

EXPERIENCES OF NURSE GRADUATES OF AN INTEGRATED HIV CURRICULUM FROM A SELECTED UNIVERSITY IN SOUTH AFRICA

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ABSTRACT

Nurses remain a crucial part in the management and care of HIV, especially in resource constrained settings where they fulfil a variety of roles and functions. Competent HIV healthcare providers, especially nurses who provide and support the first line of healthcare in South Africa, are needed to achieve optimal clinical outcomes for all people living with HIV. The integration of HIV-related competencies in an undergraduate nursing curriculum is critical to maintain continuity of HIV-related knowledge, skills and competencies within undergraduate nursing programmes from the first year of training, as it builds on foundational levels of understanding to promote critical thinking and skills for continuing learning in the area of HIV care. Against this background, this article reports on the experiences of the first cohort of student nurses who were exposed to the integration of HIV nursing competencies within a four-year Bachelor of Nursing programme. A descriptive exploratory design using a focus group discussion underpinned the



study and was considered appropriate to explore the graduated student nurses experiences of the integration of HIV competencies within a four-year Bachelor of Nursing programme and how the integrated HIV programme prepared them for their practice in the management of HIV nursing care. Three themes emerged from the study, namely, evidence informed nursing care, innovative problem-solving skills, and confident to practise. The results showed an overall positive experience from the participants in their ability to independently practise and fulfil a range of HIV-related nursing care. The findings have demonstrated that the first cohort of nurse graduates from an integrated HIV Bachelor of Nursing curriculum showed success in the participants' experience of the HIV-related content and their ability to transfer the knowledge, attitudes and skills to meaningfully and effectively manage HIV-related nursing care.

Keywords: nurse graduates; NIMART; HIV competencies; Bachelor of Nursing programme

INTRODUCTION AND BACKGROUND

Globally and especially in the context of South Africa, HIV has become one of the most significant public health concerns, with an estimated 12% (6.8 million) adults in South Africa living with HIV/AIDS (WHO 2014: 28; Dharmalingam et al. 2015, 22). Nurses remain a crucial part in HIV management and care, especially in resource constrained settings where they fulfil a variety of roles and functions in the management of HIV (Dharmalingam et al. 2015, 24). Competent HIV healthcare providers, especially nurses who provide and support the first line of healthcare in South Africa, are needed to achieve optimal clinical outcomes for all people living with HIV (Relf et al. 2011, S4). Despite their crucial role in HIV management, it has been reported that many nurses have inadequate basic education and opportunities for continuing education in relation to HIV care (Relf and Harmon 2016, 204; Worthington et al. 2014, 13).

The integration of HIV-related competencies in an undergraduate nursing curriculum is critical to maintain continuity of HIV-related knowledge, skills and competencies within undergraduate nursing programmes, as it builds on foundational levels of understanding to facilitate continuing of care and ongoing learning in the area of HIV care (Modeste and Adejumo 2015, 2). Contributing to this discourse, Relf et al. (2011, S2) highlighted that within the SADC region, nurses are increasingly being confronted with care of comorbid illnesses related to HIV. Treatment of these comorbid illnesses requires nurse graduates to be equipped with the necessary knowledge and skills set to function in the comprehensive management of HIV from their basic training level.

Moreover, in the context of a primary healthcare approach to care, Relf and Harmon (2016) stress that core HIV competencies integrated in a systematised

undergraduate curriculum is required to prepare the nurses for a role in holistic nursing care starting at an ambulatory level of care within the primary healthcare setting. The need for HIV integration within the undergraduate nursing curriculums has been emphasised with researchers such as Dhorn and her colleagues highlighting in 2009 that a re-engineered focus of the educational preparedness of nurses was needed to independently manage and treat HIV in South Africa; and research such as that by Modeste and Adejumo (2015, 1) is critical in developing a model for the comprehensive integration of HIV in undergraduate nursing curriculums to augment HIV core competencies among nursing students within their basic training.

STATEMENT OF THE RESEARCH PROBLEM

Literature has demonstrated that the quadruple burden of diseases of HIV, poverty, chronic diseases, trauma and injuries remains the biggest challenge of healthcare in South Africa (WHO 2014, 8). Recognising the need for nurses to be comprehensively trained to meet the needs of the diverse healthcare profile that South Africa presents, the World Health Organization recommended a global task shifting recommendation and guideline to train and prepare nurses in HIV care and treatment (Smith et al. 2016, 322). Aligned with the recommendations of task shifting, nurses are to be trained in the initiation and management of patients on antiretroviral therapy, through the NIMART (Nurse Initiated and Managed Anti-retroviral therapy) programme (Smith et al. 2016, 323). However, it was noted since its inception more than a decade ago that the NIMART training was offered as an in-service component for practising nurses, thus taking staff away from patient care (Dhorn, Nzama and Murman 2009, S28). It also became clear that all forms of HIV and AIDS education, including NIMART, had to be integrated into pre-service education and training of nurses (Dhorn, Nzama and Murman 2009, S28).

