Exploring Nurse's Perceptions of Integration of Mental Health Services in HIV/AIDS Treatment in Lesotho: A Qualitative Survey

Sello Ramokanate
https://orcid.org/0001-9013-2653
National University of Lesotho
Email: ramokanates@icloud.com

Isabel Nyangu
https://orcid.org/0000-0002-5892-924
Edinburgh Napier University
I.Nyangu@Napier.ac.uk

Libuseng Moureen Rathobei
https://orcid.org/0000-0001-9322-5433
National University of Lesotho
rathobeil@yahoo.com

Abstract

Background: Mental disorders are highly prevalent among people living with HIV/AIDS compared with the general population. In sub-Saharan Africa, where Lesotho resides, there are high HIV/AIDS and mental disorder prevalence with significant treatment gaps. Nurses are the primary HIV/AIDS treatment providers in Lesotho but lack the skills and resources to implement mental health care integration, which the World Health Organisation recommends.
This study sought to explore and describe the perceptions of nurses regarding the integration of mental health services in HIV/AIDS treatment.
A qualitative, explorative, and descriptive research design was used to collect data from a sample of 10 nurses who were purposively selected. A total of six in-depth interviews and one focus group discussion were conducted. Permission to conduct the study was sought from the Ministry of Health (ID46-2022). Written informed consent was sought from the participants, who were allowed to ask questions and could withdraw from the study without any prejudice. Data were transcribed verbatim and analysed using thematic analysis. Some nurses described uncertainty about the relationship between mental health and HIV/AIDS, while others described antiretroviral treatment as a factor that influences a patient's mental health. Intrinsic factors that influenced their ability to integrate the services were empathy and personal experiences. Extrinsic factors that influenced their ability were the high prevalence of mental health illness and the collaboration from village health workers. The lack of

UNISA

New Voices in Psychology
https://unisapressjournals.co.za/index.php/NV
Volume 13 | 2023 | #15566 | 14 pages

https://doi.org/10.25159/2958-3918/15566
ISSN 2958-3918 (Online), ISSN 1812-6371 (Print)

competency and other health service limitations hampered the integration of mental health services in HIV/AIDS management.
These findings necessitate the need for training and continuing professional development for nurses in the provision of mental health services to PLWHIV. Nursing curricula need to work towards the integration of mental health into HIV/AIDS treatment programs.

Keywords: Mental health; HIV/AIDS; Lesotho; primary health care; Integration

Introduction

Mental disorders are widely documented among people living with HIV/AIDS globally. Factors such as perceived shorter lifespan, stigma, neurobiological effects of the virus and side effects of antiretroviral treatment have been identified amongst other causes (UNAIDS, 2022 & Remien, 2019). Having advanced HIV disease, coupled with a history of mental illness and substance use, has further been proposed to heighten the risk of comorbidity (Motumma et al., 2019).

Particularly, studies (UNAIDS, 2022; Patel et al.,2018 & Remien, Stirrat et al.,2019) commonly report depression, anxiety, neurocognitive disorders, and substance abuse among PLWHA. Left unattended, these disorders become conducive to various challenges in life and perpetuate the risk of re-infection, challenges with retention to treatment and negatively impact the quality of life (Ahmed et al., 2020).

Despite evidence of the negative effects, there remains a treatment gap in the mental disorders among PLWHA globally and regionally, a phenomenon to which Lesotho is not immune. The World Health Organization (2020) and the Joint United Nations Programme on HIV/AIDS (2022) recommend the integration of mental health into HIV/AIDS treatment programs. Conteh, Latona, and Mahomed (2023) discerned that low-cost, high-impact strategies such as task shifting, mentorship, and interdisciplinary collaboration have been identified as effective, especially in resource-limited healthcare settings. Parcesepe, Bernard, Agler et al. (2018) argued that these strategies not only help expedite the integration but also emphasise the importance of training and the development of contextual tools.

Lesotho has the second highest prevalence of HIV/AIDS in Africa, with challenges in curbing new infections (MOH, 2022). The prevalence of mental disorders is also high, with significant treatment gaps. Research (PIH, 2017) also revealed a high prevalence of mental disorders among PLWHA in selected regions in Lesotho. Nurses are the primary HIV treatment providers and provide most mental health services (Nyangu, 2016 & Damane, 2018). However, there remains a gap in the management of mental health disorders due to a lack of training, specialist support and attention to physical illnesses in PLWHA, as is the case in most sub-Saharan African countries (Vavani et al., 2020; Ayugi, 2015).

