team then made telephonic appointments with sampled mothers and the face-to-face interviews were conducted at their respective workplaces.

Data analysis

Data collected was entered and analysed using SPSS v 25 (IBM Inc). Normality of data was assessed using the Shapiro-Wilk test and visualisations via Q-Q plots. Continuous data was presented as mean ± standard deviation (SD) while categorical data was presented as frequencies and percentages. Pearson's Chi-square was used to explore associations. When cell counts were less than 5, Fisher's exact test was used to determine associations instead. Significant associations and relevant predictor variables from literature were entered into a logistic regression model to determine predictors of exclusive breastfeeding practice. Level of significance was set at $P<0.05$.

Ethics

The study was conducted based on the ethical principles of respect, justice and confidentiality summarised in the 2013 Declaration of Helsinki (WMA, 2013). Ethical approval was obtained from the Medical Research Council of Zimbabwe (MRCZ/B/1394). Further approval was obtained from the City of Mutare Health Department and from the Human Resource departments of the various workplaces of participants. Written informed consent was obtained from each participant before study procedures.

Results

Characteristics of participants

Table 1 summarises the demographic characteristics of working mothers who were involved in the study. The study enrolled 96 formally employed mothers from Mutare after at least four did not consent. The age of the mothers ranged from 22 to 47 years, with the mean age being 33±5.6 years.

Majority of the participants (76%) had attained tertiary level of education. Above half (60%) of the mothers were getting a gross income above the Zimbabwean poverty datum line of $487 USD (ZIMSTAT, 2018). The participants were from different professions, with the most of them (24%) based in the health sector, followed by education (21.9%) and security agents (3.1%) had the least respondents.

Table 1: Sociodemographic characteristics of study participants*

Variable		**n**	**%**
Child’s age (months)	0-6	3	3.1
	7-12	28	29.3
	13-24	65	67.6
Mother`s age (years)	21-30	38	39.6
	31-40	46	53.2
	41-45	7	7.2
Education level	Secondary	20	20.8
	Tertiary	76	79.2
Total income	Less than poverty line ($487)	36	37.5
	Above poverty line ($487)	60	62.5
Marital status	Single	2	2.1
	Married	82	85.4
	Divorced	7	7.3
	Widowed	2	2.1
	Cohabit	3	3.1
Employment sector	Education	21	21.9
	Health	23	24
	Civil societies	4	4.2
	NGO's	11	11.5
	Banking, finance and insurance	4	4.2
	Telecommunication	5	5.2
	Other government ministries	17	17.7
	Security agencies	3	3.1
	Media and information	8	8.3
Mothers age (years), mean ±SD			32.86±5.609
Child age (months), mean ±SD			14.75±4.697

*n=96 for all variables except Mother's age, which had n=91 available.

Mother’s breastfeeding knowledge about breastfeeding practice

Table 2 shows that the majority of mothers (96.9%) knew the meaning of EBF. Some mothers (58.3%) found breastmilk expression to be difficult. Health care professionals (80%) were stated as the main source of knowledge on exclusive breastfeeding and friends and relatives (6%) were seen to be an influencing factor as they were the second main source of knowledge.

Table 2: Mothers breastfeeding knowledge and perceptions (n=96)

Attribute		
Knowledge	**Correct response n (%)**	**Incorrect response n (%)**
EBF is when an infant is fed breastmilk only without any additional water or fluids and/or solids for first 6 months of life	93 (96.9)	3 (3.1)
A baby younger than six months be breastfed on demand-	79 (82.3)	17(17.7)
Infant formula and breastmilk have the same health benefits	9 (9.4)	87 (90.6)
Breastmilk can satisfy the energy and other nutrient requirements for a child from birth till 6 months-	18 (18.8)	78 (81.2)
Benefits of breastfeeding are limited for a specific period	63 (65.6)	33 (34.4)
Perceptions	**Agree n%**	**Disagree n%**
Formula feeding is more convenient than breastfeeding	75 (78.1)	21 (21.9)
Breastmilk is the ideal food for babies	93 (96.9)	3 (3.1)
If the mother intends to resume work, formula feeding is a better choice	30 (31.3)	66 (68.7)
Breastmilk expression is a hard and complicated thing to do	56 (58.3)	40 (41.7)
Sources of information on breastfeeding*:*	**N**	**%**
Health care professionals	80	83.3
Reading	4	4.2
Mass media	1	1.0
School or college	5	5.2
Relatives and friends	6	6.3

Association of breastfeeding knowledge score (BKS), birth outcomes, sociodemographic factors and feeding practices

Table 3 shows the association between BKS and breastfeeding and complementary feeding practices among formally employed working mothers from Mutare. There was a significant association between mothers' education level (P=0.009) and knowledge score. Mothers who had attained tertiary education level (88.1%) were more knowledgeable about exclusive breastfeeding as well as those with higher income (above the PDL (64.4%). It appears those who initiated breastfeeding early (within an hour of giving birth) at least 57.6% had adequate knowledge about breastfeeding. Less than half the mothers who practised exclusive breastfeeding (47.5%) had adequate knowledge. More mothers whose source of breastfeeding knowledge was health care professionals had adequate knowledge (79.7%). Mothers who had adequate knowledge reported to have expressed breastmilk (59.3%) and were comfortable with handling expressed milk (70.6%). In contrast, 45.8% of those with adequate knowledge actually gave their infants other foods before 4 months of age. The most common challenge to exclusive breastfeeding on return to work was inadequate time (36.5%) and work pressure (37.5%). The most commonly cited reasons for continued breastfeeding at work was adequate time (35.4%) and supportive family and workmates (50%). The mothers who were taught about breastfeeding in the hospital after delivery (88.1%) and those that received help (96.6%) had adequate knowledge.

Table 3: Association of BKS, sociodemographic factors and IYCF practices among formally employed women from urban Mutare (n=96)

Variable		**BKS**		**Total n (%)**	**P value[1]**
		Adequate n (%)	**Deficient (%)**		
Position of child (birth order)	1st born	13(22)	12 (32.4)	25 (26)	0.422
	2nd born	22 (37.3)	10 (27.0)	32 (33.3)	
	3rd born	17 (28.8)	13 (35.1)	30 (31.3)	
	4th and above	7 (11.9)	2 (5.4)	9 (9.4)	
Mother's education level	Secondary	7 (11.9)	13 (35.1)	20 (20.8)	0.009*
	Tertiary	52 (88.1)	24 (64.9)	76 (79.2)	
Total income	Less than poverty line ($487)	21(35.6)	15 (40.5)	36 (37.5)	0.669
	Above poverty line ($487)	38 (64.4)	22 (59.5)	60 (62.5)	
Breastfeeding initiation	less than an hour	34(57.6)	19(51.4)	53(55.2)	0.053
	one hour	15 (25.4)	4 (10.8)	19 (19.8)	
	more than an hour	7 (11.9)	12 (32.4)	19 (19.8)	
	don't know	3 (5.1)	2 (5.4)	5 (5.2)	
Exclusive breastfeeding (EBF)	Yes	28 (47.5)	17 (45.9)	45 (46.9)	>0.999
	No	31 (52.5)	20 (54.1)	51 (53.1)	
Expressing breastmilk	Yes	35 (59.3)	20 (54.1)	55 (57.3)	0.674
	No	24 (40.7)	17 (45.9)	41 (42.7)	
Caregivers comfortable with expressed breastmilk	Yes	36 (70.6)	21 (61.8)	57 (67.1)	0.482
	No	15 (29.4)	13 (38.2)	28 (32.9)	
Age complementary foods were introduced	Early Introduction (<4 months)	27 (45.8)	12 (32.4)	39 (40.6)	0.272
	Late Introduction (4-5 months)	9 (15.3)	10 (27.0)	19 (19.8)	
	Normal (>6 months)	23 (39.0)	15 (40.5)	38 (39.6)	
EBF challenges faced by formally employed women	Inadequate time at work to breastfeed/express	22 (37.3)	13 (35.1)	35 (36.5)	0.003*
	no place to breastfeed at work	9 (15.3)	3 (8.1)	12 (12.5)	
	child left at home due to work pressure	26 (44.1)	10 (27.0)	36 (37.5)	
	unsupportive family or workmates	0 (0.0)	3 (8.1)	3 (3.1)	
	No reduction in working hours	2 (3.4)	8 (21.6)	10 (10.4)	
Facilitators for EBF among formally employed women	adequate time at work to breastfeed/express	13 (22.0)	21 (56.8)	34 (35.4)	0.005*
	a proper place to breastfeed/express at work	4 (6.8)	0 (0.0)	4 (4.2)	
	child could be brought at work for breastfeed	3 (5.1)	2 (5.4)	5 (5.2)	
	supportive family and work mates	35 (59.3)	13 (35.1)	48 (50.0)	
	Reduced working hours	4 (6.8)	1 (2.7)	5 (5.2)	
EBF education received at hospital	Yes	52 (88.1)	27 (73.0)	79 (82.3)	0.097
	No	7 (11.9)	10 (27.0)	17 (17.7)	

[1] Pearson's Chi-square test, [£]where cell count is<5 Fisher's exact test was used. *P value significant at P<0.05.

Factors associated with EBF amongst formally employed women

Table 4 shows the association between certain variables and practice of EBF among formally employed women. High level of education (P=0.001), early breastfeeding initiation (P=0.042), high income greater than PDL (P<0.001) and private place to breastfeed or express (P<0.001) were significantly associated the practice of exclusive breastfeeding.

Table 4: Factors associated with EBF amongst formally employed women from Mutare (n=96)

Variable		**EBF**		**Total**	**P value**[1]
		Yes n (%)	**No n (%)**	**n (%)**	
Education level	Secondary	16 (35.6)	4 (7.8)	20 (20.8)	0.001*
	Tertiary	20 (64.4)	47 (92.2)	76 (79.2)	
BKS	Adequate (≥70%)	28(47.5)	31 (52.5)	59(61.5)	>0.999
	Deficient (<70%)	17 (45.9)	20 (54.1)	37 (38.5)	
Breastfeeding initiation	less than an hour	23 (51.1)	30 (58.8)	53 (53.2)	0.042*
	one hour	7 (20.0)	10 (19.6)	19 (19.8)	
	more than an hour	13 (28.9)	6 (11.8)	19 (19.8)	
	don't know	0 (0.0)	5 (9.8)	5 (5.2)	
Income	less than $487	26 (57.8)	10 (19.6)	36 (37.5)	<0.001*
	more than $487	19 (42.2)	41 (80.4)	60 (62.5)	
Private place to breastfeed	yes	13 (28.9)	1 (2.0)	14 (14.6)	<0.001*
	no	32 (71.1)	50 (98.0)	82 (85.4)	

[1]Pearson's Chi-square test, [£]where cell count is<5 Fisher's exact test was used. *P value significant at P<0.05.

Table 5 shows the work-related factors from the survey that affected the practice of exclusive breastfeeding. The average length of maternity leave was 3±0.88 months. There was lack of provision of private breastfeeding places at most of the workplaces (85.4%). The provision of a private breastfeeding place (P <0.001) was significantly associated with EBF practice. Breastfeeding breaks were allowed for most mothers (91.7%); however, there was no significant association with EBF practice.

Table 5: Work related factors associated with exclusive breastfeeding among formally employed mothers from Mutare (n=96)

Variable		**EBF**		**Total n (%)**	**[1]P**
		Yes n (%)	**No n (%)**		
Private place to express breastmilk and breastfeed at work	Yes	13 (28.9)	1 (2.0)	14 (14.6)	<0.001*
	No	32 (71.1)	50 (98.0)	82 (85.4)	
Refrigerator to store breastmilk at work	Yes	3 (6.7)	3 (5.9)	6 (6.2)	>0.999
	No	42 (93.3)	48 (94.1)	90 (93.8)	
Workplace policies that support breastfeeding	Breastfeeding Breaks	39 (86.7)	49 (96.1)	88 (91.7)	0.048*
	Lactation rooms	0 (0.0)	1 (2.0)	1 (1.0)	
	Less work hours	6 (13.3)	1 (2.0)	7 (7.3)	
Maternity leave length mean ±SD	3.18±0.88				

[1]Pearson's Chi-square test, [£]where cell count is<5 Fisher's exact test was used. *P value significant at P<0.05

Predictors of EBF among formally employed mothers from Mutare

Table 6 presents the predictors of EBF among formally employed mothers from Mutare.

i) Normal Delivery: The odds ratio of 1.11 suggests that normal delivery slightly increases the likelihood of practising EBF, although this factor was not statistically significant (P = 0.861).

ii) Gestational Age (Preterm Birth): Preterm birth showed a negative association with EBF (OR = 0.60), but the result was not statistically significant (P = 0.555).

iii) Education Level (Secondary): Mothers with secondary education were less likely to practice EBF, as indicated by an OR of 0.28. While this factor approached significance (P = 0.096), it remains inconclusive.

iv) Income Below Poverty Line (<$481): Low income was a significant negative predictor of EBF (P = 0.019). Mothers earning less than $481 were 74% less likely to exclusively breastfeed their infants, as indicated by an OR of 0.26.

v) Breastfeeding Knowledge Score (BKS) (Deficient): A deficient BKS had an OR of 2.05, indicating a positive association with EBF, though this result was not significant (P = 0.193).

vi) Private Breastfeeding Room: The availability of private breastfeeding rooms was a significant negative predictor (P = 0.013). Mothers with access to private rooms were 94% less likely to practice EBF (OR = 0.06), potentially due to logistical challenges or misunderstandings of the concept.

vii) Age of Mother: The mother's age had minimal influence on EBF practices (OR = 1.04) with no statistical significance (P = 0.368).

viii) Maternity Leave Length: Short maternity leave negatively impacted EBF practices (OR = 0.61), though this factor did not reach statistical significance (P = 0.078).

Table 6: Predictors of EBF among formally employed mothers from Mutare

	B	S.E.	P value	Odds Ratio (OR)	95% C.I for OR	
					Lower	Upper
Normal Delivery	0.10	0.57	0.861	1.11	0.36	3.38
Gestational age (Preterm)	-0.56	0.95	0.555	0.60	0.09	3.69
Education level (Secondary)	-1.28	0.77	0.096	0.28	0.06	1.26
Income below poverty line (<$481)	-1.33	0.57	0.019*	0.26	0.09	0.81
Breastfeeding Knowledge Score (BKS) (Deficient)	0.72	0.55	0.193	2.05	0.70	6.06
Private breastfeeding room (Yes)_	-2.87	1.16	0.013*	0.06	0.01	0.55
Age of mother (years)	0.04	0.04	0.368	1.04	0.95	1.14
Maternity leave (months)	-0.50	0.29	0.078	0.61	0.35	1.06

[1] Binary logistic regression was used to obtain P values and Odds ratios. *P value significant at P<0.05.

Discussion

This study sought to investigate the predictors of EBF among formally employed women in the urban area of Mutare. The results showed that, although mothers were highly knowledgeable about breastfeeding, this was not associated with EBF practice among the formally employed mothers. We also found that availability of a private place to express or breastfeed at work and being a low income mother were the only significant but negative predictors of EBF practice amongst formally employed women. This was probably due to misunderstandings of the concept of private breastfeeding rooms and inadequate empowerment and flexibility in lower paying position.

Although in our study the BKS was high (88%), showing that formally employed women had high knowledge on exclusive breastfeeding, EBF was low. The result agrees with findings that have reported high awareness on exclusive breastfeeding among women albeit reduced practice (Dukuzumuremyi, Acheampong, Abesig, & Luo, 2020; Dun-Dery & Laar, 2016; Yakubu, Odesanya, Abbas, & Lawal, 2023). This is telling of an awareness - practice gap which needs to be bridged using various interventions such as addressing barriers, upskilling of target groups and creating adequate support systems (spouse, extended family, workmates). Additionally, it was noted that a significant proportion (80%) of the knowledge originated from health care professionals during antenatal and postnatal care visits. Consequently, the health sector continues to be crucial in advocating for EBF practices (WHO, 2021). Despite the majority of mothers possessing sufficient breastfeeding knowledge, the exclusive breastfeeding (EBF) practice rate was notably low at 46.9%. This result is somewhat unexpected given that knowledge is typically considered a significant factor in promoting EBF. However, this finding is consistent with previous studies, which also reported adequate levels of knowledge and attitudes among mothers, yet similarly low rates of EBF (Mogre, Dery, & Gaa, 2016). The study identified that the primary reason for continued breastfeeding among formally employed women was the support from family and workmates (50%). It is suggested that short maternity leave periods (maximum 3 months) may make it challenging for mothers to continue breastfeeding upon returning to work due to the absence of their support system. Employment can therefore be a barrier to exclusive breastfeeding (EBF) for a working mother. This finding highlights the importance of workplace breastfeeding policies and labour issues related to breastfeeding hours or the possibility of extending maternity leave for mothers (Plotka & Busch-Rossnagel, 2018).

Additionally, our findings indicate that mothers with lower income levels are less likely to practise exclusive breastfeeding compared to mothers with higher income levels. Consequently, having an income below the poverty line (less than $481) is associated with an increased risk of a child not being exclusively breastfed. Low-income mothers often work in jobs with strict rules, inflexible hours, and limited empowerment to practice EBF. This finding agrees with a study in United States of America which reported that women with a higher income were more likely to exclusively breastfeed as compared to their counterparts with a lower income (Chatterji & Brooks-Gunn, 2004). Based on our findings, we reinforce the need for increased community and work place awareness on the importance of breastfeeding and work place policies conducive to EBF particularly among low income households. Reduced EBF rates in low economic communities exposes children to stunting, compromising growth and development and, if they do not catch up, this leads to adults with poor physical and economic potential, reinforcing the cycle of low incomes in such communities (Caulfield, Richard, Rivera, Musgrove, & Black, 2006; de Onis & Branca, 2016). This cycle becomes relentless.

The finding that provision of breastfeeding rooms was not a determinant of EBF in this population is a concern. This finding is in contrast with findings from previous studies that showed that the most effective way of combining breastfeeding and work was to help mothers with strategies which help them feed the baby directly from the breast (Castetbon, Boudet-Berquier, & Salanave, 2020). It could be that our studied population did not understand fully the concept of breastfeeding rooms. We speculate that these mothers preferred breastfeeding in the comfort of their own homes due to difficulties of bringing a baby and carer to work. This builds a case for a longer maternity leave. To substantiate our findings, a larger sample size is required. Given the limited sample size used in this study, the results should be interpreted with caution. We continue to advocate for the provision of breastfeeding rooms at workplaces accompanied by widespread education in order to ensure formally employed women continue breastfeeding even after maternity leave expires, thus preventing undernutrition and stunting in children.

In addition, we also observed that formally employed women tend to introduce complementary foods and breastmilk substitutes early before 4 months of age (40.6%) before they return to work on expiry of maternity leave. This could be an attempt to make the infant a bit less dependent on breastmilk as they prepare to return to work. This concurs with other studies that showed that short maternity leave and unsupportive working environments are notable barriers to exclusive breastfeeding among formally employed women globally (Plotka & Busch-Rossnagel, 2018). The recommendations of a longer maternity leave of at least 6 months by the ILO Maternity Protection Convention should be explored by government and employers. This would ensure that formally employed women can exclusively breastfeed for the WHO recommended period of 6 months without any interruptions.

Limitations for the study and recommendations

Our study had some limitations. It was based on recall methods which present various challenges such as incomplete, inaccurate recall or biased recall (Blome & Augustin, 2016). We tried to overcome this by using standard validated questions used reliably before and recommended by WHO. However more objective methods are required to assess EBF practices. Methods that use stable isotopes to objectively measure EBF rates are still in a developmental phase in Zimbabwe (Victora et al., 2016). Until these are available, we may continue to rely on recall methods. We recommend similar studies in different provinces to capture context specific predictors or incorporation of the same questions in nationwide surveys such as Zimbabwe demographic health survey (ZDHS) or multiple indicator cluster survey (MICS). Furthermore, as a significant proportion of women in Zimbabwe is also found in the informal sector, their barriers must also be studied in order to inform breastfeeding policy for both formally and non-formally employed women. We used a legal city council registry to randomly select companies. This way we may have left out women from formal companies that have evaded registration.

Conclusions

The prevalence of EBF was low in this population and this could be an indication that being formally employed is a barrier to EBF and other recommended IYCF practices. Low income and provision of breastfeeding rooms in the workplaces were significant but negative predictors of EBF practice among formally employed women in Mutare urban. Therefore, there is a need for breastfeeding friendly labour policies constructed in consultation with women as well as specific workplace policies in order to promote and support EBF up to six months of age among formally employed women in this and related settings. Examples of such policies include flexible work hours, allowing mothers to adjust their work schedules to accommodate breastfeeding and childcare needs and extended maternity leave.

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Navigating the Psychological Sense of Safety in the Face of Military Conflict: A Case of Palestinians Living in the Gaza Strip

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Abstract

The study examined the psychological sense of safety among Palestinians in the Gaza Strip amidst the ongoing military conflict pitting Israel and Hamas, a militant Palestinian political organisation. Using documentary analysis, the researcher found that the distress from war significantly disrupts children's psychological and emotional development, affecting their self-concept and relationships. The findings highlight a critical need for safety, freedom from violence, and the restoration of civil society to help individuals rebuild their lives. Children and women are particularly vulnerable, suffering greatly in violent circumstances. Additionally, worsening socio-economic conditions further exacerbate the psychological challenges faced by the Palestinians in Gaza Strip. The practical implications emphasise the urgent need for interventions that address these psychological and social issues to support recovery and future resilience.

Keywords: Gaza Strip, war, trauma, distress, bombardment, torture.

Introduction

Exposure to life threatening events such as war contributes to pervasive mental health challenges due to safety concerns, loss of loved ones and disruption of daily life. In a related study conducted by the World Bank (2022), 71% of Palestinians in the Gaza Strip who were screened met the criteria for severe depression. The depression was attributed to exposure to restrictions on movements and the military conflict between Israel and Hamas. Similar studies by Rance (2020) showed that 100% of children aged 11 to 17 years had PTSD due to exposure to the military conflict between Hamas militants and the Israeli forces. The children had experienced horrific experiences of their parents and siblings being subjected to inhuman treatment such as torture, detention, home demolitions, and loss of first-grade relatives and even fear of losing their own lives.

According to Alwhidi (2023), Kamal Adwan Hospital's maternity unit was bombed by the Israeli army killing several patients. Pregnant women and babies were among the deceased. Ghebreyesus (2023), the Director-General of the World Health Organisation, gave a horrific description of the state of hospitals in the Gaza Strip. The people were treated on blood-streaked corridor floors. The dead were covered by sheets and the injured were lying helpless and in anguish on the floors.

Wadhams (2024) revealed that the Israeli minister of defence vowed to wipe out Hamas off the face of the earth completely. He went on to declare that Gaza will be forever transformed and will never look the same. These declarations impacted the lives of the general population of Palestinians living in the Gaza Strip. In a bid to achieve this, Israel cut off the supply of life-supporting resources such as water supplies, medical supplies, fuel and electricity. The children and the elderly were adversely affected. The volatile antagonism of the military conflict in the Gaza Strip caused worry and anxiety among the Palestinians living in the raided Gaza Strip.

Lazzarini (2024) reports that the health system in the Gaza Strip was on the brink of collapse. Emergence operations were done without enough anaesthetics. Clothes were used as improvised bandages and vinegar as antiseptic. The collapse of the highly demanded and needed essential health services amid the war made the casualties more vulnerable to depressive episodes. The psychological sense of safety became diminished in the war-torn Gaza Strip.

The people of Palestine living in the Gaza Strip experienced inhuman treatment as they were subjected to severe beatings, detention, electric shocks, skin burning by lighters, deprivation of food, sleep and access to bathrooms until they defecated on themselves (UN OCHA, 2024). Guterres (2024) described the situation in the Gaza Strip as catastrophic and on the verge of a humanitarian system collapse. These sentiments depicted the severity of the devastating psycho-physiological conditions experienced by the Palestinians living in the Gaza Strip.

The South African Government (2023) filed a petition to the International Court of Justice (ICJ) against Israel. The ICJ is the judicial organ of the United Nations. In its application, the South African government accused Israelis of committing genocide against the people of Palestine living in the Gaza Strip. The court validated the arguments of South Africa as having merit and ruled in favour of South Africa. Despite the court ruling, Israel continued with its military campaign against Hamas with disastrous consequences for the people of Palestine living in the Gaza Strip. The hope to end the hostility was lost as the war continued. Efforts to stop the war continued to hit a brick wall. Many lives continued to be lost in a place once called home by many of the people of Palestine. The horrific scenes of war casualties accompanied by rubbles of destroyed buildings left the people of Palestine living in the Gaza Strip in a state of shock and disbelief.

Background to the conflict

According to Lazzarini (2024), the Palestinians had for a long time viewed Israel as an oppressor who is depriving them of their land and related opportunities. They resisted any form of aggression and occupation of their land. The Palestinians in the Gaza Strip viewed themselves as denied social justice by Israelites whom they perceived as taking away their opportunities and resources. Gaza Strip has an overall unemployment rate of 46% and 70% of the youths are unemployed (UNRWA, 2023). Gaza Strip is bordered by Egypt on the southeast and Israel on the east and north. It is on the eastern coast of the Mediterranean Sea. It is 41km long and 12km wide. Its estimated population is 2 million Palestinians. Its population density is very high.

Gaza Strip is a source of identity among the Palestinians. Gaza Strip was, however, captured and occupied by Israel during the 1967 war. Upon its capture, the Israeli army remained in the Gaza Strip. When the Sunni Islamic Hamas won an election against Fatah in 2006, it began to govern the Gaza Strip. Hamas subsequently was at war against the Israeli army soon after it resumed power in the Gaza Strip. On 7 October 2023, Hamas went on a killing spree of Israeli civilians leaving many dead. According to UNOCHA (2023), over 1,200 Israelis and foreign nationals including 33 children were killed by Hamas.

The Hamas attack on Israelis at a music gala on the 7th of October 2025 made the Israeli government declare a fully-fledged war against Hamas. This war led to the horrendous scenes from the Gaza Strip. According to an Aljazeera report (16 August, 2024), more than 40,000 Palestinians living in the Gaza Strip were killed by the Israeli forces. The figure could be higher as other dead bodies were still believed to be buried by the rubble of the destroyed buildings.

Theoretical framework

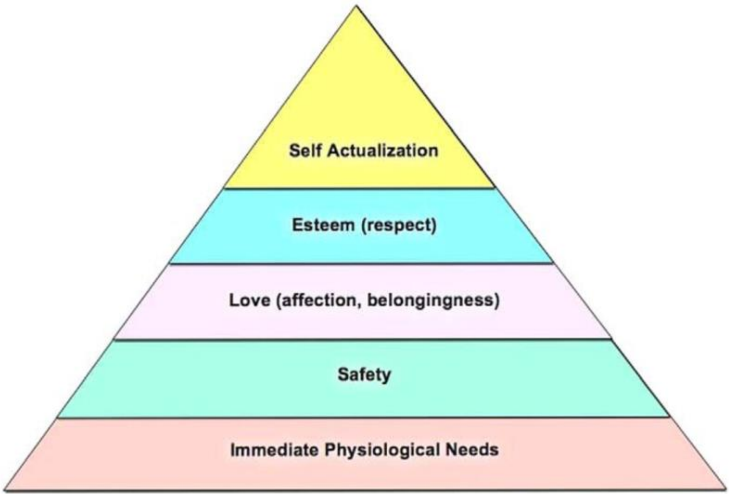

Figure 1: Maslow's hierarchy of needs
Adapted from *Pespect Psychol Sci* (2010)

The theoretical framework of the study was drawn from Maslow's hierarchy of needs. The hierarchy consists of a tiered model of human needs. According to Mcleod (2018), the needs are arranged in a hierarchical order whereby the needs at the bottom should be fulfilled first before progressing to the next level. Failure to fulfil the needs at a particular level or stage can jeopardise the progression to the next level. As put across by Maslow (1954), the hierarchical needs are physiological, safety, love and belonging, esteem and self-actualisation.

In the context of the war in Gaza, it became increasingly difficult for the Palestinians in the Gaza Strip to access physiological needs such as food, water and shelter in a hostile environment. The provision of essential services was blocked by the Israeli army. The sense of safety in a war-torn Gaza Strip was lost. Lives were continuously being lost and the basic infrastructure was reduced to rubbles due to bombardments. The children lost the much-needed parental care and love as their parents were during the conflict. The sense of belonging no longer existed among the Palestinians as the Gaza Strip was being destroyed daily. Conceptually linked to the fourth and fifth levels of self-esteem and self-actualisation, respectively, the Palestinians in the Gaza Strip no longer believed in themselves. They had lost the dignity and confidence to achieve their intended personal goals. The individuals' need to realise their full growth potential in terms of achievements had been thwarted by the conflict in the Gaza Strip.

Statement of the problem

The Palestinians living in war torn Gaza Strip were subjected to severe psychological trauma due to the military conflict between Israel and Hamas. To what extent were the people of Palestine able to navigate the psychological sense of safety in the face of hostility in the Gaza Strip?

Aim of the study

The study is aimed at exploring the perceived psychological distress experienced by Palestinians living in the Gaza Strip and come out with possible intervention strategies.

Study objectives

- To explore the psychological sense of safety in the face of hostility among the people of Palestine living in the Gaza Strip.
- To identify the psychological distress experienced by the Palestinians living in the Gaza Strip.
- To establish intervention strategies to assist the Palestinians living in the Gaza Strip to deal with the perceived psychological distress.

Research questions

- How did the war in the Gaza Strip adversely affect the psychological sense of safety among the Palestinians living in the Gaza Strip?
- What was the psychological distress experienced by the Palestinians living in the Gaza Strip?
- How can the Palestinians living in the Gaza Strip be assisted to deal with the perceived psychological distress.

Methodology

The researcher used the documentary analysis method that involved the systematic examination and interpretation of various documents and records from the print and electronic media. This was meant to gain insights of sense of safety among the Palestinians living in the Gaza Strip (Bowen, 2009). The documentary analysis gave an insight into the hostile environment in the Gaza Strip. The researcher analysed relevant documents, records and reports of the atrocities committed during the conflict and this affected the people of Palestine living in the Gaza Strip. Classified news from various news channels such as Aljazeera gave comprehensive coverage of the war in the Gaza Strip. Reports from the United Nations (2023), World Health

Organisation (2024) and UNICEF (2023) covering war in the Gaza Strip were analysed. By examining these documents, records and reports, the researchers gained a deeper understanding of the brutal nature of the war in the Gaza Strip and how it adversely affected the psychological well-being of the Palestinians living in the Gaza Strip.

In order to address the limitations of documentary analysis, strict measures were put in place which included triangulation. This involved cross checking the authenticity and credibility of the documents information through comparing it with other credible sources such as academic articles and media publications. The context in which the documents were created was also considered to ensure they remain relevant and unbiased. The researchers also engaged competent peer reviewers in the field to review selected documents and provide feedback on potential biases.

Discussion

According to the UNRWA (2023) report, an estimated 1.9 million Palestinians living in the Gaza Strip have been displaced. The situation was so terrible that there was no safe place for the Palestinian civilians living in the Gaza Strip. According to a report presented by Save the Children (2023), a total of 7,729 children in the Gaza Strip have been killed. The Gaza Ministry of Health (2024) report revealed that over 22,000 Palestinians living in the Gaza Strip have been killed and more than 58,000 injured due to Israeli bombardments. According to an Aljazeera report (16 August, 2024), more than 40,000 Palestinians living in the Gaza Strip have been killed. There was no safe place in the Gaza Strip for Palestinians to enjoy mental peace and tranquillity. The sense of safety and security was lost, which culminated in depressive episodes.

The war in the Gaza Strip had adversely affected the mental health of the community members. According to Nemer (2023), people were paranoid about getting attacked. They were experiencing obsessive compulsive disorder characterised by repeated checking on whether the doors and windows were securely closed before going to bed. This was triggered by safety needs. They were uncertain about the future as the war continued. In an attempt to deal with the distress, the individuals ended up resorting to the use of defence mechanisms such as denial to go out of the war-prone Gaza Strip. Zimmer (2024) reiterated that a lot of the individuals were presenting some psychological wounds that would take long to heal. The hostile environment created by the war made it increasingly difficult for the distressed Palestinians in the Gaza Strip to receive much-needed mental health care and support.

Asabeh (2023) posits that the heavy military presence in the Gaza Strip contributed to severe fear accompanied by loss of confidence and self-esteem. The people experienced loss of sleep, anxiety and a negative view of the self and their environment. They viewed their life as meaningless and not worthy living for. In addition, they lost their sense of security as they continued to lose their lives. Their basic physiological needs became scarce and a sense of pessimism emerged as the conditions in the environment were hostile.

In a related report by UNRWA (2024), a total of 72 United Nations aid workers were killed by the Israeli soldiers. A convoy of ambulances was struck by Israeli soldiers as it was ferrying the war casualties. The Israeli army blocked humanitarian aid leaving the Palestinians in Gaza Strip in a state of despair. The United Nations World Food Programme (2024) reported a full-blown famine in the Gaza Strip as a result of the war. Lack of food accompanied by blockage of food aid by the Israeli army resulted in a humanitarian crisis. The people went through emotional pain in the face of starvation. They perceived themselves as suffering without justification. They were victims of circumstances and endured excruciating distress. Their sense of hope was lost as they were denied access to essential services such as food, medication and clean water.

The war in the Gaza Strip disrupted the smooth provision of physiological needs. As reported by Crickx (2024), more than one million children in the Gaza Strip needed essential services. These services included shelter, food, water and medication. The war had cut off the supply of these essential services. The rule of survival in the jungle is premised on the survival of the fittest and resultantly children without surviving skills were more vulnerable to abuse. The traumatic experience of witnessing the brutal nature of war haunted them. They would struggle to deal with the negative thoughts triggered by the incessant war. The much-needed parental love, warmth and care for the children were no longer available. Most of the children's parents were brutally murdered. According to UNICEF (2023) report, 80% of the children were no longer going to school as learning facilities were also targets of bombardment by the Israeli military forces. The children's psychological sense of safety was compromised. Their future looked gloomy without parental care, love and support.

There was wanton destruction of infrastructure including residential buildings, schools and hospitals. Most people were left homeless and more were vulnerable to psychopathology. The BBC (2023, December 5) news report depicted an image of the Great Omari Mosque in Gaza City that was reduced to rubble. The mosque was built in the 7th century and was one of the

Palestinians' religious symbols. The mosque was a symbol of hope and support for those mentally distressed. It served as a place where the Palestinians could gather and find solace. They felt a sense of belonging and safety as they shared experiences. According to the UNRWA (2024) report, the Israeli army cited the Qur'an passage referring to the floods of Noah’s era that destroyed the wrongdoers as a justification for supporting the massacre of the Palestinians living in the Gaza Strip whom they perceived as wrongdoers. The Center for Victims of Torture (2023) described the war in the Gaza Strip as carnage. This was due to the horrific and destructive nature of the war which resulted in the massive deaths of both old and young people in the Gaza Strip. The people were mentally afflicted as they witnessed the demise of their close relatives. They were mentally disoriented and prone to psychiatric disorders characterised by disorganised behaviour and thinking patterns.

The psychological sense of safety and belonging among the Palestinians lessened due to continuous military incursions by the Israeli army seeking to destroy Hamas leadership and militants living in the Gaza Strip. The state of confusion heightened accompanied by role confusion. Daily routines became unpredictable and culminated into anxiety and uncertainties. The family structure became fragmented as lives were lost due to the daily bombardments. Chaotic and horrific scenes were experienced as rubbles of destroyed buildings piled on the ground. Most residents of the Gaza Strip were vulnerable to diseases as all their social amenities had ceased to function. Terrifying and horrific scenes of casualties of war were crying for help as captured by vivid media images. The injured could hardly get the much-needed life-saving help. The children could not mentally bear the trauma they were subjected to during the conflict. The children were mentally devastated by witnessing the brutalities perpetrated against their parents.

According to a UN (2024) report, a total of 2.2 million Palestinians living in the Gaza Strip were exposed to squalid conditions. The situation was so horrible that all efforts to deliver aid were curtailed by the Israeli army. The basic needs for survival such as food, drinkable water and shelter were scarce. The residents were susceptible to high levels of stress, depression and post-traumatic stress disorder. The sense of optimism was lost as there was no safe ground in the Gaza Strip for the people of Palestine. It was traumatising for the Palestinians living in Gaza Strip to experience the horrific deaths of their close relatives and the destruction of infrastructure. They were cornered and had nowhere to take refuge. Some defenceless civilians became the targets of Israeli soldiers. Dubow (2024) reveals that the war-prone Gaza Strip residents were susceptible to nightmares and intrusive frightening thoughts. These were accompanied by depressive episodes as their normal sleeping patterns were disrupted due to hyper-vigilance. The severity of the pain experienced by the residents of Gaza was described by Baghdadi (2024) as open wounds which were continuously bleeding. The distress got worse each day in the absence of bio-psychosocial support. Cognitively, the pain was appraised as insurmountable and rendered the Gaza Strip residents in a mental state of helplessness.

In the context of their culture, the Palestinian children perceived their parents as the source of support and protection. The parents had an obligation to protect their children against any form of harm, but this was no longer possible in the face of the vengeful Israeli army. According to Freud (1945), a lack of parental care and protection prompts the development of an aggressive and anti-social personality in later adulthood life. Huesmann (2024) reiterated that kids exposed to war environments were likely to be aggressive and intolerant in adulthood life. They cognitively encoded scripts of violence which will influence later personality life.

Daskal (2023) put across that first-degree relatives of the children were killed as the war rages on. The children lost their parents, brothers and sisters. The traumatic experiences made them vulnerable to shock, emotional anguish and sadness. They struggled to come in terms with the reality of war and its adverse consequences.