Aligned to the discourses highlighting the need for nurses to be competent in the management of HIV nursing care, the selected Department of Nursing, through the support of the Medical Education Partnership Initiative (MEPI), conducted a situational analysis and audit in 2010 of the Bachelor of Nursing (BN) programme to determine the amount of HIV-related content and competencies that were integrated into the curriculum. The BN curriculum has four specialisations, which are general nursing, community health nursing, primary healthcare, midwifery and psychiatric nursing offered from year one to four, respectively. In 2011 there was an introduction of the integration of HIV competencies within the BN programme's specialisation of each year. The integration of HIV competencies within the undergraduate nursing programme took the form of (i) HIV-related cases studies linked to the nursing specialisation done from year 1 to 4; (ii) HIV-related clinical competencies done linked to the nursing specialisation from year 1 to 4; (iii) a community-based workshop on HIV testing counselling and support done in year 2 of the programme; and (iv) a

two week Nurse-Initiated and Managed Antiretroviral Treatment (NIMART) done in year 4 of the programme.

PURPOSE OF THE STUDY AND RESEARCH OBJECTIVES

The purpose of this study was to explore and describe the experiences of the first group of student nurses who graduated from the selected Bachelor of Nursing programme that had an integration of HIV competencies in the curriculum.

Research Objectives:

The research objectives of this study were to:

- Explore and describe the graduated student nurses experiences of the integration of HIV competencies within a four-year Bachelor of Nursing programme.
- Explore and describe how the integrated HIV programme prepared the student nurses for their practice in the management of HIV nursing care.

RESEARCH METHODOLOGY

Design

A descriptive exploratory design underpinned the study. This design was considered appropriate to explore the experiences of graduated student nurses regarding the integration of HIV competencies in the Bachelor of Nursing (BN) programme. The group of student nurses who completed the BN programme in 2014 was sampled as this was the first group of students who had exposure to the HIV integrated curriculum in the BN programme from 2011. A focus group discussion (FGD) was used to gather the experiences among the willing student nurses.

Setting

The selected department of nursing is within one of the three universities within the province of KwaZulu-Natal. The selected university offers a four-year Bachelor of Nursing programme, which annually enrolls an average of 60–70 students, and graduates an average of 40 students from this programme annually.

Population

In 2011, the Bachelor of Nursing programme enrolled a total of forty-five students. This was the same year when the integration of HIV competencies was introduced

in the programme. From the cohort of forty-five students who enrolled for the BN programme in 2011, a total of thirty-five of that group completed the programme in 2014 and were engaged in the one-year compulsory community service in 2015 at the time of data collection. The thirty-five students who completed the BN programme thus served as the population for this study.

Sample and sampling techniques

Due to the small population size, being the thirty-five students who completed the BN programme in 2014, all students were purposively selected and invited to participate in the study. A total of ten students were willing and available to participate in the study.

Data gathering

Data gathering through the FGD occurred at the end of November 2015. This was done towards the end of the year to ensure that the participants had almost one year of experience after completion of the BN programme. The information document on the study was explained to the participants and written consent was obtained. The FGD lasted approximately 80 minutes. The central questions which guided the FGD were “What was the experience of the graduated student nurses with the integration of HIV competencies within the BN programme?” and “What are the experiences of the nurse graduates regarding their management of HIV care following an integrated curriculum of HIV competencies?”. In addition to the central questions, probing questions were also asked. These were about getting the participants to describe incidents or experiences of how they perceived exposure to the HIV integrated programme has contributed to their current experience of managing HIV nursing care after completion of the programme. The FGD was audiotaped and field notes were taken.

Data analysis

Thematic analysis guided by eight steps suggested by Tesch in Creswell (2014,198) underpinned the data analysis. Following transcription of the FGD, the transcript was coded to interpret the meaning through themes and sub-themes that emerged. Coding was undertaken by the lead author and verified by the co-authors who served as co-coders.

