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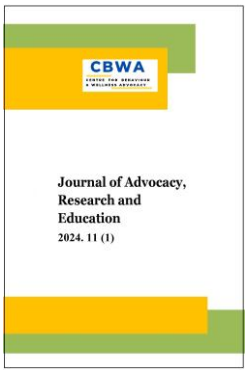

Enhancing Vision Care through Psychological Assessment in Sub-Saharan Africa: An Overview

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Abstract

Accessing quality vision care in Sub-Saharan Africa (SSA) remains a significant obstacle for persons with visual impairment. Practitioners are also confronted with numerous challenges when providing eye care services. These challenges are due to inadequate infrastructure, limited access to care, and a shortage of skilled healthcare personnel, which causes unique physical hardships for practitioners and patients. The physical burdens extend beyond mere physiological discomfort to encompass various psychosocial consequences, including increased levels of stress, depression, anxiety, Stigmatisation, and overall negative impacts on their well-being. To enhance treatment adherence, promote holistic well-being, and foster resilience among patients with visual impairment, practitioners in the field incorporate individual interviews and participant observations in their clinics to provide more comprehensive care. Addressing the challenges of assessing quality vision care in SSA requires an integrated approach that considers both visual impairments' physical and psychological consequences.

Keywords: psychological assessment, Sub-Saharan Africa, vision care, visual impairment.

1. Introduction

Vision care in Sub-Saharan Africa (SSA) faces significant challenges due to the prevalence of visual impairments, socio-economic disparities, and cultural factors that influence eye health (Abraham et al., 2023). The age-standardised prevalence of blindness, moderate or severe distance vision impairment, and mild vision impairment in SSA in 2015 were reported to be 1.03 %, 3.64 %, and 2.94 %, respectively, for males and slightly higher for females (Naidoo et al., 2020). Another study estimated that more than 25 % of individuals aged 50 and above in Sub-Saharan Africa were visually impaired, excluding presbyopia, which affected an additional 58.49 % of this age group (Kempen et al., 2017). The bulk of blindness in the region is often observed as preventable or curable (Lewallen, Courtright, 2001).

Furthermore, socio-economic disparities are evident in the prevalence of vision loss and access to ophthalmic services. For example, the prevalence of vision loss is highest among people over 80 years, those in the poorest socio-economic status (SES) group, and those with no formal education (Alrasheed, 2021). Cultural factors also play a role in eye health in SSA. For instance, some parents believe that childhood eye diseases do not require treatment and can resolve

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spontaneously (Alrasheed, 2021). Cultural beliefs and practices intersect with SES to impact eye health (Shahin et al., 2019). Inadequate intake of foods rich in micro-nutrients like Vitamin A can lead to conditions such as xerophthalmia, a type of Vitamin A deficiency that can cause night blindness and eventual blindness from corneal scarring when untreated. Socio-economic disparities contribute to reduced access to good nutrition, exacerbating the development of visual impairments (Addo et al., 2021).

Given how these factors influence eye health in SSA, a comprehensive approach to vision care is necessary. This includes addressing the psychological aspects of vision care, such as understanding the beliefs and attitudes that affect access to and utilisation of eye care services. Psychological assessment can help identify and address these factors, leading to more effective vision care interventions.

2. Factors Impacting Vision Care in Sub-Saharan Africa

Xulu-Kasaba and Kalinda (2021) reported that West Africa and East Africa had the highest prevalence of blindness in 2020. The leading causes of blindness identified were cataracts, accounting for 46 % of cases (Xulu-Kasaba, Kalinda, 2021). Additionally, studies suggest that approximately 1 % of Africans are blind, with cataracts being the major cause, followed by trachoma and glaucoma (Lewallen, Courtright, 2001). Other significant causes of blindness include refractive error, macular degeneration, trachoma, glaucoma, and diabetic retinopathy (Alrasheed, 2021).