Barriers such as lack of specialists and training, limited resources, and high patient volumes have been documented to compromise the integration of mental health in the HIV/AIDS treatment (Parcesepe, 2018; Mthinyane et al., 2021). (Ayugi, 2015; Nyangu, 2016; Ramokanate et al., 2021) identified similar challenges in the context of mental health and HIV/AIDS care in Lesotho, respectively.

The integration of mental health in HIV/AIDS treatment in Lesotho remains largely hypothetical, with myriad challenges in the implementation of mental health guidelines in national ART guidelines. Nurses' perceptions as treatment providers are critical to realising the integration (Akansel et al., 2020) but remain understudied and not documented in the literature. This paper, therefore, sought to explore the perceptions of nurses as regards the integration of mental health in HIV/AIDS treatment at a selected hospital in Lesotho.

Methodology

A qualitative, exploratory, descriptive, and contextual design was used to collect data from a purposively selected sample. The study setting was Berea Hospital, selected as one of the district hospitals with voluminous HIV/AIDS patients seeking services and a functional mental observation and treatment unit. The population comprised registered nurse-midwives working at the hospital, and the sample was purposively selected from available nurse-midwives allocated to the HIV/AIDS treatment facility at the time of data collection.

Semi-structured interviews were conducted with six participants, and one focus group discussion comprising six nurse-midwives was conducted to enrich the data, after which data saturation was reached. The data were transcribed verbatim, and field notes were kept describing the interview contexts in detail. Data were analysed using thematic analysis and presented using themes, categories, and sub-categories.

Permission to conduct the study was granted by the National Health Research Ethics Committee of the Ministry of Health (ID 46-2022) and the Hospital Management in the study setting. Written informed consent was sought from the participants, who were allowed to withdraw from participation without any prejudice, and the data from interview records was kept confidential. Anonymous codes were used to identify study participants, and the interviews were conducted privately.

Trustworthiness was ensured throughout the research process. Credibility, transferability, dependability and confirmability were strictly adhered to. The researcher developed the protocol and data collection tool and verified documents with the supervisors. Prolonged participant engagement, observations, debriefing and fieldnotes were implemented to ensure trustworthiness.

Results

Demographic description of participants

Data was collected from twelve (N=12) registered nurses who provided antiretroviral treatment services in the study setting. The participants were interviewed individually, and a focus group discussion was also conducted to ensure data richness. The average age of the participants was 34 years. The participants comprised of eight (66.6%) females and four (33.3%) males. Seven (58.3%) participants had a Diploma in Nursing and Midwifery, while three (25.0%) held a Bachelor of Science in Nursing and Midwifery. On average, the participants have five years of working experience.

Table 1: Summary of Themes, categories and subcategories

Theme	Category	Subcategory
Participants perceived mental health to affect the management of HIV/AIDS	Uncertainty about the relationship between mental health and HIV/AIDS	Lack of awareness
		Generalizations from experience and observations
	Influence of ART treatment and support on mental health and HIV/AIDS treatment outcomes	Poor ART adherence leads to mental illness
		Psychosocial support improves adherence and prevents mental illness
Various factors were found to influence the acceptance of participants to integrate mental health in HIV/AIDS treatment.	Intrinsic motivating factors	Empathy for PLWHA
		Personal experiences
	Extrinsic motivating factors	High prevalence of mental illness among PLWHA
		Collaboration with Village Health Workers

Participants Perceived Mental Health to Affect The Management Of HIV/AIDS

The findings of the study revealed that nurses have varied perceptions about the relationship between HIV/AIDS and mental health. Some participants demonstrated uncertainty, while some described that ART and support influence the mental health of affected individuals. The participants explained that they lacked knowledge, and some described that they had generalisations from experience. The participants' perceptions

were demonstrated to influence their view of mental healthcare for PLWHA. The findings are presented in Table 1.

Uncertainty about the relationship between HIV/AIDS and mental health

Participants demonstrated uncertainty about the relationship between mental health and HIV/AIDS. This was revealed by their varied responses, some suggesting a lack of awareness while some described generalisations from experience and observations.