The incurred losses triggered grief among the Gaza Strip inhabitants. Moments of sadness and sorrow engulfed the Gaza Strip community members. The past good days of success stories were suddenly shattered as most of their properties they had lived and worked for were suddenly destroyed within a short space of time. They had no place they could call home. Whitehouse and Swann (2023) describe the Gaza Strip as in a state of fragmentation and without functional systems. The residents' sense of self-identity was lost as they experienced cognitive dissonance. Their daily routines and schedules became unpredictable. Their normal thinking and behaviour patterns were disoriented. Emotions were taking precedence over logic. The uncontrolled expression of emotions served as a way of releasing painful feelings. The Israeli soldiers were accused of exercising extremism and indiscriminately killing of civilians including children, women and the elderly in the Gaza Strip without any sense of remorse.

The war in the Gaza Strip caused massive and discriminatory loss of innocent lives. Strozier (2024) concurs that war is brutal and does not conform to Islam's principles of mercy, leniency and compassion. The residents were subjected to continuous fear and loss of hope as they felt trapped and had nowhere to seek refuge. They saw themselves as animals waiting to be slaughtered by the Israeli military. The much-needed help to save lives was taking longer to come, despite the international world calling for cessation of hostility in the Gaza Strip.

The Palestinians living in the Gaza Strip were in a state of despair as they failed to come to terms with the military conflict they were subjected to (Fromm, 2024). They remained in a state of shock as bombardments were a common occurrence. They could hardly hope to survive in such life-threatening war zone. The sense of safety tended to fade away as the intensity of war got stronger each day. More war casualties were recorded daily.

Mizrahi (2024) reports that Gaza Strip was consistently bombed posing a great threat to the life of members of the community. They were continually in a fright mode culminating in acute panic attacks. The hyper-vigilant mentality contributed to cognitive dissonance among the residents of the Gaza Strip. Geva (2023) describes frightening images of victims of war and related stories on social media that adversely affected the psychological well-being of Palestinians living in the Gaza Strip. The images were so horrible that they caused severe distress, especially to those with a nervous disposition.

The deep rooted grief among the Gaza Strip Palestinians made them angry, but without the means to manage the situation. The Palestinians regarded themselves as having common challenges, which led them to strengthen each other in the event of a catastrophe. Coping with stress became difficult as lives were continuously lost without any prospects of bright future ahead of them. It increasingly became difficult to move forward with life in a hostile environment. The people became preoccupied with the thoughts of their fate. The massive displacement of the community members rendered them homeless and thereby confined in refugee camps that had inadequate basic needs supplies such as water and food. The inhabitants were vulnerable to chronic mental and physical ailments due to horrific experiences. Such pain and grief could last for a long time as these are deep-rooted experiences.

Psychological interventions to assist the Gaza Strip inhabitants in dealing with their distress included the use of art therapy. The individuals were encouraged to express their feelings in the form of art. The themes and meaning of the drawn pictures were then collectively discussed. The painful emotions were expressed in the form of drawn and painted pictures. The drawn pictures depicted stories of atrocities perpetrated by the Israeli soldiers. The art therapy was used in collaboration with other techniques such as cognitive behavioural therapy. Positive thinking and talking were encouraged among the individuals. The sense of optimism kept on providing hope to the Palestinians living in the Gaza Strip. The civilians remained hopeful that the hostile situation was not permanent, but would change for the better.

The painful memories of witnessing the horrific deaths of their close family members haunted them. In an attempt to assist the children and the elderly to deal with the distress, they were encouraged to talk about their painful feelings (Hanna, 2023). Songs and dances of solidarity were also used as a way of releasing painful emotions. According to Geva (2023), children should be taught to cherish the values of tolerance and inclusion. This could help in future to build a better world whereby people of different nationalities can live in peace with each other. In a bid to rescue the catastrophic mental health conditions, Zimmer (2024) reports that free healthcare for women and children was put in place. This was meant to caution those who could not afford to pay for mental health services.

It is however important to note that it became increasingly difficult to provide psycho-social support to all the distressed community members due to limited resources and mental health infrastructure. There was a critical shortage of social workers exacerbated by uncertainties as to when the war would end. Similar sentiments were echoed by Nemer (2024) who asserted that there are limited psycho-social supports for victims of war. This entails that the majority of victims were unattended to and thus vulnerable to severe mental distress. Asi (2024) concluded that, “There are limited tools and frameworks to screen PTSD among the victims of war”. Mental health programmes remained unattended despite the continuous traumatic exposure to the military conflict by the Gaza inhabitants.

There were various limitations of the study as the research relied on documentary analysis whereby the findings may not be generalised beyond the specific context of the Gaza Strip. The interpretation of documents can be subjective, and different researchers may draw varying conclusions from the same material. There was also a lack of direct interaction with the participants, which limited the comprehensive collection of research data. Irrespective of the acknowledged limitations, the research provides a comprehensive analysis of the psychological well-being of individuals in a conflict zone, highlighting specific challenges faced by vulnerable populations.

Conclusion

Ordinary Palestinians and Israelis have been subjected to continuous distress, which is a result of exposure to violent conflicts and trauma caused by endless military conflicts in the Middle East. The children and women bear the brunt of the horrific conditions as many die in very violent circumstances. The worsening socio-economic conditions in Palestine, particularly for those in the Gaza Strip, exacerbate the unbearable conditions that Palestinians face in their conflicts with the Israelis. These conflicts have destroyed and imperilled the mental and physical health of the vulnerable groups in both Palestine and Israel. The distress caused by wars has the effect of shaking the foundation of children's' current and future psychological, emotional, and cognitive development. Such disturbances have implications for their self-concept and relationships with others. The effects of the recent military conflict may have traumatic effects for generations to come. There is therefore an urgent need to provide policies that prioritise dialogue as a tool of conflict resolution, thereby promoting communication between the Palestinians and the Israelites. This could help to restore peace, trust and stability. The policies should also focus on rebuilding community structures and restoring the social fabric to facilitate recovery and resilience.

Recommendations

Based on the findings of this research, this study recommends a consensual and robust resolution of conflict through dialogue as a way to restore the psychological well-being of the people and to prevent further loss of life, especially among defenceless children and women. There is a need to establish a truly multilateral peace agenda involving key regional players. The research further recommends the establishment of facilities that offer free healthcare for women and children at a much greater scale. The war has ravaged not only the Hamas political and military nerve system, but has also led to the collapse of the Palestinian social fabric and other social services such as the health care system. It is important to establish a psycho-social support centre to assist traumatised and distressed victims of war. There is also a need to ensure the availability of physiological needs such as food, shelter and medication to those confronted by war.

Future studies

Future research should focus on the effectiveness of community driven mental health intervention strategies for resilience building among the children and women in war torn areas.

Any future research may highly contributions to a deeper understanding of the mental health needs in conflict zones, ultimately proffering guiding intervention strategies.

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Caregiver Experiences in Caring for Children with Autism Spectrum Disorder (ASD) in Harare, Zimbabwe

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Abstract

Autism spectrum disorder (ASD) is a lifelong neurodevelopmental condition that leads to varying degrees of impairments in communication, social interaction, and behaviour, which can hinder a child's ability to function independently and engage socially. This study aimed to explore caregivers' perspectives of their daily experiences while caring for children with ASD. A qualitative phenomenological approach was used involving five individuals through in-depth interviews and nine participants in a focus group discussion, all selected through convenience sampling. The findings reveal significant physical, emotional, and financial challenges faced by caregivers, including stigma and discrimination from the community due to a lack of understanding, which often leads to social isolation. Considering the prevalence rate of ASD globally and here in Zimbabwe, active involvement of the government in capacity building, advocacy and intervention programmes from grass-root level (clinics) is recommended. Awareness campaigns and educational initiatives may also help to alleviate the public's myths and misconceptions concerning ASD.

Keywords: *caregiver, lived experiences, autism spectrum disorder (ASD)*

Introduction

Autism spectrum disorder (ASD) is a lifelong condition affecting many children and families around the world. The first studies on the prevalence of autism conducted in the 1960s and 1970s in Europe and United States estimated a range of 2 to 4 cases per 10 000 children (Lotter, 1978). In the late 1980s and 1990s, autism prevalence studies around the world showed dramatic increases (Mutemeri, Dzenga, Siddiq & Chen, 2019).

By 2020, the prevalence of ASD in the United States increased and estimated to 1 in 54 children (Aithal, Karkou, Makris, Karaminis & Powell, 2023). Boys were about four times more likely to be diagnosed with autism than girls. This marked 15% increase from the past report two years ago, and the highest prevalence since the Centre for Disease Control began tracking ASD in 2000 (CDC, 2018). People mostly focus on the child with ASD and disregard their caregivers and what they experience in the midst of having a child that needs special care and their own lives (Cloete & Obaigwa, 2019).

Despite the recognition of ASD in Africa over 40 years ago, very little is known about the prevalence, major developmental features and course of this disorder in African people (Baio, Wiggins, & Christenson, 2018). Families and children with ASD mostly go through an emotional rollercoaster from the moment they learn of the initial diagnosis throughout the confirmed diagnosis and the journey to try and make their child 'normal'. They may go through grief of loss of hope and good health of their child, to accepting their imperfect child (Quirke, & Hagen, 2017). Decreased parenting efficacy, high levels of stress, physical and mental health problems, time pressures, significant financial strain, sibling adjustment problems reduced social support and family discord (Cloete & Obaigwa, 2019, Aithal, Karkou, Makris, Karaminis & Powell, 2023, Karst & Van Hecke, 2016). Stress levels are disproportionately high when compared with those faced by parents of children with almost any other form of impairment or health issue (Abubakar, Ssewanyana, & Newton, 2016).

Other stressors, especially in African countries, include family conflicts around issues of the child's impairment, constricted social and recreational life difficulties in accessing health care facilities (Gray, 2016; Shivers, Sonnier-Netto & Lee, 2018). Raising a child with ASD often entails a physical, emotional and financial burden for families (Hansen, 2016; Daniels, Como, Hergüner, Kostadinova, Stosic, & Shih, 2017). Therefore, addressing this myriad of challenges faced by caregivers is important for promoting family well-being (Gupta, Khanna, Garg, Sethi, Khattar, Tekkar, & Schuchert, 2023).

Although caregivers encounter negative experiences, sometimes, they experience fulfilling roles in their children's daily care and development (Dira, Machailo & Scholtz, 2024). Many caregivers report significant emotional rewards and personal growth from their experiences (Kanja, Mwenje, & Githui, 2022). The caregivers and their children often form deep bonds that yield a profound sense of purpose. When the caregivers attune the needs of their children, this usually enhances the caregivers' ability to provide tailored support for their children (Tathgur & Kang, 2021).

The aim of this study was to examine the caregivers' accounts and realities of their day to day lived experiences as they care for children suffering from ASD and to identify the coping mechanisms employed by the caregivers in managing their lived experiences as they care for a child with ASD.

Methods

This study employed a qualitative approach using a phenomenological research design to explore the lived experiences of caregivers of children with autism spectrum disorder (ASD) in Harare, Zimbabwe. The methodology involved data collection through individual in-depth interviews and a focus group discussion (FGD) focusing on the participants' perspectives, challenges, and coping strategies. Five participants (four females and one male) were selected for individual interviews, and nine participants (seven females and two males) participated in the FGD. The population of the study were caregivers of children with ASD who were learning at a centre in Harare, and who had directly cared for a child with ASD from infancy to date. It could be biological mother/father, guardian or teacher of the child with ASD. Convenience sampling was employed, with participants volunteering based on availability and willingness (Creswell, 2018).

Data were collected using individual semi-structured interviews and a follow-up FGD. The researchers observed ethics like informed consent; taking into consideration that the children that the respondents cared for were a marginalised, special population; children with ASD. Therefore, the respondents were informed of the possible risks and benefits of participating in this study. For example, this could evoke the pain that they had since forgotten about or this could help them deal with unfinished business that related to the care and support of their children. Respect for autonomy was also considered in that the participants had the right to refuse to engage into or to discontinue the face-to-face interviews and the focus group discussion, even when they were half way through, should they feel this way (Creswell, 2013).

Non-maleficence was ensured in that open-ended questions were used, in which participants would share their experiences in a way that was non-threatening and empathetic (Creswell, 2018). Examples of questions that were asked were: Would you please share how you execute activities of daily living with (pseudonym) with regards to bathing, dressing up, feeding and feeding times, toilet use during day and night, play time with you/and the family and friends at home and at school, school activities, sleeping habits, be it day or night? How have you maintained (pseudonym) in good health; any special diet? What are the challenges that you face as a caregiver?

Such questions inquired about the caregivers' experiences with a child diagnosed with ASD who would be in their care. Their responses would give the realities of the day to day lived experiences of the caregivers as they care for children suffering from ASD. Data analysis was conducted using NVivo software to identify themes and patterns in the interview and FGD transcripts (Braun & Clarke, 2019). Thematic analysis was used, focusing on semantic themes to represent participants' experiences explicitly (Braun & Clarke, 2019).

Findings

The goal of this qualitative study was to explore the lived experiences of caregivers in raising children with ASD in Zimbabwe so as to have an in-depth understanding and knowledge of the caregivers' perspectives. This would in turn provide a practical framework and guidelines for effective help and support when working with caregivers of children diagnosed with ASD and their families. The researchers explored the perceptions and experiences of 5 caregivers who all turned out to be parents of children with ASD who attended specialised school in Harare. One participant had 2 children, a boy and a girl, that were living with ASD. The girl was the only female of the children whose parents were interviewed face to face.

Table 1: Demographic information of the face to face individual interview respondents

Name of parent	**Age of parent**	**Sex of parent**	**Marital Status**	**Highest Level of Education**	**Occupation**	**Total # of children in care**	**Total # of children with ASD**	**Age of child with ASD**
A	34	Female	Married	Diploma	Unemployed	3	1	6
B	38	Female	Married	Certificate	Employed	2	1	8
C	41	Female	Single	Bachelor's	Employed	1	1	8
D	44	Male	Married	Bachelor's	Unemployed	2	1	19
E	37	Female	Married	Bachelor's	Employed	3	2	8 and 5

In the focus group discussion (FGD), 9 caregivers who also turned out be parents of the children attending specialised education attended. The FGD lasted for 103 minutes.

Table 2: Themes that emerged from the Interviews

	CAREGIVERS				
THEMES	**1**	**2**	**3**	**4**	**5**
1. Delays and concerns about the development of child	X	X	X	X	X
2. Need for help seeking	X	X	X	X	X
3. Overwhelming family adjustments and navigating the new system		X	X	X	X
4. Challenges with daily living activities		X	X	X	X
5. Social exclusion of the children	X	X	X	X	
6. Difficult communication with the children	X	X	X	X	X
7. Stigma and discrimination		X	X		X

Findings from the FGD and Individual Interviews according to the emerging themes

Key extracts from respondents' accounts are provided so that they give evidence to the development of particular themes or where they illuminate a theme.

Delays and concerns about the development of child

All the respondents agreed that there was a delay, regression or unresponsiveness that their child displayed, which led them all to be concerned about their child. This outcome and concern led them to seek help in one way or another. From the individual interviews, Respondent 4 specifically mentioned that her child regressed after he got the 18 months immunisation injection and that was the beginning of her child's negative condition.

Respondent 2 mentioned that she had twins., However, one of the twins lagged behind distinctly from the onset. The twin had a major operation at around 3 months, which she thinks may have caused or worsened the lagging behind of the twin living with ASD.

> "I noticed how my son kept falling to one side of his head and I took him to see a neurologist at 18 months…"

Help seeking behaviour

All the members present at the FGD agreed that, as much as they had previously noticed that something was not well with the communication of their child and the unresponsiveness when the child was called by name, they all experienced confusion and suspicion. They were always in suspense, and had unanswered questions. Six of the nine people who participated in the FGD were honest to divulge that they, at some time, tried to seek help from traditional healers or the Apostolic sects or simultaneously sought medical help out of desperation. The children were diagnosed at around 3 years while the child who got the latest diagnosis was diagnosed at the 5-year immunisation injection.

Respondent 4 said:

> “My family held a meeting behind my back about my child’s restricted movement and his regular uncontrollable behaviour…My wife was broken; she cried non-stop as she felt helpless. We kept our son at home… So, now they (the family) called us to inform us that they had arranged as a family that we consult prophet or a traditional healer …we refused… (shrugging) they were angry”

Respondent 4 vowed that:

> “… even if I had the last penny in my pocket, I would rather pay a doctor than consult a nurse about Ashley because nurses know nothing and their injections are the cause this condition on my child.”

Respondent 4 also said the exact statement in different words.

Overwhelming family adjustments and navigating the new system

All the parents including those who participated in the FGD agreed that, at first, they were worried about the day-today challenges of caring for their child with autism. They experienced difficulties finding balance and time to manage household tasks, other children and daily activities; but, as time went on, they adjusted.

Respondent 2 confessed this:

> “I was broken, when I was told that Thomas had Autism… I didn’t even know what it was and kept on asking God kuti [that] why me…? My situation worsened because, that’s the time that my husband abandoned me…I had to find suitable intervention programmes for him to take part in and to find out about appropriate schools for future’s sake.”

Respondent 5 said:

> “On the first one, I was in a real shock…It was after a 4 hour examination, doctor told me that it was definitely Autism…and I was like….WHAT…!!! These people (where she consulted previously) did not equip me with information… I have never seen heartless doctors… one of them said, “Prepare yourself that he might never speak, learn or communicate…” On Monday, when I told her nursery teacher, that’s

> when she explained and went on Google to search for more information. Haaa…!!! This experience taught me to lean more on God and to trust him."

Challenges with daily living activities

The challenges that the parents experienced ranged from the child not being accepted in various schools as they could not put up with such children, changing soiled clothes or nappies to a grown child, no or little understanding in communication, and no social interaction. Other challenges included hitting or violent sometimes obsessions over specific objects and routines, and repetitive body movements, to mention a few.

Bathing and dressing

As previously mentioned, Respondent 5 had two children who had ASD. The girl who was the younger one of the two, was on the more severe end of the spectrum. She said:

> "At first, I was overwhelmed…but with time and because of my supportive and helpful husband, we managed to develop a routine on the family's daily activities of living..."

Feeding and eating habits

All the parents from the individual interviews and the FGD reported that their children were able to eat alone. However, Respondent 4 specified that it took a while for James to eat alone, although sometimes he would decide to be messy. Respondent 5 also mentioned about her daughter being a messy eater and that sometimes she wanted to be fed. Only Thomas and James took Risperdal and Epilim (medication).

Respondent 1 had this to say about her son:

> "Ashley eats very well; he's not a picky eater. He eats pretty much anything that he's supposed to be eating as long as it's gluten free… He has a way that he wants his carrots and potatoes cut. Sometimes you will find him smelling the food, if he's not familiar with it."

Respondent 2 also said:

> "At home, Thomas takes high protein and vitamin diet because he can chew but can't swallow chunks of solid food, so we used to blend his food and it would result him having diarrhoea. Now he eats spaghetti, rice, mashed potatoes and soup from meat."

Respondent 5 said:

> "My son doesn't like grainy food from infancy…he scratches it aside… even up to now and he doesn't eat fries, so he eats potatoes, which are his favourite food."

Toilet use and training

Data from the interview, participants indicated that toilet use was the most difficult task for almost all the children living with ASD. Most of them wore nappies irrespective of how old they were. Only Respondent 1's child wore a nappy at night, just in case of an emergency only and during the day, he wore panties.

Respondent 2 said:

> "Thomas wears nappies throughout the day…"

Respondent 3 said:

> "With all other issues, Tynos doesn't have problems… but on pot training, Oh… he has not been cooperative …For now, I have given up…"

Sleeping habits

The findings were that, during the day, no one slept as most of the children displayed ADHD tendencies of being hyper-active. So, the parents and the school agreed that no child would sleep during the day. All the parents indicated that their children mostly slept soundly throughout the night and were accustomed to routine.

Difficult communication and social exclusion of the children

Social play and communication

Both individual interviews and the FGD showed that the nuclear family members created time to play as a family, as taught from the Pathways Autism Trust and the Support Group. However, it occurred that for most of these children, isolated play was more common.

Verbal communication

Respondent 3 and 4 echoed the same sentiments with four parents from the FGD that their children had greatly improved their communication skills through the Treatment and Education of Autistic and Communication Handicapped Children (TEACCH) programme. This is a structured learning environment that helps individuals with ASD to function by encouraging visual based engagement and communication, e.g., using pictures to reach their goals like when one gets into the toilet, they follow what is displayed on the picture. Two parents from the FGD testified that their children had significantly improved on their speech and language acquisition through the help of psychologists and social workers.

Respondent 2 said:

> "…on the internet, he (Thomas) could search games, the Lego instructions on how to build something because he couldn't express himself but he could type…"

Attending social gatherings

Results showed that most parents do not attend occasions like weddings together. Either one parent attends on behalf of the family while the other partner stays behind with the child with ASD or they both do not attend, but send their gift. From all individual interviews and FGD, this was the same response.

The other lady at the FGD talked about how people at church treated her. This was similar to what all four women from individual interviews mentioned. She said:

> "I feel most of the people at our church are judgemental. People don't understand…, and I don't really talk about my child's condition with everyone. They give me that suspicious look…yekuti wakajaidza mwana wako [like he is a spoiled brat]… (laughing as she says this)…. The other day he screamed in church and I couldn't help it…as I stopped him, he became louder. I just look away when people look at me…I have now resolved that if I want to go to church, I leave my child home, or I don't go at all…"

Stigma and discrimination

On stigma and discrimination, some of those experiences were noted above, especially when participants were attending social gatherings. In the FGD, three people discussed what they have experienced; how people whispered and looked at them when they passed-by.

Financial and relationship challenges

This response was from Respondent 1:

> "Our biggest issue is financial difficulties at the moment, especially with the current economic situation. We have other kids in the house that have needs as well…"

Respondent 4 was quoted saying:

> "… it also costs you in terms of relationships because with some relatives they won't understand. They will be so judgmental … it can take a toll on you and you

> end up excluding yourself from a lot of things because not everyone is going to understand and accept your child. So, it's very difficult…"

Defence mechanism was presented as a potentially successful coping strategy used by parents to reduce distress, and to increase social competence and resilience. They also believed God helped them. Unconditional love for their children was one characteristic that stood out for the researchers throughout all the interviews including in the focus group discussion. The love for their children overrode the burdens that come along with caring for the children with the developmental disabilities. They were ready to do anything to ensure the well-being of their children. All the parents acknowledged that they had basic essential knowledge to help their children.

Discussion

The researchers identified a gap in scholarly literature regarding caregivers' experiences in raising children with autism spectrum disorder (ASD) in Zimbabwe. Existing studies have generalised all disabilities, overlooking the distinct challenges posed by the ASD spectrum. Findings indicated that caregivers noticed developmental delays or regressions in their children, prompting them to seek help (Suma, Adamson, Bakeman, Robins & Abrams, 2016; Harrison et al., 2016; Hansen, 2016). Early intervention was linked to improved social and daily living skills, though most caregivers experienced initial struggles balancing caregiving with other responsibilities (Cloete & Obaigwa, 2019; Shorey et al., 2019). However, they adapted over time.

Caregivers faced restrictions to attend to social events, they were limited to autism-friendly settings, endured physical, emotional, financial challenges and experienced stigma from their communities (Tathgur & Kang, 2021; Wilson & Peterson, 2018). Congregants and neighbours judged their children, sometimes labelling them the "bewitched" ones. The specific needs of children with ASD may result in either the alteration of typical family routines or the prevention of engagement in family activities (Iadarola, Pérez-Ramos, Smith & Dozier, 2019). Despite these difficulties, caregivers found ways to navigate their roles. Boys were observed to have a higher prevalence of ASD than girls in the study, which is consistent with global findings (CDC, 2018).

Misconceptions about ASD led to accusations against mothers, attributing the condition to unfaithfulness, curses, or spiritual punishments. This lack of awareness fostered social isolation, reducing families' access to services. Addressing the stigma requires increased knowledge and awareness of ASD (Abubakar, Ssewanyana, & Newton, 2016).

International policies like the Convention on the Rights of the Child (1989) and the Salamanca Statement (1994) advocate for inclusive education. There was a worldwide paradigm shift from exclusion to inclusion in education in 1994 (Majoko, 2019). Inversely, this research highlights contrasting findings. Parents at the school. where the research was done adopted, preferred the TEACCH method. This is a structured and exclusive approach tailored for children with severe autism spectrum disorder (ASD). It incorporates visual aids to support communication and daily tasks. Inclusive education often groups children with diverse disabilities together, which may not address the varying needs of children with ASD.

Some parents in the study reported repeatedly changing schools or caregivers, reinforcing the preference for specialised education as the most effective option. People with severe autism have a hard time communicating their needs verbally (Chambers et al., 2016). Despite many benefits to an inclusive setting and opportunities for social communication, this can pose numerous challenges for the children with severe impairments (Majoko, 2016).

This study highlighted various coping mechanisms employed by caregivers of children with autism spectrum disorder (ASD). Families at the school and its support group adopted playing together as a coping strategy, although many children with ASD preferred solitary play (Jellet, 2016). Speech deficits and social interaction challenges, common among children with ASD, added to the complexity of caregiving. In addition, belief in God and religious practices also served as a significant coping mechanism for many caregivers. Mothers of children with ASD also searched ways to rescue their children based on religious beliefs and using practices like praise, pilgrimage, gratefulness and trusting in God (Heydari et al., 2015).

Support from family, colleagues, and other caregivers was crucial in helping parents adjust to their child's condition. Support from both family and colleagues, particularly for those who were employed, played a crucial role in the caregivers’ adjustment to their children’s condition (Gona, 2016). Meeting others facing similar challenges fostered acceptance and encouraged adaptive coping strategies (Cloete & Obaigwa, 2019). Strong family cohesion was found to reduce stress over time. While divorce rates are typically higher among parents of children with ASD, 80% of the respondents were married and described their spouses as supportive, with some noting that their child’s condition strengthened their relationship.

Despite numerous sacrifices, such as losing time, leisure, and peace at home, caregivers gained resilience, family unity, and a sense of purpose. In overprotecting their child, they may exclude them from social interactions with their peers (Tome, 2024). A WhatsApp support group formed by the school was invaluable for sharing advice and encouragement. It included caregivers of children in inclusive education settings who failed to find spaces in specialised schools.

Conclusion and recommendations

Caregivers criticised nurses for their lack of knowledge and sub-optimal support, with some being rude and unhelpful to identify the slow language development or isolative behaviour, which was misinterpreted as shyness (Elder, Kreider, Brasher & Ansell, 2017). The school played a vital role in disseminating information, enabling families to reduce medical expenses and feel more knowledgeable and confident about coping with ASD. Despite challenges, the caregivers demonstrated resilience, gaining confidence and coping skills through information, support systems, and their commitment to their children. and Researchers recommend the need to raise awareness and sensitise communities not to reject families with the condition as it is medical and not superstitious (Tome, 2024).

In the previous studies, the statistics and prevalence of autism spectrum disorder (ASD) in Zimbabwe were largely unknown owing to limited research in this area. To fill the knowledge gap that exists on ASD, cross-sectional surveys that reflect a more precise picture of a wider population, and that are more representative of the caregivers of children with ASD in Zimbabwe, are recommended. Longitudinal studies that follow up on these children that are being researched upon now are necessary as they subsequently grow into adults with ASD and how they have been incorporated in employment and self-help skills. This would thereby expand the evidence base. Statistics and information on ASD ought to be well documented like other community issues such as gender based violence and rape.

If the children with ASD are to be placed in the mainstream (inclusive) education, then trained facilitators are needed in those schools. It is therefore vital for people with ASD to be included in the discussions that concern them (advocacy) so that their voices are heard. It is important for service providers like general nurses and teachers to have a strong understanding of ASD in order to timeously refer and link families to appropriate services.

The diagnosis of ASD has caused confusion, shock, grief and loss of the ideal child that the caregivers would have anticipated. Parental feelings of disbelief, distress, anxiety, or sadness are common at the time of diagnosis and in the following months. It is against this backdrop that psychologists come in as an invaluable human resource to provide a comprehensive understanding of the needs, provide appropriate resources and most effective strategies to support the children with ASD and their families. The family, being the most important support system for any child and for the ones with ASD, plays a pivotal part in the enhancement and well-being of the child and of the overall family as a unit as the seek help. Hence, the family systems therapy would be effective in helping the child with ASD and his/her family.

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Re-conceptualising Psychological Assessment in Africa: A Critical Analysis of Eurocentric Methodologies and Framing Culturally Informed Psychometric Instruments

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Abstract

This scoping review critically examines the limitations of Eurocentric methodologies and tools used in psychological assessment across Africa, emphasising the urgent need for the development of culturally informed and contextually relevant psychometric instruments. A systematic and comprehensive search of peer-reviewed literature published over the last four years identified 20 studies spanning 12 African countries and involving over 800 participants. The review employed a rigorous methodological process, including contextual analysis of the gathered data, to evaluate the applicability and effectiveness of existing psychological assessment tools in African settings.

The findings highlight the pervasive dominance of Eurocentric methodologies and psychometric tools in psychological assessment across Africa, revealing their inadequacy in capturing the unique psychological, cultural, and contextual realities of African populations. These tools often fail to account for the cultural nuances, values, and lived experiences that shape mental health and well-being in African societies. As a result, they risk misdiagnosis, inappropriate treatment, and the perpetuation of mental health disparities.

In relation to the theory and practice, the study challenges the universality of Eurocentric psychological theories; it is supportive of theory change towards indigenous psychologies based on African worldviews, values, and cognitive systems. It underlines the epistemic injustice in dominant psychology and calls for a pluralist approach to understanding behaviour and mental health.

Furthermore, through the critical exploration of Eurocentric assumptions employed in assessment tools, the study maintains a theoretical respect for the reality that notions of intelligence, personality, and mental illness are culturally mediated. The inquiry fosters the formation of emic (culture-specific) approaches as contrasted with etic (universal) approaches.

Lastly, this study influences educational and clinical training by stressing cultural competence and the need to appreciate local belief systems and idioms of distress. Psychologists and counsellors are prompted to apply indigenous wisdom as well as community-based approaches in their assessments and interventions. By moving away from Eurocentric norms, assessments *become more equitable and inclusive, reducing the risk of misdiagnosis or cultural bias. This enhances client trust, diagnostic validity, and treatment outcomes in African populations. In practice, the study oversees the development and standardisation of psychometric tests that are culturally congruent with African communities. This renders psychological tests valid, reliable, and ethical. It can lead to the translation or creation of measures sensitive to language and context, such as the South African Personality Inventory (SAPI).*

In conclusion, this scoping review highlights the limitations of Eurocentric psychological assessment methodologies in Africa and advocates for a transformative approach that centres on cultural relevance and contextual accuracy.

Keywords: Eurocentric methodologies, culturally informed psychological instruments, psychological assessments, Afrocentric psychological assessments tools, cultural competence, mental health

Introduction

Psychological assessment is a cornerstone of mental health practice, playing a critical role in diagnosis, treatment planning, and intervention. However, the dominant paradigms and instruments used in psychological assessment have been predominantly developed and standardised in Western contexts, with limited consideration for the cultural, social, and historical realities of African societies (Mpofu, 2020). This has led to the widespread imposition of Eurocentric methodologies and instruments on African populations, often without adequate attention to their cultural validity, relevance, or applicability (Nwoye, 2020).

The use of Eurocentric methodologies and instruments in psychological assessment in Africa has been widely criticised for perpetuating cultural imperialism, pathologising African cultures, and neglecting the unique mental health needs of African populations (Kamya, 2022). As a result, they risk misrepresenting or misdiagnosing mental health conditions, leading to inappropriate or ineffective interventions (Mpofu, 2020).

Research has consistently shown that Eurocentric instruments are ill-equipped to capture the cultural nuances and complexities of African societies. For example, constructs such as resilience, emotional expression, and coping mechanisms may manifest differently in African cultures compared to Western contexts; yet, these differences are rarely reflected in standardised assessment tools (Nwoye, 2020). This cultural misalignment can result in inaccurate diagnoses, ineffective treatment plans, promote stigmatization, loss of rapport and engagement between client and assessor, impact legal and ethical issues, systematic inequality and bias, and the perpetuation of mental health disparities across the continent (Ridley et al., 1994)

The primary objective of this paper is to advocate for re-conceptualising psychological assessments in Africa by examining the limitations of Eurocentric methodologies and instruments and advocating for the development of culturally informed psychometric instruments. To achieve this, the paper draws on existing bodies of literature to critically analyse the shortcomings of Eurocentric approaches in psychological assessment (Ratele, 2016; Holdstock, 2000; Mkhize, 2004; Bulatao & Bernardo, 2016). It synthesises findings from various studies, highlighting the cultural biases and limitations of these approaches in capturing the unique cultural, social, and historical contexts of African society (Nsamenang, 1995; Mpofu, 2002; Van de Vijver & Tanzer, 2004; Atilola, 2015; Eagle, 2005).

In summary, this paper underscores the urgent need to move beyond Eurocentric frameworks and embrace culturally informed approaches to psychological assessment in Africa. By doing so, mental health professionals, researchers, and policymakers can work together to design a more inclusive, equitable, and effective mental health system that truly serves the diverse needs of African populations (Abdullah & Ridge, 2008; Ratele, 2016; Owusu-Bempah & Howitt, 2000). This shift not only addresses the limitations of existing practices but also paves the way for improved mental health outcomes and reduced disparities across the continent (Sodi et al., 2011; Laher & Cockcroft, 2014).

Background

Psychological assessment is a vital component of mental health practice, providing essential information that informs diagnosis, treatment planning, and intervention strategies (Nwoye, 2020). Accurate and culturally sensitive assessment is critical for developing effective treatment plans, improving mental health outcomes, and fostering cultural competence in mental health practice (Sue & Sue, 2020). However, the dominant methodologies and instruments used in psychological assessment have been predominantly developed and standardized in Western contexts, often without consideration for the cultural, social, and historical realities of African societies (Mpofu, 2020; Nwoye, 2020). This has led to the widespread use of Eurocentric tools in Africa, despite their limited applicability and potential for cultural bias, misdiagnosis, and inappropriate interventions (Kamya, 2022).

The reliance on Eurocentric methodologies and instruments in psychological assessment has been extensively criticised for its cultural insensitivity and lack of relevance in African contexts (Mpofu, 2020; Nwoye, 2020). These tools are often rooted in Western cultural values, norms, and assumptions, which may not align with the diverse and complex realities of African societies. This cultural misalignment can lead to inter alia; inaccurate diagnoses, ineffective treatment plans, promote stigmatisation, loss of rapport and engagement between client and assessor, impact legal and ethical issues, systematic inequality and bias, and the perpetuation of mental health disparities across the continent (Ridley et al., 1994)

The limitations of Eurocentric instruments are further compounded by their lack of cultural validity, reliability, and standardisation in African contexts (Mpofu, 2020). Without proper adaptation and validation, these tools risk misinterpreting assessment results, leading to inappropriate interventions and treatments (Kamya, 2022). For instance, a study by Kamya (2022) found that the use of Eurocentric instruments in Uganda resulted in the misdiagnosis of mental health conditions, underscoring the need for culturally informed assessment tools. Such misdiagnoses not only undermine the effectiveness of mental health services but also erode trust and confidence in these services among African communities.

Research has consistently shown that Eurocentric instruments often fail to capture the cultural nuances and complexities of African societies, leading to inaccurate diagnoses and interventions (Mpofu, 2020; Nwoye, 2020). For example, the Western conceptualisation of mental health conditions such as depression or anxiety may not fully align with how these conditions are experienced and expressed in African cultures. This disconnect can result in the misdiagnosis and mistreatment of mental health conditions, exacerbating the mental health disparities faced by African populations (Kamya, 2022).

To address these challenges, it is essential to develop culturally informed psychometric instruments that are grounded in the unique cultural, social, and historical contexts of African societies (Mpofu, 2020). This requires collaboration between African researchers, mental health professionals, and communities to ensure that assessment tools and interventions are culturally responsive, relevant, and empowering (Kamya, 2022).

In summary, the dominance of Eurocentric methodologies in psychological assessment in Africa has, among other consequences, significant limitations, including cultural bias, misdiagnosis, promotes stigmatization and neglects of indigenous knowledge systems. To address these challenges, there is an urgent need for a paradigm shift that prioritises the development and use of culturally informed psychometric instruments. By embracing this shift, Africa can move toward a mental health system that respects and reflects the diversity of its populations, ultimately improving mental health outcomes and reducing disparities across the continent.

Scoping objectives

1) To critically interrogate the limitations of Eurocentric psychological assessment tools in African contexts.
2) To explore the conceptualisation and efficacy of culturally-grounded psychometric tools that are sensitive to African populations.
3) To explore the implications and consequences of integrating indigenous knowledge systems into psychological assessment tools for mental health practice and policy in Africa.

Scoping research questions

1) How do Eurocentric psychological assessment tools fall short in aligning cultural values and social realities of African populations?
2) What empirical data in existing studies supports the efficacy of culturally-grounded assessment tools in improving mental health outcomes across different African contexts?
3) What are the practical and policy implications of adopting culturally-informed psychological assessments in African mental health services?

Knowledge gap

While diagnostic tools are widely applied in African countries, the majority of test instruments are developed and tailed to Western contexts which do not capture the sociocultural realities of the African people. Psychometric tools in Africa lack normative data and exhibit over simplified linguistic, educational, and contextual differences (van de Vijver & Tanzer, 2004; Mpofu, 2002).

