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Nurses' implementation of mental health screening among HIV infected guidelines

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ABSTRACT

Up to 25% of people living with HIV (PLWHA) in South Africa are thought to suffer from some form of depression and anxiety during the course of the illness. The nurse-initiated ART improves patients' access to ART and gives nurses authority to treat uncomplicated patients. However, there is no parallel continuing development program aimed at preparing nurses to manage mental health problems at primary health care level. The purpose of the study was to explore nurses' interpretation and implementation of HIV/AIDS guidelines for mental health screening among HIV-infected individuals in South Africa.

A qualitative, exploratory and descriptive approach was employed, using purposive sampling to select primary health professional nurses trained in HIV programmes at five primary health care facilities. Data were collected through focus groups and in-depth individual interviews. Thematic analysis was used to generate three themes, namely; guidelines as framework for care pathway, mental screening practices, strengthening mental health screening. The study revealed significant weakness in the detection of mental illness in primary health care settings, due to a lack of skills and insufficient screening resources. The implication of these findings is a need to equip all NIMART trained nurses with basic mental health screening skills.

1. Background

The human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic continues to be a major global health issue and a public health crisis in developing countries like South Africa. Globally, it is estimated that depressive features occur in 15–36% of people suffering from chronic diseases and 60% of people living with HIV (Bongongo, Tumbo, & Govender, 2013). A growing body of scientific literature emphasises a strong link between HIV/AIDS and mental illness due to the effect of HIV's neurotoxicity on the central nervous system (Uys & Middleton, 2014). Martin and Kagee's (2011) findings suggest that being HIV positive may be a stressor that results in HIV-related post-traumatic stress disorder. According to Jonsson et al. (2013), up to 25% of people living with HIV (PLWHA) in South Africa are thought to suffer from some form of depression during the course of the illness. A study on recently diagnosed HIV patients in a hospital-based HIV clinic in South Africa showed that the overall prevalence of psychiatric disorders remained high at 56%. Depression and post-traumatic stress disorder (PTSD) were the most prevalent at 34.9% and 14% (Olley, Seedat, & Stein, 2006). Research on HIV in relation to mental health is increasing. There is, however, a need for prospective studies to investigate the bi-directional effects of mental illness and HIV on each other (Breuer, Myer, Struthers, & Joska, 2011).

The role of HIV/AIDS care providers in detecting mental disorders in their patients is important in strengthening retention in antiretroviral care programmes as well as adherence to treatment (Mall, Sorsdahl, Swartz, & Joska, 2012). The immune dysfunction associated with HIV infection can lead to brain infections by other organisms and the HIV-1 also appears to be a direct cause of dementia. Severe cognitive changes – particularly confusion, changes in behaviour and sometimes psychoses – are common in the later stage (Townsend, 2012). Freeman, Patel, Collins, and Bertolote (2005) identified five distinct mental health-related issues that would be relevant to HIV/AIDS programmes: cognitive impairment and dementia due to viral infection of the brain; depression and anxiety due to the impact of the infection on the person's life; alcohol and drug use which contribute to risky behaviour; the psychiatric side-effects of some antiretroviral therapy and the social difficulties faced as a result of stigma and discrimination. In 2013, the South African HIV Clinicians Society reported that there has been a 50% increase in common mental diseases (CMD) among HIV-infected individuals, despite the guidelines provided (Jonsson et al., 2013). The increase in the incidence of common mental diseases among people

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infected with HIV led to questions about possible challenges related to the interpretation and implementation of guidelines.

The South African Department of Health (DoH) issued guidelines in 2010 regarding the management of HIV and AIDS in adults and adolescents. According the guidelines, appropriate investigations should be done focusing on the following aspects: patient weight; TB screening; clinical HIV staging; opportunistic infection diagnosis and management; CD4 and viral load monitoring; cotrimoxazole prophylaxis; sexually transmitted infections screen; Pap smear; immunisations; family planning; mental health screen (screening for depression, anxiety, substance abuse and sleep problems); adherence check; preventing HIV transmission plus reinfection and providing support. Initiation of antiretroviral therapy (ART) and follow-up care are managed by nurses who have undergone HIV/AIDS training and who are either or not trained in psychiatric nursing (DoH, 2010). The South African National Mental Health Policy Framework and Strategic Plan 2013–2020 indicates that special and vulnerable groups will be targeted and makes provision for health training programs to support non-specialists in PHC. Clinical protocols will be made available for assessment and intervention at PHC level through integrated management guidelines (DoH, 2012).

