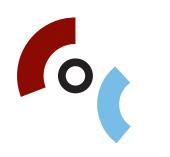
THESE ARE THE TOPICS YOU CANNOT RUN AWAY FROM"

Teaching lesbian, gay, bisexual, transgender and intersex health-related topics to medical and nursing students in Malawi and South Africa







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ACRONYMS AND ABBREVIATIONS

CEDEP The Centre for the Development of People

CHAM Christian Health Association of Malawi

DENOSA Democratic Nursing Organisation of South Africa

DOH Department of Health

FUNDISA Forum of University Deans in South Africa

GHJRU Gender Health and Justice Research Unit

LGBTI Lesbian, gay, bisexual, transgender and intersex

MBChB Bachelor of Medicine & Bachelor of Surgery degree (South Africa)

MoH Ministry of Health

MSM Men who have sex with men

NEA Nursing Education Association

NGO Non-governmental organisation

PDoH Provincial Department of Health

SANC South African Nursing Council

WSW Women who have sex with women

UCT University of Cape Town

INTRODUCTION

Over the past two decades research on lesbian, gay, bisexual, transgender and intersex (LGBTI) health has highlighted substantial health disparities based on sexual orientation and gender identity. Although interest in LGBTI health has disproportionately focused on sexually transmitted infections—in particular HIV/AIDS—there is growing awareness of the broad ranging negative health consequences of stigma, marginalization and discrimination among LGBTI individuals (Mayer et al., 2008). For example, in a recent landmark report on sexual and gender minority health (IOM, 2012), the United States Institute of Medicine pointed out that LGBTI individuals are at increased risk of harassment, victimization, depression and suicide and have higher rates of smoking and alcohol use than their heterosexual counterparts whose gender aligns with their natal sex (cisgender). These findings

underscore the link between stigma, marginalization, discrimination and health outcomes (Hatzenbuehler et al., 2015) and corroborate that sexual orientation and gender identity are important social determinants of health (Pega, 2015; Logie, 2012). These findings also apply to African contexts: a recent report by the Academy of Science of South Africa, reviewing evidence from various African countries, concludes that "[t]here is clear evidence that more repressive environments increase minority stress and impact negatively on LGBTI health. [...] LGBTI individuals [are] less likely to access health care and more likely to suffer ill-health. This causes reductions in broader social cohesion and broader social stress, as well as enhancing the transmission of infectious diseases, including HIV" (ASSAf, 2015: 60).

Data on sexual orientation and gender identity are rarely collected in large population surveys; however, recent data from the United States (Gates 2011) give a good indication of the prevalence of LGBTI identities: 3.8% of Americans identify as lesbian, gay, bisexual or transgender, and even more (8.2%) have had same-sex sexual experiences or experienced same-sex attraction (11%) It is therefore very likely that every health professional will encounter patients with LGBTI-related health needs in the course of their career.

However, studies have shown that LGBTI individuals often receive suboptimal healthcare, ranging from unconscious bias by a provider to blatant discrimination and denial of care (IOM, 2011; Gay and Lesbian Medical Association, 2001). Healthcare providers may lack knowledge, or feel uncomfortable when providing essential care to LGBTI patients (Hinchliff et al., 2005; Kitts, 2010). Healthcare providers may simply not ask patients about sexual orientation or gender identity (Eliason & Schope, 2001), or treat certain patients with different standards of care, for example not adequately assess the sexual health and HIV risk of a gay male patient (Epstein et al., 1998). As

a result of such negative experiences, LGBTI individuals thus have multiple reasons for not disclosing their sexual or gender identity to healthcare providers, including concerns about confidentiality, fears of homophobic reactions or further stigmatization. These concerns can cause LGBTI individuals to delay seeking help, or to withhold information that may be important to treatment, compromising their health care (Makadon, 2006). Healthcare providers' attitudes, knowledge and skills thus play a crucial role in determining whether healthcare is deemed appropriate and 'safe' by LGBTI individuals.

Studies from South Africa highlight the ways in which LGBTI individuals' access to healthcare is jeopardised by healthcare providers, who are crucial gatekeepers to care:

- Discriminatory attitudes and judgmental behaviour by health care providers lead to LGBTI people's reluctance to visit health facilities, barriers to access and even denial of care (Lane et al. 2008; Mavhandu-Mudzusi & Sandy 2015; Smith 2014; Stevens 2012b);
- Health care providers' lack of knowledge around LGBTI-specific health care needs leads to sub-standard care, lack of proper delivery of preventative care, including safer sex information (Matebeni et al. 2013a);
- Health care providers possess inadequate clinical skills to provide quality care to LGBTI patients (Smith 2014; Stevens 2012b).

Health care provider sensitisation and training is therefore crucial to improve LGBTI people's access to and quality of health care (Makadon 2006). The South African Academy of Science recommends that "[...] African health professionals and their associations should adopt affirmative stances towards LGBTI individuals. Psychosocial interventions and support particularly for adolescents are recommended to facilitate the adjustment of same-sex orientated persons to the stress, stigma, shame and discrimination they may face and to affirm their choices and orientations" (ASSAf 2015: 11).

In South Africa, health care provider trainings is currently mostly limited to training for providers who are already working in health facilities, and offered exclusively through non-governmental organisations. Previous research shows that issues of sexual orientation and gender identity are rarely formally or informally included in health professions education in South Africa, and hence student nurses and doctors receive close to no training on LGBTI health-related topics during their formative years (Müller 2013)gay, bisexual and transgender (LGBT.

In Malawi, healthcare provider training on LGBTI health is further complicated by the Malawian penal code criminalising same sex activity. Human rights violations and arrests of Malawian citizens for same sex activity have been documented (Amtaika 2013), some of which were initiated by health care providers reporting patients who admitted to same sex activity. Currently, no academic literature exists which examines whether and how LGBTI health topics are taught in Malawian undergraduate training for medical and nursing students.

It is important to note that LGBTI people are not a homogenous group. The acronym 'LGBTI' groups individuals together based on similar experiences of social exclusion and discrimination. While this is helpful to analyse the consequences of marginalization, it is important not to assume that individuals under this umbrella acronym have similar or identical health care needs and concerns. In fact, individual health care needs differ greatly across the populations covered under the acronym: the health needs of lesbian women are very different from gay men's, and the health concerns of people who are bisexual differ from those of lesbian women and gay men. Further, transgender individuals (including people who are transitioning or have transitioned from male-tofemale or female-to-male) face distinctly different health and social issues than cisgender people.

People who today identify as "intersex" may or may not have been diagnosed with 'Disorder of Sex Development' (DSD), and some people born with DSD carry special health risks (including harm caused by medical and/ or surgical procedures) that others do not. Thus, the populations represented by each individual letter in the acronym are complex and heterogeneous, even more so when intersecting differences in race, ethnicity, age, ability, religion, culture, socioeconomic class, and geographic location are also taken into account. This report utilizes the acronym 'LGBTI' in accordance with current terminology in the two countries of the study, and in order to point to common causes and types of stigma, marginalization and discrimination. However, this is not to suggest that LGBTI people are homogenous, or necessarily share the same health concerns.

This report presents the findings of a comparative, mixed-method study by the Gender Health and Justice Research Unit (hereafter referred to as "GHJRU" or "the research team"), funded by and in partnership with COC Netherlands. The study examined the level of inclusion of LGBTI health-related themes in the curricula of medical schools and nursing institutions in South Africa and Malawi, and identified opportunities and challenges for introducing LGBTI health-related topics into formal health professions education. South Africa and Malawi were chosen as the focus countries based on existing relationships between non-governmental organisations in each country and COC. They represent two opposite extremes in terms of the legal status of sexual orientation and gender identity, while sharing similarities in social and cultural perspectives.

The report provide an overview of current literature on sexual orientation and gender identity in health professions education, describes the rights and challenges of LGBTI individuals in the two countries, details the study methodology, presents the findings and discuss them in the current legislative and policy context. The report then makes recommendations for key stakeholders involved in health professions education and organisations working on issues of LGBTI health.

Sexual orientation and gender identity in health professions education

An important first step towards addressing health disparities based on sexual orientation and gender identity is ensuring that teaching sexual and gender minority health is systematically integrated into the curricula of health professionals' education (Obedin-Maliver et al. 2011). The Association of American Medical Colleges (AAMC) recommends a triad of including knowledge, skills, and attitudes training for working with LGBTI patients in medical school curricula by including "comprehensive content addressing the specific healthcare needs of [LGBTI] patients" and "training in communication skills with patients and colleagues regarding issues of sexual orientation and gender identity" (Fallin-Bennett 2015; Anon 2007), and recently issued guidelines to include sexual and gender minority in US medical education (Anon 2014). This seminal document provides comprehensive guidance on integration of LGBTI health content, development of competency-based objectives, learner assessment, assessments of institutional climate and curriculum impact, as well as clinical scenarios and discussion points. It identifies eight key competency areas for LGBTI health:

- Patient Care
- Knowledge for Practice
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice
- Interprofessional Collaboration
- Personal and Professional Development

Similar guidelines have been developed for the curricula of South African MBChB (medical) programmes (Müller 2015). These guidelines recommend 'mainstreaming' LGBTI health-related content into existing curricular content, as relevant for each discipline, and thus creating a consistent thread through the entire length of the curriculum. Appendix I outlines opportunities to do so within an existing medical curriculum in South Africa.

Sexual orientation and gender identity in health professions education

Approach:

- Affirms sexual and gender diversity, does not pathologise sexual orientation and gender identity
- Addresses sexual orientation and gender identity-related health concerns through the life course (from childhood to old age)
- Includes LGBTI organisations and/or individuals in conceptualising and teaching
- Aims to foster affirming attitudes and build clinical competency

Key topics:

- Definition and theories of sexual orientation and gender identity
- Clinical skills and competencies for providing care to LGBTI individuals (for example, taking a history)
- Sexual orientation and gender identity as social determinants of health
- Sexual orientation and gender identity and violence (sexual violence, domestic violence and other forms of violence)
- Barriers to access to health care for LGBTI individuals
- Substance use in LGBTI populations (alcohol, tobacco and other substances)
- Sexual health in LGBTI populations, including sexually transmitted infections and HIV, and preventative measures for safer sex
- Chronic conditions in LGBTI populations
- Mental health in LGBTI populations
- Sexual orientation and gender identity in childhood and adolescence
- Prevention and health promotion in LGBTI populations
- Transgender health needs, including gender-affirming care
- Intersex-related health concerns

A useful resource to evaluate existing curricula, from the American context, is the 'Checklist for LGBT Curriculum Inclusion', developed by the Director of the LGBT Resource Centre at the University of California San Francisco (Snowdon, n.d.).

Poor representation of LGBTI health-related content in medical curricula has been a common finding in studies assessing this component of medical training. In the United States, Obedin-Maliver and colleagues (2011) evaluated 176 medical schools and found that on average, only 5 hours were spent on LGBT health. Similarly, Müller (2013) gay, bisexual and transgender (LGBT mapped curricula at the University of Cape Town and found that LGBTI health-related topics were not adequately covered, with gaps of crucial topics such as LGBTI people's mental health and sexual health, and key clinical competencies such as taking a sexual history.

