Knowledge, attitudes and perceptions of students on sexual health needs of sexual and gender minority individuals in a South African University of Kwa-Zulu Natal: A mixed methods study

Wilbroda H. Chiya(a)* Zamasomi Prudence B. Luvuno(b) Silingene J. Ngcobo (c) Celenkosini Nxumalo (d) Deshini Naidoo (e) Orlando Harris (f) Sophia Zamudio-Haas (g)

(a)Lecturer, College Health Sciences, University of KwaZulu-Natal, Durban, South Africa  
(b)PhD, RN, Lecturer, College Health Sciences, University of KwaZulu-Natal, Durban, South Africa  
(c)RN, Lecturer, College Health Sciences, University of KwaZulu-Natal, Durban, South Africa  
(d)PhD, RN, Lecturer, Faculty Health Sciences, Durban University of Technology, Durban, South Africa  
(e)PhD, Occupational Therapist Senior Lecturer, College Health Sciences, University of KwaZulu-Natal, Durban, South Africa  
(f)PhD, RN, FNP, MPH Asst. Prof., Dept. of Community Health Systems, School of Nursing, University of California, San Francisco, USA  
(g)PhD, Asst. Prof., Center for AIDS Prevention Studies, Department of Medicine, Division of Prevention Sciences, University of California, San Francisco, USA

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ABSTRACT

There is scant literature available in South Africa that explores the knowledge, attitudes and perceptions of student nursing trainees and other healthcare workers who deliver sexual health services to sexual and gender minority (SGM) communities with unique health needs. An online, mixed-method, questionnaire-based survey was employed to conveniently sample 3978 (50%) final-year Bachelor of Nursing students from the University of Kwa-Zulu Natal to understand their knowledge, attitudes and perceptions. Descriptive statistics were applied for quantitative results and thematic analysis was used for free-text qualitative data. Results suggested that over 67% of the participants lack the skills and knowledge to obtain a comprehensive history salient to the health needs of SGM populations. Students reported that social upbringing and religious beliefs impact the care they render, with many showing favourable attitudes toward the SGM community. Overall, students reported no content related to SGMs in the current nursing curriculum, however, students were receptive, highlighting the need to be clinically competent to provide relevant healthcare for SGM to meet their sexual health needs. It thus requires that students must be trained and have included the SGM content in their curriculum to meet the sexual health needs of SGM population to enable equitable health provision, being informed and having the necessary skills and knowledge obtained during training in the health institutions of higher learning can address the issues of greatest concern related to the HIV health needs of SGM populations.

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comprehensive healthcare services such as HIV prevention and treatment programs, mental health services, substance use interventions, or other services for non-communicable diseases (Duby, Nkosi et al. 2018). While it is estimated that SGMs constitute a small proportion of the general population in South Africa, they experience higher rates of HIV infection due to stigma and discrimination, as well as social exclusion (UNAIDS, 2020). In this study, we used the term Sexual and Gender Minority (SGM) or LGBT to represent all of the acronyms used to represent lesbian, gay, bisexual, transgender and people.

Despite South Africa’s well-designed constitution which protects the rights of all members of the SGM, many continue to experience higher rates of social stigma and homophobic or transphobic violence as a result of traditional and conservative attitudes, leading to barriers in accessing quality healthcare (Luvuno, Mchunu et al. 2019). Healthcare workers’ lack of knowledge and skill around the health issues faced by SGM population further hinder access to equitable health coverage (Campbell and Stein 2014, Wilson, Marais et al. 2014, Smith 2015). Often, healthcare workers’ attitude or their approach to the care of SGMs makes it difficult for members of the community to disclose their sexual orientation or gender identity, resulting in challenges during consultation at healthcare centres and un-affirming quality of healthcare services (Permanente 2000, Sanchez, Rabatin et al. 2006, Müller 2013, Mayfield, Ball et al. 2017, Cooper, Chacko et al. 2018, Duby, Nkosi et al. 2018, Wählen, Bize et al. 2020, Joudeh, Harris et al. 2021). Research has also shown that healthcare students who are knowledgeable about LGBT people had more positive attitudes towards LGBT patients (Sekoni, Jolly et al. 2020). It is for this purpose that the study was conducted in the context of nursing students to investigate their knowledge, attitude and perceptions on meeting the sexual health needs of SGM.