The HIV/AIDS (2010) guidelines are very broad and do not provide the specifics on how the screening should be conducted. Practitioners are expected to do a psychosocial assessment to document current psychosocial status and identify factors that impact on adherence. Horwood et al. (2010) indicate that there has been little empirical evidence of the effective implementation of the guidelines. Bongongo et al. (2013) found that, in non-mental health care settings, health care professionals may often miss symptoms of common mental diseases as those are also symptomatic of the progression of the disease. Therefore, there was a need to explore how nurses understood, interpreted and implemented these guidelines.

2. Materials and methods

2.1. The study

A qualitative, explorative and descriptive design was adopted for this study. The design was appropriate for this study to explore and understand the interpretation and implementation of mental health screening component of the HIVAIDS guidelines (Creswell, 2014). The setting was the Limpopo province in the northern part of South Africa. The study was conducted at four clinics in the Capricorn District of the province. The district has a population estimation of 5.2 million and which is served by 102 clinic facilities. Some of the clinics provide a 24 h service and each clinic has an average of 6–8 professional nurses (Capricorn District Municipality, 2015).

2.2. The participants

The target population consisted of primary health professional nurses providing care HIV in Capricorn District. Sixteen nurses participated in the focus groups and eight in individual interviews. The nurses were all trained in Nurse-Initiated Management of Anti-Retroviral Treatment (NIMART). Ten were trained in primary health care specialty and six went through an integrated program that included psychiatric nursing. Criteria for inclusion were: professional nurses who have undergone HIV training programs, working at the primary health care clinics, and directly involved in the management of HIV-positive individuals including follow up visits. Non-probability convenience purposive sampling was used to recruit nurses to participate in the study. The approach was relevant and appropriate for this study as the nurses were readily available at the clinic at which HIV services are rendered daily.

2.3. Data collection and analysis

Data was collected using semi-structured, in-depth, individual and focus group interviews. The interviews started with focus group discussions as the primary research method and in-depth interviews as the follow-up. The focus group interview format was appropriate to this study as it allowed the participants to share their thoughts with one another and generate new ideas about how they implement guidelines to manage their clients (Brink, Van der Walt, & Van Rensburg, 2012). Participants were given an opportunity to elaborate on their interpretation and implementation of the guidelines. A voice recorder was used by the scribe to capture all interview sessions. Data from focus groups was used as a baseline to develop and direct the in-depth individual interviews. Two focus groups with six participants each and one with four participants were conducted in three clinics. In-depth interviews with two participants per clinic were collected from the four clinics. The interviews were conducted in a private room to avoid distractions. A semi-structured interview guide was used. Interviews lasted for 40–55 min and included prompts to encourage participants to talk freely.

The recordings from focus groups and interviews were transcribed. The authors immersed themselves in data by reading and re-reading the transcripts. Creswell's (2014) thematic analysis was used to analyse the data. Sections of the data, which seemed to be distinct opinions of participants were highlighted to develop topics, which were abbreviated into codes. Both semantic (meanings expressed verbally) and latent codes (underlying meanings) were considered. The codes were sorted into various themes grouping data extracts under each theme. This step was followed by breaking down themes into subthemes and categories. Thematic maps were developed and links between them identified. Findings from both individual and group interviews were merged and are presented as a whole.

2.4. Trustworthiness and integrity of the study

Credibility refers to confidence in the truth of the data and its interpretations (Polit & Beck, 2012). Credibility was promoted through prolonged interaction, remaining in the field until saturation of data was attained, member checks and triangulating data collections methods. Reflexivity was used to enhance self-awareness of existing knowledge and preconceived ideas about mental health screening in HIV facilities. Preconceived ideas and biases were put aside. Confirmability was enhanced by creating an audit trail. This means that comprehensive data were compiled according to themes and sub-themes and preliminary analysis performed to reflect participants' views and actual practice. One author sought confirmation from participants that the interpretations were their true reflections. Continuous checks were built into data collections process by using participants' verbatim accounts and using the audio recorder and member checks to ensure confirmability.