Beyond representation in the curriculum, pedagogical approaches to LGBTI health-related topics are important in addressing students' attitudes, knowledge and skills. Müller & Crawford-Browne (2013) argue that the positivist pedagogies applied in medical training limit students' understanding of people's lived experiences by disregarding the complexities of lived experiences, identities and sexualities. Bennett & Reddy (2009) argue

that in South Africa, creating opportunities within health sciences teaching that destabilizes norms and prejudices can help students develop openness and understanding towards people outside of their own circles. Actively engaging with attitudes within curricula can help health professions students to acknowledge their bias or prejudice with regards to sexual orientation and gender identity.

Country profile: South Africa

Legal and policy framework

South Africa's constitutional and legislative framework for LGBTI people is among the most progressive globally. The constitution provides that the state is obliged to "respect, protect, promote and fulfil" the rights enshrined in the *Bill of Rights*.¹

The Constitution guarantees the right to protection from discrimination based on, amongst others, sex, gender and sexual orientation (Bill of Rights, Section 9 (3) and (4))². Unfair discrimination by the state (9.(3)) or a person (9.(4)) on one or more grounds (including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth) is unconstitutional. This has been interpreted in the past as including protection based on gender identity. In a 1998 Constitutional Court judgment, Judge Ackermann, in Section 21 of the ruling, established that non-discrimination and equal rights in regards to 'sexual orientation' ought to be interpreted broadly to include 'transsexual' people.³ The Promotion of Equality and Prevention of Unfair Discrimination Act (PEPUDA), Act 4 of 2000, prohibits non-state actors (such as private hospitals) from discrimination on the basis of the factors named in Section 9 of the constitution, including gender (identity) and sexual orientation. A recent strategy by the Department of Justice and Constitutional Development, the National Intervention Strategy for Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Sector 2014-2017 (DoJCD, n.d.) outlines strategies to implement effective measures to prevent violence and discrimination on the basis of sexual orientation and gender identity, and to improve access to the criminal justice and health care system for legal redress.

Section 12 of the Bill of Rights ensures the <u>right to freedom and security</u>. Subsection 2(b) of section 12 is particularly relevant for LGBTI people, since it ensures the right to bodily and psychological integrity: "(2) Everyone has the right to bodily and psychological integrity, which includes the right-

- 1. To make decisions concerning reproduction;
- 2. To security and control over their body; and
- 3. Not to be subjected to medical or scientific experiments without their informed consent."

Section 27(a) of the Bill of Rights⁴ guarantees all citizens of South Africa <u>access to health care</u>, including <u>sexual and reproductive health care</u>. This constitutional provision provided the base for the Constitutional Court ruling that the State has to provide antiretroviral medication for the prevention of mother to child transmission⁵. The Department of Health's National Strategic Plan on HIV, STIs and TB (2012-2016) identifies men who have sex with men (MSM) and transgender people as 'key populations'⁶. This recognises MSM and transgender people's unique risks for HIV transmission, and requires that all interventions include a component targeted at MSM and transgender people. The Department's *Operational Guidelines for HIV, STIs and TB programmes for key populations in South Africa* (DoH, 2012) outline the key social and economic vulnerabilities of MSM and transgender people. However, now in the forth year of implementation, the Strategic Plan has had little impact on service provision for transgender people, and barriers to HIV services remain manifold (Stevens 2012b).

^{1.} Constitution of South Africa, Article 7(2).

^{2.} Department of Justice and Constitutional Development. The South African Constitution, 1996. Pretoria: Department of Justice and Constitutional Development, 1996 [http://www.justice.gov.za/legislation/constitution/constitution.htm]

^{3.} Quote from the original judgment: "The concept "sexual orientation" as used in section 9(3) of the 1996 Constitution must be given a generous interpretation of which it is linguistically and textually fully capable of bearing. It applies equally to the orientation of persons who are bi-sexual, or transsexual and it also applies to the orientation of persons who might on a single occasion only be erotically attracted to a member of their own sex" [http://www.saflii.org/za/cases/ZACC/1998/15.pdf]

^{4.} Department of Justice and Constitutional Development. The South African Constitution, 1996. Pretoria: Department of Justice and Constitutional Development, 1996 [http://www.justice.gov.za/legislation/constitution/constitution.htm]

^{5.} TAC versus Minister of Health, CCT 8/02. 5 July 2002.
Available online at: http://www.law-lib.utoronto.ca/Diana/TAC case study/MinisterofhealthvTACconst.court.pdf

^{6.} SA National Department of Health. National Strategic Plan on HIV, STIs and TB (2012-2016).

Available online at http://www.sanac.org.za/nsp/the-national-strategic-plan

It is noteworthy that the progressive and affirming stance of the constitution towards LGBTI people is not reflected in the dominant attitudes in South African society, and statements by public figures indicate that deeply conservative views about gender and sexuality prevail.7 For example, in 2010 Jerry Matjila, South Africa's representative at the UN, objected to the inclusion of sexual orientation in a report on racism at the UN Human Rights Council in Geneva. He argued that to include sexual orientation would be to "demean the legitimate plight of the victims of racism"8. Similarly, there is increasing evidence of discriminatory treatment of LGBTI people accessing public services, including health care, which will be reviewed in the following sections.

The health system

The history of South Africa is permeated with discrimination on race and gender, which impacts health care access and services in the present day (Coovadia et al. 2009). Wealth and class should therefore be considered as factors when describing health in South Africa. A large percentage of the population is affected by poverty and thereby the lack of access to the basic requirements for life and health. In South Africa, the wealthiest 10% of the population earn 58% of the total annual national income, whereas the lower earning 70% of the population earn a percentage of just 17% (Mayosi et al. 2014:1344). These disparities are the widest in the world, and they continue to widen the disparities in the provision of health care.

The current health care provision in South Africa exists in three parallel systems; a public system, which is financed through taxes, a private system financed either through user fees or through private medical schemes and a system of indigenous healing practices, which is financed through user fees. The public health sector is staffed by 30% of the doctors in the country and is the sole provider of health care for more than 40 million people, constitute 84% of the national population, while the other 16% of South Africans (8 million people) have access to private health insurance and services, provided by the remaining 70% of doctors (Mayosi et al. 2014:1346). Further, the per capita health expenditure is estimated at 1400 US dollars for the private sector and 140 US dollars for the public sector (Coovadia et al. 2009). Many public health facilities are in a state of crisis and dysfunction as a result of underfunding, mismanaging, neglect and struggles with a burden of diseases higher than in most comparable countries (Anon n.d.; Coovadia et al. 2009). Therefore there are significant barriers to quality healthcare for many South Africans.

Health care practitioners in the public and private sector are regulated by the *Health Professions Act.*9 Indigenous healing practices, defined as defined as 'health practices, approaches, knowledge, and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, to treat, diagnose and prevent illnesses and, maintain well-being' (WHO, 2003), are regulated by the *Traditional Health Practitioners Act*¹⁰. There are currently more than 200,000 'traditional' healers in South Africa, and it is estimated that between 1.2 and 11.2% of South Africans regularly use indigenous healing practices (Nxumalo et al, 2011; DoH, 2003).

Limited specialised services for LGBTI people exist through public-private partnerships, and, to a smaller extent, independently in the public system. In public-private partnerships, the South African Department of Health contracts a private entity to provide services in the public system. Two examples of such partnerships are the first primary care clinic targeted at key populations (LGBTI people, MSM, sex workers and people who use drugs), opened in 2015 in a partnership between the LGBTI organisation OUT LGBT Wellbeing and the Gauteng Provincial Department of Health. Specialised services for MSM are also available through the organisation ANOVA Health, in collaboration with provincial Departments of Health. In addition to these service provisions, non-governmental organisations, tertiary institutions and international funders provide LGBTI sensitisation training for health care providers working in public health facilities across the country (Brown, Duby and van Dyk, 2013).

Various aspects of gender affirming care¹¹ are offered at three public academic hospitals in the Western Cape and Gauteng (Wilson et al. 2014). In line with the triage system of the primary health care tenet, patients wishing to access these specialised services need a referral from a primary care provider, and due to limited resources, the waiting list for surgical procedures necessitates waiting times of over 20 years (Bateman 2011). Gender affirming care is also available from private health providers, mostly in urban centres. Due to the high cost of private care, however, private sector care is only accessible to a small, privileged minority of transgender and gender non-conforming South Africans (Klein, 2013).

^{7.} D.DeLange, "Call to Suspend ANC MP for Opening Fire on Gay Rights", Cape Times (8 May 2012).

^{8.} P. Fabricius, "SA Fails to Back Efforts at UN to Protect Gays", Cape Times (23 June 2010).

^{9.} National Health Act of 2003.

^{10.} Traditional Health Practitioners Act 22 of 2007.

^{11.} Gender affirming health care includes gender affirming hormone treatment, gender affirming surgery, as well as specialized psychosocial support services for transgender and gender diverse people.

The Department of Health is currently working to establish a national health insurance (NHI), which aims to ensure that everyone has access to appropriate, efficient and quality health services regardless of socio-economic status (Department of Health Republic of South Africa 2011). The NHI is intended to decrease the disparities between public and private health care and to improve the availability of health care for those who currently cannot afford it. This also includes the re-structuring of nursing education, which is suggested to be centrally coordinated under the national Department of Health. So far, the progress on the NHI drafting legislation has been rather slow, with 4 years passing between the release of the initial NHI Green Paper (a broad legislative draft) in August 2011 and the NHI White Paper (a more concrete legislative draft) in December 2015. The NHI White Paper is open to public comment until May 2016, after which it will be revised and amended further. There is no anticipated date for the NHI Act to be released or passed.

The ethical rules of conduct for health professionals registered under the *National Health Professions Act* from 1974 state that practitioners should at all times act in the best interest of the patient, respect patients' choices and dignity, and maintain the highest standards of personal conduct and integrity (Section 27A of the Act). The Health Professions Council of South Africa's core ethical values and guidelines for good practice elaborate on these obligations and highlight that health professionals should make sure that "their personal beliefs do not prejudice their patients' health care" (HPCSA 2008). Gender and sexual orientation are specifically named as examples for personal beliefs that might affect the treatment offered to a patient (Section 5.1.5). The HPCSA's guidelines underline that doctors and nurses have an ethical obligation to treat lesbian, gay, bisexual, transgender and intersex patients in a non-discriminatory and non-judgmental manner, regardless of their own personal beliefs and attitudes towards homosexuality. However, reports of health service discrimination based on sexual orientation (Lane et al. 2008; Rispel et al. 2011), gender identity (Deyi et al. 2015; Husakouskaya 2013; Stevens 2012b), or age and sexual activity of patients (Wood & Jewkes 2006) highlight that health care providers' attitudes often influence the quality of their service provision to LGBTI patients. As a result, most women who have sex with women, in a recent study in Cape Town, would not disclose their sexual orientation to health care provider (Smith 2014).

