

# Health Professionals' Perceptions of the Integration of Mental Health Into HIV Services

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## Abstract

**Introduction:** Mental health conditions have been reported to be common in people living with HIV (PLWH). Research has shown that the chances of PLWH experiencing mental health disorders is very high. It is claimed that there exists a link between mental health and HIV, given the neurotoxic effects of treatment on the HIV patients' central nervous systems. The justification for the incorporation of mental health services into other medical services at the primary health care level is founded on epidemiologic data, which shows that psychiatric conditions are prevalent in primary health care.

**Methods:** The study adopted a mixed method approach using both quantitative and qualitative methods. The target population included nurses, doctors, psychologists and experts on mental health and HIV attending to patients on a daily basis, at primary health care centres and in mental Health care institutions and HIV service centres. Questionnaires were administered to 200 participants. Focus group discussions were conducted with three groups of health professionals who met the inclusion criteria. Face-to-face interviews were conducted with the key informants. The study was done at three primary health care centres rendering mental health and HIV services.

**Results:** It was observed that 75% of the participants had negative perceptions of the integration of mental health into HIV services at Primary Health care centers. The majority of the participants (85%) disagreed that they had received any form of awareness of links between mental health and HIV. In other words, only 15% agreed. Eighty-nine per cent (89%) stated that people with mental health problems should be treated separately from PLWH. Most health professionals were not ready for the integration of mental health into HIV services.

**Conclusion:** The findings of this study revealed that there are still factors that hinder the integration of mental health into HIV services at primary health care centres that need to be taken into consideration before this integration can be implemented successfully.

**Keywords:** HIV services, mental health care, perception, primary health care

## 1. Introduction

Mental health conditions have been reported to be common in people living with HIV (PLWH). Research has shown that the chances of PLWH experiencing a mental health disorder is very high Duffy et al. (2017, pp. 1 -11). It is claimed that there exists a link between mental health conditions in HIV patients and neurotoxic effects on HIV patients' central nervous systems (Uys & Middleton, 2004). Also, studies have shown signs of a high HIV seroprevalence in people with severe cases of mental illness. A seroprevalence rate of about 26.5% has been found in patients who have been treated at public psychiatric facilities in South Africa (Collins, Holman, Freeman, & Patel, 2006).

The justification for the incorporation of mental health services into other medical services at primary health care level is founded on epidemiologic data which show that psychiatric conditions are prevalent in primary health care (Dodds et al., 2004). About half the number of patients who are diagnosed with psychiatric ailments are managed by general medical practitioners (Dodds et al., 2004). The incidence of mental disorders among patients infected with HIV is far higher than is seen in non-infected patients at the primary care level (Dodds et al., 2004). It has also been noted in resource-limited settings that psychiatric conditions may present as an initial clinical sign of HIV infection in patients infected with the virus (dos Santos & Wolvaardt, 2016).

There is an increased risk of co-morbid physical disease associated with mental disorders which may arise as a result of poor medical facilities or inadequate access to good general medical care services. This lowers the life expectancy of patients (De Hert et al., 2011). It has been observed in South Africa that mental ailments frequently co-occur with other conditions that worsen a patient's health, particularly in what is known as the quadruple burden of sicknesses (Tsai et al., 2014), namely: "maternal and child illnesses; infectious diseases such as HIV and TB; non-communicable diseases such as cardiovascular disease and diabetes; and injury" (Tomlinson et al., 2016).

It is vital to strengthen mental health care delivery owing to the importance of this service to patients with chronic conditions. Studies have shown that the South African government has put in place policies to help strengthen mental care systems. This can be seen in the *National Mental Health Policy Guidelines* to improve mental health care in the country. Though this has not addressed all challenges associated with mental health care delivery like inadequate inter-sectoral integration of mental health care and the stigma and discrimination associated with this ailment (Kakuma et al., 2010; Lund et al., 2011). Also necessitating the need to strengthen mental health care delivery is the gap existing between the need for and access to mental care services, referred to as the 'treatment gap'. This gap amounts to around 75% in several places globally (Kohn, Saxena, Levav, & Saraceno, 2004; Mendenhall et al., 2018).