The research design, methods and its implementation, data collection process and procedures used by the researcher in the study were described in detail. Continuous checks were built into the data collection process by using participants' verbatim accounts and using an audio recorder to ensure dependability. Transferability was enhanced through thick descriptions of the research method and data, on the premise that, in similar contexts and conditions, the results could be transferable.

Ethical approval for the study was granted by the Research Ethics Committee of the Department of Health Studies of the University of South Africa, by the Limpopo Department of Health and by the Senior Manager of Capricorn District primary health care services. Voluntary written consents were obtained from the participants and they were able to withdraw from the study at any time. Participants' privacy and confidentiality were adequately protected.

3. Results

Three themes emerged from the analysis: (1) HIV/AIDS guidelines as framework for care pathway (2) Mental health screening practices (3) Strengthening of mental health screening.

3.1. HIV/AIDS guidelines as framework for care pathway

Participants understood the guidelines as a tool that enabled them to manage HIV infected clients effectively by initiating treatment and as government's approach to demonstrating its commitment to the reduction of infection rates and effective management of HIV. A few viewed guidelines as 'non-changeable' rules that they had to follow and a document that provides them with information on what to assess to initiate ART but lacking in explicit guidelines on how to do psychosocial assessments. Some nurses viewed them as a form of empowerment for health professionals – especially the 'task-sharing' – as they were trained to initiate anti-retroviral treatment. However, they all had concerns regarding the plethora of guidelines coming from the Department of Health, the challenges they face on a daily basis such as long queues, shortage of staff, and HIV being a complex condition.

"The guidelines are broad and contain information that direct us on how to manage HIV clients, we know what to assess, and which observations to collect so that we are able to make decision on intervention. They indicate clearly which combination of ARV should be given depending on the history and the results of each client."

"The general guidelines empower us to handle HIV clients more effectively, thus knowing what to do in each case, even if you did not get the specific training, there is adequate information on HIV, what is missing is information on how to do psychosocial assessment."

"My understanding is that we have a framework for providing care, we do know when the HIV positive patient is eligible to start on ART. So, we must follow the recommended steps in the guidelines."

"Currently, there are so many directives coming from the department of health, we struggling to keep up. I understand the need to address the challenge of HIV and mental illness. However, implementing these guidelines is hampered by long queues, shortage of staff, the time it takes to assess, treat and give counselling."

3.2. Mental health screening practices

The participants viewed mental health screening and assessment as necessary processes in order to identify common mental health disorders among HIV infected clients. They were conversant with various essential assessments that could have an impact on mental health, such as close monitoring of patients for drug toxicity, general well-being, screening for viral load and CD4 count. Also, they had knowledge of side effects of efavirenz such as auditory hallucinations that could lead to false positive results and the link between depression and adherence. They check clients' levels of adherence and compliance to the treatment as some clients default either due to mental disturbance or other related factors. They raised concerns about lack of consistency in mental health screening across facilities. This was evident in inconsistencies in mental screening practices, some explained that they included depression and anxiety in their assessments, while others indicated that they only monitored the physical health.

"We practice according to the guidelines, all positive infected individuals are assessed by checking for CD4 count, and if it is less than 500 and at WHO stage 3, HAART (Highly Active Antiretroviral Therapy) should be initiated. We check client's viral load at three months intervals and assess for toxicity, side effect of efavirenz and signs of common mental illnesses. In the new provisions, we screen for TB and cervical cancer post delivery, counsel for family planning, check the client for adherence and compliance to the treatment. Once the client does not comply with ARVs, I start to suspect mental problems."

"I know there are facilities that have developed their own tools for first and subsequent visits to make things easier for themselves. I am aware that the screening does not happen as intended'.

"We are to monitor patients for ARVs adverse effects such as fatigue, depression and anxiety, I do the general physical assessments and just note if there was anything suggesting mental illness."