Health disparities based on sexual orientation and gender identity and expression

There is an increasing body of evidence for the impact of sexual orientation and gender identity and expression as social determinants of health in South Africa (Müller & Hughes, 2016).

As a result of societal heteronormativity and homophobia, and despite the protections offered under the legal framework, LGBTI people, especially gender non-conforming people, lesbian women and effeminate gay men experience high levels of violence (Sandfort et al. 2013; Lee et al. 2013). One third of lesbian women in a study by Matebeni et al. (2013b) reported being survivors of sexual violence. In a study by Nel and Judge (2008) and a constitution that enshrines the principles of human dignity, equality, and social justice. In stark contrast with constitutional guarantees of freedom and human rights for all, research indicates that homophobic victimisation is an endemic part of the South African landscape. Crimes motivated by prejudice ('hate crimes', 37% of LGB participants had experienced verbal abuse, 16% physical abuse and 8% sexual abuse.

Among a group of LGB participants, low self-esteem and hate speech had a strong influence on vulnerability to depression, thus increasing levels of depression (Polders et al. 2008). Further, in another sample of WSW, experiences of forced sex increased drug use, mental distress and lowered women's sense of belonging (Sandfort et al. 2015). In the same sample, more than half of the 591 participants had used recreational drugs (Sandfort et al. 2013).

Due to sexual violence, social exclusion and lack of appropriate prevention services, HIV prevalence rates are high among MSM (Lane et al. 2011; Rispel et al. 2011), WSW (Sandfort et al. 2015; Sandfort et al. 2013) and transgender men and women (Stevens 2012b).

Little is known about health concerns of transgender, gender diverse and intersex people, especially as they pertain to gender affirming care.

Country profile: Malawi

Legal and policy framework

The Malawian penal code focuses on same-sex activity rather than LGBTI identity. It criminalises sodomy,¹² and consensual same-sex sexual activity between men.¹³ In 2011, an amendment of the code added criminalisation of consensual same-sex sexual activity between women.¹⁴ There are no reporting requirements for health care providers who have knowledge of people engaging same-sex activity. In 2012, enforcement of the criminalisation of same-sex activity was placed on hold, following international pressure and an attempt to repeal the law by then-president Joyce Banda. The current Malawian government reaffirmed this moratorium in December 2015 (Human Rights Watch 2015). The Centre for the Development of People (CEDEP) in Malawi is the only LGBTI advocacy organisation in the country.

The health system

The Malawi Health Sector Strategic Plan 2011-2016 details the state of the Malawian health system. The health system consists of both a public and private health sector. The public sector provides services free of charge, while user fees are charged in the private sphere. Traditional healers are classified as part of the private health care system under the Malawi Traditional Healers Umbrella Organization, created in an effort to strengthen relationships between the Ministry of Health and traditional healers. The largest private healthcare network in Malawi is the Christian Health Association of Malawi (CHAM). Because CHAM operates facilities in several rural areas where the public system does not offer services, the government subsidises CHAM in order to provide certain essential services, such as maternal and neonatal care, in these rural areas to those who would otherwise be unable to afford it (World Health Organization & African Health Observatory n.d.; Ministry of Health 2011).

Significant barriers to healthcare exist for many Malawians, despite government provision of no-cost health services. Distance of facilities, the cost of private care and transport and health providers' attitudes have been cited as obstacles for Malawians (Munthali et al. 2014). Further, due to factors such as delayed salary payments and workplace interactions, there is a shortage of healthcare providers in Malawi as well as a high attrition rate (Chimwaza et al. 2014; Ministry of Health 2011).

Although prevalence has decreased over time, HIV/AIDS remains a priority health concern, with a 10.6% prevalence of HIV infection among Malawians aged 15-49 (World Health Organization & African Health Observatory n.d.). The Global Fund has confirmed an agreement with the Malawian government at the end of 2015 for over 332 million US dollars to go towards ending HIV, tuberculosis, and malaria, all major health concerns in Malawi (The Global Fund 2015). A news report featuring CEDEP indicated that these funds may go towards health interventions for LGBTI people (Chiumia 2015). Grey literature documents an effort driven by USAID, PEPFAR and Research to Prevention at Johns Hopkins University to train 25 in-service providers around healthcare for men who have sex with men (MSM) specifically as part of a larger intervention to prevent HIV transmission in MSM (Wirtz et al. 2013). Nevertheless, a recent study found that Malawian healthcare providers lack awareness and self-efficacy to provide care to MSM in the face of limited information and political support (Wirtz et al., 2014).

Health disparities based on sexual orientation and gender identity and expression

Evidence on LGBTI health disparities in Malawi focuses on MSM and infectious disease, notably HIV infection and prevention. Among MSM, a general lack of HIV information, low awareness of appropriate HIV preventions, and a low perception of risks related to HIV infection contributes to high HIV prevalence (Wirtz et al. 2014). HIV prevalence has been estimated at 15.4%, and syphilis prevalence at 5.3% (Wirtz et al. 2013). Comparative data from Malawi and two other Southern African countries showed that HIV prevalence tended to increase with age (Baral et al. 2009)men who have sex with men have been largely excluded from HIV surveillance and research.

¹² Malawi Penal Code. Sections 153-154.

¹³ Malawi Penal Code. Section 156.

¹⁴ Malawi Penal Code. Section 137a.

Epidemiologic data for MSM in southern Africa are among the sparsest globally, and HIV risk among these men has yet to be characterized in the majority of countries. METHODOLOGY A cross-sectional anonymous probe of 537 men recruited with non-probability sampling among men who reported ever having had sex with another man in Malawi, Namibia, and Botswana using a structured survey instrument and HIV screening with the OraQuick(c.

No data exists for other health concerns, or health concerns among lesbian and bisexual women, transgender or intersex people.

Aim and objectives

The aim of this study is to provide a comprehensive assessment of undergraduate health professions education in Malawi and South Africa, in order to identify opportunities and challenges for integrating LGBTI-related content into existing curricula. Participants included in this study were individuals from tertiary institutions providing undergraduate training for health professions students (medical schools and nursing colleges), key national stakeholders from government and professional boards and bodies, and civil society organisations.

The research objectives included:

- 1. To identify key stakeholders and decision-makers for health professions curriculum reform, including undergraduate training institutions (medical schools and nursing colleges), professional standards committees and boards, government departments and civil society organisations;
- 2. To identify existing capacity within undergraduate health professions education institutions to teach LGBTI health-related topics;
- 3. To document the structure and content of undergraduate training curricula in medical schools and nursing colleges in order to identify existing LGBTI health-related content, gaps and opportunities for inclusion of LGBTI health-related content;
- 4. To identify existing capacity within civil society organisations to partner with and advise undergraduate training institutions on the development and implementation of curriculum changes;
- 5. To identify existing advocacy and curriculum reform initiatives and strategies related to improving LGBTI healthcare provision.

METHODS

The study utilised a two pronged, mixed method approach:

- 1. An online mapping survey sent to all identified accredited undergraduate nursing institutions and medical schools in South Africa and Malawi, in order to map existing LGBTI health-related content in the curricula;
- 2. One-on-one interviews with educators and key stakeholders to investigate facilitators of and barriers to undergraduate curriculum reform.

In order to identify existing curriculum development practices and key stakeholder organisations and contacts at these organisations, the research team performed a desk review of existing initiatives, strategies and resources in South and Southern Africa for undergraduate health professions education reform around LGBTI health-related topics; as well as a desk review and mapping of key stakeholders and decision-makers. The detailed methodology of the study, including information on study instruments, sampling, recruitment, data collection, data analysis and ethical and regulatory compliance, is outlined in Appendix II.

FINDINGS

Structure of undergraduate education and curriculum development

Medical education in Malawi

There is one medical school in Malawi, the College of Medicine at the University of Malawi. The regulatory body overseeing the medical school is the Medical Council of Malawi. According to one participant interview, it is unclear what the exact role of the Medical Council is in curriculum development, as the participant felt the Medical Council provides input but is not required to approve curricula. He also felt that because the Medical Council is responsible for certifying graduates as doctors that they may want to be involved in the curriculum development process (Medical Council of Malawi n.d.).

Two participants described a hierarchical structure at the medical school, during which the curriculum is designed by individual departments and then passed through the University Senate, which must approve the curriculum.

Nursing education in Malawi

Of the nursing education institutions in Malawi, approximately 70% are run by the Christian Health Association of Malawi (CHAM; Ministry of Health 2011), with the remaining institutions run by the state. In a report from 2009 (Tveit et al. 2009), curriculum development at CHAM was described as follows:

- Each program shall have a curriculum developed by the college and approved by the regulatory body.
- The curriculum shall be revised at least every five years.
- New trends emerging in the health sector shall be approved by the regulatory body before incorporating them in the curriculum.
- Each curriculum should specify core and supporting courses.
- The principal shall ensure that students are aware of the core and supporting courses for their program.

Based on an interview with a CHAM representative, the regulatory body, which approves the college-developed curricula, is the Nurses and Midwives Council of Malawi (NMCM).¹⁶ The curricula among the CHAM-run and state-run nursing colleges are very similar based on the regulations of the NMCM; however, for CHAM colleges, Christian values are incorporated into the preamble of the curricula documents.

Several Malawian participants spoke about the role of the Ministry of Health (MOH) in curriculum development. Although no participants reported that the MOH plays a formal role in curriculum development, several did suggest that they are an important stakeholder group. Participant responses suggest that the MOH could be influential in achieving education institution buy-in, or conversely that lack of the support from the MOH to include LGBTI health-related topics could result in loss of funding or support for the education institution as a whole, should the institution revise the curriculum to include these topics.

¹⁵ The Medical Council of Malawi was unreachable by phone and email when contacted by the research team

¹⁶ The NMCM did not respond to the research team's interview request

Medical education in South Africa

The Health Professions Council of South Africa (HPCSA)¹⁷ creates the standards by which medical education institutions must abide. Medical education institutions are responsible for developing curricula that meet HPCSA standards and the HPCSA is responsible for reviewing the curricula and providing accreditation.

One participant explained that there has been an international move towards a core competency approach in medical education. The HPCSA has adopted a core competency framework from Canada to guide curriculum development.

HPCSA standards do not specify that LGBTI health-related topics must be included in curricula. In the core competencies, Section 5.1.1 Enabling Competencies c) reads "Act as advocates for patient/ client groups with particular health needs (including the poor and marginalised members of society)," however, there is no specification of who is included as "marginalised members of society" or whether LGBTI people would be included in this group according to the HPCSA (Undergraduate Education and Training Subcommittee of the Medical and Dental Professions Board 2014).

Generally speaking, the competencies do not identify specific content or health topics that must be taught.

Nursing education in South Africa

There are three options for individuals studying undergraduate nursing: a university, a nursing college, or a nursing school. Nursing schools and colleges are either run by private companies, often affiliated with companies providing private health care, or by provincial Departments of Health (PDoH). All three types of nursing education institutions (NEI) are overseen by the South African Nursing Council (SANC), which is responsible for setting curriculum guidelines for all SANC accredited NEIs (Vasuthevan 2014).