Ethical considerations

Following institutional and departmental permission and ethical approval (BE035/15), the participants were contacted and informed of the study. An information letter

stating the purpose of the study was distributed to all participants via email. Participants were advised about the method of data gathering and informed that they could withdraw from the study at any time without reason; they were also advised that their participation was voluntary. No identifying information was collected from the participants.

Trustworthiness

Credibility and dependability ensured trustworthiness of the findings. Credibility was achieved by member checking of the emergent themes from the FGD. This allowed for congruency in the researchers' meaning of the data to that of the intended meaning from the participants. Dependability of the data collected was ensured through an audit trail. All researchers served as peer reviewers of the FGD and the level of probing within the data gathering session.

Results

The sample was made up of eight participants who were females and two participants who were males. The size of the group did not seem to interfere with their participation. The average age of the participants was 22.4 years with a range of 21–25 years old. At the time of the study, the participants were completing their one-year compulsory community service at various healthcare settings, namely: midwifery – postnatal unit (n = 1); midwifery – antenatal unit (n = 3); midwifery – labour and delivery (n = 2), trauma and emergency unit (n = 1); community healthcare centre (n = 3). Working in the different work settings added to the diversity with the management of HIV care and treatment the participants experienced and were able to share in the FGDs. Three themes emerged which were evidence-informed nursing care, innovative problem-solving skills, and confident transition from student to qualified nurses.

Evidence-informed nursing care

This theme was characterised by participants sharing experiences of how the HIV integrated BN programme equipped the graduated nurses with skills and information to inform their nursing care, especially HIV management on current documentation and policies. Participants attributed the HIV activities within the programme, specifically the NIMART training that covered competencies on interpreting HIV/AIDS treatment management policies, for sensitising them to the practice of using current information to inform clinical practice.

I keep referring to the guidelines and the information from our NIMART files ... I always refer to my file before I do anything with my patient, to double check if I am doing the correct thing.

Some nurses just keep the old things, on the old policy, like starting ARVs when the CD4 is 350, because of our HIV training that showed me we must always refer to policies ... I just go to the intranet (hospital based internet) and check before I give the patient anything, even the health education because things keep changing.

Because I learnt in our degree that what we learnt gets outdated, especially for HIV, so in my hospital, every time a new policy comes out. I print and read it ... I make sure I know it before I give the patients any treatment.

Participants also related within this theme, that their practice of always staying updated with HIV related material, created a platform for them to collaborate with other members of the healthcare team through information sharing session, which the graduates initiated.

In the labour ward there are other community serve nurses, so when the new PMTCT guidelines came out, some just opened it (email) and said oh it's too long ... because I knew how to read and interpret the policies, I was able to summarise it for them ... this helped because they started opening up to work with me ... to get in on the team.

Peer mentoring and serving as a resource person also characterised this theme. Participants shared experiences of how their knowledge and information-seeking skills learnt from the BN programme prompted the nursing leadership to make them lead HIV peer mentoring sessions.

The matron for our department knows that I usually know the latest HIV information, she makes me lead the Wednesday in-service training we have with our team.

Some of the nurses keep coming to me to check their HIV knowledge ... I am like their NIMART resource person ... it makes me feel good, it show[s] we are all using the right information for our patients.

Once a week on my lunch times ... I go to the outpatient department ... just to update the nurses on new HIV material ... the sister in charge has even started joining me in this.

Innovative problem-solving skills

Participants described their experiences of being in situations where they had to innovatively solve clinical problems. Their skills and knowledge of HIV management enabled them to identify gaps in continued HIV care or areas where non-compliance may result, and used mechanisms to troubleshoot and resolve the problem areas.

I work in trauma so sometimes people come in afterhours with needle-stick injuries and the sisters don't know what to do, because of NIMART, I knew I can use a sexual assault kit, if there are no PEP (Post-Exposure Prophylaxis pack), because the drugs in them are the same.

The mothers end up giving one teaspoon which is overdosing of the NVP (Nevirapine), I decided to make the syringe simple for them to dose the baby ... I put stickers where 1.5

ml stops, and block out the rest ... and give them more (syringes) to take home and put in different bags, so they don't overdose the baby.

Participants also recognised that they experienced an enhanced professional and clinical skills development in how they were managing HIV nursing care. Participants stated that due to the existing skills and knowledge gained from the BN programme, they were able to challenge themselves to promote and provided nursing care in otherwise difficult situations.

I was able to see that there was bottleneck happening in the ANC (antenatal care clinic), patients were not prepared properly for labour ... it was very challenging to see where the gaps was, but I managed to create charts from the treatment guidelines and work with the staff from ANC so that everyone will know treatment flow.