Despite these challenges, achieving universal health coverage across the continent remains elusive, with less than half of Africa's citizens accessing necessary healthcare services (Orjingene et al., 2022). A study analysing recent Demographic and Health Surveys from 36 countries in Sub-Saharan Africa revealed that only 42.56 % of reproductive-age women had access to healthcare services (Tessema et al., 2022). Factors such as urban residence, literacy levels, education status of women and their husbands, media exposure, wealth status, and desired pregnancy were associated with accessing healthcare services (Tessema et al., 2022). Additionally, individuals with visual impairments face significant stigma and discrimination, impacting their social inclusion and access to essential services (Rohwerder, 2018). Studies conducted in Uganda and Kenya revealed overwhelmingly negative attitudes towards disability in communities due to harmful traditional beliefs and misconceptions about the causes and nature of disabilities (Rohwerder, 2018). These negative perceptions hinder the social integration and acceptance of individuals with disabilities (Rohwerder, 2018). Overcoming negative societal views is crucial for individuals to develop a sense of pride in their lives (Abraham et al., 2024).

These societal challenges not only hinder social integration but also exacerbate mental health issues among individuals coping with vision loss (Lester et al., 2023). According to a report published in Vision Science Academy, visual impairment negatively affects one's autonomy, options, and life. Individuals with eye diseases in Sub-Saharan Africa may experience heightened stress and mental health challenges due to the impact of their condition on daily activities, social interactions, and overall well-being (Courtright et al., 2016). The psychological burden of coping with vision loss can lead to feelings of frustration, anxiety, and depression, affecting their mental health (Akuffo et al., 2021; Courtright et al., 2016), hence the need for psychological assessment in eye clinics in SSA.

3. Benefits of Psychological Assessment in Vision Care

Integrating psychological assessment into vision care practices across SSA offers significant benefits to the overall well-being of individuals with visual impairments (Akuffo et al., 2021). This integration can lead to a comprehensive approach to eye care, considering the psychological impacts of visual impairments. The study by Akuffo et al. (2021) suggested that individuals with visual impairments often experience psychological distress, hence the need for psychological assessment and care alongside traditional practice.

Psychological assessment in vision care can also help identify and address mental health issues that may accompany vision impairment (Boagey et al., 2022). By conducting a psychological assessment, healthcare providers in vision care may identify the issues of stress, anxiety and depression early and provide appropriate interventions such as counselling, therapy, or coping support, enhancing patients' quality of life (Shah et al., 2018). Additionally, psychological assessment in vision care can help address barriers to treatment and compliance with prescribed

interventions (Demmin, Silverstein, 2020). In many instances, persons with visual impairment in SSA are faced with practical challenges such as difficulties accessing healthcare services or adhering to treatment plans due to financial constraints or cultural beliefs. Psychological assessment can help identify these barriers and inform the development of more tailored interventions that address each patient's specific needs and circumstances (Baker et al., 2010). This will improve treatment strategies and adherence, optimise clinical outcomes, and potentially reduce the burden of vision-related mental distress (Bennett et al., 2019).

Furthermore, individuals with visual impairment in SSA are faced with unique socio-cultural challenges; hence, psychological assessment plays a significant role in addressing the socio-cultural challenges (Elisha, 2019). Individuals' cultural beliefs and practices may influence their perception of care and treatment seeking (Sarfo, 2014). Likewise, individuals with visual impairment may be influenced by their cultural beliefs and practices concerning their vision care and treatment-seeking behaviour, leading to differences in access and utilisation of the available services(Bakkar, Alzghoul, 2018). By incorporating cultural sensitivity and awareness into psychological assessments, healthcare providers can better understand and address socio-cultural factors impacting patients' experience and outcomes, promoting equity and inclusivity in vision care delivery. This paper suggests that the integration of psychological assessment into eye care practices in SSA offers several benefits. These include enhancing well-being, improving treatment outcomes, and addressing the socio-cultural challenges of individuals with visual impairments, hence promoting holistic and effective care that meets the needs of the patients in this region.

