Living positive with HIV in Botswana: a self-help intervention for people living with HIV and depressive symptoms

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Chapter 8

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Summary

Introduction: Despite the severe impact, depressive symptoms among people living with HIV (PLWH) often remain underdiagnosed and undertreated, particularly in resource-limited settings where mental health services are scarce or inaccessible. Addressing depressive symptoms in PLWH is therefore a critical component of comprehensive HIV care. Traditional models of mental health treatment, relying on specialized clinical services, face numerous barriers in low- and middle-income countries (LMICs) where the majority of PLWH reside. Self-help interventions, particularly those based on Cognitive Behavioral Therapy (CBT), have emerged as promising tools for managing depressive symptoms in various populations, including PLWH.

Objectives: The overarching aim of this doctoral research is to advance the understanding and development of scalable, effective self-help interventions for depressive symptoms among PLWH in Botswana. Specifically, the objectives of this dissertation were to; 1) conduct a systematic review of existing interventions to treat depressive symptoms in LMICs; 2) explore correlates and risk factors for depressive symptoms among PLWH, in order to find intervention targets for depressive symptoms among PLWH in Botswana. We also explored the mental health needs for PLWH in Botswana and conducted a feasibility assessment for a self-help intervention; 3) to adapt a CBT-based self-help intervention to reduce depressive symptoms among PLWH in Botswana; 4) to empirically evaluate the effectiveness of the CBT-based self-help intervention; and 5) to examine implementation challenges and facilitators of our interventions as well as to present an evidence-based implementation strategy for the booklet self-help intervention.

Method: This research utilized various research designs and methods. For the review, we searched for journal articles from various databases. We looked at the overall results to find out if self-help programs helped to reduce depressive symptoms in PLWH better than control conditions in LMICs. We also conducted a survey with 291 people receiving HIV care in Botswana to understand levels of depressive symptoms, coping skills and mental health care needs. Next, we designed a self-help program and then conducted a structured study where some participants received and followed a booklet self-help program with coaching, while others were on the waiting list. Their depressive symptom scores were

compared over time to see if the program worked. Participants were assessed before, after and three months after the program. Finally, the study examined practical challenges in delivering the program and developed strategies to improve its implementation in the real world.

Results: In the review, 18 studies were included. Self-help interventions were found to be effective in reducing depressive symptoms. These interventions were even more effective when studies were conducted in countries at the lower side of income, had at least mild depression as inclusion criterion, reported less than 30% drop-out rate, did not use relaxation techniques, had a low or medium risk of bias, and used a booklet or online form of intervention.

Findings from the survey showed that a total of 43.4% participants reported clinically significant depressive symptoms. The majority of participants indicated that they needed help with the following topics: feelings of depression, physical tension, finding new goals and coping with HIV. In addition, they indicated preferring a self-help programme in booklet format. Multiple regression analyses showed that the following coping strategies had significant relationships with depressive symptoms: rumination, catastrophising, withdrawal, positive refocusing and refocus on planning.

We found significantly larger decreases in both depressive and anxiety symptoms in the group that followed the intervention than in the wait-list group. Most people were happy with the intervention. Barriers encountered during implementation included costs, lack of screening, lack of trained professionals, etc., with the most important and changeable barrier being the lack of screening and referral into the self-help program. The most important implementation strategies include good collaboration with stakeholders and training of staff and coaches.

Conclusion: The findings of this project could inform the design and implementation of mental health interventions that could prevent or treat depression. Implementing this low-cost and scalable self-help program in a LMIC such as Botswana is critical in bridging the existing mental health treatment gap. It is important to recognise that standard screening for depressive symptoms is critical to accessing the intervention. The findings suggest that an intervention for PLWH with depressive symptoms in Botswana should preferably be a self-help program presented in booklet format. With regard to content, the

results confirmed that the intervention should focus on specific coping skills. In addition, elements like goal finding and strategies to reduce physical tension should be added.

Recommendations: While booklet-based interventions were preferred and effective during our study, expanding the intervention to digital options may become increasingly relevant as mobile connectivity improves in Botswana or for different sections of the Botswana population that is living with HIV. Future research should investigate the effectiveness of online programs in treating depressive symptoms because the review showed that online programs were as effective as booklet interventions. In addition, investigating the cost-effectiveness of the intervention is also recommended in a larger sample. Resource limited countries like Botswana can benefit from such research to ensure that limited funds are used efficiently and that the intervention remains feasible over time. Furthermore, as far as we know, none of the HIV treatment centres in Botswana screen for any mental health problems, leaving those who have mental health issues possibly undetected and untreated. We recommend the design and implementation of a short screening tool for prevalent mental health problems such as depressive and anxiety symptoms among PLWH in Botswana. Early detection is critical as it means the patients can be referred into the program and receive the treatment they need. Future investigations may benefit from incorporating alternative research designs which would allow for simultaneous assessment of both intervention outcomes and implementation processes. Moreover, mixed methods studies that combine quantitative measures with qualitative insights from patients, providers, and other stakeholders could yield a more comprehensive understanding of implementation challenges, facilitators, and user experiences.