Lack of awareness about the relationship between mental health and HIV/AIDS

The participants described that they were not aware of the connection between HIV/AIDS and the mental health of patients receiving antiretroviral treatment. They indicated that they did not know much and that they did not believe HIV/AIDS and mental health would have any bidirectional relationship. Some participants indicated that mental health and HIV/AIDS were two separate issues which do not have a connection, as described in the quotes below:

> I am not very knowledgeable about this subject Sir. But I do not think these two are related honestly. Mental illness is mental illness and HIV is HIV. I don't see how related they can be (Int3)

> I don't know much about the topic Sir. (Int1)

> What can I say now...I don't think HIV can cause a person to have mental illness...? (Int2)

> Honestly, I am not in a position to say much about the topic. All that I can talk about are broad assumptions from my little exposure. The relationship of these two has not been something I have really thought and learnt about Sir. (Int4)

Generalisations from experience and observations

The participants revealed that what they might know about the HIV/AIDS and mental health relationship draws from their experiences and observations, having worked with PLWHA for some time. They explained that being diagnosed and living with HIV/AIDS could lead to some patients suffering from mental illnesses. Importantly, they described that they have observed that it is difficult for patients to accept the HIV diagnosis, and that is where mental illness starts for most patients. They expressed their views as follows:

> After testing positive, it is difficult to accept the status and this impact on mental health by causing stress which leads to depression if not dealt with appropriately, which is something we see a lot among people living with HIV/AIDS. (Participant 1 FGD)

Another focus group discussion participant expressed views of the relationship between HIV/AIDS as thus:

> Just to add on what she has said; HIV has been considered a threat for so many past years until now when we think they can accept it. But it still causes stress, even if they pretend to be okay... when they get alone, they think about it and get stressed, so they really need us to provide mental health support. (Participant 3 FGD)

> Some of our patients who are on HIV medication take medication from MOTU because of disorders like depression and anxiety after getting their HIV status. (Int3)

Influence of ART treatment and support on mental health and HIV/AIDS treatment outcomes

Participants explained that ART treatment has an influence on the mental health of patients and that psychosocial support appeared to help avert mental illness for people living with HIV/AIDS in the study setting.

Not taking antiretroviral treatment appropriately leads to mental illness.

The participants explained that they have made a realisation that patients who do not take their HIV/AIDS treatment appropriately due to various reasons, such as being in denial, end up developing mental illness at some stage. They further explained that even in patients initiated on ART who default to treatment, symptoms or episodes of mental illness occur.

> Some of our patients who are on HIV medication take medication from MOTU because of disorders like depression and anxiety after getting their HIV status and not taking their treatments as advised (Int4)

> Some just take treatment and not use it...it shows that they have depression, and they just pretend to be taking treatment...Not getting treatment leads to immune system deterioration (AIDS) then mental illness... (Int1)

Psychosocial support promotes ART adherence and prevents mental illness.

The participants demonstrated that patients who receive psycho-social support adhere well to antiretroviral treatment and do not develop mental illness, suggesting a link between mental health and HIV/AIDS. They strengthened that patients who do not get support in their treatment for HIV/AIDS struggle and, therefore, need the support. Participants added that when patients demonstrate poor treatment adherence, it is usually because they have unaddressed mental health problems and therefore strengthened that PLWHA needs mental health support:

> I have learnt that people living with HIV/AIDS who get adequate treatment support adhere to treatment... (Int1)

> Well...what I have seen is that if the patients get psychosocial support from the nurses and even from their family members, they do well on treatment and those who do not develop mental illness usually... (Int3)

> It is very important. They do need it. I can guarantee that they need it because, one, some patients default their treatment and if we trace...we manage to trace them we find that these people, the current...the certain patients have been having mental health issues that were never addressed and at the ultimate end we end up losing such patients (Int6)

Various Factors Were Found To Influence The Acceptance Of Participants To Integrate Mental Health In HIV/AIDS Treatment.

The findings of the study identified factors that influence nurses' willingness and acceptance to integrate mental health in HIV/AIDS care in the HIV/AIDS treatment setting. As regards the acceptance of the integration of mental health in HIV/AIDS treatment, the findings of the study pointed out that nurses are motivated by intrinsic and extrinsic factors to participate.

Intrinsic motivating factors

Participants described factors that originated from their personal capacity and outlook on mental health in HIV/AIDS as motivating to participate in the integration of care. These factors were not related to any external factors at the workplace and were unique to each participant but were common among them.