The purpose of this study was to investigate final year nursing students’ knowledge, attitude, perceptions and awareness of sexual health service delivery for sexual and gender minority. Research objectives of the study:

i. To explore the knowledge and perceptions of Kwa Zulu Natal nursing students’ perceptions in the care provision for the sexual and gender minority population

ii. To analyse the factors influencing the knowledge of LGBT related attitudes of the university of Kwa Zulu Natal nursing students in the care provision for the sexual and gender minority population

iii. To ascertain the teaching of LGBT health related topics to the nursing students at the university of Kwa Zulu Natal

Literature review

This literature report on the articles searched using the following databases and grey literature: MEDIBASE; Pub-med; Sabinet and references of included studies. Search engines also included google scholar and University of Kwa Zulu- Natal (UKZN) electronic theses.

South Africa was among the first countries to adopt the UNAIDS Fast-Track strategy to end HIV by 2030 (UNAIDS, 2014a). The fifth National Strategic Plan (NSP) for HIV, tuberculosis, and sexually transmitted infections was released by the South African National AIDS Council in 2023. The National Strategic Plan (NSP) outlined the country’s five-year plan (2023–2028) with bold aims to track the progress toward eliminating HIV, STIs and TB epidemics as public health threats by the year 2030. This plan was built on the successes and barriers of the previous four NSPs (Gray, Hopkins et al. 2018). In 2017, The South African government released a national SGM-focused HIV strategy for the first time, recognising that members of this group have specific needs that have been historically overlooked. The South African National SGM HIV strategic plan commits to reaching 95% of people from that community with targeted HIV prevention interventions. The plan also seeks to ensure that 90% of SGM people living with HIV know their status (South African AIDS Council, 2017). Even with the bold targets and an inclusive plan in place, health disparities still exist among the vulnerable SGM community.

This was supported by a report by a South African NGO that promotes transgender rights, demonstrated the significant negative impact provider stigma has on hindering trans women’s access to HIV prevention services (Gender Dynamics, 2013). As a result, transgender individuals, as well as other members of the SGM community, tend only to access health facilities for emergencies, or when complications have set in (Stevens 2012). An unintended consequence of provider stigma and discrimination is observed when SGM populations visit health facilities on a regular basis, since it is highly possible that they will not disclose their SGM identity prior to treatment; therefore, they are treated as heterosexual, thus missing a unique opportunity to be cared for and receive affirming healthcare services (Lane, Mogale et al. 2008). Provision of sexual behaviour-specific health screening is dependent upon healthcare workers being exposed to this community; trained, competent and knowledgeable about the health needs of the SGM community (Müller, 2017).

Previous studies advocated for the inclusion of SGM-related bias reduction training in health professional school curricula (e.g. medical, nursing and dental studies). (Müller, 2015, Müller, 2017). Specific awareness and skills training could enable health care students to identify and address their own implicit biases to ensure that these do not contribute to the health care disparities experienced by SGM individuals and other vulnerable populations. The literature also reveals that there is limited knowledge on how health professional school students are trained to identify and eliminate the effects of their own biases toward SGM individuals (Morriss, Cooper et al. 2019). This also reveals gaps in their professional preparedness to be able to provide equitable health services to vulnerable and stigmatised populations, especially in countries like South Africa, which has committed to the National Strategic Plan goals, the UNAIDS Goals and the Sustainable Developmental Goals (FUND 2015, Sidibé, Loures et al. 2016). The need for
specific awareness and skills training is essential for nurses in the South African context, as nurses are considered the backbone of the primary health system (Engelbrecht, 2008). Therefore, this manuscript addresses this gap by using the knowledge, attitudes and perceptions (KAP) survey, along with free text qualitative responses of final year nursing students attending the University of KwaZulu-Natal College of Health Sciences to assess their preparedness in caring for the SGM community.