The integration of medical services is not a simple process. It involves the interplay of several factors: policy makers and the frontline health care professionals need to work together to achieve this as this is more than just the sharing of a physical working environment (Athié et al., 2016; Knowles et al., 2013; Lawn, Lloyd, King, Sweet, & Gum, 2014). Determining the perceptions of frontline medical professionals concerning the integration of medical services will be important in the formulation of policies for proper planning by policy makers as well as in undertaking research to improve patient care (Athié et al., 2016). Also, this will help health care professionals to be aware of the need to advance their knowledge and to reassess their perceptions concerning the integration of services (Athié et al., 2016).

Research has shown and recommends that nurses as well as other frontline medical workers are the best cadres of health care experts to deliver mental health care in low resource settings, (Muga & Jenkins, 2008). But it is not uncommon to find that the treatment of mental conditions is left to hospital-based specialists thus posing a major stumbling block to the delivery of mental care delivery in low resource settings (Mendenhall et al., 2018). It has also been shown that a low level of appreciation of the health care delivery system is a very strong barrier to effective mental care service delivery (Marangu, Sands, Rolley, Ndeti, & Mansouri, 2014).

The perception of stakeholders regarding the delivery of mental health care at the primary health care level translates into the quality of service rendered. The perception of care givers is influenced by so many factors and these include: their previous experience, level of training, and their expectations amongst others (Campbell, Shield, Rogers, & Gask, 2004). In this mixed method study, the attitudes of health care professionals to the integration of mental health into HIV services was determined in selected primary health care centres.

## **2. Method**

### *2.1 Study Design, Participants and Settings*

The study adopted a mixed method approach using both quantitative and qualitative methods. The target population included nurses, doctors, psychologists and experts on mental health and HIV attending to clients on a daily basis, at primary health care centres, mental health care institutions and HIV service centres. Questionnaires were administered to 200 participants. Focus group discussions were conducted with three groups of health professionals who met the inclusion criteria. Face-to-face interviews were conducted with the key informants. The study was done in three primary health care centres rendering mental health, HIV services and primary health care services.

### *2.2 Selection of Participants*

Selection of participants was undertaken by the researcher based on those that were considered to be most relevant to the research question. Participants were selected using inclusion criteria, highlighted by the researcher, that all the participants would be required to meet and, if not, then they were excluded.

### *2.3 Ethical Considerations*

Approval for this study was obtained from the Research Ethics Committee of the University of KwaZulu-Natal, Protocol number: HSS/2248/017D. The consent of participants was sought before they were enrolled in this study. The participants offered to take part in the study voluntarily.

#### *2.4 Data Collection*

This study employed the use of a quantitative structured questionnaire to get the information from enrolled participants in order to determine their perceptions of the integration of mental health into HIV services at primary health care centres. A five-point Likert scale (strongly disagree, disagree, neutral, agree and strongly agree) was used to answer the questions. Focus group discussions and face-to-face interviews of key informants were recorded using voice recorders.

#### *2.5 Reliability and Validity*

The questionnaire employed in this study was a self-developed questionnaire and the Cronbach's alpha test was used to define the reliability of this study. Only a Cronbach's alpha score of  $\geq 0.70$  was taken into consideration and with eigen values superior  $\geq 1$ . Content validity was established in this study by ensuring that the measuring instrument measured in fact what it was designed to measure in terms of the research objectives. The reliability of the instrument was tested by administering the questionnaire to five (5) registered nurses of the population and then administering the same questionnaire to the same participants two weeks later. The two rounds of the questionnaire administered to these respondents were then checked to see if the results were consistent, which would indicate the reliability of the questionnaire to elicit the necessary information.

#### *2.6 Trustworthiness*

The basis for rigor in experimental research is founded on commonly established routines for establishing the two concepts of reliability and validity of the research. In this study, however, the researcher used action research, it being essentially qualitative. Rigor in action research is based on checks to ensure that the outcomes of research are trustworthy, in such a way that they do not reflect the particular perspectives, biases or worldview of the researcher and are not based solely on superficial or simplistic analyses of the results of the inquiry. (Stringer, 2013). In this study the researcher used vigorous checks for trustworthiness to establish veracity, truthfulness, or validity of the information and analyses that emerged from the research process.