Dependence on these Western instruments has fostered a culture of epistemic violence, exacerbating misrepresentation and misdiagnosis in the assessment of African mental health, intellect and personality (Mkhize, 2004). These insights demonstrate that there is an urgent need to re-think frameworks of psychological assessment in Africa (Ratele, 2016). Whilst, scholars across Africa have been advocating for this, there is not enough development being done in terms of designing new culture specific instruments. That said, the translation of this academic consensus amongst African scholars into pragmatic action has been slow (Mpofu, 2020). The reasons for this are various, but at the crucifix of this conundrum are a lack of funding support, lack of access to research facilities by scholars, and continued dependence on the Western norm referenced assessment tools (Nwoye, 2025; Adams et al., 2017).

Significance of the study

This review expands and taps into the current emerging decolonisation narrative in psychology by illustrating how psychological evaluations may be more meaningful, valid, and ethical in Africa if they are guided by indigenous frameworks and cultures (Pillay, 2017; Ndlovu-Gatsheni, 2013).

This study explores:

- A critical framework to assess existing tools and their validity in a different culture.
- The efficacy of culturally sensitive, ethically sound, and scientifically rigorous socially responsible instruments.
- Empirical advocacy for Afrocentric methodologies that confront the cultural invisibility within global psychological science frameworks and how the same impacts policy and pragmatic application (Stevens, 2018).

The review may also guide changes in training, clinical practice, and educational policies to make psychological services more relevant and effective in African contexts (Nsamenang & Tchombe, 2011). It also hopes to galvanise gatekeepers to be proactive in funding development of such tools.

Justification

Use of non-culturally and linguistically adapted tests leads to misdiagnosis, exclusion, validity threat, and influence stigma (van de Vijver & Tanzer, 2004). Ethical guidelines of institutions like the American Psychological Association (APA, 2023) and the International Test Commission (ITC, 2017) emphasise cultural sensitivity in test use, although these standards are not equally embraced in the African context.

Besides, African scholars argue that Western psychological science is far from being globally neutral and universal, but is based on colonial assumptions about mental health and human development (Mkhize, 2004; Ndlovu-Gatsheni, 2013). Such a review is then warranted by the urgent need to redefine African epistemology, construct context-specific assessment tools, and enhance the scientific and ethical quality of psychological services in the continent and to re-galvanise African scholars and authorities to take a pragmatic approach in addressing the gaps and applying scholarly knowledge into solving the conundrum.

Methodology

A justified archival research methodology was employed to critically analyse the limitations of Eurocentric methodologies and instruments in psychological assessment in Africa and explore the development of culturally informed psychometric instruments (Arksey & O'Malley, 2020). This approach was chosen to systematically review and synthesise existing literature, providing a comprehensive understanding of the challenges and opportunities in psychological assessment practices across the continent.

A systematic search of previous research studies was conducted using major academic databases, including PsycINFO, Scopus, and PubMed (Tricco et al., 2020). The search strategy incorporated a combination of keywords such as "psychological assessment," "Eurocentric methodologies," "culturally informed psychometric instruments," "Africa," and "cultural competence" (Kamya, 2022). Boolean operators (AND, OR) were used to refine the search and ensure the inclusion of relevant studies.

Inclusion and exclusion criteria

The inclusion criteria for this review were as follows:

a) Peer-reviewed articles, book chapters, and conference proceedings published in English.

b) Studies focusing on psychological assessment in African contexts.

c) Research published within the specified time frame (2018–2023).

The exclusion criteria included:

i) Studies that did not focus on psychological assessment in Africa.

ii) Research published outside the specified time frame.

iii) Non-peer-reviewed studies, such as opinion pieces or editorials.

Study selection process

The initial search identified 250 studies. After applying the inclusion and exclusion criteria, 50 studies were selected for further review. Following a thorough evaluation of these studies, 20 were chosen for inclusion in the final analysis. These studies represented 12 African countries and involved over 800 participants.

Data extraction and analysis

Data extraction and analysis involved content and textual analysis of the included studies. A standardised data extraction form was developed to capture key information related to study design, sample characteristics, and findings (Elo et al., 2020). The form was piloted on a subset of studies to ensure its reliability and validity.

The data extraction form captured the following information:

1) Study design: Methodology, sampling strategy, and data collection methods.
2) Sample characteristics: Demographics, cultural background, and mental health status of participants.
3) Key findings: Limitations, challenges, and implications of Eurocentric methodologies and instruments in psychological assessment in Africa.

The content and textual analysis followed a systematic and transparent process, using a combination of inductive and deductive approaches (Tricco et al., 2020). The inductive approach involved identifying emerging themes and patterns in the data, while the deductive approach tested predefined hypotheses and research questions against the data.

Thematic analysis

The thematic analysis focused on identifying recurring themes related to the limitations of Eurocentric methodologies and the potential of culturally informed psychometric instruments.

Key themes included:

i) Cultural bias and misdiagnosis: The inability of Eurocentric tools to capture the cultural nuances of African societies, leading to inaccurate diagnoses and interventions.
ii) Neglect of indigenous knowledge systems: The marginalisation of traditional healing practices and cultural beliefs in psychological assessment.

iii) Development of culturally informed instruments: The importance of creating assessment tools grounded in African cultural values and norms.
iv) Cultural competence and sensitivity: The need for mental health professionals to develop cultural competence when working with African populations.

Rigorous and transparent process

The use of content and textual analysis in this study allowed for a detailed and systematic examination of the included studies. This approach ensured that the findings were grounded in the data and provided a robust foundation for drawing conclusions. The systematic process of coding and categorising the data enabled the identification of key themes, patterns, and findings related to the use of Eurocentric methodologies and instruments in psychological assessment in Africa.

Contribution to the field

The findings of this study contribute to a deeper understanding of the limitations and challenges of Eurocentric methodologies and instruments in African contexts. They highlight the urgent need for culturally informed and responsive approaches to psychological assessment and mental health practice.

In summary, the methodology employed in this study was rigorous, transparent, and systematic, ensuring the reliability and validity of the findings. The use of archival research, combined with content and textual analysis, allowed for a comprehensive exploration of the limitations of Eurocentric methodologies and the potential of culturally informed psychometric instruments in Africa.

Results

The findings from the archival research methodology revealed a substantial body of literature critiquing the predominance of Eurocentric methodologies and instruments in psychological assessment across Africa frequently fail to account for the cultural nuances and complexities of African societies. This oversight often leads to inaccurate diagnoses, inappropriate interventions, and a lack of relevance to the lived experiences of African populations.

Key findings

a) How do Eurocentric psychological assessment tools fail short in aligning cultural values and social realities of African populations?

Criticism of Eurocentric instruments

The review found that 85% of the studies criticised the use of Eurocentric instruments in psychological assessment in Africa. Common critiques included cultural bias, limited applicability, and the neglect of indigenous knowledge systems (Mpofu, 2020; Nwoye, 2020). These studies argued that Eurocentric instruments often impose foreign frameworks that do not align with African cultural values, worldviews, or social realities. These tools use Western assumptions and normative data in their standardisation which may not be congruent to African cultures.

i) Cultural bias in constructs and norms

Western cultures are individualistic and not communal centred and highly spiritual like the Africa cultures, and norming a test instrument in such constructs demands culture etiquette and sensitivity (Mpofu, 2020; Nwoye, 2015). Such a misinformed narrative leads to misinterpretation of what may be a normal behaviour in Africa as abnormal behaviour. Mpofu (2020) goes on to argue that ancestral worship and communication may be interpreted as delusional and hallucinatory when we use the Western cultured assessment instrument. In addition, the imposition of Eurocentric instruments on African populations often ignores the historical and cultural contexts of mental health experiences in Africa (Mpofu, 2020). Also, a study conducted in Ghana found that the use of Eurocentric instruments neglected the role of traditional healing practices and cultural beliefs in shaping mental health experiences (Ofori-Atta, 2023). This oversight not only undermines the effectiveness of mental health services, but also perpetuates the marginalisation of indigenous knowledge systems and practices.

ii) Linguistic and contextual inappropriateness

Most of the Western assessment tools come prescribed in an English language which may, among other things, lack proper wording for specific issues in Africa and the vocabulary used may not be common and even unknown by both test taker and administer (Nwoye, 2020). Nwoye further posts that language complications alone can make the whole process meaningless. A study involving 200 participants in Uganda demonstrated that a culturally-informed instrument tailored to the Ugandan context yielded more accurate diagnoses and interventions compared to Eurocentric tools (Kamya, 2022). The study underscored the importance of incorporating local cultural practices, language, and values into psychological assessment.

iii) Incompatibility with indigenous worldviews

African view on health is more than just medical and psychological, it encompasses spirituality, social, community and holistic perspectives (Kamya, 2022). On the other hand, Eurocentric tools do not validate such a perspective. In South Africa, De Jager Meezenbroek et al. (2020) developed the South African Spirituality Scale (SASS) which was standardised and is used in clinical settings to integrate the country's spiritual side in psychological assessments.

iv) Overpathologising of cultural norms

In Africa, the behaviours and practices that are common may be interpreted as abnormal in Western grounded assessment instruments (Mpofu, 2020) and then may lead to wrong diagnosis and treatment. Daniels and Isaacs (2023) did a study in South Africa and it was established that;

> "Given the power and voice attributed to colonial power over indigenous power, discourses of colonial origin have taken centre stage in the realm of psychology, leaving indigenous discourses to be silenced and marginalised"

In another study in South Africa, Galvin et al. (2024) interrogated how rural women in Limpopo Province perceive mental illness. The findings of that inquiry discovered that mental illness is often attributed to supernatural causes such as ancestral displeasure or witchcraft. Unfortunately, the Eurocentric assessment tools grounded in the biopsychosocial models do not recognise such nuances.

v) Reduced acceptability and engagement

It is normal for people to disengage when they assume and perceive that the tool being used does not capture the essence of what they are going through (Adebowale, 2022). In a Nigerian study, Adebowale (2022) found that culturally unfounded instruments were the main reason why clients disengaged from assessment processes.

b) What empirical data in existing studies supports the efficacy of culturally-grounded assessment tools in improving mental health outcomes across different African contexts?

A significant proportion of the studies (75%) emphasised the urgent need for culturally-informed psychometric tools that reflect the unique cultural, social, and historical contexts of African societies (Kamya, 2022; Adebowale, 2022). These studies highlighted the importance of developing instruments that are not only culturally sensitive, but also rooted in African epistemology and practices.

i) Improved diagnostic accuracy

Inquiries across Africa show that tools that are culturally alive improve diagnostic accuracy in mental health settings (Kamya, 2022). A study involving 200 participants in Uganda demonstrated that a culturally informed instrument tailored to the Ugandan context yielded more accurate diagnoses (30% improvement over Western tools) and interventions compared to Eurocentric tools (Kamya, 2022).

ii) Enhanced client engagement

Culturally sensitivity tools are likely to motivate locals to participate more in assessments than use of Western tools (Adebowale, 2022).

In Nigeria, Adebowale (2022) researched on 300 participants and discovered that culturally-informed instruments were more acceptable to participants, leading to higher engagement with mental health services.

iii) Positive treatment outcomes

It has been proved beyond doubt that, when evidence-based treatment plans and culturally appropriate instruments are utilised to assess mental health, they yielded better improved therapeutic outcomes (Ofori-Atta, 2023); and such results include improvement on symptom severity. This study showed that there was 25% increase in treatment adherence and severity in symptoms were reduced in depression patients.

iv) Trust and accessibility

Assessment tools that are culturally informed help reduce the perception that mental health issues are foreign and do not concern locals (Mpofu, 2020). In a study on rural and marginalised communities, Mpofu (2020) found that locals put more trust into instruments that were in local languages and recognised local practices and etiquette and anything not aligned was perceived as foreign and not applicable locally.

v) Integration of indigenous knowledge

Some Africans are more likely to accept relevance and resonance of assessment tools and practices when these include local understanding of the involvement of cultural spirituality and distress (Nwoye, 2020). In the study conducted at the University of KwaZulu Natal, Nwoye (2020) argued that culturally sensitive tools that include indigenous healing theories encourage more holistic and meaningful interventions.

c) What are the practical and policy implications of adopting culturally-informed psychological assessments in African mental health services?

Incorporating culturally inspired assessment tools in the psychological assessment discourse impacts practical and policy issues immensely. Several studies (e.g., Mpofu, 2020; Nwoye, 2020) stressed the importance of integrating indigenous knowledge systems into psychological assessment.

i) Improved diagnostic accuracy and treatment outcomes

Mpofu (2020) and Kamya (2022) argue that culturally grounded tools improve validity and reliability of the assessment results. They assert that assessment tools must include; indigenous belief systems, idioms of distress, and culturally normative behaviours, as this would then help reduce pathologising everything in Africa and avoid incidents of misdiagnoses as is the norm with Eurocentric tools. The study done in Uganda by Kamya (2022) proved that context matters to improve meaningful diagnosis.

ii) Increased acceptability and engagement

When policies by both local authorities and health providers recognise that the assessment tools must include local practices and belief system, it fosters a sense of trust, participation and engagement by local populations (Adebowale, 2022).

iii) Integration of indigenous knowledge systems

When assessment tools are cognisant of indigenous knowledge systems, it then allows for inclusion of traditional healing approaches in managing mental health. Such a holistic approach supports pluralist health care systems and enforces respect to traditional value system (Mpofu, 2020, Nwoye, 2020).

iv) Policy development and institutional reform

The approach to include culturally specific inclusions in the assessment tools demands that gatekeepers provide the legal and institutional frameworks as this affects the nexus between psychology and legal regulation (Kamya, 2022; Ofori-Atta, 2023). The scholars go on to argue that researchers need financial and institutional resources to engage in research and to develop tools that are locally norm referenced.

v) Reduction in mental health stigma

In an African context, when tools are aligned to culture specific tenets, then it follows that many psychopathology diagnoses are not necessarily mental illnesses (Mpofu, 2020). This could help reduce stigma and help improve both early treatment and adherence to prescribed interventions.

Discussion of findings

Criticism of Eurocentric instruments

The review confirmed that 85% of reviewed studies were negative about the use of Eurocentric psychological instruments in African contexts. Researchers all argue that such measures are culturally biased, of low ecological validity, and insensitive to African sociocultural contexts (Mpofu, 2020; Nwoye, 2020; Serpell, 2017). They are grounded in Western theories of mental health and cognition, which are not universally applicable (van de Vijver & Leung, 1997). For example, ideas like individualism and nuclear family patterns found in most Western tests are in conflict with African communalism and large family systems (Mkhize, 2004; Ratele, 2016). Therefore, such tests may lead to misdiagnosis or stigmatisation of culturally normal behaviour.

Call for culturally-informed instruments

About 75% of the analysed studies stressed the importance of immediate action for culturally based psychometric instruments. Researchers advocate for tools that are linguistically, contextually, and culturally appropriate as well as cognisant of African epistemologies (Kamya, 2022; Adebowale, 2022; Nsamenang & Tchombe, 2011). Culture-appropriate measures would increase validity, reliability and acceptability in a range of African samples (Draguns & Tanaka-Matsumi, 2003). This is in line with international best practices, as exemplified by a best practice referred to by the International Test Commission that recommends testing through adaptation rather than direct translation (ITC, 2017).

The role of indigenous knowledge systems

A significant amount of research emphasises the use of indigenous knowledge systems (IKS) in psychological evaluation (e.g., Mpofu, 2020; Nwoye, 2015; Holdstock, 2000). African languages, belief systems, community-based healing, and culturally grounded conceptions of wellbeing are all included in IKS. According to scholars, these systems offer therapeutic relevance, cultural resonance, and conceptual clarity that are absent from the majority of imported assessments (Hampden-Turner & Trompenaars, 2000). It is believed that incorporating indigenous knowledge is not only morally right, but also necessary for social justice and psychological validity.

Implications for mental health services

Underutilisation of treatments has resulted from a mistrust of psychological interventions brought on by the ongoing employment of Western tools in African mental health services (Atilola, 2015; Kleintjes et al., 2010). On the other hand, culturally sensitive tests have been associated with increased accessibility, increased participation, and better accuracy of diagnosis (Kamya, 2022; Adebowale, 2022). This supports the public interest psychology; a psychology that is culturally responsible and socially embedded as argued by Ratele (2016).

Implications for practice and policy

According to the findings, policy reform is desperately needed to facilitate the creation and institutionalisation of assessment instruments that are African-centred (Pillay, 2017; Nsamenang, 1995). Training programmes ought to be revised to give professionals assessment skills that are suitable for their culture. Policies supporting domestic research and infrastructure for psychometric development must be adopted by national psychology councils and health ministries throughout Africa (Stevens, 2018; Asante, 2007). In order to create assessments that accurately represent the lived reality of African populations, cooperation between academic institutions, communities, and traditional health systems is also required.

Recommendations

i) Development of culturally informed instruments: There is an urgent need for researchers and practitioners to collaborate with local communities to develop psychometric tools that reflect African cultural values, languages, and social contexts. These tools must be integrated with technological platforms.

ii) Training and capacity building: Mental health professionals should be trained in culturally sensitive assessment practices, including the use of indigenous knowledge systems and community-based approaches.

iii) Policy reforms: Governments and mental health organisations should prioritize the adoption of culturally-informed instruments in national mental health policies and programmes. Policy makers and scholars must be engaged in this regard to develop ideal tools.

iv) Further research: More studies are needed to explore the effectiveness of culturally-informed tools across diverse African contexts and to document best practices for their development and implementation. More is needed in systematic development and validation of locally and culturally sensitive assessment tools in Africa. Such tools must address cross country culture diversity. Many such developed tools in Africa lack rigorous academic validation.

v) Longitudinal studies are recommended to help validate tools whose inferences cut across various cultures across Africa.

Limitations and future directions

This study has several limitations that should be acknowledged. First, the reliance on archival research methodology restricts the findings to existing literature, limiting the scope of the study. Future research should address this by conducting empirical studies that develop and test culturally-informed psychometric instruments in real-world African contexts. Such studies would provide valuable insights into the effectiveness, feasibility, and acceptability of these tools.

Second, even the literature published in the last four years may not fully capture the breadth of research on culturally-informed psychometric instruments in Africa. Future studies should expand their scope to include a wider range of literature, including older studies and those published outside mainstream academic journals, to provide a more comprehensive understanding of the topic.

A critical area for future research is the development of culturally-informed psychometric instruments that address the unique mental health needs of African populations. This requires a deep understanding of the cultural, social, and historical contexts that shape mental health experiences in Africa.

Despite these limitations, the study highlights the urgent need for ongoing research and development in the field of culturally-informed psychometric instruments in Africa. By addressing these gaps and prioritising the creation of culturally relevant tools, researchers can contribute to more effective, responsive, and equitable mental health services across the continent. This, in turn, can improve mental health outcomes and enhance the well-being of African populations.

Conclusion

The findings of this scoping review highlight the significant limitations of Eurocentric methodologies and instruments in psychological assessment within African contexts. These results emphasise the urgent need to develop and implement culturally-informed psychometric tools that accurately reflect the sociocultural realities of African populations. The review reaffirms longstanding critiques of the dominant Eurocentric frameworks, which often fail to account for the diverse cultural, contextual, and lived experiences of African societies.

The findings call for a paradigm shift in psychological assessment practices across Africa, one that prioritises cultural competence, cultural sensitivity, and the creation of contextually relevant assessment tools and interventions.

The implications of these findings are far-reaching, underscoring the need for collaborative efforts among mental health professionals, researchers, and policymakers. Such collaboration is essential to design, validate, and implement culturally-informed psychometric tools and interventions.

Additionally, the findings highlight the importance of integrating cultural competence and sensitivity into mental health education and professional training programmes. Emphasising these components in curricula would equip mental health practitioners with the knowledge, skills, and attitudes needed to provide culturally attuned and ethically sound care.

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Grassroots Psychosocial Factors Affecting Diagnosis and Management of Neurodevelopmental Disorders: A Case of Ward 13 Seke Rural District Zimbabwe

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Abstract

Various factors related to context appear to influence effective management of mental illnesses. With this in mind, this paper sought to investigate how a rural context in a low income country likely influences the diagnosis and effective management of mental disorders known as neurodevelopmental disorders (NDDs). The article investigated the factors influencing identification and effective management of neurodevelopmental disorders (NDDs) in Ward 13 in Seke Rural District in Chikomba West. The paper uses a phenomenological qualitative research design. Purposive and convenience sampling were utilised to identify participants. Data from key informant in-depth interviews was triangulated with data from caregivers of children aged 10 years and below in Ward 13 Chikomba West Seke rural district. Themes identified using Braun and Clarke thematic analysis framework include vague knowledge and awareness, limited access to specialised care resources and various worldviews influenced by culture including attitudes and beliefs. Enablers included presence of psychosocial support in the community. It was concluded that various factors interact at personal, institutional and national levels, among others, to give rise to barriers and enablers of early diagnosis of NDDs. Knowledge and culture were overarching factors that are amenable to change. It is recommended that organisations and policy makers create programmes and policies that target amendable factors that deter timely diagnosis including attitudes, self-efficacy, beliefs and knowledge.

Keywords: neurodevelopmental disorders, help-seeking, comorbidity, management of symptoms, debilitating, supernatural,

Introduction

Many people needing psychological services fail to get them with 15% in the low and middle-income countries (LMICs) accessing such help (Skylstad et al., 2019). The World Health Organization (WHO) (2021) indicates limited access to mental health services for children, though no statistics are available for sub-Saharan Africa (SSA). This paucity of statistics is worse in rural settings (Nsereko et al., 2011). Although some countries including Nigeria, Ethiopia and Ghana have made strides to improve access to mental healthcare by integrating mental health into their healthcare policies, shortages of facilities and manpower specialised in mental healthcare remains a challenge, with main psychiatric units being found in urban centres (Atewologun, et al., 2025). Mental health services are therefore highly centralised (Mlambo et al., 2014; Wainberg et al., 2017). Chibanda and Mangezi (2010) lamented the same scenario regarding mental health services in Zimbabwe, yet 61.4% of Zimbabweans live I rural areas (Zimbabwe National Statistics Agency (ZIMSTAT), 2024). Prevalence of mental conditions in children globally is alarming with 20% of children and adolescents suffering from debilitating mental illnesses (Skylstad et al., 2019). Although prevalence of NDDs in sub-Saharan Africa is not known, global trends in increases of incidence are also expected (Ruparelia et al., 2016). The Diagnostic and Statistical Manual for Mental Disorders Edition 5 (DSM 5) identifies these NDDs to include attention deficit hyperactivity disorders (ADHDs), autism spectrum disorders (ASDs), intellectual disability (ID) and communication disorders (CDs), among others (American Psychiatric Association (APA), 2013).

NDDs are highly comorbid, having an onset in infancy (APA, 2013). A disruption occurs in the development of the brain that affects social, intellectual, personal and occupational functioning (Thapar et al., 2016). NDDs vary in causes, management and responsiveness to treatment (Banda, 2021; Thapar et al., 2016). Thorough assessment by different specialists is necessary due to NDDs' complex nature (Ruparelia et al., 2016; Thapar et al., 2016).

Early and correct diagnosis that is provided for by professional medical practitioners is imperative and possible from as early as 14 months (Rosenberg et al., 2011). Early screening and assessment averts worsening of NDDs by providing a chance for early interventions (Manolova, 2017). This early diagnosis is necessary for effective management of (NDDs) (Sicherman et al., 2018). In Africa, however, there is generally a trend of delayed diagnosis (Anwar et al., 2018; Franz et al., 2017). This study thus targeted investigations of factors that affect diagnosis at grassroots in a rural community since these populations are found to be worse off in terms of access to health care.

A multi-disciplinary approach is necessary for effective NDD management (Ruparelia et al., 2016). Childhood mental illnesses require multiple informants such as teachers, parents and other individuals that spend time with the children. This is because heavy reliance is placed on recognition of behavioural signs (Franz et al., 2017). This study chose to identify key informants that can elucidate how, at rural community level, the inputs and actions of these potential multiple informants can affect early diagnosis of NDDs.

Research objectives

The study sought to determine:

1) The knowledge of NDDs found in a rural community members
2) The general perceptions and beliefs inherent in rural community dwellers about the causes and effective management of NDDs
3) Socio-economic and structural barriers and enablers of identification and management of NDDs in a rural community setting.

Research questions

The research questions that the study sought to answer were:

i) Do rural community members possess knowledge of NDDs?
ii) What are the community members' prevalent perceptions of and beliefs on the causes of NDDs and their effective management methods?
iii) What socio-economic and structural barriers and enablers towards identification and effective management of NDDs are found in a rural community?

Literature review

There is a knowledge gap in populations and practitioners alike about the identification and management that is effective for NDDs. A study in Nigeria indicated a general trend of poor knowledge of identification and management of NDDs among healthcare providers in primary healthcare (Agbo et al., 2024). This finding is consistent with earlier studies in Zimbabwe where there is little knowledge of NDDs, including ASD in Zimbabwe (Banda, 2021; Chitiyo & Chitiyo, 2019).

Ratombo (2020) found that an interaction of culture, the economy and religion impacts interpretation of signs observed in the children. Similar observations can be deduced from a Nairobi study where stigma, lack of knowledge and lack of affordability to services were found as factors that hinder identification, diagnosis and management of NDDs in informal settlements (Segre, et al., 2023). Other influential factors that impact diagnosis include lack of resources (Alonso & Little, 2019), no trust in professionals (Tirintica et al., 2018), negative attitudes and a low knowledge (Wainberg et al., 2017) and community influences including stigma (Skylstad et al., 2019).

Culture influences interpretation of symptoms (Nsereko et al., 2011). Culture shapes caregivers' behaviours through creation of certain beliefs and attitudes (Skylstad et al., 2019). These result in multiple help-seeking pathways that are rampant in Africa. However, help-seeking also depends on income levels, physical barriers, and beliefs among others (Radez et al., 2019). These multiple pathways lead to delayed or no diagnosis of NDDs (Anwar et al., 2018). Beliefs also breed perceptions of symptom severity and burden of care in the caregivers that serve as motivators or deterrents in seeking help for suspected mental illness (Skylstad et al., 2019).

Skylstad et al. (2019) identified an information gap on mental illnesses that exists among service providers and stakeholders involved in the management and identification of NDDs. Traditional healing has been found to be the most accessible and most utilised practice in SSA due to the fact that it is more readily available than medical service providers and that it caters for cultural perspectives and concerns of its users (Berhe et al., 2024). In this systematic review, Berhe et al. (2024) found varied studies including those that showed improved care in collaboration between mainstream medical practitioners and traditional healers; continued complementary use of both without collaboration of practitioners and some studies that provided evidence of human rights violations in the use of traditional methods to care. In Zimbabwe, however, medical professionals and traditional healers do not consult each other (Mangezi & Chibanda, 2010) thus depriving service providers of key information necessary to improve their services. Caregivers are unable to notice odd behaviours in the children at times, making friends and family crucial in pointing out behavioural disparities (Sicherman et al., 2018). Schools thus become vital in noting odd behaviour because of the presence of trained teachers and provision of a norm group where the child can be compared to (Godoy et al., 2014).

Stigma is ranked as the most influential factor preventing access to mental health services (Coombs et al., 2021). Stigma shapes individual perceptions of illnesses and causes isolation of the family and the sick individual (Wannenburg et al., 2018). Stigma also leads to feelings of shame and misunderstanding and neglect of the mentally ill (Gabra et al., 2020).

Research methodology

A qualitative exploratory approach to research was adapted to answer the three research questions.

The research questions sought to illuminate the research objectives of identifying whether or not rural community members possessed knowledge of NDDs. The study also sought to clarify the perceptions and beliefs that the rural community had on effective management and the causes of NDDs. Last but not least, the study also needed to determine the existing socio-economic and structural barriers and enablers of identification and effective management of NDDs that were in existence in the rural community.

Resultantly, the population of interest included caregivers of children aged 10 and below staying in Ward 13 Seke Rural District. This is because the age 10 is the transition point for family versus peer influences (Skylstad et al., 2019). A key informants approach to research was also utilised targeting various individuals believed to be knowledgeable of NDDs in the community including primary school teachers, nurses, community health workers and spiritual leaders (Mumtaz et al., 2013). Religious leaders from the apostolic sect churches and their followers view their churches as practical alternatives to medical health service providers (January & Chimbari, 2018).

The study included caregivers of children aged 10 and less because primary caregivers of such children are the ones that have the sole responsibility of seeking medical care interventions on behalf of their children. Skylstad et al. (2019) clarify 10 as a transition period for peer vs. family influence to support this inclusion criteria. Participants also had to be residents of Ward 13 Seke Rural District Council. Key informants included were teachers responsible for infants. This was important because early diagnosis has been found to be most favourable for effective management of NDDs (Ruparelia et al., 2016). Understanding their beliefs, perceptions, knowledge and attitudes would help in clarifying any reasons for delayed or early diagnosis as teachers are key stakeholders. Religious leaders from the apostolic sect were also included in the study. Mainstream and Pentecostal church leaders were excluded from the study because January and Chimbari (2018) informed this research by clarifying that Pentecostal churches are found to be practical alternatives and influencers in mental health service provision. Community health workers were included in the study as key stakeholders that influence utilisation of medical services in rural contexts in Zimbabwe. Childhood nurses were also included because of their early influence in identification and diagnosis of pathology in children. Understanding their knowledge, perceptions and beliefs may clarify the factors that affect early diagnosis and early management of NDDs.

A census of the nurses who deal with childhood issues (2) and community health workers (CHW) (1) was ideal to select participants for the study given their limited numbers. Early childhood development (ECD) teachers were purposively selected for the study since they facilitate education for the youngest infants in schools. This gives light to the factors that affects identification of odd behaviours in the youngest children in schools. Convenience sampling was then employed to identify 3 ECD teachers to be interviewed (Bryman, 2012). Four spiritual healers and 10 caregivers were identified using simple random sampling. An additional 2 caregivers were purposively selected for interviews after the CHW identified these as caregivers with children under the age of 10 who were believed to have NDDs. Although the ideal sample sizes for phenomenological studies averages three to ten individuals, data saturation informed the sample size for 6 caregivers interviewed for this study (Creswell & Creswell, 2018).

Thematic analysis was used to analyse the data using the Braun and Clarke framework (2006) (Maguire & Delahunt, 2017). Using Microsoft word, data was analysed manually utilising text highlights, copy and paste functions and commenting tools, creating codes and eventually developing themes. An interactive approach to analysis and data collection were employed as data collection and data analysis were done simultaneously (Vaismoradi & Snelgrove, 2019).

Informed consent in writing was sought from the participants in Shona vernacular and English. Participants were informed that participation was voluntary and that they could withdraw at any moment they felt the need to. Pseudonyms were used to conceal identification of the participants. Confidentiality was also ensured by keeping the recorded material in a secure place and the soft copies were password protected (Creswell & Creswell, 2018). Authority to carry out the study was sought from the Department of Applied Psychology Department since the original study was done as a dissertation paper by the author.

Results

The following themes were revealed in the study.

Vague knowledge and awareness of NDDs

There was vague knowledge and awareness of NDDs, their symptoms, how NDDs could be managed and where to get assistance.

> "Personally, on child mental health issues I am not fully aware". KI1

> "A child may not want their feet to touch wet soil. They are slow in doing things. They may not speak properly. Some love to chew at anything. They also have specific preferences in their food." (P1)

> "… they do not understand the instructions of the teacher. Some remove their clothes. (P2)

> "Children cannot verbalise. They don't understand their age mates. Some can't control the flow of their saliva." (KI4).

> "One cannot sit still in one place." (P5).

C1 testified to a lack of knowledge of where to get assistance when they realised they needed to get their child some help:

> "I did not know where to get help. Harare Hospital is where I went since it is the biggest child hospital."

Negative labelling of parents resulted from this lack of knowledge of NDDs:

> "Sometimes you try to explain and people just don't understand. They believe we spoiled the child that the illness is for white children who are not disciplined. " C1

Limited knowledge and awareness coupled with a dearth of words in vernacular to describe the disorders led to difficulties in authenticating and differentiating the disorders in young children:

> "In Shona we say anopenga [they are mad] but level of madness is not easy to delineate for a child aged 10 or less." (KI4)

Another participant found it hard to name the disorders in Shona using the word "*dzenga"* that they could not clarify its meaning when asked to explain the word. Instead, they testified it was like epilepsy:

> "Their brain is incomplete. It is identical to epilepsy." (P5).

Perceived transiency of symptoms

Most participants were reluctant to commit to whether or not symptoms are permanent or temporary. C2 believed their child would outgrow the symptoms:

> "I seriously thought he would outgrow it, that I was over reacting." (C2)

One participant however clarified that transiency of symptoms depended on the interventions employed:

> "The symptoms are definitely permanent especially if there are no timely interventions employed to manage the symptoms." (KI3)

Varying perceptions on aetiology of NDDs

Some believed the aetiology of NDDs was biological, others blamed environmental factors yet some still believed it was spiritual:

> "It is not easy to isolate mental illness from Godly matters and witchcraft. Doctors have their own opinions that vary from others and it doesn't work… A few are born ill. People want to get rich, so they do rituals to steal the gifts of a child". (KI4)
>
> "Mostly genetic. They inherit it." (P4).
>
> "Down-syndrome comes from an extra chromosome X" (KI3).
>
> "The children envelope these problems prenatally and parents rarely notice it before age 3." (P1)
>
> "After consulting spiritual healers, some find out the dead are causing the illness and so stop looking for other solutions… Some are avenging spirits that need appeasement and the parents simply have no means to appease them. They wait for God's will." (P2)
>
> "Their brains are closed up in like containers. These are evil battles with darkness. The brains are stolen." (P5).

Clarity from P5 indicated the supernatural forces are from ancestral spirits.

> "These are the ancestors. They are the source of the dark spirits." (P5)

Perceptions of causes of NDDs as parental negligence and harshness

Some participants blamed parental negligence and their harsh nature in raising children in a variety of ways:

> "Some parents confuse kids. They are harsh and children simply become confused. When the child does not respond because of the confusion, they take a stick to heat the children." (P1).
>
> "Parents can beat a child in extreme ways in the name of discipline [at times we the parents are at fault…we can beat the child to an extent that is not normal, beyond their age." (P6)

Beliefs on aetiology of NDDs influence helpseeking pathways

How individuals viewed the causes of the NDDs determined the preferred way to manage the NDDs:

> "…Prophet knows whether someone is bound. This means they can solve that. So, it depends on the situation. Where one is born that way, there is nothing that can be done because God allowed it." (P6)

> "Some are spiritual wars. Only prayers can calm the person down… Some spirits cannot be appeased though. They may require human sacrifice to compensate the avenging spirit of a murdered relative." (P5)

Financial constraints affect diagnosis of NDDs

Affordability of care was a key determinant of care given to the children.

> "As long as parents believe in medical causes, financially most are disabled. …Most in the community are farm labourers and the farms hire people depending on their seasonal needs, rarely on a permanent basis. People earn between 30 and 40 dollars a month. They cannot sustain their daily needs with it, let alone medical bills" (P3)
>
> "The private sector is simply unaffordable. Consultation costs 50 USD. Medication is cheaper in South Africa" (C1)
>
> "We cannot afford private care. Even private schools that give adequate specialised care are beyond our reach. (C2)

One participant blamed parents who diverted financial assistance they got from organisations on behalf of their children:

> "Some take advantage of their children. When they get help, they use the assistance for other uses instead of to help their children." (P1).

Culture shapes worldviews

Culture shapes a way of life for people, informing their beliefs and attitudes. Communities serve to advise its members but some were found not to readily take the advice given:

> "Even if you advise them, they are angry that you are interfering with their lives, meddling. (P1)

One participant clarified however, that the root belief of the caregivers determined acceptability of advice given:

> "Some have faith in *masowe* [apostolic sect, some traditional healers or pastors. Find out first what they believe then advise them according to their beliefs." (P6).

Worldviews impact prejudice and stigma

Negative beliefs and attitudes were associated with prejudice and stigma:

> "Some may be shy, or even fear being the laughing stock" (P1)
>
> "Caregivers may attribute the illness to superstitious causes and so hide away from the community to avoid community judgement. (P4)
>
> "We judge first who it is that has the problem, and that determines whether we step up to help or not" (P2)

Ward 13 participants mainly attributed mental illness to witchcraft activities:

> "Most believe in the supernatural caused to mental illness. Even the nurses tell you need to pray for your child and bad spirits will go away." (C2)

> "Stigma affects the parents also. So, they are embarrassed to look for help" (P1)

> "At times the mother's wickedness is seen as the cause, the illness in the child is punishment for bad sins of the mother… or a curse for wrong doing of the parents." (P3).

Resilience was noted in one participant based on their individual perceptions and attitudes:

> "Everyone has an opinion, if you are not strong, you go mad following all sorts of advice. I decided to trust myself more." (C1)

One caregiver that had a child with ASD showed resilience:

> "I knew there was nothing fishy about my child's condition. So, I did not get pressured to go to the traditional or spiritual healers" (C2)

Previous experience with the health service providers also shaped help seeking behaviours:

> "I lost all confidence in the hospital service. Mostly the queues were long, sometimes no doctors came, and when they did, different ones who did not know your case were available. " (C1)

> "After my initial visit, being placed on a waiting list or a follow-up visit, I decided not to go back, the practitioners seemed confused about my child's condition. They were not competent enough to help my child." (C2)

How caregivers perceive the symptoms determines their stance on seeking help to treat the symptoms. C2 was forced to seek help at the time their child was being aggressive and school pressure was mounting for them to seek psychological services:

> "…we sought help from educational psychologists when he was violent at school. The school demanded it. … Only after some intervention from his ECD B teacher, did he seem to stop the aggressive behaviour."

Inadequate service provision

Mental health service provision was found to be inadequate according to the participants for a myriad of reasons. The nearest hospitals that provide mental health care are in Harare, about 52Km away from Ward 13. NGOs like Hope Orphan Support Services and Seke Rural Home-Based catered for HIV and AIDS related cases.

