

Lack of education, knowledge, and supplies are barriers to cryptococcal meningitis care among nurses and other healthcare providers in rural Uganda: A mixed methods study

Abigail Link, Mark Okwir, Sarah Irebarren, David Meya, Paul. R. Bolijanen, Danuta Kasprzyk

Abstract

Background

Cryptococcal meningitis (CM) is one of the deadliest opportunistic infections related to HIV/AIDS. A research gap exists surrounding the barriers to CM diagnosis, treatment delivery, and care from the healthcare provider's perspective.

Objectives

The purpose of this study was to elucidate provider's behaviors, to identify barriers and facilitators to diagnose and treat CM, and to assess their knowledge of CM, cryptococcal screening, and treatment.

Design, setting, and participants

A convergent mixed-methods study among twenty healthcare providers who provided CM patient referrals to Lira Regional Referral Hospital in Lira, Uganda.

Methods

Surveys and interviews were conducted to obtain information from healthcare providers who referred CM patients to Lira Regional Referral Hospital from 2017 to 2019. Questions related to provider education, knowledge, barriers to CM care, and patient education were inquired to understand the providers' perspectives.

Results

Nurses had the least amount of CM knowledge with half knowing the cause of CM. Approximately half the participants knew about CM transmission, but only 15 % knew the duration of CM maintenance therapy. Most participants (74 %) last had education regarding CM during didactic training. In addition, 25 % disclosed they never educate patients due to time constraints (30 %) and lack of knowledge (30 %). Nurses (75 %) were least likely to provide patient education. Most participants acknowledged their lack of CM knowledge and attributed it to a lack of education and perceived inexperience with CM.

Conclusions

Providers' gaps in knowledge due to the lack of education and experience contributes to decreased patient education, and the lack of access to appropriate supplies affects their provision for CM diagnosis, treatment, and care. These results can guide evidence-based interventions to improve health providers' knowledge. Recommendations for standardized CM education should be developed for both providers and patients in collaboration with professional boards and the Uganda Ministry of Health.