Conceptual and Theoretical Framework Underpinning

In order to understand the health of SGM populations, this study draws on the conceptual and theoretical framework to examine how multiple identities and structural arrangements can influence healthcare access, health status and health outcomes (Graham, BERKOWITZ et al. 2011). The conceptual framework used the social ecological model as well as sexual minority stress theory provided conceptual tools that help increase our understanding of health status, health needs and health disparities in Lesbian, Gays, Bisexual and Transgender (LGBT) populations.

Additionally, the sexual minority stress theory examines individuals within a social and community context and emphasises the impact of stigma on lived experiences (Graham, BERKOWITZ et al. 2011). The social ecology perspective emphasises the influences on individuals’ lives, including societal factors, and how these multi-level influences affect SGM health. Thus, the social ecological model conceptualises health broadly, and focuses on multiple factors that might affect health. The approach advanced in the 1947 Constitution of the World Health Organization, includes physical, mental, and social well-being (World Health Organization, 1947). This conceptual framework and theory provided the basis upon which to develop the a priori themes used, which were also based on the research aims of this study.

Research and Methodology

This study employed a mixed methods questionnaire-based survey design with optional free qualitative text questions to investigate final year nursing students’ knowledge, attitude, perceptions and awareness of sexual health service delivery for sexual and gender minorities. An online survey questionnaire using Google forms was co-designed by expert researchers. The questionnaire contained predominantly closed-ended questions, with free text qualitative questions included, with a response rate of all 39 participants who answered the online survey questionnaire. The qualitative free text questions attempted to elicit more information and provide further details regarding students’ perceptions on the promotion of gender inclusiveness, their views on what they would like to see included in the current curriculum, and their experiences and awareness of health service delivery for the SGM population. The survey was completed online on 21 October 2021 due to South Africa being under Level 1 lockdown, with restrictions not allowing for face-to-face meetings due to the ongoing COVID-19 pandemic. Convenience sampling was used to sample 39 registered final year Bachelor of Nursing degree students from a population of 78 registered students. The invitation to participate was posted on the on-line Moodle platform currently used by the University of KwaZulu-Natal (UKZN) to the students that were available.

Data Analysis

Both qualitative and quantitative analysis were computed to analyse results from this study. Descriptive statistics were used to examine the quantitative structured, closed-ended questions in the Likert scale. Descriptive statistics were conducted using measures of central tendency and variability. Data were computed in a Google form which automatically computed percentages.

The free text qualitative responses from student nurses (n = 39) were analysed using thematic analysis: a standard qualitative technique for identifying and organising themes through the development of a coding template (Crabtree and Miller 1999). This technique is useful for analysis when some a priori themes are defined, based on theory and/or the research questions of interest (Crabtree and Miller 1999). In this case, the a priori themes are based on the conceptual framework and the research aims. The use of a priori themes can expedite the initial coding phase of qualitative data analysis. Data which does not relate to the a priori themes will not be disregarded, however, as this material may suggest other useful ways of categorising the themes and codes as they relate to the theoretical model (Crabtree and Miller 1999, Gale, Heath et al. 2013, King and Brooks 2021). Each open-ended response was read and analysed by the investigators. The primary author organised the information from the responses and formulated the codes and provided a brief narrative. Disagreements were resolved through discussions.

Ethical consideration

The study received ethics approval through the Biomedical Ethics Review board at UKZN, number BREC/00002917/2021. The questionnaire was accompanied by a participant information leaflet to ensure informed consent.