> "Our hospital doesn't have a mental health staff member."(KI)

> "There are no mental health organisations in Beatrice" (P1).

> "Our public hospitals do not give adequate care." (C1)

Some participants felt a need to improve routine checks for children to include checks for mental health issues rather than keeping focus on the physical aspects only.

> "The centres and schools must do more." (P4)
>
> "Government is letting us down. Schools and hospitals need these specialised services where we can take our children. " (C1).

Community members may help identify odd behaviour

C1 and C2 also showed how other members of the community are important in identifying deviant behaviour in children:

> "…elders spoke. They realised the delayed speech. They suggested something that held down the tongue that needed operating. That's when we went to the paediatrician." (C2)
>
> "My friend encouraged me to get him checked out. That's when I started noticing the signs. Her son seemed to have the same issues too." C1

Education professionals were also important in noticing the problematic behaviours of children in schools.

> "You will realise the teachers can be helpful. The one that taught my child knew much about psychology. " C1

Perceptions on managing NDDs

Various beliefs were found among the participants on how best NDDs could be managed. Some believed caregivers needed to manage their lifestyles and those of their children:

> "Parents need to socialise their children more by allowing them to play with others. Parents tend to close their children up if they think something is wrong with them." (KI3).
>
> "Illnesses can be managed by eating healthy diet." (KI2)

Some suggested consulting medical practitioners. Various forms of assistance were suggested including prevention of prolonged labour, counselling services and medication:

> "They can prevent mental illnesses cause by prolonged labour. Counselling parents also helps because stress is bad. Medication can also assist in managing illness." (KI2)
>
> "Early intervention is necessary. If parents accept their children's conditions early they can get help early enough." (KI3).
>
> "Medical professionals are certified and knowledgeable. They will assist parents better to care for their children." (P3)

> "Seeking medical attention will help the parents understand what is going on with the child. One must however commit and sacrifice." (P4).

> "Counselling from psychologists helps. They can also be advised on the best places to get more help there." (KI2)

> "In addition to seeking medical help, they need to enrol the child in school to learn daily living skills to care for themselves." (KI3)

Attitudes towards medical practitioners and their interventions

Negative attitudes towards medical practitioners and their interventions existed in some of the participants who believed the practitioners'' solution were not permanent.

> "I understand some of the injections just reduce symptom severity. Mental illness issues are complicated. Some are spiritual matters. It is therefore not easy to deal with."(KI4)

> "Some go to traditional healers and prophets. Doctors just give you tablets to reduce the symptoms but not treat them. Tablets make the sick one sleep after taking them that's all. When they awaken, troubles begin once more." (P5)

C1 had trust in the medical professionals due to personal convictions and experience of successful management of their child's illness:

> "I believe in my child's advocate. I have to stand by that. I know it is not spiritual. It is a manageable condition. So far we are managing just fine."

Multiple help seeking pathways

Participants preferred a variety of help seeking pathways. Some indicated a preference of multiple pathways so that all angles of sickness could get an opportunity to be addressed.

> "You must come to church. A spiritual church for the illness to be healed" (P5)

> "I would do both. Doctors can assess. Because sometimes the child appears normal yet they are not. Then I will ask the traditional healers to seek out an explanation on what is happening" (P1)

> "We are Africans. Some people are evil and jealous. We also have ancestors that did bad things. No harm in making sure we address the spiritual issues first. Because without that, even the doctors cannot see. The spirit won't let them" (P2)

Discussion

Factors that affect timely diagnosis interact as various levels including personal, familial, institutional and national levels. This integration is complex and can be analysed using the Bronfenbrenner concepts of the micro, meso, exo and macro-systems (Eriksson et al., 2018). The complex relationships include individual, interpersonal, institutional and national factors.

At an individual level, some participants knew the symptoms and signs of NDDs although the majority was not familiar with them, including KIs who were assumed to be knowledgeable about the NDDs (Banda, 2021). Those that knew the illnesses had encountered someone with the illnesses. Some mistook various illnesses including epilepsy, cerebral palsy, depression and anxiety for NDDs.

Level of knowledge of NDDs affected timely diagnosis. C1 and C2 delayed seeking help because they were not aware of NDDs and their symptoms. This finding confirms concerns raised in previous studies (Ruparelia et al., 2016). Some KIs also showed limited knowledge of NDDs as found in Alharbi (2018). This presents as a barrier to diagnosis since KIs are influential in informing help seeking pathways of individuals.

This lack of knowledge in turn informed on the worldviews of the community and ultimately help seeking behaviours of caregivers. Knowledge informed attitudes, beliefs and behaviours of the communities towards individuals with NDDs, their caregivers and perceptions of effective management. Perceptions that the conditions were supernatural were likely perpetuated by the lack of knowledge which in turn gave rise to stigma, negative perceptions towards efficacy of medical interventions and the role that the caregivers of the children played in the aetiology of the condition. Derogatory terms were at times used in Shona terms like "*dzakadambuka"* (they are broken) or "*kupenga"* (they are mad). This may be an indicator of prevalent stigma and a lack of attention previously given to mental illnesses (Coombs et al., 2021).

Perceptions of C1 and C2 determined the pathways they utilised to get help, basing mainly on their personal beliefs and experience. C1 followed through with diagnosis because it was helpful while C2 decided to withdraw from the diagnosis process due to the belief that the medical practitioners were not knowledgeable enough. Perceptions were also informed by community norms and culture. Some participants believed mental illness was caused by supernatural causes and so could be healed using spiritual and traditional healers. These findings confirmed those of earlier studies (Liang et al., 2016; Tirintica et al., 2018).

Only one participant was aware some symptoms can be transient. This may mean if symptoms evolved or were no longer present, the communities would not know the diagnosis of NDDs was still possible. This is against the knowledge that the diagnostic process relies on noticing behavioural oddities, both present and past (Thapar et al., 2016). The danger is in failing to mention even past symptoms or overlooking any present ones in informing the clinicians.

Participants were unsure of the referral centres they could use and had no local access to institutions that could assist in this referral pathway. This finding was similar to other studies that confirmed lack of access to localised care negatively impacts diagnosis of NDDs (Nsereko et al., 2011; Wainberg et al., 2017). Special needs centres including Sharon Cohen and St Giles were mentioned although participants were unsure of the actual care provided there. Sally Mugabe Hospital and Annex, as the nearest referral centres are found in Harare, about 52km from Ward 13 Seke Rural district. The community thus had limited access to care as a rural community.

This physical lack of access was worsened by the economic problems the community faces as one participant indicated the residents were mainly farm labourers that barely have enough to eat. C1 and C2, as caregivers of children with NDDS, confirmed this financial barrier as quality care was linked to access to private care. C1 complained of expensive medication. C2 gave up her job in the COVID era to care for their child giving them a new role of care. Purpura et al. (2021) also lamented the existence of financial barriers to care.

Stigma was a great barrier in seeking a diagnosis. Participants mentioned that caregivers may shy away from seeking advice or help because of the fear of being labelled. Some mentioned caregivers may protect their children from the public labelling. These findings were similar to previous studies that found how caregivers at times withdrew and shied away from seeking help due to the fear of prejudice or being blamed for their children's illnesses , especially women (Coombs et al., 2021; Wainberg et al., 2017). This stigma found in previous studies was a product of little knowledge (Gabra et al., 2020). The same sentiments can be derived from the current study where some participants automatically viewed familial trends of mental illness to mean that the family members had meddled with dark magic.

Schools remain central in providing insight on the caregivers of abnormal behaviours noted in the children. Both C1 and C2 actively sought assistance for their child when they had enrolled for primary school education. Although this confirms the possibilities of delayed diagnosis in Africa as suggested in previous literature, it also confirms the importance of having knowledgeable individuals in schools as a public sector institution (Godoy et al., 2014; Ruparelia et al., 2016). The role played by the school authorities of pointing out disparities in behaviour buttresses the importance of a multiple players in the diagnostic process (Wannenburg et al., 2018). The current study confirms these findings in the 2 caregivers who had children with NDDs. Being in a school set up for both children gave a norm referencing group in which they could be compared to. Multi-sectoral and multidisciplinary teams across institutions must be formed and adequately educated to be able to correctly identify signs and symptoms which are the basis of referral to the medical professionals.

Preferences for help-seeking pathways varied in this study and these were informed by beliefs individuals held over effectiveness of methods chosen. Participants believed the nature of the illness determined who they could consult as found in earlier studies (Alonso & Little, 2019; Johnston & Burke, 2019). Multiple help seeking patterns were preferred in some participants, while other preferred to consult spiritual healers only and some preferred medical practitioners.

Lack of collaboration between stakeholders proved to give rise to a fragmented flow of information as confirmed by Mangezi and Chibanda (2010). Some participants knew of NDDs and their symptoms while others were ignorant of the same. Some believed in supernatural causes, while other attested scientific explanations to the illnesses. The KIs possessed varying options that at times opposed each other in terms of knowledge of NDDs and how they could be effectively managed yet these are the same people that caregivers need to get enlightenment from collaboration of key stakeholders was found necessary to iron out disparities in information (Ruparelia et al., 2016).

Self-efficacy in caregivers is instrumental in determining diagnosis. Self-efficacy was a product of many factors including cultural, economic and structural factors as insinuated in previous studies (Alonso & Little, 2019; Johnston & Burke, 2019). Caregivers that believe they are able to assist their children by seeking help from mainstream practitioners are likely to get earlier diagnosis. This is evident in C1 who was determined and able to go through the process. C2 on the other hand stopped seeking medical advice because they believed they were not able to access adequate care for their child since they could not afford private care that they thought was best. The rest of the caregivers postulated the general feeling that some caregivers do not seek help if they believe the spiritual causes are beyond what they can fight against.

Conclusions and recommendations

It can be concluded that individual factors like knowledge and attitudes have a bearing on timely diagnosis. Negative attitudes towards medical practitioners have an effect of delaying or totally denying diagnosis of NDDs. These negative attitudes are informed by knowledge of NDDs, previous experience with the medical practitioners, communities in terms of norms and cultural beliefs that inform on how individuals perceive symptoms of mental illness. Knowledge is a necessity across all systems levels. As individuals continue to interact with various subsystems, they develop help seeking behaviours that either aid or deter timely diagnosis of NDDs.

This paper recommends designing programmes and policy frameworks to increase early diagnosis of NDDs. Attitudes, beliefs and knowledge are three factors that are amenable to change. These three are instrumental in changing behaviours and thinking processes in communities to foster increased efforts in obtaining early diagnosis. Early diagnosis is possible if symptoms of NDDs are identified early in childhood and there exists favourable conditions in the environment that promotes consultation with mainstream practitioners. This means communities must get rid of stigma and prejudice, knowledge of NDDs be increased across institutions since humans are social creatures. Norms in the community must favour consultation with mainstream medical practitioners. Furthermore, medical practitioners must share knowledge.

Limitations and delimitations of the study

The study was limited with participant apathy in the KI. The researcher however utilised data triangulation comparing information from the KIs with that of the caregivers interviewed. The exploratory study gave insight to idiographic information of the participants. Future studies could therefore utilise this information to carry out studies that evaluate whether factors raised in the study can be generalised to other rural settings in Zimbabwe.

Researchers could also investigate the effectiveness of utilising theory of change models to modify thoughts, behaviours and attitudes of individuals to foster change in communities and individuals.

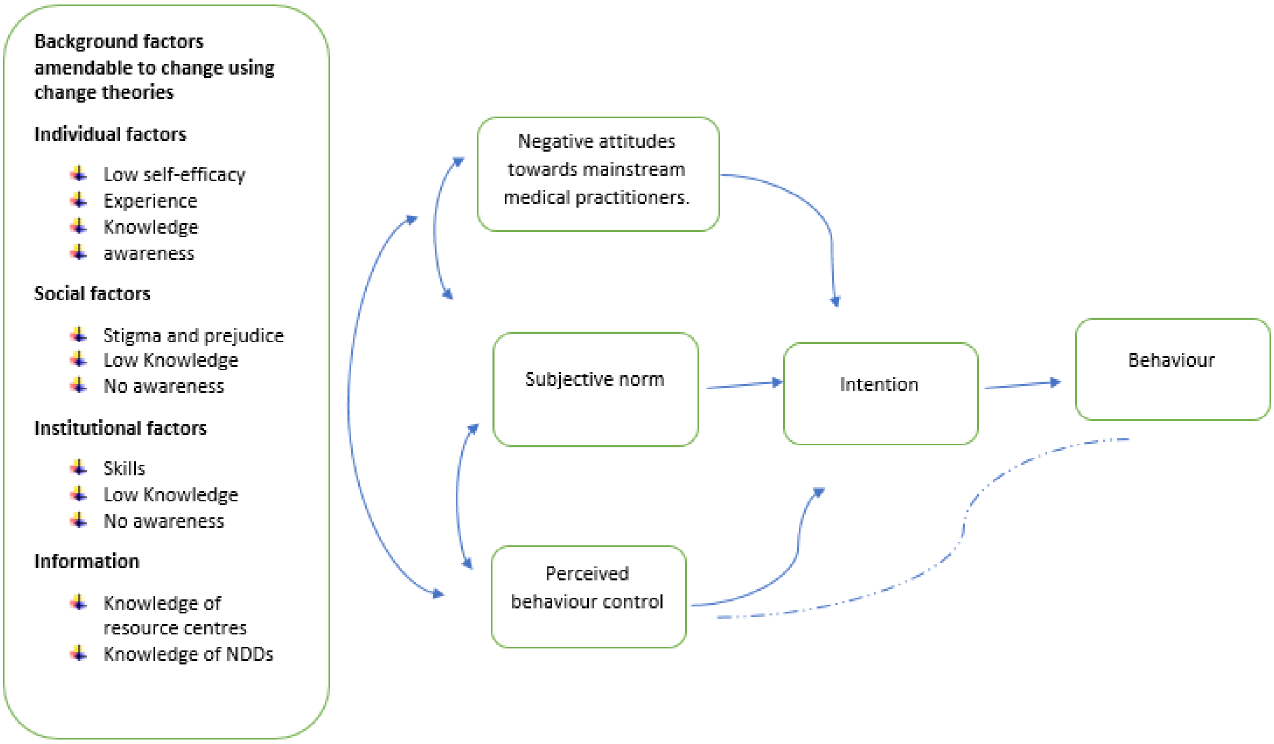

Figure 1: Pathway to behaviour modification using the theory of planned behaviour model (Source: Banda, 2022)

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The Correlation between Increased Frequency of Antenatal Care Visits and Early Registration for Antenatal Care with Positive Birth Outcomes among Women in Hatcliffe Suburb in Harare

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Abstract

The World Health Organisation (WHO) recommends early registration, regular and consistent attendance of antenatal care (ANC) sessions for all pregnant women. There are notable gaps in the uptake of ANC services in some densely populated areas that lack sufficient resources in Zimbabwe.

To determine the relationship between ANC visits and selected birth outcomes among women aged 15-49 from Hatcliffe, Harare.

This was a health facility based analytical cross-sectional study. An interviewer administered questionnaire was used to collect data. Data was entered and analysed using SPSS version 25. Descriptive statistics, and associations between dependent and independent variables were determined using Pearson's Chi-square and Fisher's exact test. Ethical approval was granted from the Medical Research Council of Zimbabwe (MRCZ/B/1438).

A total of 75 mother child pairs were interviewed. Most (77.3%) had more than four ANC visits out of the recommended 8. Only 36% registered early for ANC services (during first trimester). Most of the children had normal birth weight ≥2500g (80.3%), birth length ≥47cm, (76%), head circumference ≥33cm (80%), and (Appearance, Pulse, Grimace, Activity, and Respiration) APGAR score ≥7 (96%). A positive association was observed between number of ANC visits and birth weight [Odds ratio (OR) 7.6; 95% Confidence Interval (CI) 1.6, 36.4 (P=0.013)], birth length [OR 6.1; 95%CI 1.8, 20.1 (P=0.010)], and head circumference [OR 4.3; 95% CI 1.3, 14.8 (P=0.013)]. Positive associations were also observed between timing of registration and birth weight [OR 1.2; 95% 1.05, 1.36 (P=0.045)], birth length [OR 0.16; 95% CI 0.03, 0.76 (P=0.012)].

In this study increased frequency (greater than 4 visits) and registration during first trimester for ANC had a positive relationship with birth weight, birth length and head circumference. These findings validate the need for improving the uptake of ANC services, early registration for ANC in the first trimester and adoption of community wide strategies to ensure that pregnant women attend all recommended visits for improved birth outcomes in this and related settings.

Keywords: ANC, frequency of visits, prenatal care, pregnant mothers, low birth weight, stunting, Zimbabwe

Introduction

Antenatal care (ANC) is one of the core interventions for improving maternal and birth outcomes (WHO, 2016). The overall aim of ANC services is to deliver evidence-based interventions delivered at critical times during pregnancy. According to WHO's definition, the components of ANC include: risk identification; prevention and management of pregnancy-related or concurrent diseases; and health education and health promotion in order to ensure the best health conditions for both mother and baby during pregnancy (WHO, 2016).

In low- and middle-income countries (LMICs) like Zimbabwe, the use of antenatal care (ANC) services increased significantly in 2002 with the introduction of Focused ANC (FANC), a targeted approach aimed at early detection and management of complications (WHO, 2002). Despite this improvement, there remains a need to enhance both the utilisation and quality of ANC services (Zimbabwe National Statistics Agency (ZIMSTAT) & ICF, 2024). This is particularly crucial given that the prenatal period is a vital aspect of the '1000-day window of opportunity' (McDonald & Thorne-Lyman, 2017). The first 1000 days are a critical period of growth and development in a child's life spanning from conception to a child's second birthday. It is referred to as a 'window of opportunity' because health and nutrition interventions during this stage can significantly and positively impact a child's developmental outcomes (Nores & Barnett, 2010). Early registration (during first trimester) and regular access by pregnant mothers to quality ANC services has potential to reduce maternal mortality and morbidity in LMIC settings (Tunçalp et al., 2017). The WHO recommend initiating ANC visits during the first trimester (ideally within the first 12 weeks) of pregnancy (WHO, 2016). Inadequate quality contacts between health workers and expectant mothers often results in rising deaths of mothers during delivery and some poor pregnancy outcomes; preterm birth and low birth weight (LBW) (Chou, Walker, & Kanyangarara, 2019). Nearly 15 million infants worldwide are born preterm each year and almost 20 million children worldwide are born with LBW (Ohuma et al., 2023; Okwaraji et al., 2024). In Zimbabwe, the average proportion of babies born with LBW according to ZDHS 2023-2024 was 9.3% for urban and 8.7% for rural (Zimbabwe National Statistics Agency (ZIMSTAT) & ICF, 2024).

ANC services have long been endorsed as a major means to identify and to reduce the risks of pre-term, low-birth weight, and other adverse pregnancy conditions and birth outcomes (WHO, 2016). However, there is limited evidence on the uptake and impact of ANC services in LMICs to inform programme, policy decisions and social behaviour change communication strategies (SBCC) (Gamberini, Angeli, & Ambrosino, 2022; Kuhnt & Vollmer, 2017). The new ANC guidelines in Zimbabwe recommend that all pregnant women receive at least eight antenatal care (ANC) contacts with a skilled provider during pregnancy (Ministry of Health and Child Care (MOHCC), 2018). These contacts should include urine testing for bacteriuria and proteinuria, measurement of blood pressure, blood grouping and Rhesus factor determination, blood testing for syphilis, HIV, and anaemia, as well as weight and height measurements (Ministry of Health and Child Care (MOHCC), 2018; WHO, 2016).

In 2024, ANC coverage from the Zimbabwe demographic health survey showed that 71% of women (15-49 years) who gave birth 2 years before the survey had received 4 or more contacts from a skilled worker during pregnancy (a decrease from 73% in 2015), whilst only 9% had attended all 8 contact visits (Zimbabwe National Statistics Agency (ZIMSTAT) & ICF, 2024). Only thirty-four percent of women had attended their first ANC contact during the first trimester, a decrease from 37% (2010-2011) (Zimbabwe National Statistics Agency (ZIMSTAT) & ICF, 2024). This shows the need to expand the coverage and utilisation of ANC services in Zimbabwe. In addition, there are still worrying gaps in knowledge and impact of ANC services in population dense low resourced areas of Zimbabwe. Therefore, this study investigated the relationship between frequency and timing of ANC visits and birth outcomes among women aged 15-49 years in Hatcliffe suburb, Harare, Zimbabwe.

Methodology

Study design and setting

A facility based retrospective cross-sectional study was conducted to establish the relationship between ANC visits and birth outcomes in Hatcliffe. The study recruited women with children below 2 years of age attending a polyclinic in Hatcliffe, Harare for routine growth monitoring services. The ANC clinic at this community facility was used as the study site. Hatcliffe suburb is a peri-urban high density community in North-East of the capital city Harare. The area has the following geographical coordinates 17° 41' 18'' South, 31° 6' 35'' East and experiences subtropical highland climate or temperate oceanic climate with dry winters. Based on the results of the 2022 national census, Hatcliffe has a population of 86639 people (ZIMSTAT, 2024). Hatcliffe lacks comprehensive healthcare resources and faces socioeconomic challenges that limit access to adequate antenatal care for pregnant women (Masimba & Walnycki, 2024).

Sampling and sample size determination

While a larger sample size may offer broader generalisability, the primary aim of this study was to explore the relationship between ANC visits and birth outcomes within this specific community. The use of the chosen sample size in this study was compounded by the constraints of its facility-based nature, wherein only 75 mother-child pairs were available for recruitment. Convenient sampling method was used to select mothers attending the growth monitoring and ANC sessions at Hatcliffe polyclinic. Mothers always bring child health cards for ANC visits and this ensured collection of correct information on birth weight, birth length and APGAR score.

Data collection and tools

The questionnaire used in the study was adapted from the multiple indicator cluster survey (MICS) tool (MICS, 2014). This interviewer administered questionnaire was used to collect data on the number and timing of ANC visits, type of ANC service provider, content of ANC, which include blood pressure measurement, blood and urine samples taken and iron and folate supplementation. Birth outcomes (the child's length, weight, Apgar score and head circumference) were recorded from the child health card.

Definitions and cut-offs

Early registration for ANC was defined in this study as registering within the first 12 weeks of pregnancy and registration after 12 weeks of pregnancy was regarded as late registration. The definitions of normal birth weight (≥2500g), length (≥46.9 cm) and head circumference (≥32.9 cm) were based on standard published methods (Villar et al., 2014). While birth complications were defined as presence of any of the following: birth by Caesarean section, longer duration of labour (> 7 hours) and preterm birth (delivery before 37 completed weeks of gestation based on the last self-reported menstrual period) (WHO, 2017). Adequate ANC visits were based on WHO guidelines whereby eight are considered as adequate. (WHO, 2016). We used a cut-off of four or more visits based on similar studies for comparability (Kuhnt & Vollmer, 2017).

Ethical Considerations

The study was conducted in conformity with the Helsinki Declaration. The study was introduced and approved by the Hatcliffe Polyclinic Administrator and Matron in charge of the ANC clinic. Ethical approval was sought and granted by the Medical Research Council of

Zimbabwe (MRCZ/B/1438). Written informed consent was obtained from the study participants.

Data analysis

Data collected was entered and analysed using SPSS v 25 (IBM Inc). Normality of data was assessed using the Shapiro-Wilk test and visualisations via Q-Q plots. Continuous data was presented as mean ± standard deviation (SD) while categorical data was presented as frequencies and percentages. Pearson's Chi-square test was used to compare categorical data, when cell counts were less than 5, Fisher's exact test was used instead. Level of significance was set at $P<0.05$.

Results

Demographic characteristics of participants

A total of 75 mothers of children aged 0-24 months consented to participate in this study. Table 1 presents a summary of the demographic variables of the participants. The youngest mother interviewed was 18 years old and the oldest was 45 years. Most of the women were married (84%), and most had achieved at least secondary school level of education (70%). Out of the 75 women, 93.2% received care from a nurse and a smaller number (6.8%) were attended to by a doctor during ANC period before delivery. In terms of assistance during child birth, 74.7% were attended to by a nurse and 21.3% by a doctor.

Most of the women had the following basic ANC assessments: blood pressure assessed (74%), urine sample collected (74%), iron and folate supplementation provided or prescribed (76%). Almost all infants of interviewed mothers had been delivered at a health facility (94%). The mean ±SD duration of labour was 7.6 ±4.7 hours and the prevalence of normal delivery was 89.3%. The mean ±SD birth weight was 2804± 3.96g, birth length was 48.44 ±3.92 cm, head circumference was 33.91 ± 1.91cm (Table 2).

Table 1: Demographic and selected health characteristics of the study participants

Variable		Frequency (n)	Percentage (%)
Total		75	100
Mother`s age (years):	15–19	5	6.7
	20–34	53	70.6
	35–45	17	22.7
Marital status:	Single	2	2.7
	Married	63	84
	Divorced/ Separated	10	13.4
Education level:	No formal education	2	2.7
	Primary	5	6.7
	Secondary	53	70.7
	Tertiary	15	20
Sex of child:	Boys	36	48
	Girls	39	52
Child age (months):	0-6	29	38.7
	7-12	21	28
	13-24	25	33.3
Child`s birth order:	1st born	21	28
	2nd to 5th born	54	72
ANC staff consulted:	Doctor	5	6.8
	Nurse	68	93.2
Blood pressure measured		74	98.6
Urine sample assessed		74	98.6
Iron and folate supplementation		57	76
Tetanus injection		67	89.3
Birth delivery by:	Doctor	16	21.3
	Nurse	56	74.7
	Relative or friend	3	4
Place of delivery:	Home	4	5.3
	Health facility	71	94.7
Mode of delivery:	Normal	67	89.3
	C-Section	8	10.0

Table 2: Selected maternal and neonatal outcomes[1]

Variable	Mean ±SD
Duration of labour (hrs)	7.6±4.8
Birth weight (g)	2804±40
Birth length (cm)	48.4±3.9
Head circumference (cm)	33.9±1.9

[1] N=75 except for duration of labour N=67

Relationship between number of ANC visits and birth outcomes

A correlation was observed between number of ANC visits and birth weight [OR 95% CI; 7.6 [1.6, 36.4] (*P*=0.013)], birth length [OR 6.1; 95%CI 1.8, 20.1 (*P*=0.010)], and head circumference [OR 4.3; 95% CI 1.3, 14.8 (*P*=0.013)]. There was no relationship between the number of ANC visits and Apgar score (*P*=0.127) (Table 3).

Table 3: Relationship between number of ANC visits on birth weight, length, head circumference and Apgar score

Variable		**ANC visits**			
	Total n=75	**less than 4** n=17 **n (%)**	**4 or more** n=58 **n (%)**	***P*-value**	**OR (95%CI)**
Birth weight (<2.5kg)	8 (10.6)	5 (42.1)	3 (5.4)		
Normal (≥2.5kg)	67 (80.3)	12 (57.9)	55 (94.6)	0.013*	7.6 (1.6, 36.4)
Birth length (<47cm)	18 (24.0)	9 (57.9)	8 (14.3)		
Normal (≥47cm)	57 (76.0)	8 (42.1)	49 (85.7)	0.010*	6.1 (1.8, 20.1)
Head circumference (<33cm)	15 (20)	7 (42.1)	8 (12.5)		
Normal (≥33cm)	60 (80)	10 (18.3)	50 (81.7)	0.013*	4.3 (1.3, 14.8)
Apgar Score (<7 points)	3 (4)	2 (10.5)	1 (1.8)		
Normal (≥7 points)	72 (96)	15 (89.5)	57 (98.2)	0.127	7.6 (0.6, 89.6)

[1] Chi-square test of association was used to obtain *P* values and Odds ratios except where cell count is<5 Fisher's exact test was used. **P* value significant at *P*<0.05

Comparison of the relationship of early vs. late registration for ANC with the birth outcomes

There was a significant correlation between timing of registration and birth weight [OR 1.2; 95% 1.05, 1.36 (*P*=0.045)], as well with birth length [OR 0.16; 95% CI 0.03, 0.76 (*P*=0.012)]. There was no significant association between early registration of ANC and infant Apgar score (*P*=0.293) (Table 4).

Table 4: Relationship of early vs. late registration for ANC with the birth outcomes

		Registration for ANC			
Variable	**Total** **n=75, n (%)**	**Before 1st trimester** **n=27**	**After 1st trimester** **n=48**	**[1]*P*-value**	**OR (95%CI)**
Birth weight (<2.5kg)	8 (10.6)	0	8	0.045	1.2 (1.05, 1.36)
Normal (≥2.5kg)	67 (80.3)	27	40		
Birth length (<47cm)	18 (24.0)	2	16	0.012	0.16 (0.03, 0.76)
Normal (≥47cm)	57 (76.0)	25	32		
Head circumference (<33cm)	15 (20)	2	13	0.070	0.2 (0.04, 1.04)
Normal (≥33cm)	60 (80)	25	35		
Apgar Score (<7 points)	3 (4)	2	1	0.293	3.7 (0.32, 43.5)
Normal (≥7 points)	72 (96)	25	47		

[1] Fisher's test of association was used to obtain *P* values and Odds ratios

Discussion

The current study sought to investigate the relationship between frequency and timing of ANC visits with various selected birth outcomes in women aged 15-49 at Hatcliffe Polyclinic, Harare. In this study increased frequency and early registration of ANC visits had a positive relationship with birth weight and length. Only for head circumference was the relationship significant for the number of ANC visits. Similarly, a study conducted to identify a broad range of interventions that positively affect pregnancy outcomes and reduce infant mortality found that increased frequency and proper timing of ANC visits were found to be effective in producing positive birth outcomes such as higher birth weight, stunting and underweight reduction (Kuhnt & Vollmer, 2017). Other studies have come to the same conclusion that ANC visits are an instrumental factor in improving birth outcomes (Habte, Tamene, & Melis, 2024; WHO, 2016).

In the current study, early registration for ANC had a positive relationship with the birth weight. Studies from various regions, including Africa (Engdaw et al., 2023) and China (Wenling et al., 2024), confirm that early registration is positively correlated with birth weight. A study conducted in Tajikistan found that having the first antenatal care (ANC) visit during the first trimester was associated with an increase in birth weight by 304 grams (Habibov, Fan, Campbell, & Cheung, 2017). Based on these results, initiatives aimed at encouraging early registration for ANC among mothers could be beneficial in reducing the risk of LBW infants. Although only 10.6% of children in our study had a LBW, community awareness campaigns are recommended as a strategy to prevent adverse birth outcomes in line with the WHO target to achieve a 30% reduction in LBW in communities by 2025 (WHO, n.d.).

From this study, there was no relationship between the number of ANC visits and the Apgar score of the new-born. On the contrary, studies in Bangladesh (Doss, ElRayes, & Shireen Rajaram, 2023) and Brazil (Mendonça et al., 2022) that examined the relationship between the number of ANC visits and infant Apgar scores found a positive relationship between ANC visits and infant Apgar scores. The difference in our results may be attributed to variations in sample sizes. Our study enrolled 75 women, whereas the Brazil study involved 1028 women from both public and private health institutions, and the Bangladesh study enrolled 182 women in a refugee camp. This may also be reflective of the differences in the quality of care; for example, the study among the refugees who were receiving humanitarian aid in Bangladesh, and the Brazil study included women from both private and public settings. The current study was conducted in Hatcliffe a high-density area with reduced service provision (Masimba & Walnycki, 2024). We recognise that numerous other socio economic and environmental factors, including maternal education, wealth quintile, and the gender of the head of household, influence birth outcomes as indicated by Rahut et al. (Rahut, Singh, & Sonobe, 2024). However, these aspects were not the primary focus of this study.

In this study, the mean duration of labour was found to be 7.6 hours. Studies that have investigated labour progression show variations in the onset and duration of labour in pregnant women (He et al., 2023). Studies have indicated a median/mean duration of the active phase (<4.5cm dilation) in nulliparas women ranging from 2.4 to 8.4 hours, and in multiparous (1.5 to 3.4 hours) whilst second stage of labour (period from full dilation of the cervix until the birth of the infant) median duration from 16 to 93 minutes in nulliparous women and mean of 1.4 to 5.7 hours in multiparous women (He et al., 2023). The current study did not fully assess parity or the use of epidural analgesia, key factors influencing labour duration; thus, limiting our ability to make adequate comparisons with existing literature.

The majority of women in this study received care from nurses. According to the World Health Organization (WHO, 2021), nurses, especially midwives, provide a substantial portion of maternal delivery services globally. To improve neonatal outcomes and achieve the WHO's global target of 'Health for All', it is recommended that more nurses be trained, underscoring the critical role of this professional group (WHO, 2019).

This study was localised in an urban setting hence findings may not be representative to those in rural areas and those in urban areas who seek services in the private sector. This focused approach allowed for an in-depth analysis of the targeted population, ensuring that the findings remain relevant to the local context. These findings can be used to design appropriate messages for awareness campaigns aimed at improving ANC attendance in similar settings. Future studies may consider larger samples to validate these findings across broader settings.

Conclusions

This study found that increased frequency and early registration for antenatal care (ANC) visits are positively correlated with birth weight, birth length, and head circumference. These results underscore the importance of enhancing the uptake of ANC services, including early registration in the first trimester and the implementation of community-wide strategies to ensure pregnant women attend all recommended visits. Such measures can significantly improve birth outcomes in this and similar contexts. Consequently, nutrition and health education programmes targeting all women of childbearing age are essential.

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Public Awareness and Utilisation of Emergency Medical Services in Nyamhunga: A Case Study of Nyamhunga, Kariba, Zimbabwe

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Abstract

The study sought to determine the level of awareness and utilisation of EMS services among the public in Nyamhunga, Kariba, Zimbabwe. Emergency medical care services are emergency services that provide basic emergency assistance and care, which include road ambulance services, air ambulance services, and water and fire rescue services.

The objectives of the study were to find out the level of awareness of EMS among Nyamhunga residents, to explore the relationship between the awareness of EMS with the time it took to respond and the quality of care accorded in case of emergencies, and to identify the factors influencing the effectiveness of the awareness campaigns on EMS awareness within the EMS industry in Kariba.

The quantitative research approach was used in this study, where structured questionnaires were distributed among representative samples. The study findings indicated that people residing in Nyamhunga were characterised by a generally low level of awareness about EMS; however, this varied significantly across demographic groups.

It was found that increased awareness of EMS was associated with faster response times and better quality of care in emergency situations. Other important determinants of the effectiveness of the campaigns of EMS awareness included the availability of information to the targeted populations, strategies for community reach, and trust in health services. The findings identified significant gaps in the communication strategies, and thus there is a need for more effective strategy implementation concerning information dissemination and community outreach.

The findings resulted in various to recommendations of how targeted interventions might be made to enhance the accessibility and effectiveness of EMS in Kariba and create a safer care environment for the community.

Overall, the study provided useful information to guide targeted interventions to increase community participation in Nyamhunga and thus enhance the responses of emergency medicine, allowing a more responsive and safer healthcare environment

Keywords: emergency medical care services, emergency services healthcare, communication strategies

Introduction

The utilisation of emergency medical services (EMS) is a critical component of healthcare, particularly in rural areas, low-income areas, and a growing economy like in Zimbabwe, where access to medical facilities may be limited. Nyamhunga, a high-density suburb in Kariba, Zimbabwe, is one such area where the availability and accessibility of emergency medical services can be a matter of life and death. Emergency medical care services are emergency services that provide basic emergency assistance and care, which include road ambulance services, air ambulance services, and water and fire rescue services. There is, therefore, a cause for concern that in many cases, members of the community would prefer other means of transportation when it comes to EMS rather than utilization of the already existing EMS available. There are expected negative consequences associated with the refusal to call ambulances for emergency medical assistance. It is completely mystifying that seriously ill patients would forego an ambulance with trained emergency medical technicians, opting for a taxi (Mehmood et al., 2018). This study aimed to investigate the level of public awareness and utilisation of emergency medical services in Nyamhunga, with a focus on identifying the factors that influence the use of these services. The findings contribute to the existing body of knowledge on emergency medical services in rural areas, and provide valuable insights for policymakers and healthcare practitioners seeking to improve healthcare outcomes in Nyamhunga and similar communities.

Methodology

The research used a quantitative approach in collecting and analysing data where the focus was on numeric data and statistical analysis to draw conclusions about the awareness of Nyamhunga residents regarding the availability of emergency medical care services. The research utilised the quantitative research approach because it allowed for the collection of numerical data that can be analysed using statistical techniques to determine the level of awareness among residents. This helped in the provision of tangible evidence and insights into the effectiveness of the various current campaigns or programmes for creating awareness. This was also a method of generalising findings from a population larger than the residents who lived in Nyamunga. Therefore, through the survey conducted on a representative sample of its residents, researchers made conclusions about the general awareness of emergency medical care services in communities like these.

Research design

A research design refers to the specific plan or blueprint that outlines the detailed steps and procedures for carrying out the research study. The study adopted the cross-sectional survey design. According to Creswell, as cited by Rodgers (2019), a cross-sectional survey design involves collecting data at a single point in time from a sample of participants. This design was appropriate for the research topic, as it allowed the research to gather information about the current awareness levels of Nyamunga residents regarding emergency medical care services. The research adopted this design because surveys are an efficient way to collect data from a large and diverse sample of participants.