Empathy for people living with HIV/AIDS

Participants described that they are motivated by empathy for the dual diagnoses of people living with HIV/AIDS and mental illness at the same time. The participants explained that the "double blow" serves as a motivating factor to provide mental health services for these patients to help improve their treatment outcomes and livelihoods. The participants said:

> It is something I am willing to do because I feel for these patients who struggle with two significant problems in life...HIV and mental illness (Int2)

Another participant described that it is important to view patients who have the dual diagnoses of HIV/AIDS and mental illness as human and be empathetic to offer them mental health services together with HIV/AIDS services:

> ...just because they are on mental disorder medication does not mean we can choose not to help them...they are people like us (Int3)

> What I mean is, just because these patients have got two significant problems in their life, both of which carry stigma and discrimination...we cannot deny them any service. One of the reasons I am willing and supportive of the integration is because I can imagine what they go through. The stress...the worthlessness...I feel for them... (Int5)

Another participant strengthened that:

> I totally accept it. You find out when working with these patients that they struggle with adherence and when you follow this up it is because they are struggling with mental health issues. I feel for them. (Int6)

Personal experiences and reflections

Among other factors which motivate the participants to integrate mental health into HIV/AIDS treatment are personal experiences and their reflections on their lives. The participants described that having been through the same experiences as the patients who deal with HIV/AIDS and mental illness, they are motivated to integrate the services because they appreciate the need for and importance of the integration.

> My acceptance has mostly been influenced by my personal experience being HIV/AIDS positive and struggling with low mood for some time. I feel what they go through. (Int2)

> I think I am positive about the integration of mental health in HIV/AIDS treatment because of the journey I travelled myself after being diagnosed HIV positive a couple of years ago. Sir, it is difficult dealing with the news... I know how it feels to long for help or just a listening ear to offload. (Int5)

Extrinsic Motivating Factors

Prevalent mental illness among people living with HIV/AIDS

The participants described that they are motivated by the common mental health illness that they observe and discover among people living with HIV/AIDS whom they serve. They explained that due to the commonality of mental health illness, they end up motivated and feeling obliged to provide some mental health support to improve the treatment outcomes of their patients:

> Well, Sir, it is something we need to do as nurses because there are a lot of patients who present with such problems in this unit, quite many. So, it is something we accept and try to do because we want the patients to get better and not get opportunistic infections and mental illness... (Int 3)

Participants in the focus group discussion further expressed that:

> In that department, we happen to see any patients who come with mental health problems...when they come for HIV services, as a nurse you find out that they have mental health problems and that sometimes makes them not adhere to treatment.

> It is worrying because there are a lot of them and this makes me want to provide some psychosocial support because otherwise, they get worse...it's a lot of them... (FGD003).

> There are too many patients with those problems...we need to assist them because otherwise they get worse and do not do very well on treatment...it affects our work in that case (Int 4)

Collaboration with Village Health Workers

Amongst factors that influence willingness to integrate mental health in HIV/AIDS treatment, participants described that collaboration with village health workers in the provision of ART services motivates them to provide mental health support to patients. They explained that working with them alleviates the workload and provides an opportunity for community-based monitoring of patients.

> We also work with village health workers and this makes our job easier. For the most part, they assist us with monitoring and checking up on patients in the community. They have improved adherence and notify us when there are patients who are not doing well...I am confident that even with this integration, they can help us a lot because they even know the community a lot more than we may do... (Int 7)

Discussion

Participant's perceptions of the relationship between mental health and HIV/AIDS management

In this study, some participants described positive perceptions stemming from learning and experience. At the same time, some strongly indicated a lack of awareness about the relationship between mental health and HIV/ADS among patients of antiretroviral treatment. Boakye and Mavhandu-Mudzusi (2019) described that nursing care for PLWHA requires trained nurses who possess skills that match the unique needs of patients. The authors further purport that knowledge influences the perceptions of nurses and, hence, their therapeutic commitment, which the researcher identifies as important in the integration of mental health in HIV/AIDS treatment.