Nurses believed that both material and human resources were important in the assessment of mental health status in HIV infected individuals. This seemed to suggest skills and competencies to assess, diagnose and manage co-morbidities. They verbalised different levels of self-efficacy regarding holistic HIV management that included mental health screening, with nurses without psychiatric training showing less confidence. The main concern was the insufficient information on the HIV assessment form, which does not support identification and diagnosis of mental illness. They indicated that, in the absence of a specific tool for mental health assessment, they mostly relied on their nursing background knowledge and assessed clients for any 'abnormal' behaviour. Those with psychiatric nursing background seemed more comfortable with the screening. They implied that it is a trained psychiatric nurse who confirms the diagnosis of altered mental state and makes a final decision for referral. However, there seemed to be a shortage of nurses with psychiatric nursing background.

"The HIV form has more information on physical assessment than mental health. There's only one question on screening, no open fields for narratives on the patient condition as you see it, and if you are not trained in psychiatric nursing you will not be able to screen. But we do our best and check patients for any signs of abnormal behaviour."

"Mental health screening requires knowledge to accurately record information about history and current status of patients and it needs specialised skills. I am not trained in psychiatric nursing so I am not quite sure of mental health but I think the guidelines are straightforward about the need to screen for mental health. We refer patients with unusual behaviour to the psychiatric nurse who will make the final diagnosis and referral to specialist. When there is none, we do it. I feel that more could be done to provide essential criteria for diagnosis and referral."

"As a psychiatric nurse, I am able to do mental assessment because of my training. I do not use any specific guide to diagnose mental status, but by assessing the patient through leading questions like, 'How do you feel after being diagnosed with HIV infection?' I also observe mood, aggressiveness, silence or relevance of the answer."

Participants indicated that psychologist and social workers do visit the facilities monthly to see patients, but complained that it was not enough to support all HIV infected patients. Their main concern was the clients who do not show obvious signs of mental disorder. Therefore, fundamental basic skills in assessment as well as interpersonal skills were viewed as essential in the detection of asymptomatic clients. Therapeutic relations and good communication skills were identified as important to encourage the clients to open up and express their feelings so that nurses could observe any altered mental states.

"Psychologist and social workers do outreach at our clinic. The periodic visits are not adequate, we need frequent visits to support us identify mental health problems early especially when patients do not show any obvious signs."

"I believe that in order for us to detect all underlying problems that patients may not verbalise, there must be a good relationship between the nurse and the clients and the nurse must communicate well with patients to instil trust. We need good listening skills and empathy."

3.3. Strengthening of mental health screening

Participants recommended several measures to strengthen the mental health screening among HIV infected clients at PHC level. Some recommended continuous professional development and the majority believed that HIV and mental health care needed to be integrated. They indicated that HIV management is well integrated into maternal and child, sexually transmitted diseases and reproductive health services. Participants alleged that mental health is still fragmented and isolated. They expressed the need to keep up to date with current literature and information on mental health and HIV, and recommended the establishment of a nursing referencing centre to keep them up to date with new knowledge. They indicated that information from policy makers needs to cascade to the lower levels effectively so that they receive clinical updates timeously.

> "HIV is updated continuously and it is very important that we access recent knowledge on mental health and HIV management, we need continuous professional development, especially on drugs. Having a nursing reference centre with good access to all updates will help us."
>
> "I am of the opinion that mental health in our services needs to be taken into consideration so that clients and patients are treated in totality. HIV is well integrated to maternal, child, sexually transmitted diseases and reproductive health services but the gap is with mental health, it is fragmented and different groups do different things."
>
> "If HIV and mental health are well integrated, information from policy makers, administrators will flow seamlessly through all levels and we will receive updates timeously."

Participants maintained that the current multidisciplinary team approach needed some improvements. They recommended that all health care professionals be adequately represented at the primary health care level. Mental health specialists need to be part of HIV programmes planning as their participation at the planning stage would assist in the diagnosis of mental illness. The number of nurses with psychiatric nursing background needs to be increased. Algorithms need to be developed for mental health care. This should include short but comprehensive tools for screening, assessment and clear criteria for referrals. The guidelines regarding the frequency and intervals of each screening need to be specific. The majority believed that the role of nurses should be reviewed and expanded especially in complex situations such as HIV and co-morbidities, they were of an opinion that the nursing council needed to take a proactive role and also support the development of screening tools based on the scope of practice. The visits by HIV specialists to monitor nurses' implementation of antiretroviral drugs should be more frequent and include monitoring of mental health screening due to the increasing prevalence of common mental disorders among HIV-positive clients. They recognised the need for specific forms of communication between specialists and non-specialists, and the buddy system for adherence should be strengthened so as to enhance retention of clients in the integrated HIV/mental health care program.