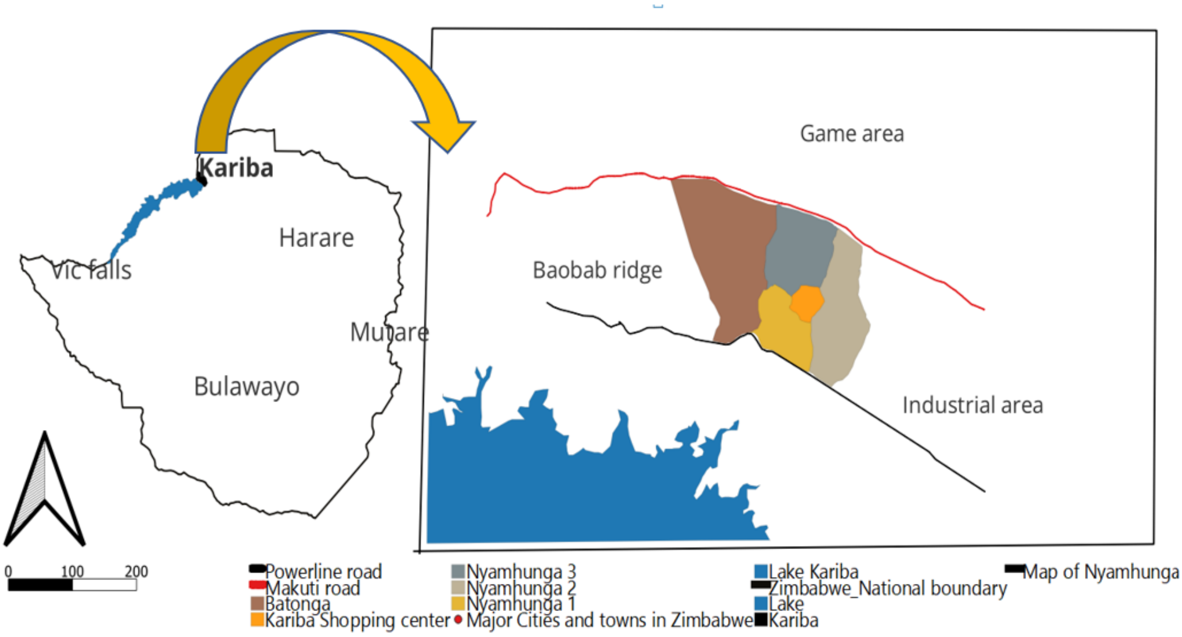

Figure 1: Setting of Kariba

Target population

The population of the study encompassed all residents of Nyamhunga, a suburb in Kariba, Zimbabwe, from sections 1-4 (Nyamhunga 1, 2, 3, and Batonga). The research focused on this specific population to gain insights into their perceptions, knowledge, and attitudes towards EMS awareness and its impact on the community. According to ZIMSTAT (2023), the population is estimated to be approximately 5,000 individuals.

Sample and sampling procedures

Sampling is the process of selecting a subset of individuals, items, or events from a larger population to study and make inferences about the population as a whole (Bhatarjee, 2021). Since the research was based on a quantitative approach, the research used a simple random sampling technique. This method is a probability sampling technique in which every individual or element in the population has an equal chance of being selected for the study (Creswell & Creswell, 2022). To conduct simple random sampling, the researchers first created a list of all households in Nyamhunga, Kariba, Zimbabwe. The list was obtained from the local council. Next, the researchers used a random number generator to select a random sample of households from the list (in Excel). Using Rao's soft sample size calculator, the sample size was 377. This was accumulated by calculating, using a percentage of an unknown population, a 5% margin of error, a 95% confidence level, and a 50% response distribution. The researchers visited each randomly selected household and administered a questionnaire to the household head or a responsible person to gather data on their awareness and utilisation of emergency medical services.

Table 1: Awareness of Ambulance Services in Nyamhunga

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	164	63.8	63.8%	100.0
	No	93	36.2	36.2%	100.0
	Total	257	100.0	100.0	

Awareness of the availability of an ambulance service in Nyamhunga indicates fair awareness in the community in that a total of 164 respondents were aware of the service, whereas 93 indicated unawareness. A valid percent of 63.8% of yes responses indicates a very strong recognition of the ambulance services available, suggesting that a majority of the residents in the study understood that such important health resources exist and are accessible. Cumulative percent shows that all of the respondents were in one of the two categories and did not include missing data, and there was complete data on this question. This meant that 36.2% of the participants were uninformed, which is an opportunity for further outreach efforts to make sure even more community members are informed about the availability and role of ambulance services in emergency situations.

Table 2: Self-Rated Knowledge of Ambulance Service

Knowledge Level	Frequency	Percentage %
Very Good	15	5.8
Good	30	11.7
Average	60	23.4
Poor	77	30.0
No Knowledge	75	29.2

Data showed that a larger percentage of Nyamhunga respondents reported poor knowledge regarding the subject matter of ambulance services, as evidenced by 30.0% characterising their knowledge as poor and 29.2% stating no knowledge, for a cumulative total of more than half, or 59.2%, describing themselves as uninformed about the subject. Thus, the distribution suggested an average self-rated knowledge of between poor and average, since its mean value was approximately 2.35 points on a scale ranging from lower values for less knowledgeable respondents to higher values representing more knowledgeable subjects. Poor being the mode of the responses shows that poor awareness persists in the community. Such findings created a clear need for targeted educational initiatives aimed at improving the state of public awareness and understanding of the ambulance service, all being fundamental to the improvement of emergency response and overall community health outcomes.

Table 3: Knowledge of ambulance contact numbers

Knowledge of Ambulance contact Number

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Yes	81	31.5	31.5	31.5
No	176	68.5	68.5	100.0
Total	**257**	**100.0**	**100.0**	

The knowledge of the contact numbers for ambulance services is quite low among the subjects, as only 31.5% confirm knowing the contact numbers for ambulance services. Therefore, the majority of the subjects, constituting 68.5% (176 persons), indicated they did not have the knowledge. The percentage distribution remained the same valid percentage: yes, 31.5%; no, 68.5%; meaning these figures were accurate. It was further supported by the fact of the cumulative percentages: 31.5% of the respondents who were aware of the contact numbers and 100% representing the total population surveyed.

Table 4: Response time rating

Response Time Rating	**Frequency**	**Percentage**
Excellent	48	12.7
Good	115	30.5
Average	153	40.6
Poor	61	16.2

A total of 40.6% described the response time as average, showing from their perspective that there was a perceived need to increase efficiency in ambulance services. Only 12.7% of the answers described the response time as excellent, which indicated that there were some challenges that hit overall performance as perceived by the community.

Table 5: Correlation analysis of response time and quality care

Variable	Response Time	Quality of Care
EMS Awareness	0.675	0.812

The correlation analysis revealed a strong positive relationship between the level of awareness of EMS and perceived response times, with a correlation coefficient of $r = 0.675$ ($p < 0.01$), as well as a notable correlation with perceived quality of care, indicated by $r = 0.812$ ($p < 0.01$). This means that the more significant the awareness there was, the faster and better the quality of services provided. Therefore, there was a pressing need for strategic public education drives on raising awareness about EMS services. Such efforts are essential for creating better knowledge in the community and involvement in emergency medical services.

Strategies that can influence the effectiveness of EMS awareness in the EMS industry

The research also gathered detailed information on the strategies that may have affected the effectiveness of EMS awareness in the EMS industry in Nyamhunga, Kariba. Strategies ranged from conceptualisation to the necessary approaches that could be followed in improving the knowledge status of Nyamhunga residents on a large scale. Below are the details of the data collected from the research study.

Effective channels for raising awareness

The respondents were asked to identify all the different channels they felt would be appropriate for creating awareness about ambulance services. This open-ended question demonstrated that a combination of channels could yield a multifaceted awareness campaign, which is one that will build education in the masses regarding the role, availability, and efficiency of ambulance services. To this effect, the findings showed a diffuse set of preferred communication methods.

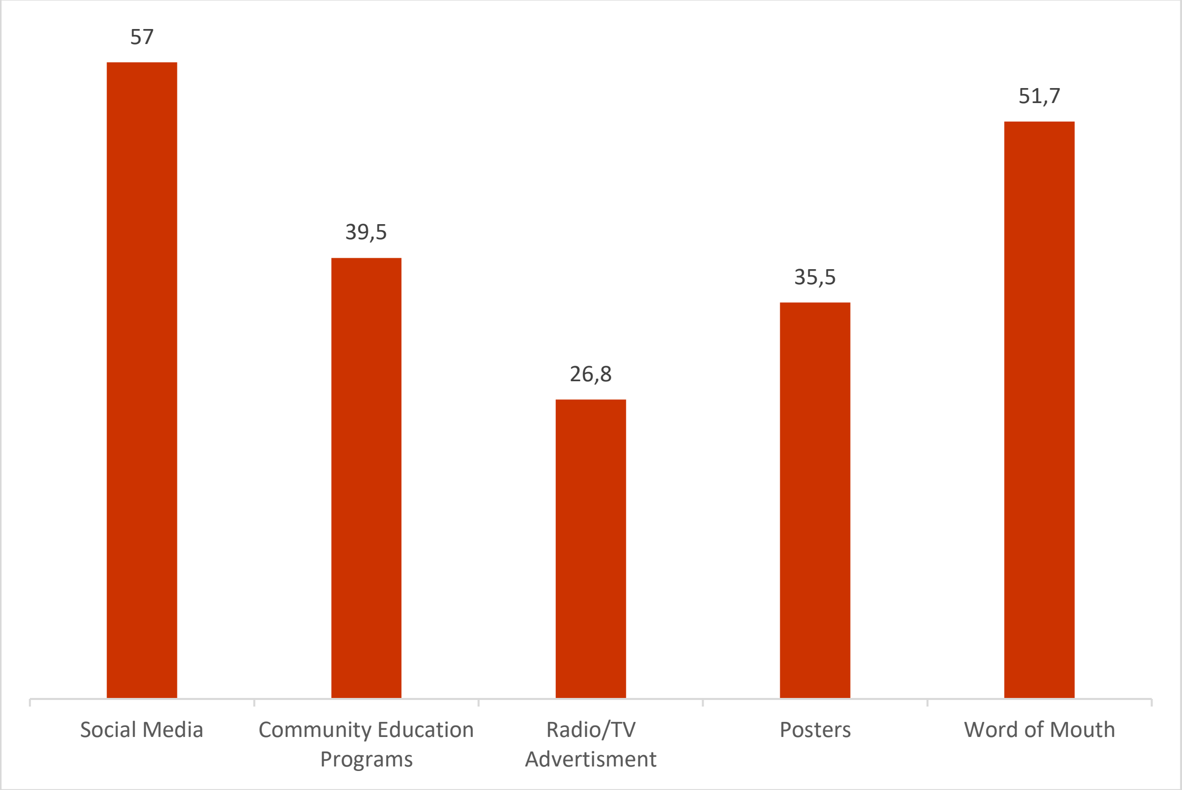

Figure 2: Channels to Improve Emergency Medical Services Awareness

Source: Field data (2024)

The outcome of the survey shows clearly that a multi-channel approach is preferred by the respondents to be more aware of the emergency medical services, and among all, social media stands at 57 percent. This shows that digital platforms are becoming increasingly influential in how information is given out fast and to wide circles, especially among the youth. Community education programmes were also considered very important by 39.5% of the responding participants, which evidences that there was an appreciation for the local, direct engagement and hands-on learning experience that could provide a deeper understanding of EMS. Other media, like radio and television, received support from 26.8%, which would suggest that these channels were still important, but mainly for an older population or populations with less digital engagement. Some (35.5%) preferred posters as the visual means of communication, citing that information is supposed to be readily available in areas that people have to pass through. Word of mouth had the highest rating, with 51.7%, propelled by personal interaction and community discussion as more vital means of passing awareness.

Strategies to Increase Emergency Medical Services Awareness in Nyamhunga

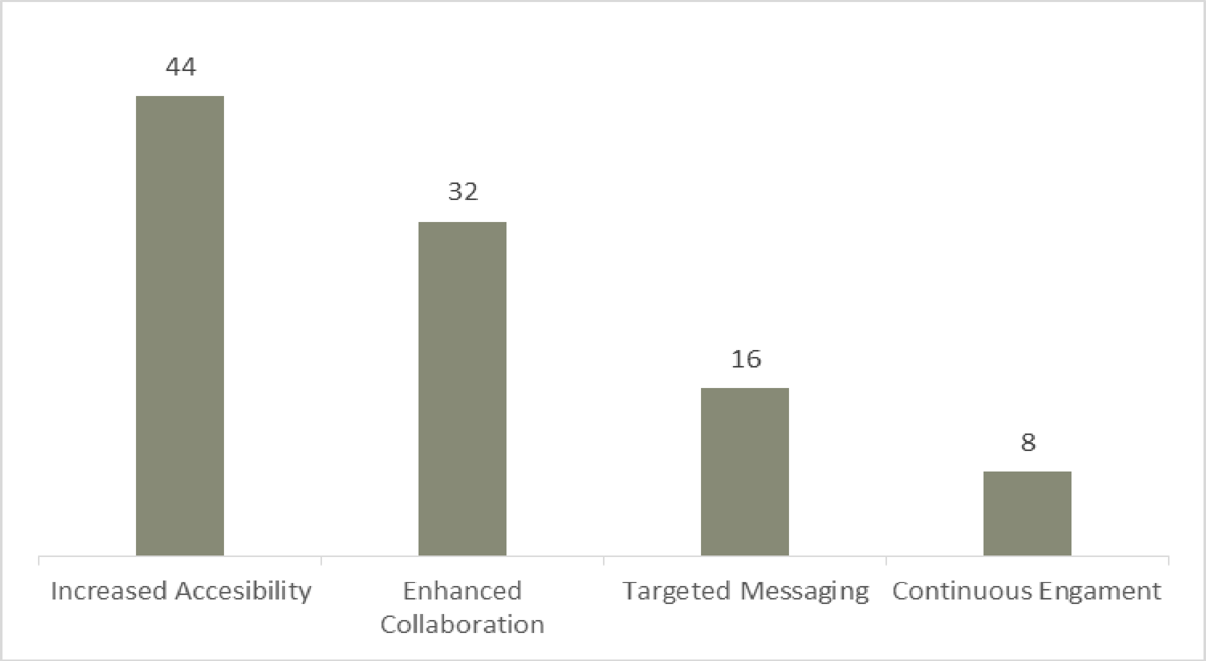

Figure 3: Strategies to increase emergency medical services awareness in Nyamhunga

Source: Field data (2024).

The data in the figure showed the strategies that could be adopted to improve emergency medical services (EMS) awareness in Nyamhunga. The data showed that increased accessibility was the highest strategy, with 44% of the responses citing it as one of the key focus areas. This, therefore, meant that making the resources and information concerning EMS more available and accessible was important in enhancing the awareness of the public. Better collaboration was supported by 32% of participants, and they emphasised that collaboration with many stakeholders involved, such as healthcare providers, local government, and community organisations, should be done to expand outreach. Sixteen percent supported targeted messaging and hence proposed tailoring communication strategies either to a particular demographic or to community needs to further enhance awareness campaign effectiveness. Continuous engagement was the least emphasised strategy, at 8%. This indicates that, while ongoing interaction with the community is of value, it is not perceived to be the highest priority when compared to the remaining strategies. These things reflect a concentration on accessibility and collaboration for the essential elements necessary in raising EMS awareness in the community.

Regression analysis was employed to examine the study hypotheses, and the results are depicted in the subsequent table.

H1: There is a significant positive correlation between EMS awareness and response time.

The analysis revealed a positive correlation coefficient ($r = 0.675$) between EMS Awareness and Response Time, which was statistically significant ($p < 0.01$). This would imply that, with greater awareness of EMS, response time could increase dramatically. With this in mind, we can rule out the null hypothesis-a significant positive correlation exists between EMS awareness and response time.

H2: There is a significant positive correlation between EMS awareness and quality of care.

The results showed a strong positive correlation, at 0.812, between EMS Awareness and Quality of Care, and also proved to be statistically significant at $p < 0.01$. Therefore, this correlation could be interpreted to mean that a high level of awareness of the EMS is associated positively with better quality of care. So, we reject the null hypothesis (H02) and conclude that there is a significant positive correlation between EMS awareness and quality of care.

Discussion

Findings were discussed in the context of available literature, describing how findings compare with previous studies, with implications for practice and future research.

Awareness of emergency medical services in Nyamhunga

Awareness of the status of knowledge of emergency medical services among Nyamhunga residents showed that serious attention was needed because of the huge knowledge gap. Overall, the findings showed that a section of the community had some understanding of what generally the functions of EMS are, although the general awareness was very low. This was evidenced by a review conducted by Chabikuli et al. (2017), which reported that raising the role and scope of work that EMS provides needs to be intensified through public educational efforts. The lack of knowledge on how to access the service, perceived barriers, and the extent of services offered result in hindrances to timely care during emergencies. The need for increased awareness cannot be ruled out because it forms the backbone of community preparation and medical crisis response.

The demographics of the respondents also revealed differences in awareness with respect to age, educational level, and socioeconomic status. Such findings support previous studies done by Ghosh et al. (2019) that young and better-educated people are usually more knowledgeable about health services, including EMS. It tells of targeting educational programmes at population groups that may conventionally have low awareness levels and ensuring information is sent out in a culturally sensitive and accessible way. Community engagement programmes may nurture discussions about EMS and improve shared knowledge in this area; thus, informing members of the community may render them capable of taking the initiative in seeking care in emergency situations. Awareness programmes can only work if they are attuned to local realities. According to Bhandari et al. (2018), tailored interventions, with consideration of a local language, cultural practice, and community structure, have significantly enhanced health education programmes. Stakeholders in Nyamhunga should, therefore, work in collaboration with local leaders and health practitioners to develop appropriate awareness programmes that would be in tune with the people's values and norms. Such collaboration has the potential to inspire trust and thereby increase the diffusion and appropriateness of educational materials distributed in the area.

Ultimately, increasing EMS awareness requires more than just giving information but building a culture in which the community will invest time in health proactively. Empowerment through the acquisition of knowledge among residents could demystify emergency responses and allow the people to adapt more speedily and with effectiveness in the services offered through EMS for better overall health outcomes. The education strategies, as indicated by Caffrey et al. (2020), need to be reviewed in order for them to respond and be effective in stimulating awareness in Nyamhunga. The findings also highlight critical aspects of the health belief model, particularly perceived barriers and perceived benefits, indicating that significant knowledge gaps hinder timely access to care.

The relationship between EMS awareness, response time and quality of care

These findings regarding the level of awareness about EMS and two metrics relating to response time and quality of care in emergencies create a critical implication for public health. Various data indicated that a high level of awareness about EMS is strongly associated with shorter response times. This agrees with the work done by Kwan and Thiessen (2017), in which it was indicated that communities comprising informed citizens tend to make better use of services at the right time, thus minimising delays in care delivery. By knowing when and how to activate the EMS and how urgent it is for timely intervention, individuals are likely to quickly react activation of the emergency services to improve the overall population health from life-threatening situations. The quality of emergency care seemed to be positively related to the degree of awareness among the community. The more informed the residents are regarding the procedures and expertise of the EMS, the more appropriately they would use these services. This can be furthered by the findings of Benabdeljalil et al. (2019), which reflected that improved public knowledge of the principles of EMS translates into better patient outcomes since interventions are done faster and more accurately. In Nyamhunga, the education programmes would not only better prepare the public, but also create better callers of the service. This, in effect, can greatly help medical responders in the mobilisation of the right care through effective communication of key information. From the data, what came out was that people feel increased awareness could help reduce the time taken to assemble resources and personnel during an emergency. This is further supported by studies conducted by Atakites et al. (2021), which established that the more the public is involved and aware, the more coordinated the community responses in case of emergencies. Such training sessions, simulations, and educational workshops help the community understand the significance of timely calls to the EMS and result in a well-informed and responsive community able to take action with dispatch in emergency situations. With these promising associations, the barriers to effective use of EMS due to lack of awareness are still noted. Research from Mulaudzi et al. (2018) indicates that cultural misconceptions and fear of medical services could lead to delays in calling for assistance. Hence, Nyamhunga faced the challenge of not just creating awareness, but breaking down barriers of distrust and misunderstanding. Interventions should be comprehensive, addressing knowledge gaps and the socio-cultural factors prevailing and guiding the utilisation of EMS to ensure long-lasting improvements both in response times and quality of care in the region. The findings showed the health belief model's emphasis on perceived susceptibility and benefits, revealing that enhanced awareness of emergency medical services (EMS) leads to shorter response times and improved quality of care during emergencies.

Strategies that can influence the effectiveness of EMS awareness

Results of strategies to improve the awareness of EMS in Nyamhunga showed different areas of promise for intervention. The data support the fact that the most feasible strategy revealed increasing accessibility to information concerning EMS, as reiterated by Ziegler et al. (2019). Easy access to information through different formats such as digital, print, and community presentations, would ensure a better-informed public. The development of easy-to-use online platforms and mobile apps intended for the distribution of EMS information may prove particularly effective in knowledge gaps, especially among the younger segment of the population, which was more prone to use modern technologies compared to their older peers. The second important strategy arising from the process included an increase in inter-stakeholder coordination; that option received significant approval from participants. This was supported by the results of Ludwick et al. (2020) in their study, which recognised that collaboration between public health organisations and local authorities and/ or community groups increases the effectiveness of awareness programmes. For this reason, coordination in resources and skills would make it easier to develop informational tools that are both educational and relevant to the targeted culture. These partnerships can also facilitate the development of community health worker programmes using local knowledge and contacts to make appropriate awareness for the community on the grassroots level about EMS.

Another way of designing awareness programmes is demographic-based focused messaging. Studies have shown that tailored communication strategies are more representative and effective in reaching a greater diversity of distinct audiences. In Nyamhunga, for example, crafting a message that is sensitive to local languages, norms, and values could result in a much better engagement rate. Any training content should be prepared in alignment with community priorities and concerns related to health emergencies. This would make the information relevant and applicable to the target community. Local stories or testimonials can even further solidify this emotional tie and a sense of urgency when EMS is unavailable. The least amount of support in the survey was continuous engagement; however, this was a key factor in long-term awareness. For long-term awareness, as explained by Jansen et al. (2019), strategies must aim at making the habit of awareness rather than dependence on one-time campaigns among members of the community. This topic discussing EMS and the role of every community member regarding safety could be nurtured through community workshops, health fairs, and school programmes. The momentum built up should be maintained so that Nyamhunga develops a knowledgeable community with regard to awareness and effective engagement with EMS for a better public health status.

The results, directly in line with the health belief model, indicated increased access to information and specific messaging as critical interventions geared toward raising the awareness of communities toward emergency medical services (EMS). Culturally relevant strategies and inter-stakeholder coordination could facilitate dynamic reductions in experienced barriers and thereby increase public going to EMS for health gains associated with health service utilisation.

Conclusion

The knowledge of EMS in Nyamhunga emphasised the dire need for focused educational initiatives that raise awareness and utilisation of such important services within the community. The findings showed that the general trend in the population under survey had a basic understanding of EMS; however, low defects were noted, especially in the older adult population and among those with lower education levels, regarding knowledge of what services were available, how to access them, and reasons for which emergencies required urgency. Moreover, there was across-the-board mistrust of the system due to various issues in response time, quality of care, and personal experiences. All these factors made people in the community reluctant to seek such services, even when their lives were in danger. The study calls for serious outreach and education to demystify EMS, gain trust, and emphasise to them the essence of timely medical intervention. They can therefore be majorly in a position to improve health outcomes in Nyamhunga by better equipping the residents with confidence in facing the health care system. It therefore improves the general capacity of the community to respond to any medical emergency and serves as a useful foundation for future initiatives aimed at enhancing awareness, perception, and utilisation of the EMS within the community.

Recommendations

Based on the identified gaps and findings from the study of awareness of the existence and accessibility of emergency medical services in Nyamhunga, the researchers made various recommendations. First, they developed standard strategies for improvement concerning both knowledge in the community and approaches toward seeking these vital services. These recommendations are hereby included to help address the noted gaps in knowledge, increasing confidence in the working of the EMS system, and thus enabling the residents to seek medical care in time. The following are the recommendations for facilitating a more informed and responsive community towards emergency health care.

Policy recommendation

In step with Zimbabwe's Education 5.0 philosophy, one of the viable pragmatic policy options for public awareness and utilisation of emergency medical services (EMS) within a community of Nyamhunga, Kariba, would be creating a health emergency fund within the community. This would be financed through a small percentage deduction from the salaries of all formal sector workers, similar to NSSA contributions. The pooled resources from this would enhance access to free EMS services across the community to the marginalised segments of society and low-income earners. This policy not only speaks of social responsibility and collective investment in public health but also innovation through micro-financing in finding part of the answer to community challenges. To propel the initiative, an aggressive campaign would be run at local health authorities, formal/informal markets, and academic institutions to inform the public about the initiative to build a proactive health-seeking behaviour culture that is more inclusive of using the available EMS resources. This aligns perfectly with the research objectives by addressing the critical need to enhance awareness of emergency medical services (EMS) among residents of Nyamhunga, creating pathways for improved response times and quality of care, and identifying innovative strategies to foster community engagement and accessibility within the EMS framework.

Resource allocation

To make the Nyamhunga, Kariba Emergency Medical Services thicker with effectiveness and availability, it is proposed that the local council should develop an emergency services infrastructure fund (ESIF) borne by a minimal additional incremental amount added to the rates payable by residents. The new strategy may stabilise and sustain an income stream to acquire EMS equipment and infrastructure such as ambulances, medical supplies, and emergency response facilities. The local council may engender a community-centred posture in establishing this fund by involving residents in budgeting and planning discussions to allow the resources to be allocated in accordance with the real health needs of the community. This might be further consolidated by a performance-based funding pathway designed to reward EMS providers for service delivery and responsiveness. This would also strengthen initiating a community-led funding approach to deal with urgent infrastructural deficits and build ownership among residents, thereby creating further avenues for the improvement of visibility and utilization of EMS. Establishing an emergency services infrastructure fund (ESIF) directly addresses the identified knowledge gap regarding emergency medical services (EMS) in Nyamhunga. This does not only enhance the effectiveness and availability of EMS resources, but also promote community involvement in the planning and allocation of funds, thereby fostering greater awareness and responsiveness to emergency care needs among residents.

Programmes on education

The study recommends an initiation of the community health champions Programme, which could introduce EMS education into the national school curricula from primary and secondary schools, as well as outreach programmes within the community. It may also involve integrating

EMS subjects into primary school to secondary learning curricula, teaching students about health-related emergencies, first aid, and the importance of timely medical interventions. The gap between formal education and community involvement could be bridged by bringing school-age partners together with local health authorities and EMS professionals to facilitate workshops, simulations, and awareness campaigns in the community. Furthermore, a mentorship framework can be developed so that the best students in these modules can be empowered as community health champions to facilitate peer education and outreach in their communities. At this multi-tiered level, life-saving skills equip the younger generation and build a culture of health consciousness and resilience in communities right from the early days. Inherited knowledge would be disseminated adequately and become popularly used for daily lifesaving. By connecting students with local health authorities and EMS professionals through workshops and campaigns, we can close the gap between what is taught in school and what is needed in the community.

Technological recommendation

It is proposed that a mobile application designed by and for the community be developed for Nyamhunga, Kariba, to allow increased efficiency and responsiveness in the emergency medical services (EMS) sector. The name of the app can be Nyamhunga EMS Connect. Such an app could serve various functions. For example, the app would guide local residents by providing real-time information regarding EMS resources available to them, including information on the nearest hospitals, available ambulances, and the identity of emergency response teams. Therefore, it would be very important because during emergency periods people can make quick access to such lifesaving resources. The app would also boost response time for EMS given the emergency alert system through which the residents could quickly inform and alert the EMS about any health emergency. Through such a platform, users may get push notifications with regard to health workshops, first aid training, and other community health programmes, thus creating an informed citizenry. To boost the community engagement, a feedback system for users could allow residents to report their experiences positively and suggest improvements in local EMS practices. Such a technological provision creates the possibility for this connected and proactive community to rise to the occasion in this dire public health scenario.

Future studies

Further studies in this area may look at the assessment of long-term effects of improved awareness and access to emergency medical services on the health status of the Nyamhunga community. Longitudinal studies may be useful in determining how the implementation of strategies identified by the research recommendations improves health service utilisation, community health indicators, and general perceptions about EMS. Researching on a variety of educational interventions that show the most promise could also help bring to light best practices and give an idea of how these successful programmes may be replicated in other areas to help a greater number of people.

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Social Media’s Impact on Young Women’s Self-esteem and Body Image Satisfaction in the City of Kadoma, Zimbabwe

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Abstract

The study sheds light on social media usage. The aim was to assess the effects of social media on young women's self-esteem and body image satisfaction in the City of Kadoma. The study`s objectives were to explore the relationship between social media usage time and body satisfaction, to find out if any relationship exists between appearance comparisons and social media usage, and to examine how age and ethnicity contribute to young women`s social media usage. The research adopted a quantitative approach and a descriptive research design. The social media appearance preoccupation scale (SMAPS) was used as a data collection tool. Descriptive statistics and Spearman`s rho correlation was used to analyse data with the help of the Statistical Package for the Social Sciences version 27.0.1 (SPSS). A sample of 274 was conveniently selected for the study. The findings showed that age and ethnicity are important predictors of social media usage where users aged 26 to 27 and the Ndebele tend to be more active than others. There was a moderate positive correlation between social media usage and body dissatisfaction of $\rho = 0.53$ ($p < 0.001$). *There was no correlation found between appearance comparison and social media usage i.e.,* $\rho = -0.06$ ($p < 0.301$). *The researcher recommends a mixed approach research and encourages digital literacy to users of social media. A mixed approach would provide a holistic assessment of the impact of social media while providing explanations where a quantitative approach fails. Digital literacy would equip users with necessary knowledge and foundation to navigate the digital world positively.*

Keywords: social media, self-esteem, body satisfaction, young women

Introduction

In this era, where technology is now arguably seen as the backbone of modernisation, it may be viewed as socially unacceptable for one not to occasionally spend one’s time one social media. It has become common behaviour for people to glare at their phones and laptops all day communicating with friends, relatives, workmates, business clients or even just entertaining themselves. This study sought to explore the relationship between social media usage time and body satisfaction, to find out if any relationship exists between appearance comparisons and social media usage, and to examine how age and ethnicity contribute to young women`s social media usage. According to a study carried out by Bergagna and Tartaglia (2018) on Italian undergraduate and graduate students, spending considerable time on social media may result in low self-esteem and body dissatisfaction due to constant comparisons of oneself with others or to unrealistic images on the internet. According to Henriques and Patnaik (2020), social media comprises social networking sites, image-sharing sites, video hosting sites, community blogs, bookmarking sites, and gaming sites. Mellor et al. (2013) posit that body image dissatisfaction can be associated with different body shapes and parts such as breast size, curves or skin colour, and eye shape. These developments have attracted many researchers who felt the need to analyse the impact of social media on people.

Background

Gorman (2015) notes that previous research on body satisfaction and self-esteem often focused on traditional media like magazines, television and advertisements. Studies before 2000 highlighted the influence of idealised beauty standards portrayed in media on individuals' body image, perceptions and self-esteem (Yu & Jung, 2018). With the rise of social media platforms such as Facebook, Instagram, and Twitter, research began to explore the impact of these platforms on self-esteem and body satisfaction (Chang, 2019). According to Perloff (2014), studies from around 2000 to 2010 began examining how constant exposure to edited or idealised images, the culture of comparison, and the reinforcement of societal beauty standards on social media affected individuals' perceptions of themselves.

In addition, Grogan (2021) notes that research from 2010 till date continues to explore a deeper understanding of the relationship between social media use and its effects on self-esteem and body satisfaction. He also points out that scholars began examining various factors like frequency of social media use, types of content consumed, engagement with others' content, and the role of peer interactions in influencing body image and self-esteem. Perloff (2014) carried out research in the United States of America which focused on young women's perspectives on the impact of social media use on body image and self-esteem. It explored how different social media platforms influenced their body satisfaction. Fardouly et al. (2015), on the other end, carried out research in the United Kingdom, which compared individuals' actual and idealised selves portrayed on social media profiles and investigated how differences between these images affected body dissatisfaction.

Furthermore, in Africa, Nyambura (2019) carried out a similar study investigating the relationship between social media use and body image concerns among university students in Kenya. The study also examined how social media impacted body satisfaction and self-esteem. The research targeted 347 female students in School of Journalism and Mass Communication at the University of Nairobi and reached a sample size of 183. Some of Nyambura`s findings identified Instagram as a source of influence of ideal body image in Kenya where 89.7% agreed and 10.3% of the respondents disagreed.

In Nigeria, Okoro et al. (2021) examined how social media usage affected body image and self-esteem among adolescents in Nasarawa State. The study further examined the impact of exposure to idealised body images on these individuals' perceptions of themselves. The study comprised 238 sampled participants across 5 departments at a university. Three hypotheses were tested and the result of Hypothesis 1 showed that there was a significant inverse relationship between body image dissatisfaction (BID) and self-esteem scale (SES) [r (230) = -.877, p < 0.05], indicating that the higher the BID, the lower the SES. The result of Hypothesis 2 revealed that physical appearance related comparison (PARC) had a significant negative relationship with SES among female undergraduate students [r (230) = -.303**, p < 0.01]. Lastly, the result of Hypothesis 3 showed that BID and PARC had a significant effect on SES [F (1,230) = 10.589; R2= .739; p<.05], [F (1,230) = 94.071; R2= .471; p<.05], and [F (2,229) = 85.895; R2= .991; P<.05], respectively.

To add more, the number of people using social media in Africa has been gradually increasing due to certain economic and technological developments. AfrikaTech (2020) revealed that in 2020, Africa had 217.5 million social media users, showing a 10% growth compared to the previous year. Statista (2022) reports that the number of African social media users has gradually risen to over 384 million. These reports may be used to understand the rise in body dissatisfaction in the region. Asakitikpi (2016) points out that behaviours such as skin surgeries and skin bleaching are traits which show that some people in African countries such as Zimbabwe, South Africa, Nigeria, and Ghana are not satisfied with their complexion and perceive light-skinned women as more beautiful in comparison to natural black skinned women. Hunter (2011) notes that the existence of skin-whitening behaviours in Africa have existed for many centuries but the rapid increase of such behaviour can only be attributed to the mass marketing of images of white beauty. In some social media platforms such as Instagram and TikTok, the demand and usage of skin-lightening features and filters have generally increased and some users even demand more of them (Uti, 2022). Social media platforms began using advanced algorithms to personalise content, leading to increasingly immersive and addictive user experiences (Guess et al., 2023)

Furthermore, the waves of social media in Zimbabwe are also being felt where phone and laptop purchases and even internet connectivity have improved over the last decade, increasing social media usage (Mpofu, 2017). However, there is little coverage of the implications of social media on young women's self-esteem and body image dissatisfaction. Zimbabwe is a country which is greatly influenced by indigenous culture and some women have resorted to the use of traditional herbs to widen hips and enlarge breasts (Komichi et al., 2022). Men, on the other hand, are also a driving force when they flood positive comments on social networking sites to women with light skin and curvy bodies which in turn causes body dissatisfaction and low self-esteem in other young Zimbabwean women without those features.

According to a report published by Kemp (2022), there were 1.55 million social media users in Zimbabwe in January 2022 and the numbers have still been rising to date. However, not all that occurs on social media is harmless to people and little attention has been given to the impact of using social media platforms.

Therefore, to help young women in Zimbabwe overcome low self-esteem and body dissatisfaction, it is important to find out the causes of such feelings. This research intended to explore such effects and how they are related to social media use. It also attempted to help women build their self-esteem and value their natural beauty which may be affected by social media's influence.

Aim of the study

To assess the effects of social media on young women's self-esteem and body image satisfaction in the city of Kadoma.

Objectives

a) To explore the relationship between social media usage time and body satisfaction.
b) To find out if any relationship exists between appearance comparisons and social media usage.
c) To examine how age and ethnicity contribute to young women`s social media usage.

Research Questions

a) What is the relationship between social media usage time and body perception?

b) What relationship exists between appearance comparisons and social media usage?
c) How does age and ethnicity contribute to young women`s social media usage?

Methodology

The study took a quantitative approach and made use of the descriptive research design. Participants of this research were women aged between 20 and 29 years. This range allowed the researcher to collect data from women who were most likely to own devices or use social media without parental or financial restrictions. Using a population size of 39 520 acquired from ("Kadoma, Zimbabwe — Population and Demographics — City Facts," 2024) a sample of 267 (266.77) was obtained using Cochran`s sample size formula. $\frac{1.96^2\ x\ 0.5\ x\ 0.5}{0.06^2} = 267$

The researcher made use of the convenience sampling method in the business area of the city of Kadoma, targeting young women waiting in line for services, at bus stops and those who visit areas such as salons, restaurants and clothing shops. The researcher focused on potential participants who were readily available and willing to participate. This method allowed the researcher to collect data quickly from a convenient sample of young women and reached a sample size of 274. The sample exceeded the expected size by 7 to cover for any spoiled or skipped items. According to Nikolopoulou (2023), this sampling method uses a non-probability concept where units are selected for inclusion in the sample because they are the easiest for the researcher to access.

The researcher adopted and adapted the social media appearance preoccupation scale (SMAPS) developed by Zimmer-Gembeck et al. (2020). The SMAPS is a measure designed to assess appearance preoccupation related to social media use.

Data analysis

The researcher made use of descriptive statistical elements such as descriptives and frequencies. To determine relationships between variables, the Bivariate correlation method was employed. The descriptive statistics helped the researcher in:

a) Producing demographic information such as age and ethnic group. This helped in understanding social media usage by age range or by ethnic group.
b) Categorising social media use by creating a frequency distribution to categorise and count the levels of social media use among the participants such as heavy users,

moderate users, and occasional users. This helped in understanding the number of young women who fit into each category.

c) Generating body satisfaction and self-esteem scores by creating frequency distributions for body satisfaction and self-esteem scores, and showing the number of participants who fit into different score ranges. This helped in identifying the distribution of responses and whether there were any trends or patterns.