NEIs develop individual curricula, often referred to by educators as the "micro-curriculum," based on the SANC guidelines. Some private NEI chains, such as Life College of Learning (Life Healthcare) or Mediclinic, may have one curriculum that all NEIs under their umbrella use. When a NEI curriculum is developed for the first time, it must adhere to SANC guidelines and be reviewed by the Council on Higher Education (CHE) for quality in order to be accredited. Further, NEIs are required to register for qualifications through the National Qualifications Framework (NQF), for which a letter of approval from SANC is also required, according to participants.

Additionally, other stakeholder groups in South Africa may be influential in curriculum development, though they do not play a formal role in the curriculum process. Based on interviews with participants, these stakeholders include the union 'Democratic Nursing Organisation of South Africa' (DENOSA), the dean organisation FUNDISA¹⁸, the continuing professional education organisation NEA, and the national Department of Health (DOH).

The DOH is responsible for hiring staff and providing funding in the public NEIs and the neighbouring Universities are meant to serve in an academic mentoring role to the public nursing colleges. The DOH also develops healthcare policies, which may influence nursing education.

Nursing educators or education specialists, working independently or as a team depending on the NEI, then develop the specific course outlines and material based on the NEI curriculum. According to interview participants, as long as the objectives of the curriculum are met, educators are allowed to include additional information based on their own judgment. In some institutions this was reported as a participatory process, in which educators were given ample time to review and feedback on the curriculum. In others, a more top-down process was described in which the curriculum was delivered to the educators without a feedback process.

SANC guidelines do not mandate specific inclusion of LGBTI health-related topics in curricula (South African Nursing Council n.d.). The majority of SANC guidelines are broad and do not focus on specific health topics. SANC emphasizes evidence-based teaching in line with global standards (South African Nursing Council n.d.). For this reason, one participant suggested that the International Council of Nurses (ICN) could be important in influencing guidelines in line with global standards.

A few South African participants spoke about a new curriculum structure that is being designed by SANC. Little detail was provided about these changes, as participants said the new guidelines have not yet been publicised. The findings shared in this report centre on the curriculum structures currently in place.

¹⁷ THE HPCSA did not definitively respond to the research team's interview request

¹⁸ FUNDISA did not definitively respond to the research team's interview request

Existing LGBTI health-related content in curricula (online survey)

Survey responses

Two hundred and eighty-four medical and nursing institutions in South Africa and Malawi were identified for the survey. Fourteen were public institutions in the Western Cape and not contacted as provincial approval was still pending upon closing the survey. Additionally, 23 institutions were unable to be reached by phone or email, five institutions were reached by phone but stated they do not have institutional email access, and one institution was contacted by phone and declined to provide an email address for the survey. During the study period, the survey link was sent to the remaining 241 institutions. For some institutions, the survey link was sent to more than one email address. Responses were received from two of these institutions informing the research team that they do not teach undergraduate students.

The survey was open for responses from 2 October 2015 to 25 February 2016. All Malawian private South African and Malawian institutions were first emailed the survey on 2 October. Public institutions were emailed as soon as possible following approval from the appropriate province. See Appendix V for timeframes for Provincial approvals.

One hundred and forty-two entries were recorded in SurveyMonkeyTM during the study period. Of these, 27 respondents were deemed ineligible: Ten did not teach a medical or nursing school in South Africa or Malawi, 9 did not teach undergraduate nursing or medical students, and 8 did not meet either criteria. Three participants who were not ineligible declined to take the survey based on the consent statement. Ineligible and declining participants did not complete the survey.

Of the 112 participants who could have completed the survey, 12 participants did not continue to the survey, leaving responses from 100 participants: 15 from Malawi and 85 from South Africa.

Malawi survey results

Nineteen institutions were identified in Malawi as teaching undergraduate nursing and/or medical education. The survey was sent to a total of 45 email addresses in Malawi. Of these, 12 email addresses produced bounce back responses.

Fifteen survey respondents participated and indicated that they taught undergraduate nursing (13, 86.7%) or medical (2, 13.3%) students. Due to this small response rate, the findings cannot be said to be representative of all Malawi medical and nursing educators, although we did receive responses from 9 of the 18 institutions, indicating a somewhat diverse range of respondents. The greatest number of responses came from Ekwendeni College (4, 26.7%) and Kamuzu College of Nursing (4, 26.7%).

A full table of findings can be found in Appendix IV. Of the Malawian respondents, five (33.3%) indicated they do teach LGBTI health topics, nine (60%) indicated they do not, and one (6.7%) did not complete this section of the survey. Among those who do not teach LGBTI health topics, the most common reasons cited for not teaching were not having the knowledge or training to teach LGBTI health topics (three participants) and the topics not being a part of the formal curriculum (three participants). Less commonly cited were lack of institutional support, discomfort teaching the topic, student resistance, and the belief that "being LGBTI is uncommon in Malawi" (each by one participant).

Of those who did indicate teaching LGBTI health topics, the most common topics taught were 'definitions and theories of sexual orientation and/or gender identity' (three participants) and 'barriers to access to healthcare for LGBTI people' (three participants). Less commonly cited LGBTI health-related topics were 'social determinants of health' (two participants), 'sexually transmitted infections' (two participants), HIV/AIDS (one participant), 'domestic/intimate partner violence' (one participant), 'disorders of sex development/intersex' (one participant), and 'mental health' (one participant). No respondents reported teaching topics related to clinical skills/competencies for providing care to LGBTI individuals, sexual violence, alcohol/tobacco/drug use, safer sex, chronic disease risk, general transgender health, gender affirming treatment, adolescent health, or bringing LGBTI people to the classroom. In total, the five educators teaching LGBTI health in Malawi separately taught fourteen health topics.

Teaching LGBTI health-related content in Malawi				
5 teach LGBTI health-related content	9 do not teach LGBTI health-related content			
Topics taught	Reasons for not teaching			
 Definitions and theories of sexual orientation and/ or gender identity (3) Barriers to access to healthcare for LGBTI people (2) Sexually transmitted infections (2) HIV/AIDS (1) Domestic/ intimate partner violence (1) Mental health (1) 	 No knowledge or training (3) Not in the formal curriculum (3) No institutional support (1) Discomfort with the topic (1) "Being LGBTI is uncommon in Malawi" (1) 			

Missing topics

- Clinical skills and competencies for providing care to LGBTI individuals (for example, taking a history)
- Sexual orientation and gender identity as social determinants of health
- Sexual orientation and gender identity and violence (sexual violence, domestic violence and other forms of violence)
- Substance use in LGBTI populations (alcohol, tobacco and other substances)
- Sexual health in LGBTI populations and preventative measures for safer sex
- Chronic conditions in LGBTI populations
- Sexual orientation and gender identity in childhood and adolescence
- Prevention and health promotion in LGBTI populations
- Transgender health needs, including gender-affirming care
- Intersex-related health concerns

Of the fourteen LGBTI health topics that were reported, most were taught in the first two years of medical or nursing school (12 of the 14 topics). Nine were taught in five hours or less, while five were taught in more. More than half of the topics (8 of 14) were taught using lectures, and less commonly group work or a workshop was used. No educators reported using bedside teaching for LGBTI health-related topics. Three of the reported topics were not formally assessed, and open response questions were the most common form of assessment used.

All Malawian participants indicated that the LGBTI health content they taught was mandatory.

Topic that is taught	(number of teaching topi of those tea	Africa f educators c, percentage ching LGBTI over this topic)	Malawi (number of educators teaching topic, percentage of those teaching LGBTI health who cover this topic)	
Definition and theories of sexual orientation and/ or gender identity	3	6.8%	3	60.0%
Clinical skills/competencies for providing care to LGBTI people (ie. taking a history)	3	6.8%	0	0.0%
Domestic violence and/or intimate partner violence, as it relates to LGBTI people	6	13.6%	1	20.0%
Sexual violence, as it relates to LGBTI people	4	9.1%	0	0.0%
Social determinants of health (social exclusion, stigma, discrimination of LGBTI people)	7	15.9%	2	40.0%
Barriers to access to health care for LGBTI people	2	4.5%	3	60.0%
Alcohol, tobacco, or other drug use for LGBTI people	4	9.1%	0	0.0%
Safer sex for LGBTI people	0	0.0%	0	0.0%
HIV in LGBTI people	5	11.4%	1	20.0%
Sexually Transmitted Infections (other than HIV) in LGBTI people	12	27.3%	2	40.0%
Chronic disease risk for LGBTI populations	2	4.5%	0	0.0%
Disorders of Sex Development (DSD)/ Intersex	3	6.8%	1	20.0%
Transgender health in general	0	0.0%	0	0.0%
Gender affirming treatment (hormonal/surgical, AKA sex reassignment surgery (SRS))	1	2.3%	0	0.0%
LGBTI adolescent health	0	0.0%	0	0.0%
Mental health in LGBTI people	4	9.1%	1	20.0%
Bringing LGBTI people into the classroom	0	0.0%	0	0.0%
Other topic affecting LGBTI people	5	11.4%	0	0.0%

South Africa survey results

Two hundred and sixty-five institutions were identified in South Africa as teaching undergraduate nursing and/or medical education. The survey was sent to a total of 330 email addresses in South Africa. Of these, 70 email addresses produced bounce back responses.

Eighty-five survey respondents participated and indicated that they taught undergraduate nursing (79, 92.9%) or medical (6, 7.1%) students. Forty-eight participants (56.5%) worked for private institutions and 34 participants worked for public institutions (40%). Three participants did not report whether their institution was public or private (3.4%). The greatest number of responses came from Netcare (private, 12 participants), Kwazulu Natal College of Nursing (public, 12 participants), Life College of Learning (private, 11 participants), University of the Free State (public, 11 participants) and Mediclinic (private, 10 participants).

A full table of findings can be found in Appendix IV. Of the South African respondents, 44 (51.8% of participants) indicated that they teach LGBTI health topics, 40 (47.1%) indicated that they do not, and one (1.2%) respondent did not complete this section of the survey. Among those who do not teach LGBTI health topics, the most common reason cited for not teaching the topics was the feeling that LGBTI health topics are not relevant to their discipline (19, which is 47.5% of those not teaching). In addition, they explained that not having teaching materials on LGBTI health (13, 32.5% of those not teaching) was another reason that they did not teach the topics. Furthermore, nine participants (22.5% of those not teaching) said they were not teaching LGBTI health because it was not in the formal curriculum and nine participants felt that they do not have the knowledge or training to teach LGBTI health topics. No participants reported student resistance as reason for not teaching. Less commonly cited were lack of institutional support (7, 17.5% of those not teaching) and discomfort teaching the topic (2, 5% of those not teaching).