> "There is a need to strengthen the multidisciplinary teams in HIV programmes. Psychiatrists should be available and involved in planning of HIV programmes to be able to provide direct support and clear information on integration of mental health and HIV management. We need more psychiatric nurses to help us identify patients who need further management effectively."
>
> "In most of our services we use algorithms which help us when screening for conditions. I think that is also important for mental health screening. The algorithm can include questions like family mental health history, substance abuse, facial expression and attitudes which will help us to screen."
>
> "Guidelines to include clear criteria for referral and intervals for screening. Nursing council could support the development of mental screening tools based on our scope of practice, expand our role because training in NIMART already puts us a step ahead."
>
> "I suggest that specialists visits to be more frequent to monitor how we do metal health assessments, the communication between nurses and specialist need to be formalised, so that we are aware of any changes in the regimen, this will enable proper follow up. Adherence is very important in managing HIV, formalising and strengthening the buddy system will ensure that more patients remain in the system."

4. Discussion

The results revealed that nurses subjectively shared their views and understanding of what the guidelines meant to them as professionals in their work with HIV infected individuals. There were various interpretations; some understood the guidelines as broad strategies to manage HIV infected clients effectively, while others described them as an enabling and empowering framework, especially the initiation and provision of ART. An understanding of guidelines as broad could be viewed as an acknowledgment of an opportunity for individual interpretations and creativity in the implementation. A common thread that cut across all interpretations was the perception of guidelines as a care modality. The participants seemed content with the ART component of the guidelines; they articulated essential investigations and assessments required and this was found to be consistent with the provisions of the guidelines. Their main concern was the scanty content on the procedures for mental screening. According to Du Toit (2008), the policies relating to HIV and AIDS have risen out of the necessity to develop a more organised, formalised response to the increasing epidemic. The guidelines play an important role in ensuring uniformity of treatment. They also provide nurses with standards and procedures regarding criteria for initiation of ART and regime, follow-up visits, adherence, patient management and diagnosis and management of side effects (DoH, 2010; Du Toit, 2008). It is the authors' opinion that clarity of guidelines is essential for effective implementation.

A study in South Africa found that the Nurse-Initiated Management of Anti-Retroviral Treatment (NIMART) programme was well accepted by nurses than physicians and other health service staff (Georgeu et al., 2012), thus, giving evidence that if nurses are provided with well formulated guidelines, they would provide effective and holistic HIV management. Also, reports from small-scale Task Shifting Demonstration Project confirm that task shifting of ART initiation from doctors to nurses in Namibia is an appropriate, vital, initiative in continuing the scale-up of life-saving HIV clinical services (O'Malley et al., 2014). However, review of the consolidated guidelines of 2015 showed no modifications or new provisions regarding mental health screening. The nurses reported the variations in the mental screening practices across the facilities, suggesting increased likelihood that nurses in primary health care settings devised their own means to identify altered mental states in HIV infected clients. It appears, then, that the uniformity and consistency advocated in the guidelines was compromised. The number of HIV directives coming from the department of health seemed problematic for nurses who had to familiarise themselves with the new content whilst managing long queues of clients and work overload.