The correlation method helped the researcher in generating correlation analysis by analysing the relationships and patterns that exist among the variables.

Ethical considerations

Ethical approval was sought from the Sanyati District Administrator's Office and Kadoma City Council. The researcher made a great effort to follow ethical guidelines, which were not limited to obtaining voluntary and informed consent of the participants in the research study. Furthermore, the researcher ensured that the confidentiality and privacy of the participants were protected throughout the research process.

Results

Demographic information

Table 1: Demographic statistics

		Age	Ethnic Group
N	Valid	274	274
	Missing	0	0
Mean		24.26	1.49
Std. Deviation		2.703	.732

Table 2: Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	274	20	29	24.26	2.703
Valid N (listwise)	274				

Tables 1 and 2 show demographic statistical scores of the number of participants: 274, who provided information about their age and ethnic group. The missing score is 0 because no questionnaire was spoiled or skipped. Table 2 shows that the minimum age for this research was 20, the maximum 29 and the average age (mean score) was 24.26.

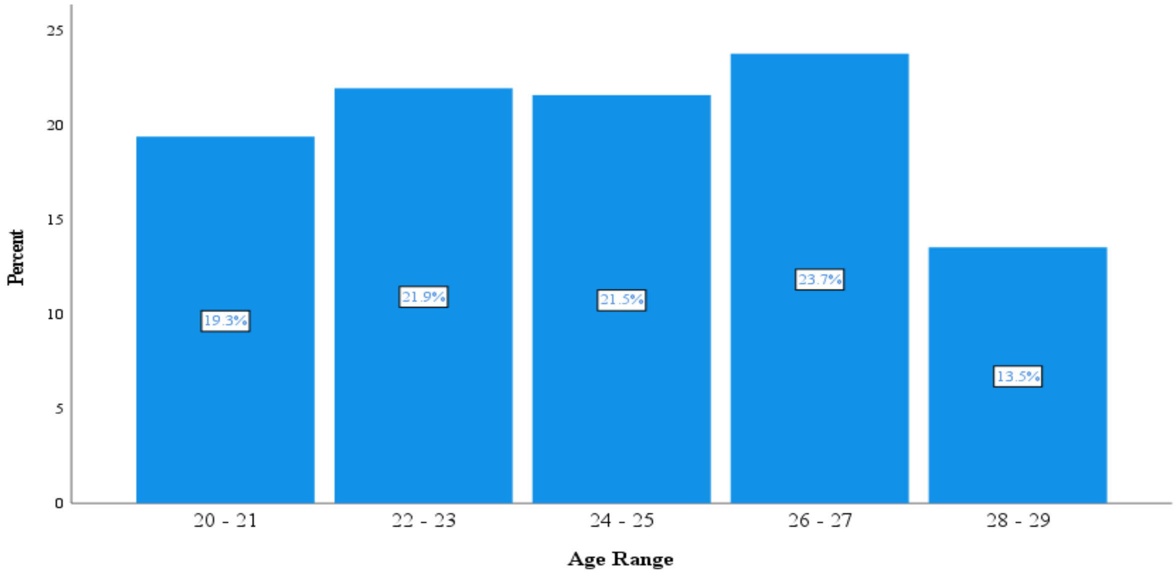

Figure 1: Age range

Figure 1 provides a comprehensive bar graph of age ranges which were discovered from data analysis. The figures show that most social media users and participants range from 26 to 27 years consisting of 23.7% of the total population of 274. The second active users range from 22 to 23 years contributing to 21.9% of the population followed closely by users aged between 24 to 25 which consist of 21.5%.

The least users range from 28 to 29 years with 13.5%. Based on the data presented, women ranging from 26 to 27 may be the most active due to financial independence and actively seeking out stable relationships as pointed out by Clark et al. (2018) that many African women marry after the age of 25. This may also be possible due to the bias of convenience sampling which may result in the sample having more people aged 26 to 27.

Young women aged between 22 to 23 and 24 to 25 were the second and third most active users respectively, possibly because they may have been exposed to social media by colleagues and have access to Wi-Fi although they are limited by academic demands. Singh and Pathak (2023) identify social media burnout as one of the possible causes of less social media participation from people aged between 28 to 29. Ehoro and Badey (2021) indicate that women aged between

28 to 29 may be focused on other responsibilities such as work, marriage or childbearing leading them to reduce their social media presence.

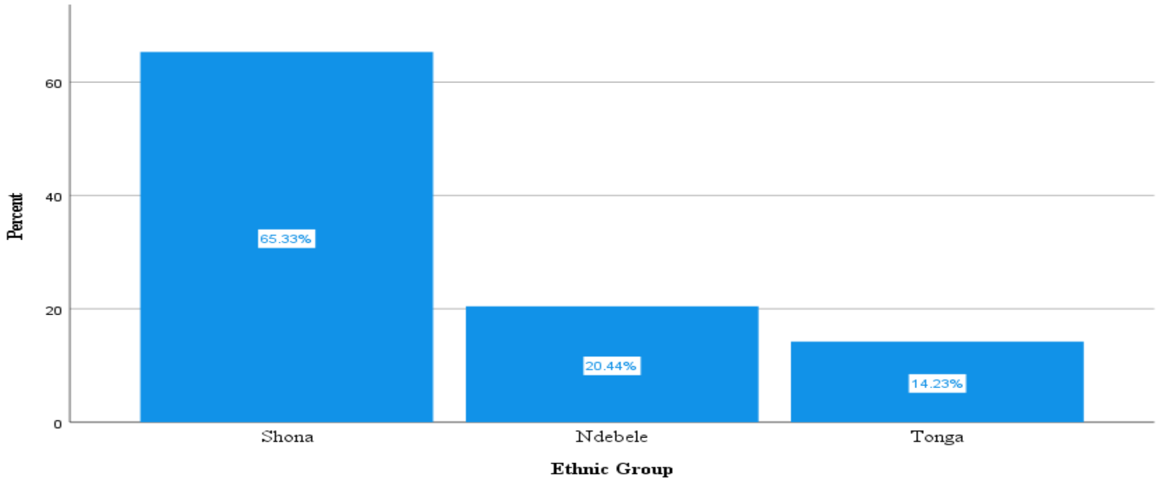

Figure 2: Ethnic groups

Figure 2 is a bar graph which was used to explain the size of the population based on the ethnic groups which exist in Kadoma. It shows that the Shona consisted of the most participants with 65.33% of 274. This may be because the research was carried out in a Mashonaland area. The other minor groups which populated the graph are the Ndebele 20.44% and Tonga 14.23%. The diversity in the population was intentionally done to find out if ethnic backgrounds contribute to social media usage. Ethnicity provides insights into social, cultural and economic differences that other demographic variables may not consider.

Relationship between social media usage and body perception

Table 3: Descriptive statistics of social media usage and body image dissatisfaction

Descriptive Statistics

	N	Minimum (Hours)	Maximum (Hours)	Mean (Hours)	Std. Deviation
Social Media Usage Time	274	1.33	7.00	4.8187	1.32291
Body Image Dissatisfaction	274	1.50	7.00	4.0721	1.46871
Valid N (listwise)	274				

Table 3 shows descriptive statistics of different scores of social media usage time and body image dissatisfaction. N represents 274, which is the number of participants in this study. Social media usage time mean score of people who tend to spend more than 6 hours per day was 4.82 (rounded off from 4.8187). Body image dissatisfaction score was 4.07 (rounded off from

4.0721). Based on the questionnaire, minimum scores for social media usage time and body image satisfaction were 1.33 hours and 1.50 hours respectively showing that some participants Strongly Disagreed. Maximum scores for both social media usage time and body image satisfaction was 7 which shows that some participants strongly agreed to questions such as "I tend to spend more than 6 hours per day using social media".

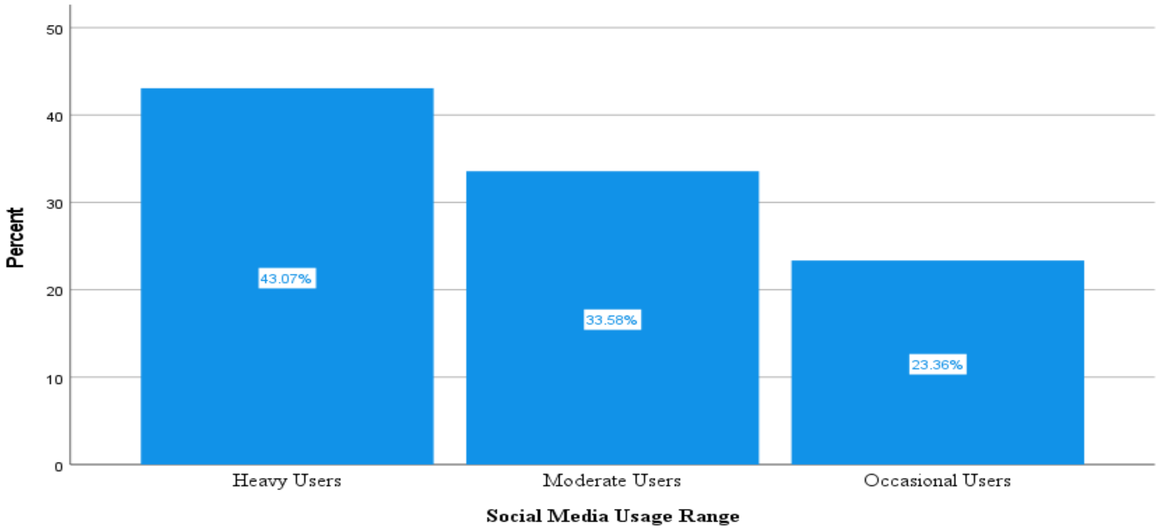

Figure 3: Social media usage range

Figure 3 is a bar graph which shows a broad analysis of social media usage range. The figure shows that 43.07% of the participants are heavy users. These were people whose scores for social media usage time items were the highest and who strongly agreed to spending more than 6 hours on social media. 33.58% are moderate social media users. Slightly less than a quarter (23.36%) were people who use social media occasionally. Moderate users were people whose social media usage time scores were average i.e., around 4 hours per day and ranging from Neutral to Agree on social media usage items. Occasional users were people who used social media but scored the lowest on the social media usage time items on the questionnaire. These people spent the least hours per day. They also ranged from Strongly Disagree to Somewhat Disagree to questions such as "I tend to lose track of time when using social media."

Participants who were categorised as heavy users could be linked to data from Figure 1 which presents people aged from 20 to 23 as the most active users. This may be due to factors such as digital literacy, peer pressure and digital curiosity which is relatively high in young people. Moderate users could be people who use social media but have other priorities such as family or work. Occasional users might be participants who dislike social media but only engage to receive urgent academic or work updates. They may also be people who are transitioning to the corporate world.

Table 4: Social media usage time and body image dissatisfaction correlation

			Social Media Usage Time	Body Image Dissatisfaction
Spearman's rho	Social Media Usage Time	Correlation Coefficient	1.00	.53**
		Sig. (2-tailed)	.	.001
		N	274	274
	Body Image Dissatisfaction	Correlation Coefficient	.53**	1.00
		Sig. (2-tailed)	.001	.
		N	274	274

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4 demonstrates a non-parametric correlation analysis. The analysis emphasises the relationship between social media usage time and body image dissatisfaction scores. Spearman's rho is a measure of correlation used when the variables being compared are ordinal or when there is a nonlinear relationship between them. The population of the two variables is 274. Spearman's rho for the correlation between social media usage time and body image dissatisfaction is $\rho = 0.53$. The significance level is reported as p-value =.001 for both correlations, indicating that the correlation coefficients are statistically significant $p < 0.05$ i.e., the results did not occur by chance. However, the correlation coefficient $\rho = 0.53$ indicates that there is a moderate positive correlation between the variables. The findings show that, if social media usage time scores are high, body image dissatisfaction increases. This may be due to the fact that as social media usage time increases, exposure to content which promotes perfect body shapes increases.

Comparison effects scores

Table 5: Appearance comparisons descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Appearance Comparison	274	1.25	6.75	3.61	1.5
Valid N (listwise)	274				

Table 5 shows appearance comparison effects scores. Minimum and maximum scores were 1.25 and 6.75 respectively. The average score (Mean.) was 3.61 demonstrating that most participants scored from “Somewhat Disagree” to “In the middle” on how comparisons to others affect them. This might have occurred due to the idea that some people naturally feel neutral about how comparisons affect them.

Table 6: Social media usage time and appearance comparison correlations

			Social Media Usage Time Scores	Appearance Comparison
Spearman's rho	Social Media Usage Time	Correlation Coefficient	1	-.06
		Sig. (2-tailed)	.	.301
		N	274	274
	Appearance Comparison	Correlation Coefficient	-.06	1
		Sig. (2-tailed)	.301	.
		N	274	274

Table 6 shows Spearman`s correlations between social media usage time and appearance comparison. Spearman`s rho correlation coefficient = -0.06, Significance (2 tailed) p-value = .301. There was no correlation between social media usage time and appearance comparison because the correlation coefficient is close to 0. This may be because of the type of social media content someone chooses to see; how sensitive they are to comparisons; and other influences outside of social media may impact how they perceive their appearance. This suggests that there is no statistically significant relationship between the amount of time individuals spend on social media and their tendency to compare their appearance with others. However, the results might have occurred by chance since $p > 0.05$. The relationship between social media use and comparing one's appearance to others may not be straightforward.

Contributing factors

(i) Age

Table 7: Age range

	N	%
20 - 21	53	19.3%
22 - 23	60	21.9%
24 - 25	59	21.5%
26 - 27	65	23.7%
28 - 29	37	13.5%

Table 7 presents a bar graph illustrating age distribution among social media users based on a dataset of 274 individuals. The majority of users fall within the 26–27 age range, making up 23.7% of the sample. This is followed by users aged 22–23 at 21.9%, and those aged 24–25 at 21.5%. The smallest group consists of users aged 28–29, representing 13.5%.

Women aged 26–27 may be the most active due to financial independence and a focus on forming stable relationships, aligning with findings that many African women marry after 25. Younger women aged 22–25 follow in activity, likely influenced by peer exposure and internet access, though academic responsibilities may limit their usage. Lower engagement among the 28–29 age group may be due to social media fatigue (Singh & Pathak, 2023) or shifting priorities such as careers, marriage, or parenting (Ehoro & Badey, 2021).

(ii) Ethnicity

Table 8: Social media usage time and ethnic groups crosstabulation

Ethnic Group Crosstabulation

		Ethnic Group						Total	
		Shona		Ndebele		Tonga			
		N	%	N	%	N	%	N	%
SOCIAL MEDIA USAGE TIME	Strongly Disagree	14	7.8%	1	1.8%	2	5.1%	17	6.2%
	Disagree	20	11.2%	8	14.3%	2	5.1%	30	10.9%
	Somewhat Disagree	16	8.9%	4	7.1%	5	12.8%	25	9.1%
	In the middle	14	7.8%	4	7.1%	1	2.6%	19	6.9%
	Somewhat Agree	43	24.0%	11	19.6%	12	30.8%	66	24.1%
	Agree	32	17.9%	8	14.3%	7	17.9%	47	17.2%
	Strongly Agree	40	22.3%	20	35.7%	10	25.6%	70	25.5%
Total		179	100.0%	56	100.0%	39	100.0%	274	100.0%

Table 8 shows that the Ndebele people scored highest in social media usage time items whereby 35.7% of (N) 56 strongly agreed that they spend significant time on social media. This may be because different cultures react differently to technology whereby some encourage it whilst others may discourage it. The findings above may be a result of differences in cultural social norms whereby some ethnic groups view social media as an important communication tool whilst others perceive it as a source of distraction. The results also suggest that cultural and socio-economic background may influence social media usage patterns within different ethnic groups. The second ethnic group were Tonga where 25.6% of (N) 39 also strongly agreed. The last group were the Shona, despite having a large dominance, 22.3% of (N) 179 strongly agreed to spend time on social media.

Discussion

Relationship between social media usage time and body image dissatisfaction.

The findings from the researcher`s analysis provide insight into the relationship between social media usage time and body image dissatisfaction scores. Based on data presented in Table 7 Spearman’s rho, a correlation measure suitable for ordinal variables or nonlinear relationships was used. The study included a population of 274 participants.

The Spearman`s rho analysis revealed a moderate positive correlation coefficient of $\rho = 0.53$ ($p < 0.001$), which indicated a statistically significant correlation between Social Media Usage Time and Body Image Dissatisfaction. The results showed that there was a moderate positive correlation between the variables. In some way, when Social Media Usage Time increased, there was a moderate increase in Body Image Dissatisfaction as well. This suggests that exposure to content on social media platforms that glorifies certain body shapes potentially leads to increased body dissatisfaction among users.

The study reveals the important connection between using social media and how individuals perceive their bodies. It emphasises the importance of further research and potential measures to address any negative effects on people’s well-being resulting from social media engagement.

These results are in line with findings by Freitas (2017) who is of the view that young people often face a lot of pressure to look perfect and happy online. The research by Freitas (2017) was based on interviews with college students in the United States of America. Fardouly et al. (2015) also researched the effect of Facebook on women`s mood and body image. Their results showed that increased time spent on Facebook correlated with higher levels of body image concerns among the participants.

Furthermore, these research findings support the objectification theory propounded by Barbara Fredrickson and Tommi-Ann Roberts in 1997. Roberts et al. (2018) note that this theory proposes that women are socialised to internalise an observer’s perspective of their bodies and to treat themselves as objects to be evaluated based on their appearance. Social media can reinforce this objectification process, as young women are exposed to sexualized and objectifying images of women, and receive feedback on their appearance from others.

Relationship between appearance comparison and social media usage

This research also looked into the relationship between social media usage time and appearance comparison, as shown in Table 9. Spearman's correlations were employed for this analysis, considering the ordinal nature of the variables and the potential for nonlinear relationships.

The Spearman`s rho analysis showed that the correlation coefficient was $\rho = -0.06$ ($p < 0.301$). There was no meaningful relationship between how much time people spent on social media and how often they compared their appearance to others since correlation coefficient is close to 0. This means that the time spent on social media does not have a significant impact on whether or not a person tends to compare their appearance to others. However, it's essential to acknowledge that the lack of significance in this correlation could be attributed to chance, given the p-value exceeds 0.05. This prompts the researcher to exercise caution in interpreting these results as definitive.

The above results contradict a study by Bergagna & Tartaglia (2018) which examines how self-esteem and social comparison influence the way people use Facebook. In their study, the results show that low self-esteem and high social comparison are associated with more time on Facebook and more use of Facebook for simulation, especially for females. This contradiction may be because, self-reporting methods used in this study may not have accurately captured comparison effects as participants may not fully understand their behaviour or may not be willing to reveal their genuine emotions, potentially resulting in data inaccuracies (Burke & Carman 2017). The findings may also reveal that, according to the social comparison theory some users may be using lateral and downward comparisons. Downward social comparison occurs when individuals compare themselves with people they perceive as worse than they are (Guyer & Vaughan-Johnston, 2020). Lateral social comparison also takes place when individuals compare themselves with someone they perceive as equal to them in different ways (McCarthy & Morina, 2020). Therefore, the questionnaire mainly involved questions relating to upward comparison which may be more harmful.

This highlights the need for more research using different methods to understand this complex issue fully.

Contributing factors that influence social media usage

i) *Age*

Table 3 presented a bar graph which illustrated age distribution among social media users based on a dataset of 274 individuals. The majority of users fall within the 26–27 age range, making up 23.7% of the sample. This is followed by users aged 22–23 at 21.9%, and those aged 24–25 at 21.5%. The smallest group consists of users aged 28–29, representing 13.5%.

Women aged 26–27 may be the most active due to financial independence and a focus on forming stable relationships, aligning with findings by Clark et al. (2018) that many African women marry after the age of 25. Younger women aged 22–25 follow in activity, likely influenced by peer exposure and internet access, though academic responsibilities may limit their usage. Lower engagement among the 28–29 age group may be due to social media fatigue (Singh & Pathak, 2023) or shifting priorities such as careers, marriage, or parenting (Ehoro & Badey, 2021).

These findings support research by Perrin (2015) who discovered that age is strongly correlated with social media usage and young adults are the most likely to use social media. In short, age seems to play a big role in how much people use social media. This may be because women in their mid-20s tend to be the most active, while older ones might use it less as they get busier with other duties of life such as work or marriage.

ii) *Ethnicity*

Table 10 data reveals variations in social media engagement among different ethnic groups. Ndebele participants showcased the highest engagement, with 35.7% strongly agreeing to spend much time on social media. The Tonga group followed closely with 25.6% strongly agreeing. Notably, despite being the largest in the sample, the Shona group had only 22.3% strongly agreeing to spend time on social media.

These findings also support research by Perrin (2015) who revealed that there are notable differences by racial or ethnic groups (Whites, Hispanics and African-Americans) in terms of social media usage. This suggests that cultural or socio-economic differences between ethnic groups may affect how they use social media. Cultural beliefs or financial situations within specific communities could influence how people interact with these platforms (Elias & Shiftan 2017).

For instance, factors like access to technology, social norms around digital communication, or even the prevalence of certain types of content on social media could vary between ethnic groups and impact their usage patterns. Socio-economic disparities might play a role, influencing factors such as internet access, digital literacy, or leisure time availability, all of which can affect how much time individuals spend on social media Terras and Ramsay, (2017). All of these affect ethnic groups differently which may explain how different people interact on social media differently with different effects.

Conclusion

The researchers discovered that young women, particularly those aged between 26 and 27 years, tend to be the most active users of social media platforms. As people get more older, they tend to use social media less (28 to 29 years). This shows that age is an important factor in how people use social media, with people 26 to 27 being more likely to use it actively.

The researchers also noted variations in social media usage across different ethnic groups. Although the sample size may have been too small to reflect on the entire ethnic groups represented, nevertheless, amongst the three ethnic groups studied, the Ndebele showed the highest involvement in social media, followed by the Tonga and lastly the Shona despite having a larger population. However, more research may be required to determine the exact causes behind these variations in social media usage.

The study also discovered that using social media for longer periods moderately increases dissatisfaction with one's body. This may be because social media often shows images of people with perceived ideal body types, which can make people feel like their own bodies don't measure up. These revelations also make it possible to suggest that an increase in body dissatisfaction may also lead to low self-esteem.

The researcher also noted that no significant correlation was found between social media usage time and appearance comparison. This indicates that the amount of time individuals spend on social media does not strongly influence their tendency to compare their appearance to others. However, the lack of significance may be influenced by the limitations of self-report measures in capturing comparison effects accurately.

Recommendations

For researchers

Interdisciplinary collaboration – researchers should form collaborations with experts from different fields such as psychology, sociology, communications, and computer sciences to get a well-informed view of social media use and its impacts

Open data sharing - researchers are encouraged to share their data openly to ensure transparency, consistency of research findings, and collaboration.

Long-term tracking studies – researchers should conduct studies over time to observe how social media habits and mental health outcomes change, helping other researchers understand how people develop and how social media affects them in the long run.

Mixed Methods Approaches – researchers should make use of mixed approaches i.e., using both quantitative and qualitative methods to thoroughly explore the complexities of social media use and its influence on people.

For users

Digital well-being practices – users are encouraged to use social media wisely by setting limits, taking breaks, and valuing real-life interactions to protect their mental health.

Media literacy skills – users are encouraged to learn to identify trustworthy and false information, recognize persuasive tactics and critically analyse online content to make informed decisions.

Community engagement – users are encouraged to build supportive online communities by showing kindness, compassion, and respect. Join efforts to prevent cyberbullying and harassment.

Privacy awareness – users are encouraged to understand the importance of protecting their personal information online. Educate themselves about privacy settings and safeguard their digital footprint.

For social media application developers

User empowerment tools – developers may also provide social media users with tools and features to customise their digital experiences, such as content filters, time management features, and privacy controls, empowering them to make informed choices about their social media usage.

Research collaboration – developers are also encouraged to collaborate with researchers and experts in psychology and mental health to conduct user-centric research, evaluate the impact of platform features on user well-being, and implement evidence-based interventions to promote healthier social media habits.

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Understanding Resilience Development in Teenage Mothers: Insights into Effective Mechanisms and Intervention Programmes

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Abstract

Understanding resilience development can highlight how some teenage mothers successfully navigate these challenges; and offering insights into their coping mechanisms and strengths is of great concern. The objectives of this research sought to explore the psychological outcomes associated with participation in resilience programmes, including changes in mental health, self-efficacy, and coping skills. Furthermore, they sought to examine the policy implications of research findings, and thereafter provide recommendations for policymakers to support resilience programmes for teenage mothers. To develop best practices influenced by the paper for designing and implementing resilience programmes that are tailored to the unique needs of teenage mothers,. a qualitative integrative literature review approach was used. Inclusion criteria were based on studies that focused on teenage mothers aged 13 to 19 years. Exclusion criteria were based on excluding quantitative studies, reviews, or meta-analyses that did not focus on qualitative methodologies. A purposive sampling strategy was used, and thematic analysis was utilised to analyse the data. The results indicated that the formation of support groups, family support, financial support, and life skills are vital for promoting resilience. The paper has shown that effective resilience programmes often combine educational, emotional, and social support, addressing multiple facets of a teenage mother's life. One of the recommendations was that there was a need to foster collaboration between schools, healthcare providers, social services, and community organisations to create a cohesive support system for parenting teenage mothers.

Keywords: resilience, parenting teenage mothers, teenage mothers, mental health empowerment, sexual reproductive health

Introduction

In Africa, the adolescent birth rate remains high, with the largest number of estimated births to 15–19-year-olds in 2021 occurring in sub-Saharan Africa (6,114,000) (WHO, 2024). Zimbabwe's adolescent birth rate, currently estimated at 93 (World Bank, 2024) stood at 108 in 2019 (ZIMSAT & UNICEF, as cited in Hofisi & Hungwe, 2025). The need to understand the operation and meaning of resilience in African teenage mothers' lives is significant.

Resilience is conceptualised as the teenage mother's ability to cope and solve problems in the presence of multiple risk factors (Lacy et al., 2021)**.** One could argue that resilience is the product of the intuitive application of positive psychology to the management of personal adversity experienced by teenage mothers. Resilient teenage mothers are those individuals who display the capacity to remain well, recover, or even thrive in the face of adversity and choose not to become victims (Lupac & Alvarez, 2020). Programmes that foster resilience can improve mental well-being and reduce risks of depression and anxiety for this vulnerable group. Strengthening the resilience of parenting teenage mothers may contribute to overall community health, reducing societal costs related to health care and welfare. Though the government of Zimbabwe considers parenting teenage mothers as disadvantaged and at-risk with specific sexual and reproductive health needs, not many mental health programmes have been implemented for this vulnerable group (Berejena, 2019).

Little is known about teenage mothers' exposure to health information within their daily lives, their familiarity with preconception health, and their preferences for receiving health messages and other information in most marginalised countries deter them to effectively build on mechanism and programmes that strengthen their well-being (Bosire et al., 2021). Collins (2010) notes that commentators on teenage motherhood see teenage mothers as lacking rationality and thus making bad choices that disadvantage their own and their child's future. Some 38% of teenage mothers are unaware that a woman can become pregnant after having sex only. If teenage mothers do not have enough knowledge, experience, and counselling on SRH, they may face health-related issues such as unintended pregnancies, leading to adverse health consequences and long-term psychosocial, social, and economic problems (Lat et al., 2022). Generally, mental health has not received priority policy attention across most of sub-Saharan Africa (Eboreime et al., 2022). Few studies have been found that tested interventions that enhance resilience in teenage pregnancy (Kuasit et al., 2018). This paper could inform policymakers on effective interventions and support systems, ultimately leading to better resources for parenting teenage mothers.

Aim of the study

The purpose of the paper was to assess the effectiveness of current mechanisms and programmes aimed at identifying best practices as well as areas of improvement to create and recommend new programmes that specifically address the unique challenges faced among parenting teenage mothers.

The objectives of the study

These sought to:

i) To explore the psychological outcomes associated with participation in resilience programmes, including changes in mental health, self-efficacy, and coping skills.
ii) To examine the policy implications of research findings, providing recommendations for policymakers to support resilience programmes for teenage mothers.
iii) To develop best practices influenced by the paper for designing and implementing resilience programmes that are tailored to the unique needs of teenage mothers.

Methodology

Research approach

The paper employed a qualitative integrative literature review approach to gather published studies on resilience mechanisms for parenting teenage mothers.

Purposive Sampling

The paper selected studies that specifically addressed the research questions or themes of interest. This method focused on relevant literature rather than random selection.

Inclusion and exclusion criteria

Inclusion criteria used multiple databases such as PubMed, Scopus, Web of Science, Science Open, and Google Scholar to gather secondary data sources to ensure a comprehensive search. Keywords and synonyms used during the search of literature were “resilience,” “strategies,” “teenage mothers,” and “pregnant and parenting” to capture relevant studies. Inclusion was based on qualitative studies only, for example, interviews, focus groups and ethnographies that explored resilience mechanisms, coping strategies and intervention impacts were used. The paper used publications that were in English or with accessible translations. The paper used studies published over the last 10 years from 2015 to 2025 to ensure relevance. Exclusion criteria were based on studies involving participants outside the age range of 13 to 19 years or non-mothers. This research that did not specifically address resilience or related themes in teenage mothers. Studies that were not available in English or without adequate translations were also excluded.

Data analysis

The paper utilised thematic analysis by identifying common themes, patterns, and trends across the studies to synthesise findings and draw conclusions. By employing these methods, an integrative literature review enabled effective compilation and synthesising of existing knowledge on the topic, providing valuable insights for future research, practice and policy.

Ethics in research

Plagiarism

The authors ensured proper citation of all sources to avoid plagiarism and acknowledged the original authors' contributions accurately.

Data integrity

The authors presented findings and interpretations honestly and transparently, avoiding misrepresentation of the literature.

Results

Teenage-friendly health services

Studies show that teenage pregnancy is mainly due to a lack of teenage-friendly services, inadequate comprehensive sexuality education, nonavailability and cost of contraceptives, inadequate health personnel, judgmental attitude of service providers, and inadequate counselling (Geda, 2020). Statistics from Europe and sub-Saharan Africa suggest that various interventions aimed at reducing teenage pregnancies have had little or no success (Nkabura, 2016). Empowered teenage mothers are more likely to attend facility-based reproductive health services, utilise modern family planning methods, and experience fewer pregnancies. An increased emphasis on male engagement in women’s health may assist in preventing reproductive health issues, increasing acceptance of contraceptive methods, and empowering women’s decision-making (Wisofschi & Pell, 2020). The establishment of adolescent youth centres is requisite for all teenage mothers' issues, including legal resources and professional services, information on potential policies, sexual and reproductive health training, mental health education, and well-being (UNICEF, 2023). Research has shown that teenage mothers seem to understand that their importance and value only exist when they repeat what is reinforced by their social group (Butler as cited in Anima, 2019).

Resilience-enabling relationships and participatory programme development

Resilience-enabling relationships can involve a supportive family, supportive peers, supportive community members, leaders, faith-based supports, and service providers from education, mental health, welfare, or criminal justice services for parenting teenage mothers (Zhange, 2020). These relationships protect and enhance the resilience of teenage mothers by offering them an optimal environment in which they have the capacity and ability to adapt to adverse conditions that are likely to threaten their physical, social, and psychological functioning (Zhange, 2020). Interventions such as the Paying Attention to Self-intervention in Australia that involved adolescent mothers in the development and implementation of these groups, in addition to involving other key social networks such as family members, were also successful at improving teenage mothers' mental health and emotional well-being (Tinago et al., 2020).

Contextual resilience mechanisms

Social cohesion helps to strengthen self-confidence and a sense of belonging essential for enhancing resilience among parenting teenage mothers (Kwembeya & Mutambara, 2022)**.** The psychological development of teenage mothers requires a stable environment that enables them to develop a positive self-image and self-identity (Tfwala & Mpofu, 2022). Resilience skills have been conceptualised to include an individual's ability to adapt to change, to cope with stress, and to tolerate negative emotions (Marta et al., 2022). Therefore, resilience can be increased in a universal capacity, and allow pregnant teenagers to prevent and overcome adversities, as well as the damaging effects of adversity. Teenage mothers need to have their resilience enhanced such that they develop more competency, including inner strength, external support, and interpersonal and problem-solving skills, to manage the several adversities they may face in their lives (Kuasit et al., 2020). These include feeling stronger, having a meaningful life, maturity, and independence, becoming more responsible due to having a child they were responsible for, and considering a career and education (Okine et al., 2020)**.**

Sexual reproductive health rights

Sexual reproductive health rights (SRHR) of empowerment equips teenage mothers with vital knowledge and improved self-concept that aids them in making crucial decisions about their reproductive life (Nkhoma et al., 2020). The rights include having access to complete information related to safe, affordable, and effective methods to plan one's family size, the spacing of children, regulation of fertility, access to health care services, and effective communication for safe motherhood that enhances the possibility to have healthy children and healthy teenage mothers (Biswas, 2020). Other strategies involve engaging families, peers, healthcare services, and schools to support and help teenage mothers make decisions that are in their best interest, particularly as they transition from childhood to adulthood (Bosire et al., 2020). The teenage mother's partner and father of her child should be included in teenage pregnancy and parenting programmes with access to education and vocational training, parenting skills classes, and contraceptive education (Shah et al., 2020). Zimbabwe National Adolescent and Youth Sexual and Reproductive Health Strategy (2016-2020) highlighted that the provision of sexual and reproductive health services, including education, was consistently concentrated on adults and high-risk groups, leaving out the entire population, including teenage mothers (Manyange & Makunika, 2021).

Comprehensive sexuality education

Providing a comprehensive sexuality education (CSE) can play a key role in preventing and responding to teenage pregnancies. Facilitators' motivation, attitudes, and skills are essential to a CSE programme fidelity and effectiveness at the school level (Chavula et al., 2020). A review conducted by Chavula et al. (2020) indicates that the implementation of a CSE has often not been successful because the facilitators find it difficult to deliver sensitive topics on sexual reproductive health education. In Zimbabwe, various departments, ministries, and NGOs worked together to detect key strategies and approaches to provide suitable sexual and reproductive health services for teenagers (Berejena, 2019). Furthermore, limited health literacy not only influences teenage mothers' behaviours related to self-management of chronic conditions, but also affects the health outcomes of parenting teenage mothers (Sántha, 2021). This integrated model of health literacy encompasses access, understanding, appraisal, and application of health-related information in three domains: health promotion, disease prevention, and health care. (Scott-Ashley et al., 2020). Literature showed that different countries had decided to teach teenage mothers about reproductive health to increase their awareness (Tinago et al., 2020). In Africa, some studies showed that 56.9% of teenagers have access to reproductive health, and this is more common in educated and urban teenagers (Rwabukwerere, 2022). If the family does not provide sex education to children, counsellors are given that responsibility (Saputra & Sofiana, 2016). Information services aim at equipping teenage mothers with various kinds of knowledge needed to solve problems faced regarding the surrounding environment, education, occupation, and social culture (Erwinda et al., 2020).

Formation of support groups

According to Hendricks (2022), support group is an innovative method to educate students about sex and sexuality. Globally, peer support group interventions have been effective at increasing social connectedness, self-esteem, and self-efficacy, providing coping mechanisms to manage stigma experiences, in addition to empowering and improving teenage mothers and teenage mothers mother mental health and emotional wellbeing. Peer support groups provide a platform for knowledge and experience sharing to provide emotional, social and practical support (Murendo, 2020). In Cameroon, programmes that incorporated peer education to educate girls on disease, pregnancy, sexuality, peer pressure, and dating were used to empower teenage mothers to make the right choices (Gunawardena et al., 2019). A cluster randomised trial in Zimbabwe evaluated the effectiveness of training community teenage mothers' peer counsellors in problem-solving therapy on mental health outcomes and observed improved symptoms of common mental disorders and depression (Eboreime et al., 2022). Since many children are not given thorough and reliable information at home and peers are shown to be unreliable sources, strides have been taken to provide quality sex education through schools (Chomba, 2020).

Family support

Family support is crucial and required for a teenage mother to return to school and to provide support to young teenage parents to alleviate poverty and increase the likelihood of positive parenting (Simelane, 2019). The goal of family support is mainly to provide material things to the pregnant teenager and the teenage mother. These include supplying food, shelter, finances, and clothing, helping with healthcare expenses, and equipping them with parenting skills and education. According to Simelane (2019), strong family support and the availability of adult caregiving are required for a teenage mother to return to school. Simelane (2019) suggests that parents should be allowed to examine and reflect on their own values and knowledge gaps on sexuality, sexual socialisation, sexual risks, and discomforts that they have with sexual communication. This parental reflection could create an environment where teenage mothers would feel at ease to communicate their perceptions about the consequences of teenage pregnancy without fear or prejudice (Simelane, 2019). Even though parents are an influential source of knowledge for teenagers about SRH, there is a silence between parents and teenagers on the subject of SRH. Without access to information about sexual and reproductive health, teenagers are at high risk of contracting sexually transmitted infections (STIs), including HIV/AIDS, having unplanned pregnancies, unsafe abortions, and other serious SRH problems that could negatively affect future life (Ewnetu et al., 2020). The pregnant teenage families may be the main discursive reference for them as a reliable information resource about the self-care needed during the prenatal process, rather than the care services professionals.

Social support and positive relationship development

Some studies indicate that teenage resilience is characterised by social support and positive relationship development with their bodies. For example, Jefferis and Theron (2020) reported one of the significant supportive factors that affects the well-being of children and provides them with comfort is the parent-child relationship. The definition of resilience necessarily requires two core elements: (1) the person faces risk so significant that it threatens to disrupt culturally aligned normative development, and (2) the person adjusts well to experiences of significant risk (Jefferis, & Theron, 2020)**.** Decreasing early marriage has become a priority of the Sustainable Development Goals (SGD). The SGD goals state that by 2030, all human beings must be free from poverty, and women and children should be free from health problems such as reproduction problems and sexual abuse, and should have gender equality (Susilo et al., 2021). However, the practice of early marriage has witnessed a gradual decrease in achieving sustainable development goals (Susilo et al., 2021). Social learning processes activities used in the teaching of life skills build upon participatory learning, which aims to develop teenage mothers' experiences by learning from other peers' experiences, and these activities can be used worldwide (Pummanee et al., 2021).