4. Challenges and Potential Solutions

Regions in SSA face resource constraints, including funding, equipment, and trained personnel, hindering the integration of psychological assessments into vision care services (Abraham et al., 2024; Graham, 2017). Limited resources often lead to challenges in acquiring the necessary infrastructure and equipment for psychological assessments (Graham, 2017). Limited resources in implementing psychological assessment in vision care in Sub-Saharan Africa can be addressed through task-shifting strategies where non-specialist healthcare workers are trained to conduct basic psychological assessments, easing the burden on specialised professionals and addressing resource limitations (Graham, 2017).

Socio-cultural beliefs further compound the challenges posed by resource constraints. Diverse socio-cultural beliefs in Sub-Saharan Africa also influence perceptions of mental health and hinder acceptance of psychological assessments in vision care (Foxcroft, 2011). The historical reliance on Eurocentric theories and philosophies in scientific psychology in Sub-Saharan Africa has led to the development of psychological tests based on Western models (Oppong et al., 2022). This Western influence hinders the development of indigenous African theories and assessments, creating a challenge in aligning assessments with local cultural beliefs and practices (Oppong et al., 2022). As seen, cultural beliefs can be mitigated by handling elements that complicate the proper implementation of the psychological assessment into vision in SSA, involving local communities in the learning of cultural beliefs, and tailoring approaches to the psychological evaluation sensitively and acceptably (Foxcroft, 2011).

Insufficient training among healthcare professionals in psychological assessment techniques also poses a significant challenge to effective implementation (Oppong et al., 2022). Professionals need training to develop multicultural awareness and adapt their practices to diverse cultural contexts in Sub-Saharan Africa (Oppong et al., 2022). Addressing professional training in implementing psychological assessment in vision care in Sub-Saharan Africa involves developing training programs that focus on multicultural awareness and worldview to equip assessment practitioners and researchers with the necessary skills to understand and provide services to culturally diverse populations (Foxcroft, 2011).

5. Training Needs for Vision Care Professionals

To ensure that eye care professionals in SSA can provide comprehensive care for individuals with visual impairments, it is important to include psychological assessment training in their existing curricula (Dean et al., 2021). This inclusion will enable them to recognise and address the psychological aspects of vision care. The training can be integrated into both the undergraduate and postgraduate education programs. Additionally, the organisation of continuous education

sessions on psychology assessment for eye care professionals to keep them updated on best practices and emerging trends in mental health assessment and interventions. Continuous Professional Development programs such as workshops, virtual training, and certificate programs are important to ensure practitioners remain competent and proficient (Merry et al., 2023) in conducting psychological assessments. Thus, evidence-based interventions should be implemented to support patients with visual impairment effectively (Dean et al., 2021). Also, programs such as the WHO-AFRO Primary Eye Care training packages can help strengthen the eye health system and improve coverage by providing regular professional development opportunities. Developing a deeper understanding of the interplay between psychology and vision health enables eye professionals to provide more holistic and patient-centred care.

Furthermore, collaborative approaches involving government, educational institutions, professional organisations, and non-governmental organisations are important in addressing the human resources crisis in SSA (Graham, 2017; Willcox et al., 2015). By collaborating with counsellors, psychologists, and other healthcare professionals, vision care providers can leverage their expertise to deliver integrated and coordinated care that addresses vision health's physical, social, economic, and psychological aspects. The interdisciplinary collaboration facilitates knowledge sharing, skill exchange and the development of innovative approaches to vision care delivery, improving patient outcomes and enhancing the overall and holistic quality of care.

6. Implementation Strategies

Integrating psychological assessment into vision care practices in Sub-Saharan Africa requires a multifaceted approach that emphasises interdisciplinary collaboration, community engagement, and capacity-building initiatives. These strategies are essential for supporting the effective implementation of psychological assessment and addressing the holistic needs of individuals with visual impairments in the region.

Interdisciplinary collaboration initiatives are crucial in supporting the effective implementation of psychological assessment in Sub-Saharan Africa. The limited availability of psychological tools developed for Sub-Saharan Africa underscores the significance of interdisciplinary collaboration. Consulting with target populations and engaging professionals from diverse fields can facilitate the development of culturally relevant and effective psychological assessments tailored to the region's needs (Akuffo et al., 2021; Rohwerder, 2018).