#### *2.7 Conformability*

The researcher confirmed that all the procedures described took place during the period of data collection. The researcher provided an audit trail that enabled an observer to view the data collected, instruments, focus groups, voice recordings, and journals related to the study. This was done to ensure the veracity of the study, providing other means for ensuring that the study was trustworthy.

#### *2.8 Data Analysis*

Quantitative data was analysed using SPSS package Version 23.0. A p-value less than 0.05 was considered significant. Quantitative variables across the groups were compared using the one-way analysis of variance (ANOVA) while mean and standard deviation were used to describe continuous data. Categorical variables were described using frequencies and percentages. Audio recordings from interviews were transcribed verbatim and analysed using NVIVO (version 11). Both authors independently read through the transcripts and the analysis was done meticulously.

### **3. Results**

#### *3.1 Demographics*

Table 1. Demographics of participants

Characteristics	Variables	n (%)
Gender	Male	130 (65.0)
	Female	70 (35.0)
Age	≤ 25	50 (25.0)
	26 - 35	65 (32.5)
	36 - 45	35 (17.5)
	46 - 55	30 (15.0)
	56 - 65	20 (10.0)
Number of years' service as a mental care professional	2 - 5	80 (40.0)
	6 - 10	45 (22.5)
	11 - 15	30 (15.0)
	16 - 20	15 (7.5)
	≥ 20	15 (7.5)
Number of years' service as health care professional working in HIV services	2 - 5	100 (50.0)
	6 - 10	29 (14.5)
	11 - 15	15 (7.5)
	16 - 20	10 (5.0)
Number of years' service working as a primary health care professional at a primary health care setting (years)	2 - 5	65 (32.5)
	6 - 10	52 (26.0)
	11 - 15	28 (14.0)
	16 - 20	45 (22.5)
	≥ 20	10 (5.0)
Qualification	Mental Health Nurse, primary health care nurse, HIV trained nurses	142 (71)
	Psychiatrist	1 (0.5)
	Psychologist	11 (5.5)
	Medical doctors working in PHC, HIV and in mental health care facilities	43 (21.5)
	Missing	3 (1.5)

The table above presents the demographic characteristics of the participants enrolled in this study. The majority of the health care professionals who took part in this study were mental health nurses, primary health care nurses and nurses trained on HIV and working on HIV services (71 %). In this study, 0.5 % of the participants were psychiatrists, medical doctors working in primary health care, HIV and in mental health care facilities constituted 21.5% of the population, and 5.5 % were psychologists. The enrolled health care professionals all had experience working as mental care providers and HIV care providers in primary health care settings.

Table 2. Respondents' responses on perceptions towards the implementation of integrating mental health care into HIV services

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	n (%)	n (%)	n (%)	n (%)	n (%)
People with mental health problem can never recover fully to live quality life	65 (32.5)	60 (30.0)	15 (7.5)	45 (22.5)	10 (5.0)
People with mental health problems are dangerous	35 (17.5)	45 (22.5)	45 (22.5)	60 (30.0)	10 (5.0)
Integration of mental health care into HIV services can pose danger to me	55 (27.5)	60 (30.0)	15 (7.5)	30 (15.0)	40 (20.0)
People with mental health problems should be treated alone	45 (22.5)	65 (32.5)	20 (10.0)	45 (22.5)	25 (12.5)
It is a waste of time to treat people with mental health problems in HIV services	60 (30.0)	45 (22.5)	15 (7.5)	45 (22.5)	35 (17.5)
I have a responsibility to intervene with people who have mental health problems	15 (7.5)	20 (10.0)	20 (10.0)	85 (42.5)	60 (30.0)

#### *Perceptions of health professionals on the integration of mental health into HIV services*

Seventy-five per cent (75%) of the participants had negative perceptions of the integration of mental health into HIV services at primary health care centres. Most of the participants (85%) disagreed that they had received any form of awareness of the possible link between mental health and HIV. Only 15% agreed. Eighty-nine per cent (89%) stated that people with mental health problems should be treated separately from PLWH. Most health professionals were not ready for the integration of mental health into HIV services.