The findings of this study are consistent with several research studies conducted previously in other countries where nurses expressed similar perceptions and lack of knowledge. In South Africa, Cele & Mhlongo (2020) indicated in their study exploring health professionals' perceptions regarding integration of mental health in HIV/AIDS services that 75% (n=150) of the participants had negative perceptions. Cele & Mhlongo (2020) further explained that the negative perceptions were consequent to a lack of knowledge, as 85% (n=170) of the participants attested to a lack of knowledge about the intersections between HIV/AIDS and mental health and the care thereof. It, therefore, strengthens the findings of this study that the varying perceptions of nurses influence the perceived role in treatment and likely impair the integration of mental health in HIV/AIDS treatment.

The participants in this study demonstrated a lack of knowledge about the mental health treatment guidelines section in the National ART treatment guidelines (MOH, 2022). However, they were cognizant of other sections within the same document. Modula and Ramakumba (2018) noted in their paper assessing nurses' experiences implementing mental health care for PLWHA that nurses conversed with mental health treatment

guidelines and viewed them as an empowering tool in ART care. This disaccord suggests a lack of comprehensive training and partial dissemination of treatment guidelines in Lesotho, which often focuses on ART treatment regimens and physical comorbidities.

The findings of this study pointed out that despite a lack of knowledge, nurses in the HIV/AIDS treatment setting have the willingness to regard integration as their responsibility and as a patient right. Some nurses, however, indicated that it was not their responsibility. Similar disarray was noted by Cele and Mhlongo (2020). Participants identified motivating factors and hindrances in describing their willingness and acceptance of integrated care. Ayugi (2015) explained that nurses in Lesotho have the potential and willingness to integrate mental healthcare into HIV/AIDS care but lack proper preparation, which was evident in this study.

Furthermore, studies conducted in one part of South Africa and Zimbabwe demonstrated that commitment and willingness to integrate mental health in HIV/AIDS care were low among nurses who provide ART services (Duty, Sharer, Cornman et al 2017; Cele & Mhlongo, 2020). The literature demonstrated that there is a lack of knowledge about the relationship between mental health and HIV/AIDS, hence the lack of willingness. Participants in this study explained that they have willingness and acceptance. Therefore, the study facility and possibly others have an advantage that could be leveraged to optimise HIV/AIDS care, provided nurses receive the necessary training and mentorship.

Factors found to influence the acceptance of participants to integrate mental health in HIV/AIDS treatment.

The results of this study indicated that nurses understand the value of integrating mental health into HIV/AIDS care. Through experience and observation, participants reported have deciphered that psychosocial support improves HIV treatment adherence (and hence HIV/AIDS outcomes) and patient mental health outcomes. Hoare, Sevenoaks, and Mtukushe et al. (2021) have described that health systems, through clinicians in the frontline, can only achieve successful integration if there is common understanding and commitment. In this regard, the study setting is advantageous to other countries where clinicians lack comprehension and commitment.

These findings are congruent with an integration project conducted in several regions of Lesotho (PIH 2018: Online), where psychosocial interventions and psychiatric medications improved the treatment outcomes in PLWHA. Truong, Rane, Govere et al. (2021) noted the dearth of literature exploring the impact of mental health interventions on HIV care initiation and retention in resource-limited settings. However, in the context of Lesotho, this study provides insight into the fact that nurses are motivated by positive patient outcomes to provide mental healthcare for PLWHA.

Empathy surfaced as another factor that influenced nurses' willingness to integrate mental health in HIV/AIDS treatment. The participants described that they were motivated by their capacity to place themselves in the position of patients. While empathy is a globally recommended phenomenon central to nurses' ability to render quality nursing care, Wilberg (2022) argued that nurse-patient relationships and therapeutic communication influence the health outcomes of patients, not just empathy.

Croston, Wibberley, and Jack (2022) strengthened this notion and further described that to improve patient satisfaction, treatment adherence and HIV/AIDS treatment outcomes, empathy must be integral to HIV nursing philosophy. However, it should be seasoned with other factors such as therapeutic communication, nurse-patient relationship, and expression of feelings/emotions. This assertion suggests that nurses should exercise empathy, not sympathy, to avoid being affected by patient's problems.

The study's findings and the cited literature elicit a need to discuss compassion fatigue, which Coles (2015) referred to as a cause of burnout and work dissatisfaction. It is imperative to note that while nurses are motivated by empathy to integrate mental health into HIV/AIDS treatment, appropriate strategies must be sought to regulate their vulnerability to empathy-related fatigue against supporting evidence that they already handle high patient volumes and incur other challenges.