Of those who indicated that do teach LGBTI health topics, the most common topics taught in relation to LGBTI people were sexually transmitted infections (STIs) other than HIV (12, 27.3% of those teaching), social determinants of health (social exclusion, stigma, discrimination) (7, 15.9% of those teaching) and domestic violence and/or intimate partner violence (6, 13.6%). Less commonly cited LGBTI health topics were HIV/AIDS (5, 11.4% of those teaching), alcohol/tobacco/drug use (4, 9.1% of those teaching), sexual violence (4, 9.1% of those teaching) and mental health (4, 9.1% of those teaching). No respondents reported teaching LGBTI health topics related to general transgender health (only 1 participant (2.3% of those teaching) reported teaching about gender affirming treatment), adolescent health, or bringing LGBTI people to the classroom. In total, the 44 educators teaching LGBTI health in South Africa separately taught 61 health topics.

Teaching LGBTI health-related content in South Africa

reaching LGBTT health-related content in South Africa					
44 teach LGBTI health-related content	40 do not teach LGBTI health-related content				
Topics taught	Reasons for not teaching				
Sexual health in LGBTI populations, including STIs and HIV (38.7%)	Not relevant to discipline (47.5%)No teaching materials (32.5%)				
Sexual orientation and gender identity as social determinants of health (15.9%)	Not in the formal curriculum (22.5%)				
Sexual orientation and gender identity and violence					
(sexual violence, domestic violence and other forms of violence) (13.6%)					
	Discomfort with the topic (2.5%)				
Substance use in LGBTI populations (alcohol, tobacco and other substances) (9.1%)					
Mental health (9.1%)					
Clinical skills and competencies for providing care to LGBTI individuals (for example, taking a history) (6.8%)					
Intersex-related health concerns (6.8%)					
Definition and theories of sexual orientation and gender identity (6.8%)					
Barriers to access to health care for LGBTI individuals (4.5%)					
Chronic conditions in LGBTI populations (4.5%)					
Gender affirming care (2.3%)					
Missing topics					

Missing topics

- Preventative measures for safer sex
- Sexual orientation and gender identity in childhood and adolescence
- Prevention and health promotion in LGBTI populations
- General transgender health needs

The LGBTI health topics that were reported were most commonly taught in the second year of medical or nursing school (23, 37.7% of the 61 health topics). The majority of LGBTI health topics were taught in 1 to 2 hours or less (39, 63.9% of the topics). Five health topics (8.2% of the topics) were taught for 10 or more hours. More than half of the topics (36, 59.0% of the topics) were taught using lectures, and less commonly group work was used (16, 26.2% of the topics). No educators reported using bedside teaching for LGBTI health. Most of the topics were formally assessed. Open response questions were the most common form of assessment used (30, 49.2% of the topics), followed by multiple choice questions (9, 14.8% of the topics), or through "other" means (15, 24.6% of the topics). Most of the health topics were reported as being mandatory for students (53, 86.9% of the topics).

Survey discussion and summary

Although responses from Malawi were limited, the participants from Malawi and South Africa represented a range of institutions in different geographical areas, both public and private, providing a broad picture of the state of LGBTI health-related topics teaching in undergraduate nursing and medical schools.

It can be assumed that educators receiving the survey were more likely to respond to the survey if they were teaching LGBTI health-related topics, or had an interest in the subject, than if they were not teaching it or not interested. In order to mitigate this response bias, the introductory email encouraged educators to complete the survey even if they did not teach LGBTI health-related topics. Despite this, the research team believe it is likely that the survey results overestimate the overall percentage of educators teaching LGBTI health-related topics in institutions.

Communication with the nursing and medical schools in both countries was challenging at times, which likely limited the response rate. In Malawi, many of the nursing and medical schools were unable to be reached by phone—either due to disconnected phone numbers or phone calls that were unanswered—which made it difficult to follow-up with potential participants to encourage them to complete the survey. In South Africa, most institutions were contactable by phone, however, the nursing education institutions in Mpumalanga and Limpopo were more challenging to contact than institutions in other provinces, which may have resulted in fewer responses from these areas.

The depth of information that was provided in surveys is limited. While participants indicated that they taught specific LGBTI health topics, the survey did not record information on the exact nature of the content, the approach, or perspective that is channelled to students through their teaching. This depth was provided and described in the smaller sample of participants through the one-on-one interview section of this report.

There were a few notable gaps across institutions in both countries. None of the 102 participants completing the survey reported teaching about general transgender health, and only one participant reported teaching about genderaffirming treatment. While some educators may briefly mention or include transgender people as part of other topics, this is a significant gap.

The survey identified important reasons that educators cited for not teaching LGBTI health-related content. In both countries, educators stated their own lack of knowledge and training around LGBTI health-related topics, as well as the lack of formal curriculum inclusion and teaching materials as the key obstacles to teaching. Additionally, the survey results suggest that student encounters with LGBTI people are limited in nursing and medical schools. None of the educators in either country reported using bedside teaching with LGBTI patients or bringing LGBTI people into their classroom for educational purposes. There was no indication that nursing and medical students are given practical, hands-on experience on providing care to LGBTI individuals prior to graduating.

One-on-one interviews

Overview of participants and data collection

Educators volunteered to be interviewed through the online survey, curriculum stakeholders were identified through an online review of curriculum processes, and both educators and stakeholders requested to be interviewed through the professional networks of the principal investigator. Once they had been interviewed, participants were also asked if they could suggest others that could be interviewed. This snowball sampling had little success, as it was found that many educators were unaware of others teaching LGBTI health topics and so were unsure of who to refer us to. Using these sampling methods, the research team identified 52 potential participants in both countries.

Two GHJRU interviewers travelled to Malawi for a field visit in October 2015. Ten interviews were conducted in Blantyre (four participants), Lilongwe (three participants), Malosi (one participant), and Mzuzu (two participants). One additional interview was completed by phone from Cape Town, South Africa.

The majority of South African interviews were conducted over the phone by two GHJRU researchers working separately. Five interviews were conducted in person in the Cape Town area.

Informed consent was obtained for all participants and documented by their signature on the informed consent form. Phone interview participants, printed, signed, scanned, and emailed their informed consent form to the researcher prior to the interview. All interviews were conducted in English and audio recorded. Participants were given the choice of being named as the source of the information, or to be anonymised. Participants wishing to be named can be found in Appendix IV.

The current state of LGBTI health teaching

What is being taught (content)

In Malawi, only a handful of individuals teaching about sexual orientation and gender identity were identified. A few educators stated that sexual orientation is a part of the formal nursing curriculum (some identifying "community nursing," specifically). A couple of respondents spoke of discussing sexual orientation "in passing," in that students are told that gay, lesbian and bisexual people exist, but the topic was not discussed in-depth. When participants were prompted to say in what ways sexual orientation relates to specific health topics, they spoke about HIV and sexually transmitted infections (STIs).

At times in the Malawi interviews, clarity seemed to be lost in the difference between sexual orientation and sexuality as a whole, and gender identity and gender as a whole. Some respondents would start by indicating that they taught sexual orientation or gender identity topics, but upon probing it became clear that they were teaching other issues of sexuality and gender, such as the sexual response cycle or gender-based violence. A curriculum stakeholder respondent who plays a leading role in curriculum development reported that gender was part of the curriculum, but not gender identity explicitly.

There were also mixed reports of whether and how students were being taught about patients' right to health in relation to sexual orientation and gender identity in Malawi. While educators speaking on this topic spoke confidently that patients' rights to health and confidentiality are emphasised in nursing education, none of these participants reported making a specific link between these rights and LGBTI people, leaving it to students to make this connection on their own. No educators reported teaching that healthcare providers are allowed to refuse to serve LGBTI people, though a participant working for an NGO shared that there had been a case in Malawi in which a nurse reported a man to the police for seeking treatment for an anal infection (see more under "Law and Government" below).

Eight South African participants shared that they currently teach LGBTI health topics in their institution, taught it in the recent past, or are preparing to teach it in the coming year. In South Africa, it was clear from speaking to participants that LGBTI health topics are not required to be taught as part of the formal curriculum in nursing or medical education. Although umbrella topics such as human rights, patient rights, and "sexual variance" were described as being written into curricula (which could, and, some participants argued, should include LGBTI rights and health), only three participants, two of whom are from the same institution, stated that LGBTI health topics were formally included in their curriculum. It was

clear from the data that although a handful of institutions were including LGBTI topics formally, there is no systemic requirement or standardised format for inclusion of LGBTI health topics in the curriculum. The onus currently rests on individual educators to decide whether to include LGBTI health topics in their teaching. One example that clearly highlights this is an educator who used a gay character in a case study. When this educator left his institution, he discovered that the new educator taking over the course decided to make the same character heterosexual.

Because of the lack of standardisation, content of LGBTI health teaching varied widely in South Africa. The most common approach was to discuss LGBTI identity and students' attitudes towards LGBTI people. In relation to ethics and patient rights, the participants did not have a shared understanding of healthcare providers' obligation to serve LGBTI patients. Two participants taught students that they have the "right to refuse" to treat LGBTI patients if it is against their personal beliefs or causes them to feel uncomfortable. Both educators, however, agreed that if no other healthcare provider was available to serve the patient, the healthcare provider is required to do so regardless of their personal feelings. Another educator described very explicitly making the link between patient rights and LGBTI people, making it clear to their students they are required to serve patients irrespective of their

sexual orientation or gender identity. Other educators had conversations around the importance of not allowing personal beliefs and prejudice influence interactions with patients, although these educators did say whether they spoke about this in context of laws and a patient's right to healthcare. In addition to interactions with patients, one principal/educator explained that role plays are used to also teach students how to appropriately interact with colleagues who are openly LGB and also how to handle discrimination from patients and other people if they are LGB themselves. None of the educators promoting non-judgmental care mentioned using the existing HPCSA ethical guidelines, which explicitly mention sexual orientation, illustrating that they were unaware of the little existing material and guidelines that actually addressed LGBTI health-related issues.

When prompted to discuss specific health topics impacting LGBTI people, most participants spoke about HIV, STIs, and mental health (including drug and alcohol use). Many guided students in discussion around sexual orientation and gender identity to gain a more holistic understanding of LGBTI people's lived experiences beyond healthcare. One educator's approach in the medical curriculum was to move away from heteronormative teaching of human development by including same sex attraction as part of normal human development.

Of all of the participants, only one reported teaching about intersex people. This was in the context of midwifery education and genetics in which she taught about "ambiguous genitalia" and "hermaphrodite" patients, per the curricula set out in her institution. She identified the lack of national guidelines for how to treat intersex babies as a gap, and thus her teaching mainly focuses on supporting the family of the intersex baby and referring them to genetic counsellors and a social worker. She was not able to comment on what medical treatment, if any, takes place once a family is referred.

Although all of the participants who taught LGBTI topics reported doing so due to it being an important and relevant topic, the information that some educators disseminated was sometimes incorrect or was information that might not accurately reflect the experiences of LGBTI people. In South Africa, one educator was teaching his students that having a small penis may be a cause of homosexuality in men (and that healthcare professionals should be aware and non-judgemental about this), while another in a class discussion defined transgender people as "I don't know if it's right...but something from 'the Rocky Horror Picture Show.'" In Malawi, one educator included bestiality alongside homosexuality in his standard teaching of sexual orientation:

"We have a topic, especially in community health nursing, which is called human sexuality...we have some issues of sexual orientation...we teach [homosexuality] exists. Because, you know, people are attracted, sexually, differently. We teach them so they should not get surprised if one is maybe attracted to maybe animals and whatever, and even members of the same sex. So we orient them that they should not get surprised if they see that in the communities." (Nursing principal, Malawi, teaches LGBTI health)

Few South African participants were aware of other educators teaching LGBTI health topics. Most did not have concrete information about who else at their institution was teaching these topics.