Participants had no interest in treating people with mental health problems at the primary health care level. They take this as a risk, stating that these people are highly dangerous.

“As a person I don't have any interest to treat people with mental disorders at PHC and I strongly believe that these people are highly dangerous. If it happened that I sustain an injury what would happen?”

[Participant 1]

Participants indicated that they had too little information on how to deal with mental health patients

“I cannot say that I can deal with people who have mental health problems since I had little information about mental health disorders”

[Participant 2]

Others did not know that there is an intertwined link between mental health and HIV

“Can you explain the intertwined link you are talking about because I have never had of it” ...

“I also don't know that mental health and HIV are related”. [Participant 3]

Participants felt that not all health care professionals understand the link between mental health and HIV. They also felt that integration needs to be introduced at the primary health care level in order for it to be successfully implemented. Health professionals should first know what integration means and be trained and receive in service education on mental health and HIV.

“If you have to integrate those two you have to try and integrate them at primary health care settings”.

[Participant 4]

One participant felt that doctors do not like working with mental health care patients. This alludes to the presence of psychiatric stigma. They also felt that it was important for doctors, including entry level doctors, to be trained on the procedure for admitting mental health according to the Mental Health Act. This training would also extend to ensuring the appropriate completion of the mental health forms.

“eh you know eeh.. Psych is the domain or field that many doctors don't like. So we have to train them on these

procedures, admitting the patient, we have to follow this mental health care act, and at times when interns come because what we do every time the interns come, we give them in-service training, train them on this mental health act, on how to fill in those forms. Even the medical officers because they do come so we have to train them, we give them an in-service training about how to admit these patients. It is important because this is a level one hospital so each doctor needs to be trained on mental health care act, so integrating these two may be it can be a challenge". [Participant 5]

#### 4. Discussion

The perceptions of health care professionals regarding the integration of mental health care into HIV services at primary health care centres is a critical factor that can impact on the effectiveness of service delivery either positively or negatively. The current study utilized a mixed method to determine the perceptions of health care professionals in selected primary health care centres and the results obtained show that the enrolled health care professionals had a low opinion of the prospect of the introduction of mental health into HIV services at primary care centres. It was observed that a very high number of these health professionals (75%) had negative perceptions. These perceptions of health care professionals can be influenced by several variables ranging from personal to working environment-related factors (Campbell et al., 2004).

Such perceptions also affect the confidence levels of health care professionals as well as their productivity. In order to improve the situation, the implementation of the proposed programme could be effected through in-service training and health care professionals engaged in continuous education-development programmes (Maconick et al., 2018), as this low perception level may not be unconnected with their level of education. Research has shown that health care professionals demonstrated poor skills in the diagnosis of mental disorders due to their lack of training and awareness. This therefore necessitates the need for constant training and retraining (Modula & Ramukumba, 2018; Naledi, Schneider, & Barron, 2011).

This study also showed that most of the health care professionals enrolled (85%) have not received any form of training to make them aware of the possible link between mental health and HIV. There is the need to raise the awareness among health care professionals of the issues regarding management of mental care needs of HIV infected patients. This is important and will help medical professionals to go beyond the customary means of managing mental health conditions, thus leading to proper patient care delivery. Also, this will give them the sense of being stakeholders in achieving integration (Athié et al., 2016).

The creation of awareness and training of frontline health care professionals in community settings to give specialist care to patients will help to address the shortfall of specialist professionals needed to provide such care, thus helping to sustain excellence in health care delivery in under-funded communities (Koon, Goudge, & Norris, 2014). It is essential for first line health professionals, who provide mental health care, to receive all-round training in the diagnosis and management of mental conditions as well as in the proper ways of providing referrals for more advanced care (Dewing et al., 2011; J. A. Joska & K. J. A. j. o. p. Sorsdahl, 2012). The implementation of effective supervision which may be one-on-one or general supervision of health care workers and also implementation of a continuous learning process through peer education among health professionals, may help to broaden the scope of health care given at the primary care level (J. A. Joska & K. Sorsdahl, 2012).