Depression in HIV has been linked to high viral load and subsequently, clients with depression are more likely to default. The results support this observation; nurses showed good knowledge when they emphasised the association between adherence, depression and viral load. They applied this knowledge and took the initiative to refer clients with low adherence to the psychiatric nurses for further assessment. They study found that successful implementation of mental health screening required adequate resources. The inclusion of mental health screening in HIV required considerable time and attention to each client. The management practices included general assessments, CD4

count, viral load, monitoring drug toxicity and side effects of efavirenz such as hallucinations. Furthermore, nurses had serious concerns about the assessment tool that was available to them. They indicated that the HIV form had limited questions on mental health, while the free text field to capture narratives was missing. It is evident that they lacked a resourceful screening tool to support their understanding of what they needed to do in the detection of mental illness. The authors viewed this as an apparent shortcoming or weakness in the guidelines. Presumably, some verbalised self-doubt, but those with basic psychiatric training appeared to navigate mental health screening with confidence. Bongongo et al. (2013) confirm the findings and posit that screening for mental health in non-mental health care facilities could be a challenging task. The workload, feeling of uncertainty in screening for mental health left them with one option: to do general physical assessments and monitor for side effects of efavirenz. This meant that the holistic assessment was not done adequately.

Services such as TB and cervical cancer screening were thought to be well integrated in HIV management and nurses reflected a sense of confidence providing the additional care. The main challenge was the referrals, especially in facilities where there were no psychiatric nurses. They relied on their nursing experience and used own judgment to refer clients to the specialists. Kaaya et al. (2013) support the findings and contend that management of HIV clients presenting with CMD needs establishment of explicit referral policies and procedures, including training to guide health care providers. The outreach services provided by the psychiatrists and social workers were deemed inadequate. As with other complex conditions, HIV requires intervention from a range of interdisciplinary specialists such as social workers, psychiatrists or psychologists (Van Dyk, 2013).

The shortage of nurses trained in psychiatry appeared to compromise mental health screening in primary health care. In such situations, strategies to enhance capacity of nurses in mental health screening will be critical. As participants indicated, this could be achieved by a well-structured support programme led by the specialists, especially in the diagnosis of asymptomatic clients. In support of these findings, Uebel, Guise, Georgeu, Colvin, and Lewin (2013) posit that nurses are expected to manage a high number of HIV patients and the shortage of resources negatively affects mental health care. Singh, Sunpath, John, Eastham, and Gouden (2008) acknowledge that low and middle income countries experience lack of skilled mental health specialists to provide effective management of CMD among HIV infected individuals. The need for specialised skills in mental health screening is also confirmed in Do et al. (2014), Mall et al. (2012). Clients may respond to HIV results with depression and anxiety, and these symptoms may not necessarily be indicative of mental illness (Kagee, 2012). It is for this reason that specialised skills become imperative in primary health care settings. In South Africa, the burden of mental disorders has grown in the 20 years between 1990 and 2010, and is expected to rise due to comorbidity between HIV and mental illness, especially depression (Jack et al., 2014).

The skills regarded as important for nurses include interpersonal skills such as therapeutic and communication skills to enable them to create an environment that will encourage clients to open up, to detect vulnerability. Interpersonal skills refer to particular techniques of communication that the nurse uses with the client or patient. The techniques may require considerable discipline and practice before being integrated by the nurse to become part of a personal communication style (Uys & Middleton, 2014). In addition, the frequent updates necessitates a need for properly designed continuous professional development programme for nurses. The suggestion to establish a nursing reference centre was seen as a confirmation of their willingness to take the initiative to seek necessary information. Similarly, Viswanathan et al. (2014) support the suggestion of providing referencing material in that it will ensure consistency in care practices. Other recommendations for improvement included the integration of HIV and mental health, as this would give nurses access to new developments and support in mental health screening. Joska and Sorsdahl (2012) indicate that more research is needed on integrating mental health screening into HIV routine care. Kaaya et al. (2013), Petersen and Lund (2011), Do et al. (2014) confirm that implementing integrated HIV and mental health in PHC is legitimate and reduces health care costs.

Participants maintained that further improvements and strengthening of the current approach to the multidisciplinary teams would enhance the effectiveness of HIV programmes and ensure that all health needs of HIV infected individuals are adequately addressed. Psychologists, psychiatrist and social workers could play a significant part in HIV planning and supporting nurses. This could include an establishment of a formal communication structure between clinicians as well as a good cascade of policies through all levels of health care. Their recommendations for clear referral guidelines, structured communication patterns and algorithms suggest greater awareness of fundamental factors in the identification of mental illness in PHC. In support, Kaaya et al. (2013) confirm that multidisciplinary approach to integrated HIV and mental health is a core enabler to the development of joint procedures to manage HIV clients effectively.