"I'm really not joking to you, but I have never, never heard that this content or concept has been included in the curriculum ever before."

(Nursing educator (private institution), South Africa, does not teach LGBTI health)

This has important implications for educators' ability to share experiences and knowledge. Without the opportunity to discuss teaching strategies, difficult classroom situations, or even to increase their knowledge around LGBTI health-related topics, educators lack the possibility of improving their pedagogy and content through reflection and feedback from peers.

"I think we should talk about how it is for us as facilitators...often things will come up that are quite upsetting...I sometimes feel that after a workshop that I give there is stuff I would actually like to vent about or debrief about and there's nowhere to do that. In general I see a lot of difficult things that students experience and they're very hard to deal with. And there's no real, not that I'm aware of, avenue to discuss this sort of thing...these types of workshops [teaching LGBTI health topics] that can be quite controversial...because my heart is in it and because I've got really close people who have experienced this, sometimes things that come up are upsetting." (Medical educator, South Africa, teaches LGBTI health)

Assessment of LGBTI health topics

Of those teaching LGBTI health topics in Malawi and South Africa, few of them formally assessed their students' knowledge of this area. Educators in both countries spoke about more informal types of assessment, such as listening in on classroom discussions, observing student role plays, or asking students to do a class presentation. Only one educator, who is no longer serving in a teaching role, reported including LGBTI health topics as part of a formal exam:

"I just put it in there, even though it wasn't blatantly in the curriculum, but it was in my coursework." (Former nursing educator (public institution), South Africa, used to teach LGBTI health)

One participant, employed by a private NEI in South Africa, pointed out that often the educators are not the ones to formulate the exams, meaning that the educators may not have control over whether LGBTI health topics are included—particularly if these topics are not part of the formal curriculum. Another educator shared that even when LGBTI health is incorporated into the formal curriculum, there can still be barriers to assessment:

"They are not going to learn it if they are not assessed on it, that is just the bottom line. [LGBTI topics are] in the curriculum in that everybody does it. On paper it's in the curriculum, it's a set teaching session that is compulsory, but it falls down from a curriculum point of view because it's not being assessed. That's the main problem and that we need to change...We're not assessing them on this, which sends a tacit message, 'you're not being assessed, therefore, it's not as important as the other topics.'" (Medical educator, South Africa, teaches LGBTI health)

The lack of formal assessment of LGBTI-health related topics is important, because it also delegitimises and devalues the topic in the eyes of students.

Barriers to teaching LGBTI health

Culture

Culture was mentioned as a factor defining attitudes towards LGBTI people in almost every interview. As the research team did not prompt participants to speak about broad culture outside of the classroom, this is notable. Culture was most often cited as a barrier transforming student attitudes and making teaching LGBTI health topics accessible in both Malawi and South Africa. In Malawi, one participant pointed to the taboo of sex itself, "let alone talking about same sex" (NGO employee, Malawi), which was also mentioned by others. In South Africa, several participants acknowledged that despite progressive laws, topics of sexual orientation and gender identity remain stigmatised, taboo, and silenced in South African cultures:

"For them [Xhosa and African students], it is a taboo...some of our students do come out during training, but they can't go to the community." (Nursing principal, South Africa, teaches LGBTI health)

"I come from the Afrikaans culture...'that thing," as they call it, is just not acceptable." (Curriculum stakeholder, South Africa)

Concerns about the role of cultural norms were expressed by participants from all professions and in both countries. Some suggested that this provides motive for including LGBTI health topics in the curriculum, but to focus on transforming student attitudes rather than on specific health topics. Some educators expressed that they did not feel equipped at present to lead this process, despite seeing it as important.

"The learning guide does not make provision for it. It makes sense to do something more...that when anyone in the class mentions something about gay or lesbian people, instead of just saying 'we should live and let live,' definitely as an educator, we should be equipped to say more than just that...I'm sure there should be more to say. It didn't come up this year in a positive way, it comes up in a negative way." (Nursing educator (private institution), South Africa, does not teach LGBTI health)

A few respondents from Malawi and one from South Africa country expressed that they or other educators sometimes fear that others would link teaching LGBTI health to the educator's own sexual orientation, if they were to advocate for inclusion in the curriculum.

Religion

Religion was often closely linked to culture for respondents. However, many more Malawian participants identified religion as a barrier to including LGBTI health topics in the curriculum than South African participants. It was reported that although public and Christian education institutions shared curriculum, Christian institutions also include Christian values as part of the curriculum, which was cited as a barrier to thorough inclusion of LGBTI health topics. A few Malawian participants identified the religious affiliation of education institutions as very influential in what can be taught about LGBTI health-related topics. One identified Catholic institutions as not allowing teaching about LGBTI people, and reported that

in faith-based institutions one cannot "over-emphasize" information about LGBTI health-related topics. Another participant felt that Catholic and Anglican institutions would be particularly challenging to approach about including LGBTI health content, while Adventist and Presbyterian institutions may be more flexible. One participant from Malawi reported that some educators at faith-based institutions have expressed fear that they would lose their jobs for teaching about LGBTI health-related topics. Overall, religion was seen as a main barrier to gaining buy-in from curriculum developers and influential institutions.

One Malawian respondent from an NGO stated that they work with religious leaders in their programming and that some leaders do identify as "pro-LGBTI" (NGO employee, Malawi). Another respondent expressed that religion should not be seen as too large a barrier, as some other controversial topics are taught.

In South Africa, religion was not discussed by participants in as much depth or frequency. Furthermore, two respondents—including one working at a faith-based organisations—stated that they feel it is untrue that Christianity is against LGBTI people. The faith-based organisation has a pastor who counsels students who was described as very liberal and in support of LGBTI people. Another educator emphasised that the earlier one can be taught about LGBTI issues—preferably before entering the workforce—the more likely it is that their beliefs can be transformed. Another educator, who uses two one-hour workshops to teach about LGBTI health, explained that religion often comes up, and consequently linked the negative attitudes of those students who persisted in feeling that way after the workshops to their religious beliefs.

Lack of local health professions teaching materials on LGBTI health

Participants were asked to describe LGBTI health materials they were aware of or used in their teaching. In Malawi, when educators did describe having materials, these were limited to anatomical models or general materials addressing human sexuality. Most Malawian participants did not describe having materials specifically addressing LGBTI health topics, though many felt this would assist in their teaching or in advocating for LGBTI health to be taught. One participant who was aware of resources made it clear that local, contextualised resources are lacking:

"When you google...even if you go to Fenway...there are lots of materials there. They have got curriculum there. So, it's not really, to me it's not an issue. The issue is to put those materials together to suit our context or to be responsive to our context." (Medical educator, Malawi, teaches LGBTI health)

This lack of materials was also described as being detrimental to educators' ability to teach about LGBTI health:

"Most of the teachers, I may say, all of them, because I don't know any who is a homosexual. To teach about something which you don't do, you really need to have had adequate information about it...Most of these things, we just hear about it, and it would be difficult [to teach it]."

(Nursing principal, Malawi, teaches LGBTI health)

In South Africa, very few educators were aware of LGBTI health materials designed specifically for health professions educators. A few educators described developing their own materials within their institutions and several used, or planned on using, YouTube clips or other videos to facilitate discussion. While this was seen as a useful resource by some, one educator described the internet as "a big, dark, scary place," explaining that the results of some students' internet research are often inaccurate or problematic. A small number of participants were aware of US-based materials for health professions education, but were not aware resources developed in the Southern African context. Two educators reported using materials developed by local NGOs to assist in teaching, though it was unclear whether these materials specifically target educators. Another was certain that materials would be available through HIV organisations at workshops and conferences, but that the health content would be limited to HIV.

Textbooks were identified as problematic by two South African participants. One described their textbook as "very heteronormative" (Medical educator, South Africa, does teach LGBTI health) and another described not having a text to reference at all on the subject. This was described as a barrier to educator knowledge, ability to assess students on LGBTI health topics, and capability to have a standardised way of teaching content.

Law and government

The legal framework and current political atmosphere was commonly discussed by Malawian participants. Participants who were interviewed from NGOs explained that while homosexual behaviour is criminalised in Malawi, there is no law requiring healthcare professionals to report LGBTI patients to police. These participants also expressed that the current political environment could facilitate introduction of LGBTI health topics into medical and nursing curricula, and stated they have fostered a good relationship with the Ministry of Health.

Malawian educators themselves shared conflicting opinions about the legal framework as well as how they teach this to students. One educator stated that healthcare providers are required to report homosexual behaviour of patients to police, while others stated this is not the case. Another educator was unsure how LGBTI health topics could be included in teaching while "sodomy laws" are still in place.

This confusion about the conflict in laws is highlighted by a story shared by one of the NGO workers about a nurse. He explained that a patient seeking treatment for an anal infection was not only not treated, but was reported to the police by his nurse and arrested:

"This nurse is like, you know, 'I know homosexuality is illegal. So if I do this it's like I am promoting him to, you know, I am encouraging him to. But I want him to stop. That's why I called the police. Yes, the ethics says this. The law also says this. So this is why I did this.'" (NGO employee, Malawi)

Some educators expressed concern about whether the Ministry of Health would allow them to include LGBTI health topics in the curriculum and that this request could jeopardise funding. However, another educator felt the laws should not be relevant in deciding whether to teach LGBTI health and that providing education on the topic is not in conflict with the law.

In South Africa, law and government were rarely discussed by participants. A few participants explained that they do teach laws that relate to LGBTI rights, such as the right to marry and the right to adopt children. Generally, participants did not discuss South African laws as being either barriers or facilitators to teaching LGBTI health.

Sensitisation to sexual orientation and gender identity

In Malawi, there were mixed reports of awareness among students that LGBTI people exist. Some described students as being shocked that a patient might be gay, while others felt that because LGBTI people are seen on the news and in mass media, many students are aware that there are LGBTI people. It is possible that this awareness may be linked to location within Malawi.

Awareness on sexual orientation and gender identity in South Africa was overall more positively described, although one educator confessed to having never heard of the term LGBTI, and transgender and intersex specifically, prior to participating in this research.

Educators from both countries reported that students ask about LGBTI people in the classroom, whether or not it is included in the formal curriculum.

"Even if the lecture isn't, the students, they, it comes up...Some of the students are in the gay community and we don't have people that are still in the closet. They feel it is their right to choose the kind of life they want to. Despite the fact that as a lecturer, you may be uncomfortable, but these topics, they come...these are the topics you cannot run away from." (Nursing principal (public institution), South Africa, teaches LGBTI health)

One South African educator astutely analyses how allowing the topic to come up naturally or not when planning the discussion can leave educators off guard, by describing an instance in the past where students had strong, negative reactions to a brief discussion of LGBTI issues (S12). This was echoed by an NGO worker in Malawi who recounted a colleague's experience in which a fifteen minute introduction to LGBTI health spun into a two hour discussion covering law, politics, and religion based on students' questions (M07). In both of these instances, the educators reported negative attitudes being expressed by the students without meaningful transformation of these attitudes.