A significant fraction of the enrolled participants in this study (89%) wanted people with mental health complications to be treated separately from PLWH. This may be since the perception level is low and that they are not properly informed about mental health complications. Another factor that may contribute to this is the fact that in most cases the usual practice is to have different facilities for persons with mental ailments (Swartz & MacGregor, 2002). This perception of medical professionals may also be due to the belief that patients with psychiatric problems have impaired understanding, which affects effective communication (Collins, 2006).

Another importance of the integration of mental health into medical services at the primary health care level is its potential to help to curb the stigma associated with the treatment of mental disorders. This can be achieved by task-sharing of mental health care services among primary care workers, leading to improved access by patients to specialist mental care in the face of limited resources (Liu et al., 2016). The perception of health workers about the treatment of comorbid mental health conditions and HIV infection can be boosted through the adoption of a pragmatic model that can be sustained in the long run. Such a model should address the educational needs of the health care professionals and their negative mind-set and fears about the integration of mental health into HIV services at the primary health care level (Maconick et al., 2018).

The researchers also found that participants had no interest in attending to patients with mental health challenges at PHC centres. They consider it a risk, stating that these people are highly dangerous. These findings are

corroborated by findings in a similar study which stated that health care professionals discriminate against mentally disturbed patients, because they view these patients as strange and they believe them to be dangerous (Ndeti, Ngumi, Mutiso, Musyimi, & Kamau, 2013). The negative attitude of medical professionals towards patients with mental disorders is not just associated with a few insensitive health care providers, rather this problem is one that is general in nature and linked to the attitude of a good number of medical professionals (Knaak, Mantler, & Szeto, 2017). It has been observed from research that a stigmatisation of people with mental conditions cuts across most of the professions found in the health sector (Knaak et al., 2017).

To underscore the need for medical professionals to be retrained, this study found out that some health care professionals do not know there is a link between HIV and mental health. It has been reported that there is a connection between patients' mental health and the neurotoxic effect of the treatment of HIV on the central nervous system (Modula & Ramukumba, 2018; Uys & Middleton, 2004). Also, the opportunistic infections associated with HIV infection may result in neurologic damage (Dubé, Benton, Cruess, & Evans, 2005). Research has also shown that there exists a high level of post-traumatic stress disorder and depression among people infected with HIV (Myer et al., 2008).

#### *4.1 Limitations*

The limitation of the study was that data were collected concurrently with the live broadcast of the Life Esidimeni trial, which made the participants reluctant to participate as they felt that the information could later be used against them.

### **5. Conclusion**

The findings of this study revealed that there are still factors that hinder the integration of mental health care into HIV services at primary health care centres that need to be taken into consideration before this integration can be implemented successfully. There is a need to reassess health professionals' attitudes, especially at the PHC level, if the 90-90-90 targets are to be achieved as well as meeting SDGs globally.

If a consideration of mental health problems can be incorporated into pre-and post-test counselling of HIV, particularly in low and middle-income countries (LMICs) where the burden of HIV and associated morbidities is high, this could reduce the chances of PLWH ending up with depression (Senn, Carey, & Vanable, 2010). Limited or lack of mental health integration within PHC HIV services is a source of significant public health burden (Brody et al., 2015). Mental health, it is argued, is an important determinant of HIV outcomes among PLWH. Untreated or poor mental health contributes to late recruitment into antiretroviral therapy. Among PLWH, Mental health practitioners (MHPs) have also been associated with higher rates of HIV disease progression, hospitalisation, and mortality including suicides (Brody et al., 2015).

### **Declarations**

Ethics approval and consent to participate.

Approval for this study was obtained from the Research Ethics Committee of the University of KwaZulu-Natal, Protocol number: HSS/2248/017D. The consent of participants was sought before they were enrolled in this study. The participants offered to take part in the study voluntarily.

### **Consent for Publication**

Not applicable.

### **Availability of Data and Materials**

The data and the material will be available on request.

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### Authors' Contributions

Cele WB designed the study, collected and analysed data, compiled and wrote the manuscript. The supervisor, EM. Mhlongo guided the design and provided logistical support during data collection, reviewed the manuscript and provided critical comments.

### Competing Interests Statement

The authors declare that they have no competing interests.

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