The development of a comprehensive mental health assessment tool that provides a basis for further management is critical; the tool needs to be user friendly to non-specialists in primary health care (Aidala et al., 2004; Joska & Sorsdahl, 2012). Accurate diagnosis requires thorough history and assessment, yet there is currently no brief screening tool that has been validated worldwide (Nassen et al., 2014). It is possible that the absence of well defined screening tools could be the reason for weaknesses in the implementation of mental health screening in South Africa. Presumably, that could have been the rationale behind the nurses' suggestion that the nursing council could play a significant role in the development of a nursing mental health screening tool.

Findings provide support for the conclusion that nurses in PHC face great challenges with regard to the detection and referral of common mental health illnesses among HIV-infected clients. The nurses' interpretation of general HIV management guidelines was appropriate, since they were all trained in NIMART. They showed confidence in the initiation and management of ART. However, mental health screening was found to be challenging due to fragmentation of mental health services and perceived lack of appropriate psychosocial assessment skills and mental health screening tools. In the absence of sufficient information, support and tools to create accurate definitions of mental illness, nurses relied mostly on their background knowledge and experiences to identify clients that needed further management by mental health specialists. This was not ideal, as clients who did not manifest signs of mental illness could have been missed, this could lead to missed opportunities to improve the service.

5. Recommendations

The study recommends maximum support for nurses working in HIV/AIDS units. There must be a concerted effort by nurse managers and policy makers to create an enabling working environment. It is for this reason that a nursing reference centre becomes imperative to enable nurses to seek relevant information to create accurate definitions of mental illness. In addition, the current approach to the multidisciplinary teams needs to be strengthened to enhance effectiveness in the referral chain and communication between the providers of care.

The integration of HIV and mental health will provide nurses access to new information and support from mental health specialists. This would in turn, enhance appropriate knowledge, confidence, creativity and skills required in primary health care. Identifying means of working around mental health screening algorithms and increasing visits by specialists could also lead to more dynamic systems that provide comprehensive care to HIV infected clients. Policy development and review processes need to include mechanisms of direct communication

with the nursing profession to ensure adequate resources for screening for mental health. In addition, analysis of training needs to be undertaken prior to the introduction of policies. Policy makers are to develop a plan to implement and monitor outcomes of guidelines, and identify key stakeholders that would support the implementation processes. The South African Nursing Council could lead efforts in the development of a valid and reliable screening tool on depression, anxiety, sleep insomnia, substance abuse, suicide risk and adherence. The tool must be specific on what to look for and when to refer.

Further research into barriers to integration of HIV and mental health care in PHC as well as exploring possibilities to build frameworks or models for effective and sustainable collaborations to manage common mental health disorders among HIV infected individuals.

5.1. Implications for health and nursing policy

Mental health screening among HIV infected individuals is a significant component of HIV management in South Africa. Researchers' observations suggest that policy makers should recognise that, if nurses are to function at their most optimum, their information needs and skills should be addressed, to maximise their contributions in the delivery of mental health care.

5.2. Implications for nursing practice

The implications of these findings is that mental health screening requires appropriate confidence, creativity, knowledge and skills among primary health care nurses, but most of all, an environment that fully supports identification of common mental illness. The need for interpersonal skills such as therapeutic and communication skills is highlighted; the study believes that effective communication would enable nurses to create an environment that will encourage clients to open up, to detect vulnerability. There is an opportunity to review and refine specialised skills for mental health screening for nurses.

It is apparent that the unique challenge lies in the availability of a comprehensive mental health assessment tool that provides a basis for further management.

5.3. Implications for nursing education

The implication of these findings is a need to equip all NIMART trained nurses with basic mental health screening skills. The study believes that this could be an opportunity for educational policy makers to develop strategies that facilitate the acquisition of interpersonal and assessment skills in basic nursing programs. In addition, frequent updates on HIV/AIDS necessitate a properly designed continuous professional education.

Conflict of interest

No conflict of interest to declare. No funding received from any agency.

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Author contribution

MMJ and MMR wrote the manuscript. MMR conducted final critical review and aligned the paper to the journal requirements.

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