Results

Demographic characteristics of participants

A total of n=39 final year Bachelor of Nursing students participated in the anonymous online survey out of a total of N=78 targeted Bachelor of Nursing students, resulting in a response rate of 50%. Most respondents (77%) were 21 years of age or older (mean age of 22 years, standard deviation of 1.97). A significant proportion of the sample (85%) identified as female, with only 15% identifying as male. In addition, 80% were Christians, 7% identified as either Islamic or Hindu, and 13% were not affiliated with any religion.
The majority of the sample (92%) self-identified as heterosexual or straight, while the remaining participants (8%) identified as bisexual. The quantitative and qualitative findings are presented below.

Quantitative Results

SGM-Specific knowledge and awareness

The students reported a lack of structure in the approach to teaching and learning, and an absence of specific modules on sexual and gender minorities’ health needs in the School of Nursing curricula. Students (61%) indicated a lack of knowledge and awareness of the specific health needs of members of the SGM community. Almost all students had not attended or received SGM specific education and training, but indicated a desire for such training to be included in their nursing current modules. More than 57% of the students indicated a lack of knowledge and did not possess the skills necessary to conduct a comprehensive sexual health history assessment with SGM patients.

Curriculum inclusion of SGM

Almost 21% of the respondents had never been exposed to any curricula content on sexual and gender minority in their entire undergraduate training within the college. The students that reported some content, was minimally covered in their first or second year of study as part of psychology studies.

Stigma and history-taking

About 36% of the students felt that stigma remains the main contributor to the current disparities in HIV among sexual and gender minorities. At least 21% of the students felt that the impact of their social upbringing, cultural and religious beliefs around SGMs might prevent them from engaging with sexual and gender minorities or providing care to them. Regarding history-taking, a small number of students (38%) feel comfortable in obtaining a sexual history, with a significant percentage (67%) specifically indicating that they do not feel comfortable obtaining a comprehensive sexual history from sexual and gender minority patients.

Qualitative Findings

Student perceptions on how communities and institutions of higher learning can promote sexual and gender inclusiveness.

Varied free text opinions were shared by students. There was a common perception that there was not SGM inclusiveness in this nursing college. One student felt that the current curriculum is lacking and felt strongly about the inclusion of a module on SGM in the curriculum.

‘I feel that the school needs to include and teach a module about sexual and gender diversity…’

The current cohort of students were exposed to gender identity during a psychology lecture in their first year of study. Psychology is one of the subjects in their first year of study.

‘in Psychology, in my first year [of study], I was introduced to the discussion on sexual diversity and [the] difference between sex and gender’

With the majority of students reporting a Christian religious identity, some students cited their spiritual beliefs as reasons for their reluctance to provide care to SGM communities. Amongst other quotes, one student mentioned that:

‘My religion really don’t support people that are this community [SGM]; in our church it is considered a sin…’

This is supported by over 31% of the student respondents who felt that their social upbringing, cultural and religious beliefs might impact on their engagement in providing care to SGM patients.

Support requirement to improve students’ knowledge and skills in providing healthcare to sexual and gender minorities.

Students raised various support needs that will enable them to build on their knowledge and skills and prepare them to meet SGM healthcare needs, stemming from a need to be offered necessary teaching and learning experience on this subject.

‘I want to think that including teaching and learning on this subject [SGM health needs] in the clinical component will help me to gain more information and increase (my) knowledge’

What would you like to see included in the curriculum on sexual and gender minority health? (Table 3)

Students articulated the topics they wanted to have included in the curriculum, which included issues of stigma and discrimination, sexual and gender minority health needs; a support system available for SGMs, as well as a proposal for students to become acquainted with the necessary skills concerning the approach and assessment of the SGM community, as one student proposed:

‘... I need to know how to identify [the] LGBT community group… how a healthcare practitioner should approach them, ...carrying out [a] full assessment without stigmatising.’

Feelings of stigmatisation led to students expressing feelings of helpless and despair.
Furthermore, students identified that they need to learn skills to ensure that, as nurses, they are able to deliver relevant, SGM-affirming healthcare that does not cause further stigmatisation. Suggested topics by students to be incorporated into the curriculum include skills to provide care to SGMs; how a healthcare practitioner should approach people who identity as SGM; how to carry out an assessment without stigmatising, and how to prevent stigma and prejudice.