While in many instances class discussion was facilitated by students' knowledge of LGBTI issues, or their decision to share their own LGBTI identity with the class, gaps remained. One South African educator explained that while LGB students and issues were visible and were dealt with comfortably at her institution, transgender health was not taught or discussed. She went on to explain that she knows of only one transgender person in the entire community. Another South African educator made it clear that educators cannot expect students to naturally learn about LGBTI health issues without formally including it in course content:

"Sometimes I would turn down other things which I know students would learn 'by the way.' But LGBTI issues are not something in health curriculum that they will pick up 'by the way.' And that's been proven...It's things that don't happen organically. And you really have to place a great emphasis on it." (Former nursing educator (public institution), used to teach LGBTI health)

Perceived facilitators to teaching LGBTI health

Generally, participants had fewer perceived facilitators than perceived barriers to teaching LGBTI health. The most commonly discussed perceived facilitators are below.

Personal connection to LGBTI topics and people

"It has to be something that is close to someone...because of their sexual minority or gender minority status, or because of someone very near and dear to them, who would be LGBTI self-identified. I imagine the passion and the drive and the commitment to this work is often embedded in that." (Medical educator, South Africa, teaches LGBTI health)

Three participants (all South African) openly identified as being gay during the interviews. All three individuals described their own sexual orientation as a facilitator for teaching about LGBTI health. One educator was open about her sexual orientation with students and planned to draw on her experience in teaching, however she did not use personal examples in the classroom. Another educator reported drawing strongly on personal experience in the classroom and reflected on the effectiveness and potential challenges of this approach:

"The use of self... it is an extremely challenging strategy because you put yourself out for scrutiny...when you use the self, people will attack you, people will delve into your life, use words, you know, students get up, undergrad students, and say words like "***"[insult] and whatever, so it's very difficult to actually go home in the evenings. '...I need to go back there tomorrow, I can't cry.' That is the one thing that is difficult when you put yourself out there and do this. But! I think the reward is greater. When I can see the change...I know that I actually changed somebody...and because I'm so open, students feel free to pick up a phone years later and still consult me about such issues...but it is very dangerous. You need to be, I think, a very strong person, you need to feel safe, you need to have a safe environment for yourself where you can go to. So if you haven't dealt with your own issues, there is no way I would advise anybody to use this strategy and say 'use yourself,' because you might end up with mental unwellness if you take on this strategy." (Former nursing educator (public institution), used to teach LGBTI health)

Other participants who did not share their personal sexual orientation or gender identity spoke about relationships with LGBTI friends, colleagues, and students, as well as encounters with LGBTI patients, as influential in their decision to teach LGBTI health.

In Malawi, participants were less aware of LGBTI people around them, though one educator shared his experience of studying in South Africa as influential, citing his lecturer including LGBTI health topics as making it easier for him to do the same. After describing a classmate who was very open about being gay in class, he reflected that this taught him that "they are human beings" (M06).

Resources and mass media

South African participants who reported teaching more progressive and accurate content were usually connected to resources that helped them achieve this, such as community-based organisations or educators/academics who specialise in LGBTI health.

For educators who were not connected to LGBTI health teaching resources, many drew on mass media or what was happening in the news to discuss LGBTI topics with students. These educators described media and news as facilitators to their teaching. Several Malawian participants in particular spoke about cases that had been in the news about homosexuality, which made it easier to discuss LGBTI people with students. Furthermore, one participant shared that students sometimes ask about transgender people in class, in response to what they hear on the news about transgender people.

Curriculum review processes

A few participants in South Africa who reported teaching LGBTI health spoke about using their institution's periodic curriculum review process as an opportunity for including LGBTI health topics. Others who were not teaching LGBTI health also felt that those responsible for the curriculum at their institutions could be open to including LGBTI health in the curriculum, if they were made aware of the gap and also provided with justification as to why including LGBTI health is important.

This was not true of all participants, as several from both South Africa and Malawi expressed concern about going through formal curriculum processes. This is expanded on in the following paragraph.

Recommendations by participants

Curriculum reform for LGBTI health inclusion

Participants disagreed whether LGBTI health content should be included formally or informally into the curricula in their respective contexts. Participants also disagreed whether a stand-alone approach or an integrated approach would be best. Despite some participants, who were currently teaching LGBTI health, mentioning that they were able to do so as result of including LGBTI health topics into their formal curricula process, others shared concerns about following this process and recommended against it. These participants felt that encouraging educators to include LGBTI health topics as part of what they currently already teach within the curriculum—that is, an integrated approach, rather than motivating for a new separate module or session covering LGBTI health—would be a more effective approach. Such an integrated approach would be in line with local (A Müller 2015) and international recommendations (Association of American Medical Colleges 2014) for introducing sexual and gender minority health into health professions education.

Participants recognised that an integrated approach, where relevant LGBTI health-related topics were 'mainstreamed' throughout the curriculum and across disciplines, necessitated a thorough curriculum reform at institutional level. In contrast, stand-alone approaches, such as a once-off seminar on LGBTI health, were seen as being potentially achievable with less institutional involvement, giving individual educators more flexibility and potentially bypassing institutional resistance.

In Malawi, several educators shared concerns about whether the MOH would continue to support institutions once they started formally teaching LGBTI health. One participant explained that having MOH support would be important for institutional buy-in. He felt that institutions may feel powerless to change their curriculum without MOH support. Conversely, another participant cautioned against following formal curricula reform process due to the number of stakeholders whose buy-in would be needed to facilitate curriculum reform. A curriculum development stakeholder echoed this concern, in particular with regards to religious-led institutions:

"The teachers are not the problem; the problem is the cultural values of the institutions." (Curriculum development stakeholder, Malawi)

However, the same participant felt that formal curriculum channels should be followed in order to initiate curriculum reform to include LGBTI health-related content. She recommended engaging the regulatory bodies in Malawi as a starting point, thus initiating a top-down approach. Several participants echoed that the current political, social and cultural climate would be conducive to advocate for curriculum reform. A particular opportunity was seen linked to health systems funding through the Global Fund, which included provisions for MSM health care provision, and hence could provide an opportunity to introduce broader LGBTI health-related topics into conversations of healthcare delivery and quality.

Opinions in South Africa were less based on concerns about various stakeholder groups' reactions and attitudes towards LGBTI health and more about the time and energy involved in advocating for and effecting curriculum reform. Participants were concerned about the disjointed structures of medical and nursing education, with rather unresponsive regulatory bodies at the top and a multitude of stakeholders in curriculum reform at institutional level. As a result, participants suggested interventions at a number of levels in order to sustainably introduce LGBTI health-related topics into curricula:

1. Interventions at top level, targeted at HPCSA, SANC and CHE

• These regulatory and oversight bodies provide the broad framework for health professions education by setting the standards (minimum requirements) that undergraduate degree programmes need to meet, and, in the case of the HPCSA, by determining the 'graduate profile' of medical graduates. Some participants suggested that interventions at these levels could advocate for recognition of LGBTI health as a distinct competency, requiring specific knowledge and skills, and thus warranting the development of an integrated curriculum at institutional level. However, other participants disagreed and did not think this would be appropriate or beneficial in improving LGBTI health teaching, as regulatory bodies do not have direct influence on curriculum content. In the case of medical schools, one respondent who is teaching LGBTI health did not feel it would be appropriate to advocate for LGBTI inclusion at the HPCSA level, as their competencies do not address specific health topics. Her recommendation was to advocate for inclusion of LGBTI-friendly and appropriate care in health policies, which feed into what is taught at universities.

2. Interventions at institutional level, targeted at institutional curriculum reform and individual educators

Many nursing educators and stakeholders spoke about the flexibility provided to nursing educators in producing
the content of their specific courses and suggested this could be an opportunity for intervention at a more
direct level:

"As long as you can show that you have met the minimum requirements to make a safe practitioner, the 'nice things to have' are your own in how you then make sure that you don't make it five years—you put the 'nice things' within the... four years." (Nursing educator (public institution), South Africa, does not teach undergraduate students)

"We need to find something they are comfortable with, rather than coming with "LGBTI 101" 'cause they'll just dismiss you, because it is another add-on...if they start to see the value of what you're teaching and how it can influence the service, I think they will really start to integrate it."

(Former nursing educator (public institution), South Africa, did teach LGBTI health)

For such interventions, participants suggested targeting curriculum developers at individual institutions as well as at individual educators, who would be responsible for teaching the content. In the case of nursing institutions, the inter-institutional consulting and coordinating bodies for curriculum development were mentioned as important to target advocacy at, specifically FUNDISA, the Forum of University Deans in South Africa.

When to teach LGBTI health

The South African participants had varied opinions about the stage that LGBTI health should be taught in the curriculum. Almost all nursing participants agreed that it should be taught in some way, although one participant suggested including it as an elective only, as part of the new nursing curriculum structure that is currently under development at SANC.

Some participants argued that LGBTI health should be included from the being of undergraduate education and one participant, who currently teaches LGBTI health in fourth year medical school, shared that some students have requested it be taught earlier. Participants who felt LGBTI health should be taught early generally spoke about "planting the seed" of knowing about LGBTI people early on, before preconceived notions became firmly entrenched:

"My recommendation would be that it's definitely introduced from the first year. We're never going to move towards gender quality in any form if we don't start including and preaching it from day one when the students enter. I don't think it is good that students experience it first and then come back with confusion and learn from uncontrolled behaviour or obstructive behaviour or discriminative behaviour first, as a role model...those things must be clarified and sorted out from the beginning." (Nursing educator (private institution), South Africa, teaches LGBTI health)

Other participants felt that it would be better for students to wait until at least second year to begin learning about LGBTI health. These participants spoke about student maturity as being an important factor in being able to learn more effectively about the topic.

A few educators expressed that LGBTI health should be taught as building blocks and addressed where appropriate in every year of study. These educators spoke more to a holistic, integrated approach of teaching LGBTI health, whereas educators who spoke about LGBTI health being taught as a separate module generally recommended it be taught only in the later years of the undergraduate programmes.

Summary and discussion of one-on-one interviews

Overall, the one-on-one interview data suggests that there is little formal inclusion of LGBTI health topics in nursing and medical education in Malawi and South Africa. Of the participants teaching LGBTI health topics, few were doing so because it was part of the formal curriculum, and few were aware of others teaching LGBTI health.

In Malawi, there was little evidence of meaningful education around sexual orientation, as well as mixed responses as to whether sexual orientation was part of the required curriculum. When sexual orientation was taught by educators this was often limited to a very basic description of what sexual orientation is. Some educators initially responded that they were teaching LGBTI health, but upon probing it was revealed that the content of their teaching focused on aspects of sexuality and gender other than sexual orientation and gender identity. Few participants, whether educators or other stakeholders, discussed women who have sex with women and no one mentioned teaching about intersex people. Furthermore, it was very clear that transgender health is not part of formal teaching and rarely part of informal teaching in Malawi.