Confident to practise

Emerging from the findings, participants experienced confidence in their clinical practice. They also recognised that their undergraduate training provided them with skills and knowledge usually not available for other practising nurses, and their HIV clinical competence enabled them to sometimes take a more leadership role in the management of HIV care.

I started in nursery, and it was just me and the EN (enrolled nurse); so there was a child who needed PCR, and no one knew about the test or how to do it. I was able to do it and even teach the other nurses ... it was my first month there, but I was confident because of the NIMART training.

Because of all our training, whenever there is a new patient who needs to start on ARVs or anything to do with HIV patients, I just take the lead and go first, I am not scared about it.

Another characteristic that emerged within this theme was how their clinical HIV competence enabled them to treat patients more holistically and to promote HIV care in all areas of nursing care.

Even when patients come in for other injuries, because of my HIV training, I am confident to make that part of my practice, and ask them if they have been tested and know their status.

It is part of my assessment, every patient I work with I just promote HIV testing and I ask about treatment, you find so many who are HIV positive and needed proper treatment.

Apart from the confidence to perform a wide range of HIV-related nursing care activities, participants also noted that because they were sometimes placed in resource-limited settings after completion of the BN programme, they were often engaged in task-shifting activities. Their strong foundation in the HIV training they received within the BN programme enabled them to confidently practise within task-shifting contexts.

I am in a rural district hospital ... sometime it is just me and another nurse assistant on duty but I can do all the services now for HIV care, I do the counselling and testing, and I initiate ARVs because we are short staffed, but I am able to help in all this areas, even taking bloods for monitoring the patient.

DISCUSSION

The first cohort of integrated HIV competencies within the BN programme demonstrated success in that graduates were able to effectively manage HIV nursing care and enhance clinical outcomes. Having the HIV competencies embedded in the curriculum from the fundamental years to the exiting year of the programme allowed them to holistically integrate HIV management in their nursing care. This finding is supported by other studies (Biswas et al. 2013, 16; Suominen et al. 2015, 3). Moreover, the participants experienced that their clinical competence in HIV management, especially their skills and knowledge on NIMART, enabled them to take a leadership role and to initiate peer mentoring among other professionals in the healthcare team. This is supported by literature that demonstrated increased cognitive and technical skills and positive effects or attitudes in HIV-related competencies among graduates from a curriculum that has HIV competencies embedded with them (Biswas et al. 2013, 14; Mbombo and Bimerew 2012, 4). The findings also demonstrated that critical thinking and the use of evidence-based nursing were evident among the participants, where they were able to recognise gaps in their HIV knowledge and seek out current information to inform HIV-related clinical decisions. This is validated by literature that found that professionals exiting a programme, where HIV skills and knowledge are structured within their programme, demonstrate greater autonomy in how they manage HIV care, and are more actively participating in continuing education and learning experiences to improve on their HIV skills (Zuber et al. 2014, 523).

Nurses from a bachelor's programme are often criticised for being clinically inferior in their competence and skills to their counterparts exiting from a diploma programme (Bartlet et al. 2000, 371). This study supports similar studies and demonstrated that the participants from this Bachelor of Nursing programme showed more competent knowledge and skills especially in the area of HIV management, which was recognized and used to mentor and educate their peers (Bartlet et al. 2000, 375; Mbombo and Bimerew 2012, 6; Snell and Daniels 2013, 148).

Not only were the participants of the study confident to perform a range of HIV management care, the attributes of the BN programme further enabled them to confidently transition from their role from student nurse to qualified professional nurse, and to perform a range of task shifting activities due to the resource-restrained environments they were sometimes placed in. This finding is supported by literature which expands the scope of practice of nurses to not only manage HIV care but to encompass NIMART to enhance patients' outcomes and to improve quality of care

such as enrollment of antiretroviral treatment among eligible patients living with HIV and AIDS (Fairall et al. 2012, 894; Zuber et al. 2014, 524).

CONCLUSION

The initial cohort of the Bachelor of Nursing curriculum with integrated HIV competencies demonstrated positive experiences among the participants who were able to successfully transition into their role of being qualified nurses in a healthcare system that demands greater engagement of nurses in the treatment and management of HIV-related care. Moreover, participants were able to transfer their HIV-related skills and knowledge with other healthcare professionals and collaborate through peer mentoring activities.

LIMITATIONS OF THE STUDY

Despite efforts being made to gather the experience from as many students from the group of 35 students who completed the BN programme in 2014, the participation in the study was low. The results therefore cannot be generalised to all BN students.

CONFLICT OF INTEREST

There is no conflict of interests.

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