Conclusions

Mental health care for people living with HIV/AIDS has not received the necessary attention in terms of clinician capacity development, research and policy alignment. Pertinent to this observation, nurses at the forefront of HIV/AIDS treatment have been identified to have varied perceptions about the integration of mental health, impacting negatively on their therapeutic commitment. We conclude that to increase knowledge and improve attitudes and practices of ART nurses, training and integrated HIV/AIDS treatment programs with inclusive policy and protocols are imperative.

Recommendations

We recommend the capacitation of nurse-midwives who provide treatment for people living with HIV/AIDS in mental health. The findings of this study elicit the need for training antiretroviral nursing professionals, developing an integrated service delivery model, and capacity development for implementation and sustainability plans in HIV/AIDS treatment programs henceforth. The authors further recommend further research to understand better the role nurses play in the integration of mental health in HIV/AIDS treatment in Lesotho and how it can be improved. Guidelines for implementation of the integration of mental health in HIV/AIDS treatment are necessary in order to improve the mental health services PLWHA receive.

References

Ahmed, I., Weldegebreal, T., & Mekonnen, A. (2020). Integrating mental health services into human immunodeficiency virus clinics: Lessons from task-sharing between clinical and lay healthcare providers in Ethiopia. *The Ethiopian Journal of Health Development = Ya'Ityopya tena lemat mashet*, *34*(1), 5–13.

Akansel, N., Watson, R., Vatansever, N., & Özdemir, A. (2020). Nurses' perceptions of caring activities in nursing. *Nursing Open*, *8*(1), 506–516. https://doi.org/10.1002/nop2.653

Ayugi, J. (2015). *Mental health and HIV in Lesotho.* Malaika Big League Publishers.

Boakye, S.D. & Mavhandu-Mudzusi, H.A. (2019). Nurses knowledge, attitudes and practices towards patients with HIV and AIDS in Kumasi, Ghana. *International Journal of Africa Nursing Sciences*, 11: 100147. https://doi.org/10.1016/j.ijans.2019.05.001.

Cele, W., and Mhlongo, E. (2020). Health professional's perceptions of the integration of Mental health into HIV services. *Global Journal of Health Science, 12*(2), 13–23. https://doi.org/10.5539/gjhs.v12n2p13

Conteh, N.K., Latona, A. & Mahomed, O. (2023). Mapping the effectiveness of integrating mental health in HIV programs: a scoping review. *BMC Health Serv Res* 23, 396. https://doi.org/10.1186/s12913-023-09359-x

Croston, M., Wibberley, C., & Jack, K. (2022). Developing therapeutic relationships with people living with HIV: exploring the nurse–patient relationship. *British Journal of Nursing*, *31*(11), 16–22. https://doi.org/10.12968/bjon.2022.31.11.S16

Dutty, M., Shareer, M., Cornman, H., Pearson, J., Fullem, A. (2017). Integrating mental health and HIV services in Zimbabwean communities: A nurse and community-led approach to reach the most vulnerable. *Journal of the Association of Nurses in AIDS Care, 28*(2) 186–198. https://doi.org/10.1016/j.jana.2015.09.003

Lesotho Ministry of Health (MOH). (2022). *Lesotho population-based HIV impact assessment 2020 (LePHIA, 2020): Final report.* Maseru: MOH.

Ministry of Health. (2019). *National art treatment guidelines, addendum. Government Printing. Maseru, Lesotho.*

Modula, M., and Ramakumba, M. (2018). Nurses' implementation of mental health screening among HIV infected guidelines. *International Journal of African Nursing Sciences, 8,* 8–13. https://doi.org/10.1016/j.ijans.2018.02.001

Motumma, A., Negesa, L., Hunduma, G., & Abdeta, T. (2019). Prevalence and associated factors of common mental disorders among adult patients attending HIV follow up service in Harar town, Eastern Ethiopia: a cross-sectional study. *BMC psychology*, *7*(1), 11. https://doi.org/10.1186/s40359-019-0281-4

Mthinyane, N., Harling, G., Chimbindi, N., Baisley, K., Seeley, J., Dreyer, J., Zuma, T., Birdthistle, I., Floyd, S., McGrath, N., Tanser, F., Shahmanesh, M., & Sherr, L. (2021). Common mental disorders and HIV status in the context of DREAMS among adolescent girls and young women in rural Kwazulu Natal, South Africa. *BMC Public Health, 21*, 478. https://doi.org/10.1186/s12889-021-10527-z

Nyangu, I. (2016). Evaluation of Antiretroviral therapy program in primary healthcare settings in Lesotho. (Thesis, University of South Africa).