Community engagement initiatives are vital in supporting the effective implementation of psychological assessment in Sub-Saharan Africa. Community engagement initiatives involve raising awareness and sensitising communities about the importance of psychological assessment in vision care (Bain et al., 2022). Through various channels such as drama, social media, and community events, awareness can be increased, reducing stigma and promoting participation in assessment programs (Bain et al., 2022).

Capacity-building initiatives are essential in supporting the effective implementation of psychological assessment in Sub-Saharan Africa. Capacity-building initiatives involve providing professional development opportunities for healthcare professionals in Sub-Saharan Africa. These opportunities focus on enhancing psychological assessment skills, cultural competence, and ethical practice, thereby improving the quality of psychological assessment services (Oppong et al., 2022). Studies illustrate the positive impact of psychological assessment in vision care settings through successful interventions, improved patient outcomes, and the role of psychological assessment in addressing the needs of individuals with visual impairments in the region (Abraham et al., 2024; Abubakar et al., 2009). A study by Abubakar et al. (2009) highlights the role of participant consultation in enhancing psychological assessment in Sub-Saharan Africa. This approach has contributed to enhancing construct, content, and criterion validity of studies conducted in the region.

7. Ethical Considerations

Cultural sensitivity, patient autonomy, and informed consent are components of key principle considerations in psychological assessment and vision care in SSA. These considerations encompass cultural sensitivity, patient autonomy, and informed consent (Currier et al., 2023). These principles are paramount as they ensure respect for dignity and individual rights and acknowledge and address unique cultural norms and values (Dell'Osso, 2016). With the significant variation in cultures, languages, and belief systems in place, it becomes necessary to closely observe the appreciation of

cultural sensitivity in caring for and providing psychological assessment of visually impaired individuals within the region (Dell'Osso, 2016). Cultural beliefs, practices, and norms influence individuals' perceptions, hence the willingness and commitment towards assessment and treatment regarding vision care (Brooks et al., 2019; Kaihlanen et al., 2019). Respecting cultural diversity fosters trust, facilitating effective communication and assessment processes.

Respect for patient autonomy builds trust between the patient, their family and the practitioners (Barello et al., 2020). Through such assessment, the practitioner is assured that such a patient knows the type of care that can be given, further promoting autonomous judgment. Ethical practice through informed consent is well explained by detailed information sharing (Yu et al., 2020). Sharing information in a way and manner that is easy yet assuring consent underlines a patient's involvement in their care. International guidelines such as the International Test Commission make it clear that tests should be used only in appropriate, professional, and ethical ways, and they should consider people's needs and rights in being assessed. Therefore, Vision care services in SSA must be fair, just, and transparent. This will be brought to pass through the cooperation of professionals, policymakers and the communities (Murgić et al., 2015). Achieving sustainable cooperation at regional and international levels is paramount for over-representation in answering mental health issues in low and middle-income countries, gaining mentorship, gaining political support and shaping policy development.

8. Conclusion

In conclusion, from the ever-rising complexities in dealing with issues of vision care in SSA, there has to be an approach that rises obligatorily to the occasion by coming up with a multi-strategic approach that captures both physical and psychological aspects of vision care without discrimination. Quality will be realised when issues such as resource constraints, socio-cultural beliefs, and professional training can be pinpointed and addressed by practitioners. Underpinning all these are the values of cultural sensitivity, patient autonomy, and informed consent, which point to the fact that care is just, transparent, and inclusive. Doing so would help sustain work across stakeholders in mental health issues and policy building towards better outcomes for low- and middle-income countries.

9. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

All authors read and approved the final version of the manuscript for publication and agree to be accountable for all aspects of the work, ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Availability of data and materials

Not applicable.

Conflict of interest statement

The authors report no conflicts of interest.

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Authors' contributions

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