Understanding of key terms

A considerable number of students were aware and showed understanding of the definition of key terms such as bisexual, gay, transgender. However, there were terms that they found difficult to define. These terms include cisgender, cross-dressing, intersex, queer and gender affirmation.

Both the quantitative survey results and the open-ended qualitative results highlighted the lack of SGM health needs in the nursing curricula, resulting in a lack of skills and knowledge on the part of nursing students about the health needs of the SGM community.

Discussion

This study highlighted the fact that final year nursing students are not trained to address the specific sexual health and social issues faced by the SGM community. The results indicate that training on the health needs for SGM populations is sparse, and that the current curricula lack content specific to this key community. Most students had only been exposed to a discussion of sexuality in their first-year psychology module, with little to no attention given to care considerations of transgender and gender diverse people.

The findings of this study indicate a need for the School of Nursing to develop a module pertaining to affirming healthcare for sexual and gender minorities. Education on SGM health concerns would be in keeping with the national Department of Health’s 2023-2028 South African National LGBT HIV Plan, which aims at reaching 95% of people from the LGBT community with HIV prevention and ensuring that 95% of LGBT people living with HIV know their status. Nurses will only be adequately prepared to deliver affirming healthcare for people who identity as LGBT if students are taught and assessed on the specific health needs of sexual and gender minorities.

Students reported that they did not have the skills necessary to conduct an inclusive relevant sexual history, had difficulty conducting ano-genital health assessments, as well as difficulty completing a risk assessment. The students require appropriate skills and education to be able to meet the health needs of patients, especially SGM communities (Cooper et al., 2018). Studies have identified that many health professionals do not feel comfortable in their ability to provide quality care for SGM patients, do not perform complete sexual histories routinely and/or harbour bias toward these patients or their sexual practices (Cooper, Chacko et al., 2018).

Healthcare workers must end LGBT invisibility by identifying the sexual orientation and gender identity of their patients, and then using this knowledge to address the issues of specific concern for the care of LGBT patients (White, Brennan et al. 2015, Wahlen, Bize et al. 2020) which includes taking history from SGM who are susceptible to healthcare disparities.

Conclusions

The results underscored the urgent need to include SGM content in the curriculum of health institutions of higher learning, like University of Kwa-Zulu Natal, to develop health workers who are knowledgeable, informed and can meet the health needs of the SGM community in order to provide universal healthcare. Healthcare workers, in particular, nurses, can make great strides in improving the sexual health needs of SGM populations by being informed and having the necessary skills and knowledge obtained during training in the health institutions of higher learning to address the issues of greatest concern related to the HIV health needs of LGBT patients. Higher education institutions can enable non-discriminatory, equitable health provision by producing competent health workforce members, skilled in taking culturally competent sexual histories; conducting patient examinations; conducting risk assessments, including the provision of other health interventions to improve the health outcomes for communities, including SGM communities. This is particularly important in highly burdened HIV/AIDS prevalent contexts like South Africa, and is a critical component of achieving epidemic control. It thus requires that students are trained and inclusion of SGM content in their curriculum to meet the sexual health needs of SGM population.

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Wilbroda Hlouisile Chiya, Zamasomi Luvuno, Silingene Joyce Ngcobo conducted the analysis. Wilbroda Hlouisile Chiya, Deshini Naidoo and Zama Prudence Busisi Luvuno drafted the paper. All authors contributed to writing and revising the final manuscript.

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**References**


Lane, T., Mogale, T., Struthers, H., McIntyre, J., & Kegeles, S. M. (2008). "They see you as a different thing": the experiences of men who have sex with men with healthcare workers in South African township communities. Sex Transm Infect, 84(6), 430-433.


Müller, A. "Discrimination of lesbian, gay, bisexual and transgender people by health care workers: A call to action."


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