Sensitisation of stakeholders on the reintegration of teenage mothers in school

School heads and teachers should be sensitised on how to deal with retention of parenting teenage mothers (Musili et al., 2020). The guidance and counselling department in each school should actively counsel these girls who should be exempted from heavy manual duties. Musili et al. (2020) found that exposure to more hours of pre-service and in-service training in guidance and counselling improves the management of counselling resources and enhances the application of counselling skills. Nkansah et al. (2022) points out that, if people who have been previously isolated from those around them continue to suffer alone, it is very hard for them to normalise. Teachers should avoid using abusive language to these girls. Another complicated challenge these girls face is self-hatred. This is a psychological problem that needs adequate guidance and counselling. The socio-cultural barriers facing teenage mothers in Africa therefore appear related to traditional attitudes to the different roles of boys and girls.

Comprehensive and balanced mental health services

To help teen mothers to cope with the different challenges they encounter, The Mental Health Foundation report (2013) indicates that it is imperative to deal with the problems faced by teen mothers while offering them a series of comprehensive and balanced services. This could help ensure that they are prevented from being exposed to difficulties such as depression, tension, losing hope, and feelings of abandonment, which are common problems that they face after giving birth (Ketsaia, , 2020). There are people of goodwill who have joined their efforts together and formed groups to assist teen mothers in overcoming the consequences of early motherhood in Zimbabwe (Ketsaia, 2020. These support groups can be a good way to help young girls who have experienced sexual violence and become mothers at an early age fight loneliness, build confidence, and get emotional strength (Ketsaia, 2020). Zimbabwe's primary health care services for teenagers are available through the public sector, nurse-led primary care clinics. Barriers to service accessibility for teenagers and their caregivers in Zimbabwe include user fees (currently approximately USD 5 per consultation) (Chingono et al., 2020). Eissa (2019) divides coping strategies into two categories: emotion-focused coping aims to diminish the emotional components of a stress by maintaining a sense of hope and optimism and to deny the worst.

Financial support and life skills

A strategy that non-governmental organisations tend to use to enable the generation of financial assets in poor households is employment creation. Studies show NGOs creating employment through IGAs supported by NGO loans and management support for teenage mothers. Participants in IGAs have an opportunity to gain the financial income needed to fight poverty. Disputing this notion, a study by Kabonga et al. (2021) observed some dysfunctional ISALS groups that did not improve the situation of poor households. Studies conducted in India found that life skills education was effective in preventing a wide range of problems such as substance abuse, teenage pregnancies, violence, and low self-esteem among others (Prajapati, Sharma, & Sharma, 2017). These studies concluded that life skills education has a positive effect and improves social development, and emotional and social adjustments suggesting an increase in the compatibility of teenage mothers and public health (Ochola et al., 2021). Many Zimbabwean teenage mothers are discovering that the only way to break the glass ceiling that prevents them from rising to the top of many organisations is to start their own businesses, hence the increase in female entrepreneurship. Some perceive that gender inequality is still a main factor in entrepreneurial performance. Zimbabwe is a patriarchal society that favours males over females in many aspects, and thus gender roles play an important part as well (Mandiringana et al., 2023).

Discussion

Teenage mothers are the centre point of their own welfare and their children’s well-being. Educating mothers about the developmental milestones of children could help them to celebrate their child's growth and achievements. By fostering a positive perspective on pregnancy and parenting, communities could empower teenage mothers to embrace their roles and envision a fulfilling future for themselves and their children.

On social support and positive relationship development**,** creating spaces where teenage mothers can share experiences, challenges, and solutions could foster some sense of resilience. These groups promote companionship and reduce feelings of isolation. Young mothers should try to engage their partners in parenting education and support activities to foster a collaborative environment.

Establishment of an online platform or app where young mothers can easily access resources, articles, and videos related to parenting and personal development could go a long way to promote and strengthening positive outcomes in the lives of parenting teenage mothers. Incorporating activities that promote self-esteem and confidence, such as public speaking, assertiveness training, and personal reflection exercises is of paramount importance in such platforms.

Comprehensive and balanced mental health services are required to provide access to cognitive behavioural therapy and other evidence-based therapies to help parenting teenage mothers cope with anxiety, depression, and stress. Offering telehealth services for both primary health care and mental health support, provide teenage mothers with convenient access to care, especially if they have childcare responsibilities.

Mass digital campaigns for sex education targeting pregnant and parenting teenagers are an effective way to disseminate important information, promote healthy behaviours, and reduce stigma. These campaigns can leverage various digital platforms to reach young mothers and their support networks, ensuring they have access to comprehensive and relevant education. Materials shared should ensure that they are culturally sensitive and resonate with diverse backgrounds and experiences.

Financial support and life skills development are crucial for parenting teenage mothers, enabling them to navigate the challenges of motherhood while promoting their independence and self-sufficiency. The authors believe that governments and other stakeholders should prioritise programmes that offer scholarships for young mothers to continue with their education, including college or vocational training.

Furthermore, because most interventions for teenage mothers' have been conducted in high-income countries, little is known about whether such interventions could similarly improve mental health in low- and middle-income countries. There is still a gap in the relevance and effectiveness of sex education in schools in African settings. The practical integration of mental health into public health clinic systems and services has not gained so much traction in lower-middle-income countries, more studies have to be done on this area.

Limitations of the Study

Differences in methodologies across studies, that is, qualitative vs. quantitative, cross-sectional vs. longitudinal, made it challenging to compare results and draw comprehensive conclusions.

Conclusions

The paper has shown that effective resilience programmes often combine educational, emotional, and social support, addressing multiple facets of a teenage mother's life. Strong support systems, including family, peers, and community resources, are critical in fostering resilience among teenage mothers. This therefore indicates that programmes that are culturally and contextually tailored to the specific needs of parenting teenage mothers tend to be more effective. Teaching life skills, such as problem-solving, stress management, and decision-making, is essential in enhancing resilience among parenting teenage mothers. To add, addressing mental health issues through counselling and therapy is crucial, as psychological well-being significantly impacts resilience of parenting teenage mothers. Empowering teenage mothers through education and vocational training can enhance their self-efficacy and resilience. Resilience programmes that provide ongoing support can lead to long-term positive outcomes, including better parenting practices and improved socio-economic status for this vulnerable group. Based on the analysis of the data, more diverse research is needed to understand the varied experiences of teenage mothers across different backgrounds, ensuring that programmes are inclusive. These conclusions highlight the complexity of supporting resilience among teenage mothers and underscore the need for multifaceted, context-sensitive approaches in programme design and implementation among parenting teenage mothers.

Recommendations

i) There is a need for developmental agencies, government ministries and communities to develop and implement programmes that provide holistic support, including education, mental health services, parenting skills training, and social support networks for parenting teenage mothers

ii) There is also a need to ensure that programmes for parenting teenage mothers are culturally sensitive and tailored to the diverse backgrounds of teenage mothers to increase engagement and effectiveness.

iii) Furthermore, there is a need to foster collaboration between schools, healthcare providers, social services, and community organizations to create a cohesive support system for parenting teenage mothers.

iv) Stakeholders ought to incorporate life skills training into programmes, emphasising problem-solving, decision-making, and stress management to enhance resilience for parenting teenage mothers

v) In addition, stakeholders involved in the affairs of parenting teenage mothers ought try to leverage technology to provide virtual support services, online resources, and mobile applications that could help teenage mothers access information and connect with peers.

vi) There is a need to engage families and caregivers in resilience programmes to strengthen support systems and improve outcomes for parenting teenage mothers.

vii) Government ministries and community agencies could attempt to conduct regular evaluations of resilience programmes to assess their effectiveness and make necessary adjustments based on participant feedback and outcomes.

viii) Researchers ought to advocate for policies that provide funding and resources for resilience programmes, ensuring that they are sustainable and widely available.

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Job Satisfaction in Sub-Saharan Africa: A Scoping Review of Literature from 2004-2024

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Abstract

Job satisfaction is a critical determinant of employee performance, retention, and overall organisational effectiveness, influencing numerous key performance outcomes. Although extensively studied globally, job satisfaction remains an emerging area of research within sub-Saharan Africa. This scoping review aims to map the existing literature on job satisfaction in sub-Saharan Africa, with particular focus on the populations studied, contextual factors, and measurement instruments utilised. Covering a twenty-year period (2004–2024), the review included 42 studies identified through systematic searches of databases such as EBSCOhost, JSTOR, PubMed, Emerald, ProQuest, and ScienceDirect. Screening processes adhered to PRISMA guidelines, encompassing both abstract and full-text review stages. Findings reveal a predominant reliance on Western-developed measurement tools, although there is a growing trend towards the development of African-centric instruments. Correlational study designs were most common, particularly in research focusing on the health and education sectors. Notably, primary extractive sectors, including agriculture, were underrepresented. The review highlights critical gaps and advocates for future meta-analyses or systematic reviews to synthesise existing evidence and inform policy and practice in the region.

Keywords: job satisfaction, scoping review, sub-Saharan Africa, African-centric instruments, Western-developed measurement tools, screening processes

Introduction

Job satisfaction plays a vital role in determining employee performance, retention, and overall organisational effectiveness. As a key construct of organisational behaviour studies in the 21st century, job satisfaction functions as a cross-disciplinary variable intricately linked to various performance outcomes (Vigan & Giauque, 2018). In many high-income countries, including the United States, a significant proportion of workers report high levels of job satisfaction (Meier & Spector, 2015). Comparatively, job satisfaction in Asia tends to be somewhat lower than in the U.S. (Deng et al., 2024), while Europe, characterised by a diverse workforce, generally exhibits higher job satisfaction rates (Faragher et al., 2005). Notably, mental health factors such as self-esteem, anxiety, depression, and burnout are closely associated with job satisfaction levels (Faragher et al., 2005).

Conversely, in sub-Saharan Africa, research reveals a broader and more variable range of job satisfaction prevalence. Understanding job satisfaction in this region is particularly important due to its unique socio-economic, cultural, and political contexts that shape the work environment. This review examines the populations studied, contextual factors, and measurement instruments used to assess job satisfaction in sub-Saharan Africa, highlighting their strengths, limitations, and contextual relevance. Job satisfaction levels in the region may be influenced by factors such as job security and the availability of alternative employment opportunities, both of which are deeply affected by socio-economic conditions and culturally rooted humanistic values (Maleka et al., 2019; Sartorius et al., 2011). For instance, despite significant political transitions in the past decade, North African countries continue to attract substantial foreign direct investment, which plays a critical role in supporting economic growth, job security, and labour market alternatives (Badran & Youssef-Morgan, 2015).

While job satisfaction tends to remain relatively stable on a global scale, regional distinctions emerge due to varying levels of socio-economic development (Dziuba et al., 2020). In the Global North, particularly in the United Kingdom, the aftermath of the COVID-19 pandemic has seen a paradoxical situation where, despite relatively high wages, many workers exhibit decreased motivation to attend work. Current estimates suggest over eleven million economically active individuals are absent from the workforce, possibly reflecting diminished job satisfaction (Get-Britain-Working White Paper, n.d., ILO, 2021). In contrast, the Global South, exemplified by Zimbabwe's staggering unemployment rate of approximately 90% (Maleka et al., 2019), shows a strong tendency among workers to remain in their jobs for extended periods, even when wages fall below the poverty datum line. These contrasting realities underscore the critical influence of economic conditions, cultural norms, and workplace dynamics on job satisfaction and employee behaviour across diverse settings.

Job satisfaction is a well-established area of inquiry within organisational behaviour (Dormann & Zapf, 2001; Vigan & Giauque, 2018). Although some scholars argue that there is no universally accepted definition of job satisfaction (Vigan & Giauque, 2018), there is broad consensus regarding its antecedents and outcomes. This consensus enables the integration of findings across diverse studies. Generally, job satisfaction is defined as the overall contentment an individual feels toward their job, often conceptualised as a multifaceted construct encompassing an employee’s attitudes and feelings about various aspects of their work (Adio & Popoola, 2010; Meier & Spector, 2015). Job satisfaction reflects the degree to which employees are content or dissatisfied with elements such as the work environment, job roles and responsibilities, compensation, benefits, and other work-related variables.

Background of the concept

In recent years, there has been a marked increase in scholarly and practical interest in the concept of job satisfaction (Reshma & Velmurugan, 2024; Lee et al., 2023). This surge is attributed to a combination of heightened academic focus and evolving workplace realities, particularly in the aftermath of the COVID-19 pandemic. The pandemic catalysed significant shifts in employees' values, work-life balance, and mental health awareness, further amplified by advancements in technology and greater accessibility to data (Hassan et al., 2022).

Despite the homogenising effects of globalisation, job satisfaction research in sub-Saharan Africa remains disproportionately underrepresented compared to other world regions (Vigan & Giauque, 2018). The overreliance on Western paradigms and measurement tools (Faye et al., 2013) risks undermining cultural validity and may misrepresent job satisfaction in African contexts. This underrepresentation raises essential questions about the applicability and relevance of dominant theories and frameworks when applied outside Western contexts. While global reviews often suggest lower job satisfaction levels in sub-Saharan Africa (Ayalew et al., 2021), such findings may be biased due to the prevalent use of Western-centric measurement tools. In essence, it could be argued that there are differences in the underlying reasons on what makes employees happy in various work contexts.

Numerous scholars attribute disparities in job satisfaction to historical legacies, cultural distinctions, and enduring economic hardships (Janicijevic et al., 2018). Colonial histories, political instability, and limited socio-economic opportunities have profoundly shaped the employment landscape and worker expectations across the regions. Whilst colonial historicity could be a plausible explanation of marked differences in job satisfaction, one would argue that this could not hold water as almost all the world regions experienced some colonisation in one form or another.

In many developing nations, employment serves a foundational role, ensuring survival and escape from poverty, primarily due to the limited capacity of governments to meet essential social needs (Adio & Popoola, 2010; Ndong Ntoutoume, 2023; Owuor, 2021). In contrast, in more economically advanced nations, work serves a broader purpose that includes self-actualisation, social integration, and psychological fulfilment (Georgescu & Herman, 2019).

Job satisfaction is, thus, deeply intertwined with economic structures, labour market dynamics, and avenues for expressing workplace discontent (Freeman, 1977). According to the ILO (2021), sub-Saharan regions facing high unemployment and limited alternative opportunities, like Zimbabwe with an unemployment rate of around 90% (Maleka et al., 2019), may lead employees to stay in unsatisfying jobs out of necessity. Conversely, in economically stronger countries like South Africa, more abundant opportunities and better working conditions often correlate with higher reported levels of job satisfaction (Dziuba et al., 2020; Heimerl et al., 2020; Maleka et al., 2019). In less prosperous economies, restricted opportunities may compel employees to endure suboptimal conditions, thereby suppressing their capacity to express dissatisfaction (Lazarova et al., 2023).

This context calls for a reassessment of the methodologies and tools used in job satisfaction research. Existing evaluation instruments, largely grounded in Western epistemologies, may therefore inadequately capture the unique variables that influence job satisfaction in sub-Saharan Africa. The resultant findings may reflect methodological biases rather than authentic lived experiences. Thus, expanding the theoretical and methodological toolkit to include Afrocentric and indigenous perspectives is essential.

Given these considerations, this study adopts a scoping review approach to systematically map the literature on job satisfaction in sub-Saharan Africa. This methodology is particularly suitable for assessing research breadth, identifying knowledge gaps, and guiding future investigations. By situating job satisfaction within its historical, cultural, and economic contexts, this review seeks to provide a more nuanced and inclusive understanding of the construct in the region.

While job satisfaction remains a globally studied phenomenon, there is a pressing need to enhance the representation of non-Western, particularly sub-Saharan African perspectives in this field. This review contributes to that effort by offering context-sensitive insights and laying the groundwork for more culturally responsive research. By incorporating local realities and diverse epistemologies, future scholarship and practice can achieve a richer, more holistic understanding of job satisfaction across global contexts.

Scoping review objectives

The concept of job satisfaction plays a critical role in shaping workforce dynamics, influencing not only productivity, but also employee well-being and overall life satisfaction (Faragher et al., 2005; Gazi et al., 2024; Lee et al., 2023). Employees who feel valued and fulfilled in their roles are more likely to experience lower levels of stress, burnout, and turnover intentions (Griffeth et al., 2000; Maslach & Leiter, 2008). From an organisational perspective, higher job satisfaction is directly linked to increased productivity, greater employee engagement, enhanced innovation, and improved retention rates, all of which contribute to the long-term success and competitiveness of enterprises (Bakotić, 2016; Harter et al., 2002). At the societal level, widespread job satisfaction supports economic stability and social cohesion by fostering a more motivated, resilient, and empowered workforce (Green, 2006). In this way, job satisfaction functions not merely as an individual concern, but as a vital component of sustainable development and societal progress.

Although extensively explored from multiple theoretical and disciplinary perspectives (Freeman, 1977; Vigan & Giauque, 2018), this body of research remains unevenly distributed across global contexts. This study, therefore, seeks to evaluate the breadth and depth of job satisfaction research within the sub-Saharan African region. To that end, the research aims to address the following objectives.

i) To conduct a comprehensive review of the existing literature on job satisfaction within the context of sub-Saharan Africa, highlighting key insights and thematic trends.
ii) To provide an overview and critical assessment of the various survey instruments and measurement scales employed in job satisfaction research across the region.
iii) To identify and evaluate the methodological approaches adopted in these studies, including qualitative, quantitative, and mixed-method designs.
iv) To investigate population and contextual gaps within the existing body of research, and inform future scholarly inquiry.

Methodology

This scoping review systematically mapped two decades (2004–2024) of peer-reviewed literature on job satisfaction within the context of sub-Saharan Africa, with a particular emphasis on organisational behaviour. The review aimed to identify prevailing theoretical frameworks, commonly employed measurement instruments, and the contextual dimensions shaping job satisfaction in the region. The methodological framework for this review was guided by the Arksey and O'Malley (2005) scoping review framework and further refined based on the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) guidelines (Tricco et al., 2018).

Inclusion criteria

Inclusion criteria were rigorously defined to ensure the relevance and contextual integrity of the selected studies. First, articles were required to be predominantly written in English to promote accessibility and alignment with the global academic discourse. Second, studies had to explicitly focus on sub-Saharan African countries and address job satisfaction within either public or private sector organisations. This regional focus reflects the unique socio-economic, political, and cultural conditions that influence organisational environments and employee experiences across the continent. Additionally, only studies published within the past ten years (2014–2024) were included to ensure the timeliness and relevance of the findings.

Search strategy

To enhance the breadth and robustness of the review, a systematic search was subsequently conducted across several academic databases, including EBSCOhost, Emerald Insight, ScienceDirect, ProQuest, JSTOR, and PubMed. These databases were selected for their comprehensive collections of peer-reviewed literature in the fields of social science, organisational studies, and human resource management.

The search strategy employed broad terms such as "job satisfaction," "work satisfaction", and "employee satisfaction", which were iteratively refined using Boolean operators (AND, OR) and geographic delimiters (e.g., "Sub-Saharan Africa" or specific country names) to isolate relevant studies. This approach ensured comprehensive coverage of literature addressing job satisfaction within diverse and multicultural African contexts.

Selection process and data sources

The screening process yielded an initial pool of 98 peer-reviewed articles. After the removal of duplicates and the application of inclusion and exclusion criteria, 80 articles were retained for full-text review and data extraction. These studies were selected based on their empirical or theoretical contributions, recency of publication, and relevance to the research objectives.

Both public and private sector studies were included, enabling a comprehensive comparison of job satisfaction across different institutional and organizational environments. This sectoral inclusivity provided deeper insights into how structural and policy-related variables shape employee experiences.

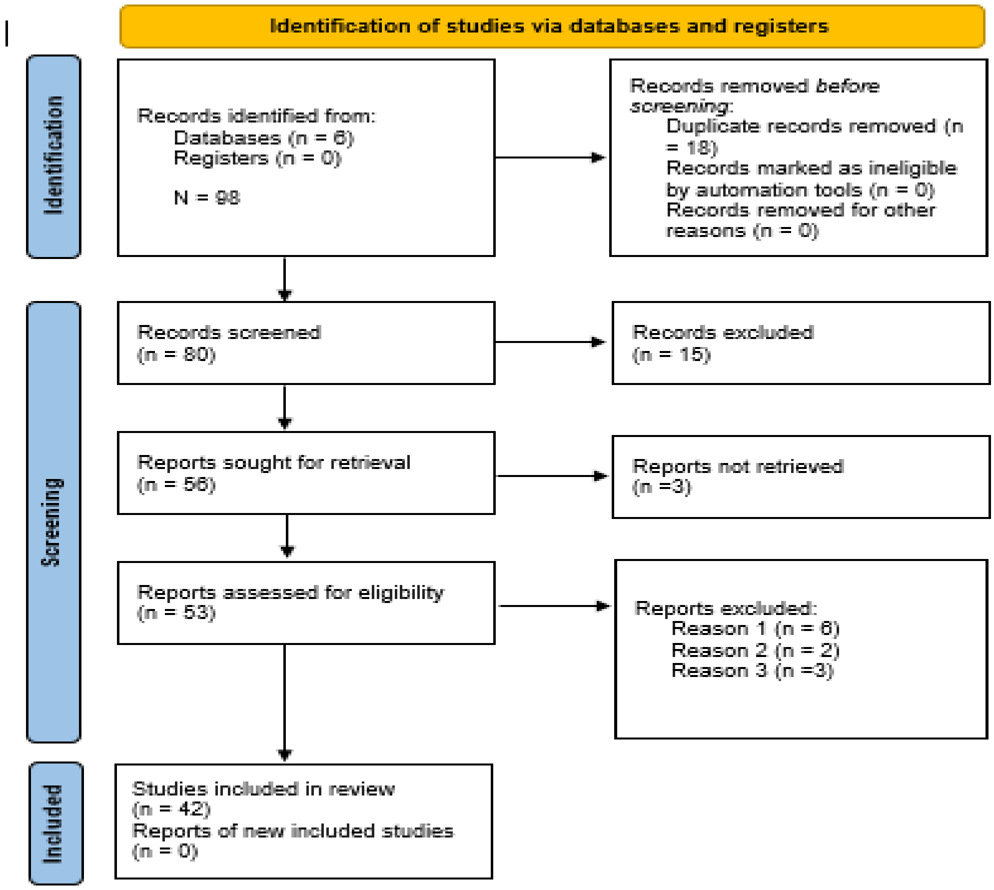
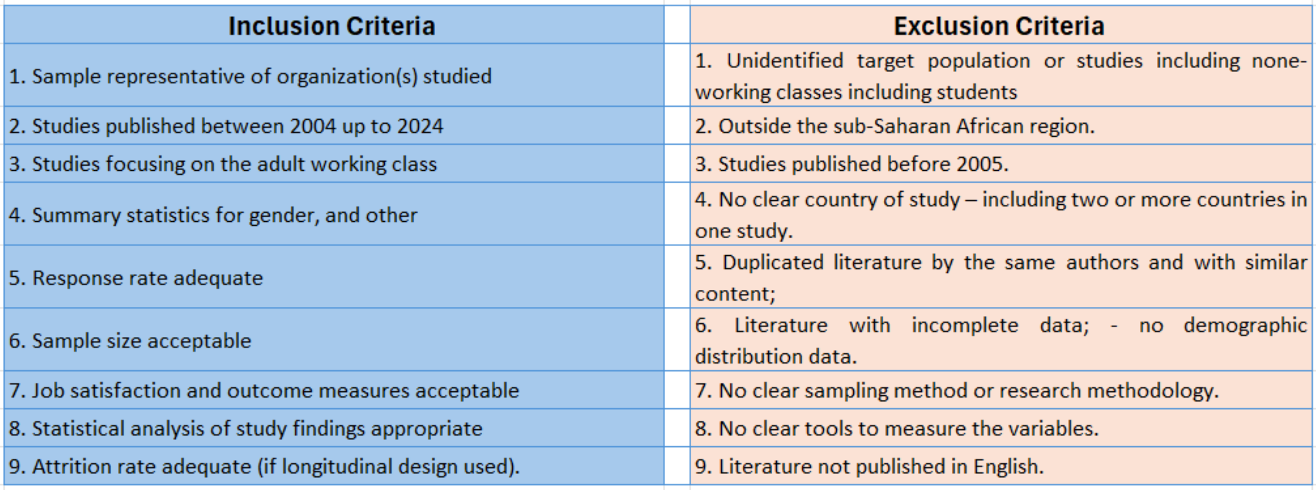


Figure 4: PRISMA Flow diagram (M.J. Page et al., 2021)

Table 3: Inclusion & Exclusion Criteria



Inclusion Criteria	Exclusion Criteria
1. Sample representative of organization(s) studied	1. Unidentified target population or studies including none-working classes including students
2. Studies published between 2004 up to 2024	2. Outside the sub-Saharan African region.
3. Studies focusing on the adult working class	3. Studies published before 2005.
4. Summary statistics for gender, and other	4. No clear country of study – including two or more countries in one study.
5. Response rate adequate	5. Duplicated literature by the same authors and with similar content;
6. Sample size acceptable	6. Literature with incomplete data; - no demographic distribution data.
7. Job satisfaction and outcome measures acceptable	7. No clear sampling method or research methodology.
8. Statistical analysis of study findings appropriate	8. No clear tools to measure the variables.
9. Attrition rate adequate (if longitudinal design used).	9. Literature not published in English.

Following a systematic literature search, ninety-eight (98) potentially relevant articles were initially identified. Using Microsoft Excel Version M365, eighty (80) articles remained for full-text screening. This phase was conducted independently by two reviewers (Q.D. and Y.L.) to uphold objectivity and methodological rigor, consistent with established practices in systematic review methodology (Higgins et al., 2022; Liberati et al., 2009)

Inclusion criteria for full-text screening were as follows:

1) The study must focus on a clearly defined occupational group within a specific sub-Saharan African country;
2) It must explicitly examine job satisfaction or investigate variables demonstrably linked to job satisfaction;
3) It must involve primary data collection utilising a self-administered questionnaire to assess job satisfaction;
4) The study must report its research methodology, including sample size and empirical findings.

This multi-stage, structured screening process was designed to ensure the inclusion of only methodologically sound and contextually relevant studies. Discrepancies between reviewers were resolved through discussion and, when necessary, adjudicated by a third reviewer. This approach reflects best practices in systematic review protocols and enhances the reliability and validity of the final synthesis (Moher et al., 2009).

A total of fifty-six (56) studies were retrieved for full-text screening following the title and abstract screening phase. However, three (3) potentially eligible studies could not be accessed for full-text review due to subscription requirements that exceeded the resource constraints of this review, an issue similarly noted in previous reviews where limited access to subscription-based databases posed challenges to comprehensive inclusion (Lefebvre et al., 2011; Bramer et al., 2017).

Of the fifty-three (53) studies assessed during full-text screening, eleven (11) were excluded based on eligibility criteria. Specifically, six (6) studies were excluded due to an unclear definition of the occupational population under investigation, which is critical for ensuring population-specific relevance in systematic reviews (Petticrew & Roberts, 2006). Two (2) studies were excluded because they encompassed multiple countries, a factor that can introduce heterogeneity and complicate context-specific analysis, particularly in regionally focused reviews (Gough, Oliver, & Thomas, 2017). Finally, three (3) studies were excluded due to insufficient methodological transparency, particularly concerning data collection procedures, which hindered the ability to appraise study quality and reliability (Moher et al., 2009).

Results

The findings revealed that the studies included in this scoping review encompassed 14 countries out of a total of 42, resulting in a coverage rate of 38% for the sub-Saharan Africa region. Among the studies, South Africa, Zimbabwe, and Malawi each contributed six studies, collectively accounting for 42% of the total studies reviewed. Additionally, Nigeria, Rwanda, and Somaliland were represented by one study each. The results of the review are presented in Table 2 below.

The studies included in this scoping review spanned 14 out of the 42 countries in the sub-Saharan Africa region, representing a coverage rate of approximately 38%. South Africa, Zimbabwe, and Malawi were the most frequently studied, each contributing six articles, which together made up 42% of the total sample. In contrast, countries such as Nigeria, Rwanda, and Somaliland were each represented by a single study, highlighting differences in research distribution across the region. Figure 2 below provides a detailed summary of the geographic distribution of these studies.

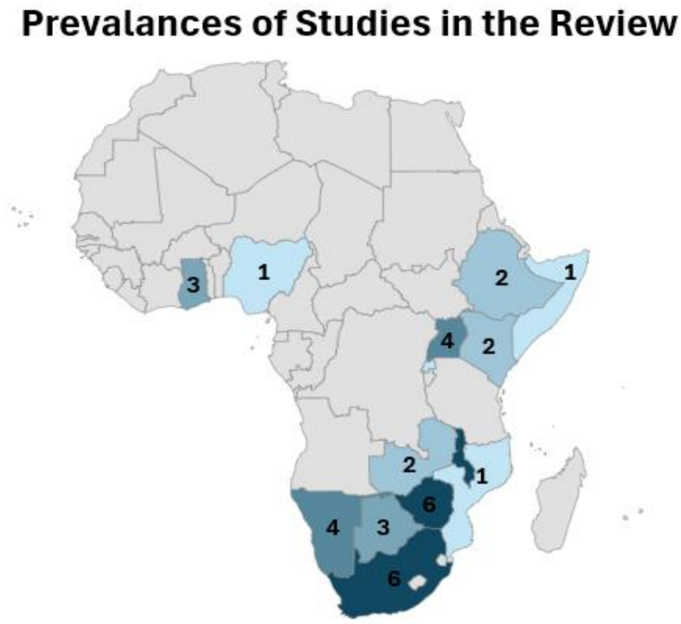

Prevalances of Studies in the Review

Figure 5: Distribution of studies within the sub-Saharan African countries

A total of 12,498 participants were included in the reviewed studies, resulting in an average sample size of approximately 298 respondents per study. Notably, one study reported a substantially larger sample size of 1,714 participants, which was identified as an outlier. The smallest study sample comprised only 51 respondents. Among the occupational groups investigated, the health sector, particularly nursing professionals, was the most extensively studied, accounting for 14% of all included studies. Similarly, teachers within the education sector represented 14% of the studies. University academic staff constituted the second largest occupational category at 9%. The representation of other employee groups, including those in construction, retail, non-governmental organisations (NGOs), small and medium-sized enterprises (SMEs), mining, government, and general employment sectors, is summarised in Table 2.

Research designs and methodology

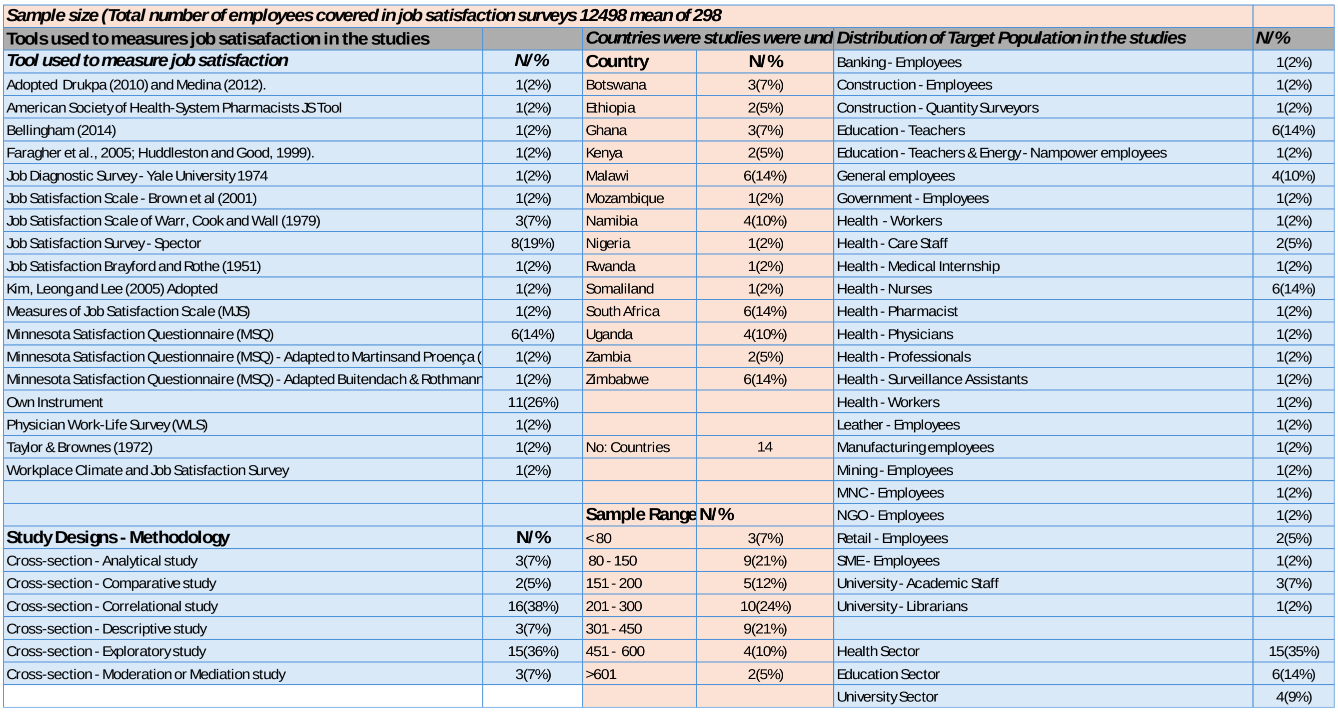
All studies included in this scoping review employed primary data collection methods and utilised a cross-sectional study design. Among these, 16 studies (38%) were classified as correlational, as they primarily sought to examine relationships or associations between job satisfaction and other variables. Exploratory designs represented the second most common approach, with 15 studies (35%) aiming to investigate phenomena where limited prior research existed. In contrast, analytical and descriptive designs were each employed in three studies, comprising 7% of the total, respectively. Furthermore, three studies (7%) applied moderation or mediation analysis, an extension of the correlational framework, focusing on understanding the mechanisms through which variables influence job satisfaction. These findings indicate that correlational studies were the most frequently adopted research design within the scope of this review.

Measuring instruments used to measure job satisfaction in Sub-Saharan Africa

The analysis revealed that the Job Satisfaction Survey (JSS) developed by Spector was the most utilized instrument for measuring job satisfaction, appearing in eight studies, which accounts for 18% of the total. The Minnesota Satisfaction Questionnaire (MSQ) was also widely cited, with two additional studies employing modified versions of the MSQ, representing 4% of the reviewed studies. A notable proportion of 11 studies (26%) used custom-developed instruments, all of which underwent piloting and pretesting with samples drawn from the target populations. These instruments were frequently refined through input from expert panels, enhancing their face validity.

Additionally, the Warr-Cook-Wall Job Satisfaction Scale (1979) was used in three studies, representing 7% of the sample. The Job Diagnostic Survey (JDS), developed in 1974, was cited in only one study, despite its historical prominence in the field. The diversity of tools reflects both the methodological preferences of researchers and the contextual adaptations necessary for studying job satisfaction across different occupational and national settings.

Table 4: Results of the scoping review



Sample size (Total number of employees covered in job satisfaction surveys 12498 mean of 298					
Tools used to measures job satisafaction in the studies		***Countries were studies were und***		***Distribution of Target Population in the studies***	***N/%***
Tool used to measure job satisfaction	***N/%***	**Country**	**N/%**	Banking - Employees	1(2%)
Adopted Drukpa (2010) and Medina (2012).	1(2%)	Botswana	3(7%)	Construction - Employees	1(2%)
American Society of Health-System Pharmacists JS Tool	1(2%)	Ethiopia	2(5%)	Construction - Quantity Surveyors	1(2%)
Bellingham (2014)	1(2%)	Ghana	3(7%)	Education - Teachers	6(14%)
Faragher et al., 2005; Huddleston and Good, 1999).	1(2%)	Kenya	2(5%)	Education - Teachers & Energy - Nampower employees	1(2%)
Job Diagnostic Survey - Yale University 1974	1(2%)	Malawi	6(14%)	General employees	4(10%)
Job Satisfaction Scale - Brown et al (2001)	1(2%)	Mozambique	1(2%)	Government - Employees	1(2%)
Job Satisfaction Scale of Warr, Cook and Wall (1979)	3(7%)	Namibia	4(10%)	Health - Workers	1(2%)
Job Satisfaction Survey - Spector	8(19%)	Nigeria	1(2%)	Health - Care Staff	2(5%)
Job Satisfaction Brayford and Rothe (1951)	1(2%)	Rwanda	1(2%)	Health - Medical Internship	1(2%)
Kim, Leong and Lee (2005) Adopted	1(2%)	Somaliland	1(2%)	Health - Nurses	6(14%)
Measures of Job Satisfaction Scale (MJS)	1(2%)	South Africa	6(14%)	Health - Pharmacist	1(2%)
Minnesota Satisfaction Questionnaire (MSQ)	6(14%)	Uganda	4(10%)	Health - Physicians	1(2%)
Minnesota Satisfaction Questionnaire (MSQ) - Adapted to Martinsand Proença (	1(2%)	Zambia	2(5%)	Health - Professionals	1(2%)
Minnesota Satisfaction Questionnaire (MSQ) - Adapted Buitendach & Rothmann	1(2%)	Zimbabwe	6(14%)	Health - Surveillance Assistants	1(2%)
Own Instrument	11(26%)			Health - Workers	1(2%)
Physician Work-Life Survey (WLS)	1(2%)			Leather - Employees	1(2%)
Taylor & Brownes (1972)	1(2%)	No: Countries	14	Manufacturing employees	1(2%)
Workplace Climate and Job Satisfaction Survey	1(2%)			Mining - Employees	1(2%)
				MNC - Employees	1(2%)
		Sample Range	**N/%**	NGO - Employees	1(2%)
Study Designs - Methodology	**N/%**	<80	3(7%)	Retail - Employees	2(5%)
Cross-section - Analytical study	3(7%)	80 - 150	9(21%)	SME - Employees	1(2%)
Cross-section - Comparative study	2(5%)	151 - 200	5(12%)	University - Academic Staff	3(7%)
Cross-section - Correlational study	16(38%)	201 - 300	10(24%)	University - Librarians	1(2%)
Cross-section - Descriptive study	3(7%)	301 - 450	9(21%)		
Cross-section - Exploratory study	15(36%)	451 - 600	4(10%)	Health Sector	15(35%)
Cross-section - Moderation or Mediation study	3(7%)	>601	2(5%)	Education Sector	6(14%)
				University Sector	4(9%)

Discussion

The main objective of this review was to map the existing literature on job satisfaction in sub-Saharan African countries, revealing that this topic is widely explored. A comprehensive analysis was conducted on 42 studies spanning 14 nations, representing 38% of the countries in the region and more than 50% of the Anglophone nations. It is noteworthy that the other 26 countries are classified as Francophone, while 6 are considered Lusophone, reflecting their colonial histories with France and Portugal, respectively (Ethnologue, 2024. Consequently, this study adopted a thorough approach to ensure extensive coverage, taking into account the quality of the research included.