Parcesepe, A., Bernard, C., Agler, R., Ross, J., Yotebieng, M., Bass, J., Kwobah, E., Adedimeji., Goulet, J., & Althoff, K.N. (2018). Mental Health and HIV: Research priorities related to the implementation and scale up of 'treat all' in Sub-Saharan Africa. *Journal of Virus Eradication*, *4*(2), 16–25. https://doi.org/10.1016/S2055-6640(20)30341-1

Patel, P., Rose, C.E., Collins, P.Y., Nuche-Berenguer, B., Sahasrabuddhe, V.V., Peprah, E. Vorkoper, S., Pastakia, S.D., Rausch, D., & Levitt, N.S. (2018). Noncommunicable diseases among HIV-infected persons in low-income and middle-income countries: a systematic review and meta-analysis. *AIDS*, 32(suppl. 1), S5–S20. https://doi.org/10.1097/QAD.0000000000001888

Pelletier, A.R., Derado, J., Maoela, L., Lekhotsa, T., Sechache, M., & Nkuatsana, K. (2022). Impact of the DREAMS program on new HIV diagnoses in adolescent girls and young women attending antenatal care — Lesotho, 2015–2020. *MMWR Morb Mortal Wkly Rep*, 71(2), 48–51. https://doi.org/10.15585/mmwr.mm7102a3

PIH. (2017). Partners in Health Mental Health Integration Program. Mental Health Innovation Network. Retrieved from https://www.mhinnovations.net/innovations.

Ramakumba M. (2018). Nurses implementation of mental health screening among HIV infected guidelines. *International Journal of Africa Nursing Science* 8, 813. https://doi.org/10.1016/j.ijans.2018.02.001

Ramokanate, S., Nyangu, I and Tsekoa, L. (2021). Health professionals perceptions regarding mental healthcare services quality in a selected psychiatric hospital in Lesotho. *Merit Research Journal of Medicine and Medical Sciences*, *9*(8), 354–360

Remien, R H. (2019). The impact of mental health across the HIV care continuum. psychology and AIDS exchange newsletter, American Psychological Association. Retrieved from https://www.apa.org/pi/aids/resources/exchange/2019/01/continuum

Remien, R.H., Stirratt, M.J., Nguyen, N., Robbins, R.N., Pala, A.N., & Mellins, C.A.(2019). Mental health and HIV/AIDS: the need for an integrated response. *AIDS*, 33(9), 1411–1420. https://doi.org/10.1097/QAD.0000000000002227

Stockton, M., Uddedi, M., Kulisewa K., Hossanpour, M., Gaynes, B., Mphonda, S., Maseko, J., Petifor, A., Verhey, R. (2020). The Impact of an integrated depression and HIV treatment program on mental health and HIV care outcomes among people newly initiating ART in Malawi. *PLoS One, 215*(5). https://doi.org/10.1371/journal.pone.0231872

Truong, M., Rane, M.S., Govere, S., Galagan, S.R., Moosa, M.Y., Stoep, A.V., Celum, C., & Drain, P.K. (2021). Depression and anxiety as barriers to art initiation, retention in care, and treatment outcomes in KwaZulu-Natal, South Africa. *EClinicalMedicine*, *31*, 100621. https://doi.org/10.1016/j.eclinm.2020.100621

UNAIDS. (2022*). Integration of Mental health and HIV interventions. Key considerations*. Joint United Nations Program on HIV/AIDS and the WHO. 3–6.

Vavani, B., Kraaiij, V., Spinhoven, P., Amone-P'Olak, K., Garnefski, N. (2020). Intervention targets for people living with HIV and depressive symptoms in Botswana. *African Journal of AIDS Research, 19*(1), 80–88. https://doi.org/10.2989/16085906.2020.1727933

Wilberg, M. (2022). Improving HIV Care: Does your patient living with HIV/AIDS need advice, empathy, or something else? Aidsmap. Retrieved from https://www.aidsmap.com/news/feb-2022/does-your-patient-living-with-HIV-need-empathy-advice-or-something-else