The findings from the scoping review highlighted a diverse array of job satisfaction survey instruments that have been acknowledged and utilised in contemporary literature. This observation emphasises the significant variety of tools employed across different studies, indicating that both researchers and organisations have adopted numerous methodologies for assessing job satisfaction. However, the dominance of Western-centric job satisfaction instruments suggests a continued reliance on Western paradigms, particularly the Job Satisfaction Survey Scale created by Spector and the Minnesota Satisfaction Questionnaire.

These instruments vary not only in their design and format, but also in the specific aspects of job satisfaction they aim to evaluate. Some surveys may focus on overall job satisfaction, while others delve into dimensions such as the work environment, interpersonal relationships, compensation, and opportunities for professional development. Given the extensive theoretical framework established in the reviewed studies, we argue that there is no need to rely solely on Western-developed tools for research purposes. Instead, it would be prudent to develop tailored scales, as the concept of job satisfaction is widely acknowledged. This is supported by researchers who have created their measurement scales, as noted in the review, which have shown high reliability. We maintain that these measurement tools will enhance the understanding of cultural differences and aid in the conceptualisation of job satisfaction.

The review also indicated that the studies encompassed a range of populations; however, there are notable gaps in other sectors, particularly those that are crucial to economic growth in sub-Saharan Africa, such as agriculture. These gaps highlight the necessity for further research, especially in economically significant sectors that primarily employ individuals with lower educational qualifications. Most existing research has concentrated on sectors that require higher educational attainment.

A comprehensive examination reveals that a significant proportion of researchers are focused on the interactions among various factors influencing job satisfaction. This emphasis is crucial as it marks a shift towards empirically testing hypotheses regarding the relationships between these variables, moving beyond merely descriptive or exploratory methodologies. Correlational research seeks to establish predictive frameworks, and it is recommended that a meta-analytical or systematic method be employed for specific variables within the sub-Saharan context. Such an approach would facilitate a deeper understanding of the involved variables, ultimately strengthening the empirical evidence and models pertaining to their interrelations.

The results indicated that most studies are conducted in health, with over 35% of the studies, whilst the education sector contributed 23%. This concentration can be attributed to the critical role these sectors play in achieving national development and public service delivery goals, particularly within low- and middle-income contexts. Healthcare workers and educators form a substantial portion of the public workforce and are frequently at the centre of government reform agendas and international development funding. Moreover, chronic challenges such as resource constraints, high workloads, inadequate compensation, and poor working conditions in these sectors have heightened scholarly and policy interest in understanding workforce motivation and retention. Additionally, donor-funded programmes and global health initiatives often mandate workforce assessments, further contributing to the volume of research in these areas. As a result, health and education become accessible and priority-rich environments for exploring issues of job satisfaction in the sub-Saharan context.

Practical implication of the review

While job satisfaction appears to be a well-explored subject, this review reveals significant gaps that call for continued empirical investigation, particularly within the sub-Saharan African context. These gaps pertain to demographic coverage, thematic content, and broader contextual influences, emphasising the need for sustained research efforts by African scholars to deepen and diversify the understanding of job satisfaction across the region.

A key concern highlighted by the review is the widespread reliance on Western-developed measurement instruments. Although there is encouraging evidence of African researchers beginning to develop and adapt tools that are culturally and contextually relevant, such efforts remain limited and fragmented. There is a pressing need for greater coordination and standardisation in the development of indigenous research instruments that more accurately reflect local values, work norms, and organizational structures.

Moreover, the current literature exhibits a notable imbalance in terms of sectoral focus. While the health and education sectors are well represented, crucial sectors such as agriculture, which employs a substantial proportion of the workforce in many sub-Saharan African countries, remain significantly under-researched. This oversight presents a practical limitation for policymakers and organisational leaders who seek evidence-based strategies to improve job satisfaction in sectors vital to national development and food security.

Therefore, future research should aim to address these sectoral and methodological imbalances through inclusive sampling, context-sensitive research tools, and interdisciplinary collaboration. By doing so, scholars and practitioners can generate more actionable insights that are aligned with the unique socio-economic dynamics of the region.

Study limitations

This scoping review is subject to one major limitation that may affect the breadth and inclusiveness of its findings. Notably, the review focused exclusively on studies published in English, thereby disproportionately representing job satisfaction research from Anglophone countries within sub-Saharan Africa. As a result, relevant literature from non-English-speaking countries, particularly those in Francophone, Lusophone, and Germanophone regions, was likely excluded. This linguistic constraint may have limited the review’s ability to capture a more holistic and regionally representative understanding of job satisfaction.

Furthermore, the cultural and linguistic diversity of sub-Saharan Africa extends well beyond colonial languages. Many local languages, such as Kiswahili, which is widely spoken in East Africa, are often used in non-academic or community-based research outputs. The exclusion of such sources may have resulted in the omission of context-specific insights that are highly relevant to the study of job satisfaction. Consequently, this limits the review’s ability to fully reflect the multicultural and multilingual realities of the region.

To address these gaps, future reviews would benefit from a more inclusive and multilingual search strategy, as well as interdisciplinary collaborations between organisational behaviour scholars, linguists, and regional practitioners. Such efforts should also aim to incorporate grey literature and consult regionally indexed databases. This approach would enhance the equity, depth, and cultural relevance of future syntheses.

Despite these limitations, the current review offers a meaningful and methodologically rigorous synthesis of existing literature, and identifies critical directions for future research in the field of job satisfaction across sub-Saharan Africa.

Despite these limitations, the review provides a meaningful synthesis of the current literature and highlights key areas for future research**.**

Conclusion

This scoping review examined the evolution and scope of job satisfaction research in sub-Saharan Africa over a two-decade period (2004–2024). The analysis encompassed a diverse range of occupational populations, with notable emphasis on the health and education sectors, two domains that remain central to human capital development in the region (World Bank, 2020; Oketch, 2016).

Methodologically, literature is characterised by a predominant use of cross-sectional research designs, with correlational studies emerging as the most common approach. This trend reflects an increased interest in empirically examining the relationships among the multifaceted factors influencing job satisfaction (Spector, 1997; Judge et al., 2001). The breadth of variables investigated across the reviewed studies presents a valuable foundation for future meta-analyses or systematic reviews aimed at synthesising findings in a more integrated manner (Petticrew & Roberts, 2006).

Importantly, the review underscores a critical under-representation of primary economic sectors such as agriculture, which continues to employ over 50% of the labour force in many sub-Saharan African countries (FAO, 2022; ILO, 2021). Addressing this gap is essential for developing more comprehensive and policy-relevant insights into job satisfaction across the full spectrum of economic activity. Furthermore, the continued reliance on Western-developed measurement instruments (e.g., the Job Satisfaction Survey and Minnesota Satisfaction Questionnaire) highlights the pressing need for culturally responsive tools that are conceptually and contextually suited to African work environments (Mugo, 2019; Adeyemi & Ijaiya, 2009).

In sum, while the field of job satisfaction research in sub-Saharan Africa has demonstrated considerable growth, advancing this scholarship necessitates greater inclusivity in sectoral representation, methodological innovation, and the development of indigenous measurement instruments. These steps are vital to ensuring that future research is both contextually grounded and practically impactful.

Acknowledgements

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Reference

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How Men in Harare Perceive and Engage with Mental Health Support Systems: Insights from an Organisation in Harare, Zimbabwe

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Abstract

Men's engagement with mental health services remains disproportionately low, particularly in Zimbabwe, where cultural norms, societal expectations, and stigma often discourage help-seeking behaviours. This study explored the perceptions and engagement of men in Harare, Zimbabwe, regarding mental health support systems, with a focus on identifying the barriers that hinder their willingness to seek psychological support. Results from the research revealed that many men perceived mental illness as a sign of personal weakness, leading them to self-medicate with alcohol, pursue traditional healing practices, or seek religious counselling instead of accessing professional mental health services. Structural challenges, including long waiting times, financial constraints, and dissatisfaction with the quality of formal mental health care, further deterred engagement. However, community-based interventions, such as the Friendship Bench, emerged as effective, accessible, and culturally sensitive alternatives. The study recommends integrating mental health services into primary healthcare, expanding community-led mental health programmes, and implementing targeted awareness campaigns to challenge stigma and normalize help-seeking among men. Addressing these barriers is essential to fostering a more inclusive mental health system that encourages greater male participation in Zimbabwe's mental healthcare landscape.

Keywords: men's mental health, stigma, masculinity norms, help-seeking behaviour, Zimbabwe, mental health services, cultural perceptions, community-based interventions

Introduction

Mental health is a crucial component of overall well-being, influencing emotional resilience, cognitive functioning, and social relationships. However, men's reluctance to seek psychological support remains a significant global concern, particularly in Zimbabwe, where cultural, societal, and structural factors discourage help-seeking behaviour (Seidler, 2019). Traditional masculinity norms often promote stoicism, self-reliance, and emotional restraint, discouraging men from acknowledging mental health challenges or seeking professional support (Mahalik, 2019). Consequently, men are less likely than women to access mental health services, even when experiencing severe conditions such as depression, anxiety, or post-traumatic stress disorder (PTSD) (WHO, 2020). This reluctance has contributed to higher rates of undiagnosed mental illnesses, increased substance abuse, and rising male suicide rates worldwide.

In Zimbabwe, mental health services have historically been underfunded and deprioritised, with greater focus directed towards other public health concerns like HIV/AIDS, tuberculosis, and maternal health (Mufunda & Mebrahtu, 2022). Limited awareness and accessibility further discourage men from seeking mental health care, as societal norms often equate help-seeking with weakness rather than strength (Chibanda, 2016). As a result, many men resort to self-medicating through alcohol or drug use, compounding their psychological distress rather than addressing its root causes. A lack of mental health education exacerbates the problem, leaving many Zimbabwean men unaware of symptoms or available services within their communities.

The World Health Organisation (WHO, 2020) notes that cultural expectations across African societies often pressure men to internalise their emotional struggles, making it challenging to acknowledge mental health issues or pursue professional support. In Zimbabwe, stigma surrounding mental illness extends to families and communities, discouraging open discussions. Consequently, many men suffer in silence, leading to severe consequences, including chronic depression, social isolation, and an increased risk of suicide. Studies indicate that for every female suicide in Zimbabwe, there are at least three male suicides, underscoring the urgent need to address men’s mental health challenges (Chibanda, 2019).

Despite the growing demand for mental health interventions, Zimbabwe faces significant barriers in service provision. Limited funding, a shortage of trained professionals, and inadequate mental health infrastructure restrict access to timely and effective care (Matare, 2017). Most mental health services are concentrated in urban areas like Harare, leaving rural populations underserved (Mafa & Chigangaidze, 2020). Additionally, the high cost of private therapy sessions and under-resourced public services further deter men from seeking support.

In response, non-governmental organisations (NGOs) and community-based initiatives, such as the Friendship Bench programme, have introduced accessible, low-cost mental health support by training lay health workers to provide psychological assistance in informal settings (Chibanda et al., 2016). While these interventions have shown success in reducing depression and anxiety symptoms, men’s participation remains disproportionately low, indicating that cultural beliefs and stigma continue to hinder access to care (Nyoni, 2020).

This study aims to explore men’s perceptions and engagement of mental health services in Harare, Zimbabwe, identify key barriers to help-seeking, and assess potential interventions to increase male participation in mental health care. By addressing stigma, raising awareness, and tackling systemic challenges, stakeholders in Zimbabwe’s health sector can work toward a more inclusive mental health framework that prioritises accessibility, affordability, and culturally sensitive interventions.

Literature review

Global perspective

The global discourse on mental health service utilisation consistently reveals that men engage with mental health services at lower rates than women, despite experiencing similar or higher levels of psychological distress. Research from Western countries, such as the United States and the United Kingdom, indicates that men are significantly less likely to seek professional mental health support due to concerns about social stigma, financial constraints, and a lack of culturally sensitive services (Mahalik et al., 2013). This belief is further reinforced by social norms that equate emotional vulnerability with weakness, making it challenging for men to openly discuss their mental health struggles. In Australia, similar findings demonstrate that dominant masculine ideologies contribute to men's reluctance to engage in conversations about mental health. Seidler et al. (2019) highlight that this reluctance reduces the effectiveness of mental health interventions, as men may resist therapy or fail to adhere to treatment plans.

The issue of low male engagement in mental health services is not limited to high-income countries. In many Asian cultures, particularly in Japan and China, societal expectations for men to embody strength, rationality, and self-sufficiency serve as additional barriers to seeking professional help. In Japan, mental health challenges are often perceived as personal failures, prompting many men to conceal their distress rather than seek external support (Yamawaki et al., 2012). Similarly, in China, there is a cultural emphasis on endurance and perseverance, discouraging open discussions about emotional struggles. These patterns underscore the influential role that gender norms play in shaping men’s perceptions and utilisation of mental health services across different cultural contexts.

Regional context (sub-Saharan Africa)

In sub-Saharan Africa, mental health care remains significantly underdeveloped due to limited resources, inadequate policy implementation, and deeply ingrained cultural beliefs. Mental illness is often attributed to supernatural forces, witchcraft, or divine punishment, resulting in widespread stigmatisation (Nyamhanga & Frumence, 2014). These prevailing societal attitudes discourage individuals from seeking professional medical interventions, as mental disorders are frequently perceived as spiritual afflictions rather than medical conditions. Studies in South Africa reveal that men facing mental health challenges often resort to harmful coping mechanisms, such as excessive alcohol consumption, rather than seeking professional support (Petersen et al., 2016). Within many African communities, alcohol abuse is normalised, with substance use often seen as an acceptable means of escaping emotional distress. The World Health Organisation (2021) reports that many African nations allocate less than 1% of their health budgets to mental health services, severely limiting access to care and reinforcing the stigma associated with mental illness.

Additionally, the lack of mental health infrastructure and trained professionals in sub-Saharan Africa presents a significant challenge. Many countries in the region have an alarmingly low number of psychiatrists and psychologists, rendering mental health services inaccessible to large segments of the population. Even in urban areas where mental health facilities are available, cultural beliefs and societal expectations often prevent men from seeking professional intervention. Furthermore, mental health campaigns and awareness programmes remain insufficient, with few initiatives specifically addressing men’s unique concerns and perceptions. As a result, many African men continue to suffer in silence, further perpetuating the neglect of mental health as a crucial aspect of public health (Nyamhanga & Frumence, 2014).

National and local insights (Harare, Zimbabwe)

In Zimbabwe, mental health has historically received limited attention due to competing health priorities, including HIV/AIDS, tuberculosis, and maternal health (Mufunda & Mebrahtu, 2022). Mental health services in the country remain severely underfunded and are often a low priority in national health policies. Religious and traditional healing practices play a central role in Zimbabwe's approach to mental health. Many Zimbabweans turn to spiritual healers and religious institutions as their first point of contact for mental health issues rather than seeking assistance from psychologists or psychiatrists (Matare, 2012). The widespread belief in supernatural causes of mental illness further deters the use of formal mental health services. However, initiatives such as the Friendship Bench in Harare have made significant strides in addressing the mental health service gap. The Friendship Bench is a community-based programme that offers psychological support through trained lay health workers who conduct therapy sessions in informal, non-clinical settings. This model has demonstrated success in improving mental health outcomes, particularly for individuals experiencing anxiety and depression (Chibanda et al., 2016).

Overall, the literature suggests that men's reluctance to seek mental health support in Zimbabwe is deeply rooted in cultural norms, societal expectations, and structural limitations within the healthcare system. Addressing these barriers requires targeted interventions that promote mental health awareness among men, challenge harmful gender norms, and integrate mental health services into accessible and non-stigmatizing environments. By understanding the unique challenges faced by men in Harare, mental health professionals and policymakers can develop more effective strategies to encourage help-seeking behaviours and improve mental health outcomes for men in Zimbabwe.

Objectives of the study

i) To explore men's attitudes and perceptions toward mental health and their willingness to utilise mental health services.
ii) To identify the primary barriers preventing men from seeking professional mental health support, with a focus on cultural, societal, and structural factors.
iii) To evaluate the effectiveness of existing mental health interventions in engaging men and addressing their mental health needs; and to propose evidence-based recommendations for enhancing men’s engagement with mental health services

Methodology

Research design and approach

This study employs a qualitative research approach, focusing on in-depth exploration of men’s perceptions towards mental health services in Harare, Zimbabwe. A qualitative approach is particularly effective in understanding complex social phenomena, such as cultural attitudes and behavioural patterns, which influence mental health help-seeking behaviours (Bryman, 2012). Unlike quantitative research, which emphasises numerical data, qualitative research prioritises subjective experiences and lived realities, making it ideal for this study’s objective of examining men’s attitudes, beliefs, and barriers to mental health care.

The research is grounded in a phenomenological framework, which aims to capture the lived experiences of participants as they relate to mental health services (Smith et al., 2009). Phenomenology allows researchers to understand how individuals perceive and interpret their interactions with mental health care providers and the broader health system. Given that men's reluctance to seek mental health services is influenced by deep-seated social norms, stigma, and structural factors, this framework provided an opportunity to explore these factors in a holistic manner. Through phenomenology, the study delved into participants' personal narratives, shedding light on how cultural expectations and masculinity norms shaped their mental health decisions.

These interviews encouraged in-depth discussions and enabled the researcher to probe further into the reasons behind certain perceptions and behaviours societal norms and peer influences on mental health. This methodological approach ensured that the study captured both individual and collective perspectives, making it well-suited for understanding the multi-layered barriers that prevent men from seeking professional mental health support.

Participants and sampling

The study engaged 30 men aged 18 to 65 from diverse socio-economic backgrounds in Harare to capture generational differences in perceptions of mental health. Participants were purposively selected to ensure diversity in age, education, employment, and social experiences. Recruitment was conducted through community networks, mental health organisations, local clinics, and NGOs, with additional participants identified through snowball sampling. This approach helped include individuals who might typically be hesitant to discuss mental health due to stigma or lack of awareness.

To ensure a balanced and representative sample, participants were selected based on three key criteria:

Table 1: Three key criteria used to select participants

Demographic Category	Subgroups	Purpose/Focus
Age group	Young adults (18 – 30) Middle Aged Men (31-50) Older Men (51-65)	To analyse generational differences in perception of mental health
Socio Economic Background	Low Income Middle Income High Income	To capture how economic status influences mental health help seeking behaviour
Education and Employment Status	Unemployed Students	To explore the impact of employment stability and education on mental health perceptions

By utilising purposive and snowball sampling methods, the study ensured that the participants' experiences provide a comprehensive representation of how different socio-economic factors influence men’s perceptions of mental health services in Harare. This approach enhances the credibility and transferability of the findings, allowing them to inform policies and interventions that aim to increase male engagement with mental health care in Zimbabwe.

Data collection methods

The study employed face-to-face semi-structured interviews and focus group discussions (FGDs) as primary data collection methods. These methods were chosen to allow participants to express their views freely while enabling researchers to explore underlying themes influencing men's perceptions of mental health services in Harare.

The semi-structured interviews were conducted in a one-on-one setting, allowing participants to share their personal experiences and perspectives without external influences. This approach was particularly useful in understanding individual barriers to mental health help-seeking, including stigma, masculinity norms, and personal beliefs about mental illness (Krueger & Casey, 2015). Each interview lasted between 45 to 60 minutes, covering key topics such as men's understanding of mental health, their awareness of available services, and their perceived challenges in accessing psychological support. The interview questions were open-ended, allowing for a natural flow of conversation and enabling participants to discuss aspects they found most relevant. Interviews were conducted in both English and Shona, depending on the participant’s preference, to ensure clarity and comfort during the discussions.

In addition to the interviews, focus group discussions (FGDs) were conducted to capture collective attitudes towards mental health services and explore how peer influences shape men’s perceptions of mental health help-seeking behaviours. Each focus group consisted of 5-7 participants and lasted approximately 90 minutes. The discussions were moderated using a structured guide, but participants were encouraged to engage in free-flowing dialogue, sharing their opinions and experiences regarding mental health. FGDs provided an interactive environment, allowing researchers to observe how societal norms are reinforced within peer groups. This method was particularly valuable in understanding how masculinity expectations shape men’s reluctance to seek professional psychological support.

All interviews were audio-recorded with participant consent, ensuring that data was accurately captured for later transcription and analysis. Field notes were also taken to document nonverbal cues, emotional expressions, and notable interactions that could provide additional context to the responses. The combination of personal interviews and group discussions ensured that the study captured both individual perspectives and collective social attitudes, offering a comprehensive understanding of the factors influencing men's engagement with mental health services.

Appointments for the FGD were arranged using multiple methods to maximise participant convenience and attendance. Potential participants fitting the target demographics were contacted via phone, WhatsApp, and in-person outreach. Various date and time options were offered to accommodate schedules, and participants confirmed their preferred slots. Venue details and reminders were sent prior to the sessions, with follow-up reminders a day before. Flexibility was maintained by offering alternative sessions or one-on-one interviews for those unable to attend the initial groups.

Data analysis and interpretation

This research utilised reflexive thematic analysis, as described by Braun and Clarke (2006, 2019). This method is particularly well-suited for analysing qualitative data such as focus group discussions (FGDs), where the aim is to explore participants' perceptions, experiences, and meaning-making processes in depth. Reflexive thematic analysis was selected because it prioritises the researcher's active role in theme development and interpretation. It allows for rich, detailed exploration of participants' perceptions and experiences and it also works well with data derived from varied demographic groups. The analysis followed Braun and Clarke's six phase process: familiarisation with the data, generating initial codes, searching for themes, reviewing themes, defining and producing the report.

The following key themes emerged from the data analysis:

1) Cultural norms and masculinity: Many participants emphasised that societal expectations of strength and emotional control discouraged them from seeking mental health support. There was a strong perception that men should "handle their own problems" without external help.
2) Stigma and fear of judgment: A significant number of participants expressed concerns about being labelled as weak or mentally unstable if they sought professional help. Some feared that their peers or employers would view them differently if they were known to have mental health concerns.

3) Lack of awareness and accessibility: Several participants were unaware of the available mental health services in Harare. Others reported difficulties in accessing psychological support due to financial constraints, long waiting times, and the lack of male-friendly mental health services.

Ethical considerations

Given the sensitive nature of mental health discussions, ethical considerations were strictly adhered to throughout the research process. Ethical guidelines were followed to ensure participant safety, respect, and well-being throughout the study (Orb et al., 2001).

Before participating, all respondents were provided with detailed information about the study's objectives, procedures, potential risks, and benefits. Informed consent was obtained from each participant, ensuring that their involvement was voluntary and based on full understanding of the research process. Participants were also assured that they had the right to withdraw from the study at any point without any negative consequences.

Confidentiality and anonymity were strictly maintained to protect participants' identities. Personal details such as names, addresses, and any identifiable information were excluded from the final research documents. Each participant was assigned a unique code, which was used for data storage and analysis instead of their real names. All audio recordings, transcripts, and written notes were securely stored, accessible only to the research team.

Considering the emotional sensitivity of discussing mental health issues, psychological support was made available for any participant who felt distressed or uncomfortable during the interview or focus group discussions. Participants were informed of available mental health support services, including community-based organisations and helplines, in case they required further assistance. Special attention was given to ensuring a safe and non-judgmental environment where men could freely express their views without fear of stigma or discrimination.

Findings

Table 2: Thematic analysis outline

Objectives	**Major Theme**	**Sub-Theme**	**Key Insights**
1. To explore men's attitudes and perceptions toward mental health and their willingness to utilize mental health services	Negative Perceptions of Mental Health Masculinity and Internalization	• Mental illness as weakness • Therapy seen as ineffective • Resistance to seeking help	• From the findings, many men view illness as a sign of personal failure and perceive professional help as unnecessary or untrustworthy. • Cultural expectations discourage men from acknowledging emotional struggles ore expressing vulnerability
2. To identify the primary barriers preventing men from seeking professional mental health support	Stigma and societal judgement Culture and religion	• Fear • Loss of respect • Alcohol and substance use	• From the findings, stigma around mental health leads to shame, fear of social exclusion, and avoidance of therapy. Men worry about being seen as weak or unfit • In the absence of trusted health services, men self-medicate or turn to culturally accepted coping strategies that are often harmful or ineffective
3. To evaluate the effectiveness of existing interventions and propose recommendations	Alternative coping mechanisms Community-based models	• Peer support approach • Friendship bench success	• The friendship Bench is widely appreciated for its culturally appropriate, non-judgemental and accessible format. It reduces barriers by normalizing mental health talk and offering peer support

Men's attitudes and perceptions toward mental health and their willingness to utilise mental health services

Most participants held negative perceptions of mental health services, viewing them as ineffective or unnecessary. Mental illness was seen as a sign of weakness, especially among older and traditionally minded men. Many believed that men should handle problems internally, discouraging help-seeking behaviour. Some participants expressed a lack of trust in mental health professionals, feeling that their concerns were not well understood or adequately addressed. The prevailing belief among participants was that mental illness is a sign of personal weakness, leading many men to resist acknowledging psychological distress or seeking professional assistance. A significant proportion of participants reported avoiding professional mental health services due to the societal stigma attached to seeking psychological support.

Many believed that admitting to mental distress could lead to social ridicule, discrimination, or even loss of respect within their communities. Some participants feared that seeking therapy would lead others to question their competence at work, as mental illness is often associated with diminished masculinity and vulnerability.

> "We, men, are always secretive and we don't want to expose our issues to other people. We pretend to be strong in every situation" (Participant C)

> "I believe society and our upbringing play a big role. We believe that we should not show emotions as it is a sign of weakness and with such phrases as *shingirirai semurume* (persevere as a man). As a sign of strength man avoid seeking help and try to solve the problem on their own" (Participant A)

Participants expressed widespread scepticism toward formal mental health care. Many viewed therapies as unnecessary, ineffective, or a sign of personal weakness. This belief was especially common among older men and those from traditional backgrounds. Such attitudes significantly limit men's willingness to engage with mental health services.

Barriers preventing men from seeking professional mental health support, with a focus on cultural, societal, and structural factors

The study revealed that the perception of mental health services among men in Harare is largely negative, with stigma and cultural beliefs playing a significant role in discouraging help-seeking behaviours. Many participants preferred traditional healers or religious leaders over mental health professionals. Structural barriers included high costs of private therapy, long waiting times, and lack of resources in public health facilities. There was also a general distrust in formal systems, with services perceived as inaccessible or irrelevant to men lived realities. Instead of engaging with formal mental health services, many participants relied on self-medication, traditional remedies, or religious counselling as alternative coping mechanisms. Others turned to traditional healers, believing that mental illnesses were caused by supernatural forces, witchcraft, or ancestral spirits rather than medical conditions. Religious counselling was also frequently cited, with several participants stating that they preferred seeking guidance from church leaders or prophets rather than mental health professionals. Many men viewed prayer and religious intervention as more socially acceptable ways of addressing mental struggles, reinforcing the idea that mental health treatment should be spiritual rather than medical.

> "I believe culture and religious beliefs have created an accepted perception that mental issues are a result of either spiritual attacks or demonic manifestations" (Participant E)

> "We fear having our problems being divulged to others in the same circles with the effect, thereafter, being that one who becomes a laughingstock of the community" (Participant D)

Stigma emerged as a powerful barrier. Participants feared being labelled as weak or unfit for work. This fear led many to avoid professional help and instead suffer in silence. The pressure to maintain a strong, unemotional image prevented open discussions about mental health.

The effectiveness of existing mental health interventions in engaging men and addressing their mental health needs, and to propose evidence-based recommendations for enhancing men's engagement with mental health services

For those who had engaged with formal mental health services, dissatisfaction was a recurring theme. Many participants criticised the inefficiency of mental health services, citing long waiting times, inadequate attention from professionals, and the perceived ineffectiveness of therapy. Some men felt that mental health professionals did not fully understand their concerns or offer practical solutions, leading to a lack of trust in the system. Additionally, the cost of mental health services was noted as a barrier, with some participants highlighting that private therapy sessions were too expensive, while public mental health services lacked sufficient resources and personnel. Alcohol and substance use emerged as common self-treatment methods, particularly among younger men and those from economically disadvantaged backgrounds. Some participants reported using excessive alcohol consumption to "numb" their emotional pain and escape societal pressures.

> "I have always been told that seeking help from a professional requires money. So, I just left it. The government clinics are always full, and you wait for hours. Sometimes there's no one even available."
>
> "In the absence of trusted health services, men self-medicate or turn to culturally accepted coping strategies that are often harmful or ineffective" (Participant F)

In place of professional care, many men turned to alcohol, religious counselling, or traditional remedies. These coping mechanisms were seen as more accessible and socially acceptable but often worsened their mental health. This underscores the need for better formal services that are culturally and socially aligned with men's preferences.

Despite these negative perceptions, the Friendship Bench emerged as a promising community-based model that effectively engages men by providing informal, non-judgmental, and culturally sensitive support. Its peer-led approach was especially valued for building trust and breaking down stigma.

> "Talking to someone from the community is different. They understand us better. Doctors just ask questions, but these people really listen."

While alternative coping mechanisms such as alcohol use, traditional healing, and religious counselling remain prevalent, initiatives like the Friendship Bench demonstrate promising solutions for improving men's access to mental health care.

Discussion of findings

This study set out to explore men's perceptions and attitudes toward mental health, the barriers they face in seeking professional support, and the effectiveness of current interventions. The findings indicate that societal norms around masculinity, cultural beliefs, and stigma remain significant obstacles to help-seeking among men in Harare. Many participants reported that expressing vulnerability or seeking psychological help is perceived as a weakness, a view deeply rooted in how men are socialised.

Additionally, structural barriers such as the cost and inaccessibility of services further limit men's engagement with formal mental health care. Instead, many rely on alternative coping mechanisms, including alcohol use, traditional healing, or religious counselling. Despite these challenges, community-based models like the Friendship Bench were found to be more acceptable and effective due to their informal, peer-led approach.

These findings are consistent with global and regional literature on men's mental health and suggest the need for more inclusive, culturally sensitive, and male-friendly mental health strategies. Future interventions must address both the cultural and structural barriers while promoting models that resonate with men's lived experiences and social realities.

Conclusion

The findings of this study underscore the significant influence of cultural norms, stigma, and lack of awareness on men's perceptions of mental health services in Harare, Zimbabwe. Many men continue to view mental health struggles as a personal weakness, preventing them from seeking professional support. Deeply embedded masculinity norms that emphasise self-reliance and emotional restraint further discourage men from openly discussing their mental health concerns. As a result, a large proportion of men preferred self-medication, traditional remedies, or religious counselling over engaging with formal mental health services. This reluctance to seek help has contributed to worsening mental health conditions, increased substance abuse, and in extreme cases, a rise in male suicide rates. The study also reveals systemic challenges in the provision of mental health care, including long waiting times, financial constraints, and the perceived ineffectiveness of therapy, which further deter men from utilizing available services.

One of the most critical findings of this study is the role of stigma and fear of judgment in shaping men's attitudes toward mental health services. Many participants expressed concern about being labelled as weak, unstable, or incompetent if they sought professional help. This stigma is not only reinforced by social circles, workplaces, and religious institutions, but also by the healthcare system itself, which is often perceived as being ill-equipped to handle men's mental health concerns effectively. Even among those who were aware of mental health services, distrust and dissatisfaction were common, with complaints about the lack of male-specific interventions, inadequate counselling, and dismissive attitudes from healthcare providers. These barriers create an environment where men suffer in silence, choosing to endure psychological distress rather than seek professional help.

Despite these challenges, the study identified opportunities for improving mental health service accessibility and engagement among men. One promising intervention is community-based mental health programmes, such as the Friendship Bench, which has been well-received for its non-judgmental, informal, and easily accessible approach. Unlike traditional clinical settings, the Friendship Bench provides a comfortable environment where men can receive psychological support without fear of stigma. The success of this model suggests that mental health interventions must be tailored to fit within the cultural and social frameworks that shape men's perceptions of help-seeking behaviours.

Recommendations for future interventions

To address the barriers identified in this study, future interventions must focus on:

1. Expand community-based mental health support

Scaling up initiatives like the Friendship Bench: Stakeholders ought to establish similar peer-led, community-based mental health programmes in underserved areas. These could expand their presence in workplaces, schools, and religious institutions to improve accessibility.

Train and support lay health workers: Interested organisations could provide ongoing training to lay counsellors to enhance their capacity in providing mental health support. They could also equip them with knowledge about men's mental health concerns and stigma management.

Introduce mobile mental health units: Mobile network providers could deploy mobile clinics or pop-up mental health services to reach men in rural and economically disadvantaged areas. These units could offer confidential consultations and mental health screenings.

2. Reduce stigma and promote help-seeking

Implement culturally relevant anti-stigma campaigns: Community organisations ought to develop campaigns that challenge harmful masculinity norms and emphasize the strength in seeking help. They could utilise storytelling, testimonials, and positive male role models to normalise mental health discussions.

Engage local leaders and influencers: Stakeholders could collaborate with respected community leaders, religious figures, and public personalities to advocate for mental health support and reduce stigma.

Leverage media and digital platforms: Media organisations ought to produce radio shows, podcasts, and short films discussing men’s mental health challenges. They could also use social media to share real-life stories and resources.

3. Develop male-centred mental health services

Establish men’s support groups: Stakeholders ought to create safe spaces where men can openly discuss mental health challenges without fear of judgment. Peer-led discussions can be effective in reducing stigma and fostering mutual support.

Offer specialised counselling programmes: Psychological services organisations could develop counselling initiatives that address issues commonly faced by men, such as financial stress, relationship challenges, substance use, and trauma.

Provide flexible and anonymous services: Stakeholders and psychological services organisations could implement telehealth and online counselling platforms that ensure confidentiality, catering to men who may fear public exposure or stigma.

4. Integrate mental health into existing services

Incorporate mental health into primary care: Training institutions could offer training to general practitioners and healthcare providers to conduct routine mental health screenings and offer basic mental health support. This normalisation can reduce stigma.

Partner with workplaces and educational institutions: Various educational institutions and employers could offer on-site mental health counselling and workshops to address workplace stress and academic pressures. These could assist to implement employee assistance programmes (EAPs) with mental health resources.

Strengthen collaboration with traditional healers and religious leaders: Stakeholders could provide mental health literacy training to traditional healers and clergy, encouraging appropriate referrals to mental health services when needed.

5. Address structural and financial barriers

Advocate for increased funding: Mental health institutions ought to work with policymakers to allocate greater resources for mental health services, especially in public health facilities.

Provide affordable and accessible services: Mental health institutions ought to establish subsidised mental health programmes or sliding-scale fee models to ensure affordability for low-income individuals.

Expand mental health infrastructure: Local authorities and government ought to develop more community mental health centres with trained professionals in both urban and rural areas.

6. Build capacity through training and research

Train mental health professionals in gender-sensitive approaches: Educational institutions ought to ensure psychologists, counsellors, and social workers receive training on addressing men's mental health challenges in a non-judgmental and supportive manner.

Incorporate cultural competency training: Educational institutions ought to equip professionals with knowledge on cultural beliefs surrounding mental health and masculinity to provide respectful and effective care.

Encourage community-based research: Educational institutions ought to conduct participatory research that involves men in shaping mental health interventions. Establish feedback mechanisms to continually improve programmes.

7. Promote early intervention and preventive measures

Introduce mental health education programmes in schools: The curriculum ought to educate boys and young men on emotional intelligence, coping strategies, and stress management. It should also encourage open discussions about mental health from an early age.

Develop peer mentorship programmes: Communities ought to establish peer support networks where older, experienced men mentor younger men on mental health and emotional resilience

Provide psycho-education to families: Stakeholders ought to offer workshops and resources to families on recognising signs of mental distress and providing support to male relatives.

8. Monitor and evaluate intervention effectiveness

Establish monitoring systems: Mental health providers ought to track the outcomes and impact of mental health interventions through surveys, focus groups, and interviews.

Utilise data for continuous improvement: Mental health providers ought to analyse findings to refine programmes, ensuring they remain responsive to the needs of men in Harare.

Promote collaboration: Mental health providers ought to foster partnerships between government agencies, NGOs, and academic institutions for large-scale implementation and evaluation of mental health initiatives.

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