While in South Africa there was more discussion about transgender health in the interviews, very few educators reported including transgender health topics in their teaching. Additionally, only one participant reported teaching about intersex health, and this content was limited. Most South African participants focused on sexual orientation during the interviews, as well as in their teaching.

In South Africa, almost all educators teaching LGBTI health topics reporting doing so because they felt personally compelled to include them. Even educators who reported LGBTI health as part of the curriculum described how they themselves played a role in including it as part of the curriculum. The interviews therefore cannot give insight into the experiences of educators who are asked to teach LGBTI but do not feel personally compelled to do so. The strong personal motivation to teach about sexual orientation and gender identity is not surprising – people who have close relationships with LGBTI people,

or a personal connection to LGBTI-related issues tend to be more accepting of sexual and gender diversity. In this respect, our findings are congruent with existing research on LGBTI inclusion. Of concern is, however, that opportunities for medical and nursing students to form personal relationships or associations with LGBTI people are almost non-existent in the current teaching initiatives. Educators who identify as LGBTI themselves only rarely used their own identity in their classes, and none of the educators invited LGBTI persons or organisations into their classroom.

The lack of formalised curriculum for LGBTI health-related topics means that currently educators teach mostly 'ad hoc'. This has resulted in a lack of standardisation of approach, content and assessment, which is directly related to the lack of local teaching and training resources. As a result, the data suggest that even well-meaning educators may be teaching inaccurate information due to a lack of resources and un-interrogated personal assumptions. Further, monitoring in what is taught about sexual orientation and gender identity in nursing and medical schools, and

Although some educators that do not teach LGBTI health topics were included as participants, most participants identified as either LGBTI themselves or LGBTI-friendly. Because of this, the one-on-one interview findings mostly reflect the experiences and opinions of people in Malawi and South Africa whom are comfortable with LGBTI health topics. It is important to interpret these findings as not reflective of the entire population, but as input from educators and curriculum stakeholders who may be able to assist in implementation of LGBTI health teaching in undergraduate nursing and medical schools.

Malawi - South Africa similarities

This research project aimed to map existing curriculum initiatives, identify key stakeholders, and identify opportunities and challenges for integrating LGBTI-related health teaching into medical and nursing school curricula in Malawi and South Africa. These two countries present an interesting comparison due to the differences in the legal framework, which criminalises same-sex activity in Malawi, yet provides constitutional protection for LGBTI people in South Africa. While there are specific findings related to curriculum development, health system structure and the legal framework in the two countries, it is worthwhile reflecting on the commonalities that arose in the findings.

A key challenge for the inclusion of LGBTI health-related topics in health professions education in both South African and Malawi was the fact that among health professions educators themselves (whether in medical schools or nursing colleges) there was a significant *lack of knowledge, skills, and teaching materials* to adequately teach LGBTI health-related topics, including the ability to challenge students' potentially homophobic or discriminatory attitudes.

In both countries, this seems to be linked to the complete absence of references to LGBTI health at the level of regulatory and professional bodies, and within existing minimum requirements for medical and nursing curricula and graduate student profiles.

In both countries, some educators do teach LGBTI health-related content despite the silence of the formal curriculum. These educators often feel isolated, do not know other educators who teach similar topics, teach against institutional or student resistance, do not have access to teaching materials or continuous professional development to further their LGBTI teaching practice, and are motivated by a personal and professional sense of need. Their work needs to be acknowledged and commended. However, some educators, despite their good intentions, also perpetuate harmful stereotypes and misconceptions due to a lack of thorough understanding and knowledge.

In addition, a disconnect seems to endure between existing initiatives for in-service healthcare provider trainings and existing training for health professions educators. In-service training is offered by LGBTI organisations, funders and international research institutions in both Malawi and South Africa, but does not reach educators who might focus on teaching rather than being practising healthcare providers.

Topics related to the health of transgender, gender diverse and intersex people were not covered by any of the participating educators. Existing literature points to the consequences of this gap: most primary care providers (whether in the public or private sector) are unable to provide basic information and support to people regarding the development of their gender identity and the health-related issues that arise from this, including options for gender-affirming treatment (Moloi, 2013), and thus, health care providers are likely to be as ill-informed as other community members (Graves, 2013). There is also a lack of clarity on treatment pathways and standards of care for gender affirming care (Müller & Artz, forthcoming), so that health care providers are not in a position to guide that person through the health system (Klugman, Treger, Conco, & Moorman, 2011).

IMPLICATIONS AND RECOMMENDATIONS

Based on the findings of this report, there are several key gaps in LGBTI health topics that have been identified in undergraduate nursing and medical education in Malawi and South Africa:

- 1. A lack of formal and comprehensive inclusion of LGBTI health-related topics into the curricula of medical and nursing institutions in both countries;
- 2. A lack of standardised, context-specific teaching resources and assessment methods;
- 3. A lack of coverage of transgender and gender diverse people's health needs, as well as intersex health-related topics.

Furthermore, there is tension in deciding a standard approach to LGBTI health topics teaching—whether to integrate the teaching of LGBTI health topics throughout an entire curriculum or to teach LGBTI as a specialised, stand-alone lecture or course. Each course of action has both benefits and drawbacks. Integration allows for the most comprehensive coverage of LGBTI health topics, however it requires significant institutional support and time and energy of curriculum developers to identify where to include LGBTI health. A specialised, stand-alone lecture or course will ensure that LGBTI health topics are covered in some amount of depth, nevertheless this may exoticise or label LGBTI health concerns as "different" or unrelated to general healthcare.

Recommendations for Malawi

Given the very limited knowledge base on topics of LGBTI health among health professions educators, and based on participants' recommendations, we suggest the following broad advocacy approaches to increase competency for LGBTI health among medical and nursing students. These approaches would best be coordinated by local civil society organisations.

- Collaborate with selected supportive educators to organise stand-alone lectures or events for medical and nursing students to introduce them to LGBTI health topics.
- Concurrently, provide strategic training to educators in medical and nursing institutions. Educators who might be sympathetic, but lack the knowledge to start teaching LGBTI health topics, should be strategically invited to further their knowledge through attending seminars, trainings or conferences, for example in South Africa. The aim of these targeted educational interventions would be to build interest and capacity within medical and nursing institutions. Over time, such sensitisation training can build a critical mass of educators, students, and healthcare providers who are advocates for inclusion of comprehensive LGBTI health topics.
- Build relationships with CHAM. A representative from CHAM voiced interest in including LGBTI health as part of the nursing curriculum.

Recommendations for South Africa

Given the progressive legal framework of the country, the existence of a group of educators who teach LGBTI topics in South Africa, and based on participants' recommendations, we suggest the following broad advocacy approaches to increase competency for LGBTI health among medical and nursing students. These approaches would best be coordinated by local civil society organisations, in partnership with academic institutions who can provide expertise and legitimacy when engaging with health professions institutions and regulatory bodies.

- Advocate for a multi-layered, comprehensive approach to LGBTI health teaching and for these topics to
 be integrated throughout existing nursing and medical programmes, following the recommendations for
 interventions identified by participants, and aligned to international and national recommendations for
 inclusion of LGBTI health into curricula (Association of American Medical Colleges 2014; Müller 2015).
- Draw on the obligations outlined in South Africa's progressive legal framework and the expertise of local academic experts and LGBTI organisations in this process.
- Develop a local training course to equip interested educators with the key knowledge and competencies related to LGBTI health, so that educators can pass this on to students. This course could also be open to educators from other Southern African countries, who might not be able to access similar training in their own country. This would link with the recommendation to train selected Malawian educators.
- Develop teaching resources that are evidence-based and locally-relevant to equip educators and other curriculum reform stakeholders with the tools to meaningfully teach and support LGBTI health-related

Recommendations for specific stakeholder groups

The following recommendations are aimed at individuals and institutions in both countries who would like to build competency for LGBTI health among medical and nursing students. These recommendations should be read as guidelines, and might need to be adapted based on local and institutional context.

Undergraduate nursing and medical educators

- 1. Form a network of educators teaching LGBTI health topics: As most educators reported not knowing others teaching LGBTI health topics, forming a network would facilitate sharing of resources and information and developing advocacy strategies for LGBTI health topic inclusion in curricula. When and if possible, these networks should be developed within existing structures for health professions educators' interest groups.
- 2. Seek out training to learn strategies for teaching LGBTI health topics and improve LGBTI health knowledge: The research team acknowledges and commends the efforts made by educators whom have taken it upon themselves to include LGBTI health topics in their teaching even when not required to. It essential that educators ensure that LGBTI health content taught is accurate and respectful. Attending additional training on the topic will assist educators in this regard. While context-specific training might not yet be available, valuable online courses are available through, the Fenway Institute in the United States, for example.
- 3. Involve LGBTI people through NGOs: Personal relationships and interactions with LGBTI people were very commonly cited as facilitating the teaching of LGBTI health topics and being sensitive in doing so, in both countries. As the onus should not be on LGBTI staff members and students to share personal experiences (nor should they be asked to do so in a classroom setting), local LGBTI NGOs can be used as resources who can draw on their professional expertise and experiences to assist in lectures, seminars or panels for undergraduate nursing and medical students. NGOs in both Malawi and South Africa are already involved in such efforts, and are excellent and skilled resources for educators.
- 4. Explore teaching spaces outside of the formal curriculum:
- 5. Encourage interested students to form interest groups: As students were also reported to be drivers in requesting education around LGBTI health topics, students who express such interest should be encouraged to form their own advocacy groups to include LGBTI health topics into curriculum. Educators should be prepared to connect these students with local LGBTI NGOs.
- 6. Be aware that teaching LGBTI health signifies a safe space to students: Due to educators who teach LGBTI health topics being particularly rare in both countries, those who do discuss LGBTI health topics openly and sensitively will likely be identified as safe people to speak to for LGBTI students. These educators should be prepared and make themselves aware of appropriate referral mechanisms and support systems for LGBTI students.

Health professions institutions

- Review their curriculum: Institutions should support inclusion of LGBTI health topics by facilitating identification of appropriate places to include LGBTI health teaching during curriculum review processes. The research team recommends including specific learning outcomes related to LGBTI health topics that require assessment. Existing local (Muller, 2015) and international guidelines (AAMC, 2015) should be used as a framework for institution-specific curriculum assessment and reform.
- Implement adequate resources: Although there is a lack of local resources to guide educators in teaching LGBTI health, institutions should encourage and require educators to use available international, evidence-based resources for teaching LGBTI health. Further, as local resources are developed and become available, institutions should support implementation.
- · Encourage and support student and staff interest groups related to sexual orientation and gender identity
- Include sexual orientation and gender identity as key transformation concerns at institutional level, while recognising its intersections with other structural oppressions

LGBTI health specialists and researchers

• Develop local evidence based resources: Local resources should be developed (and international resources modified for local context) to assist educators in teaching LGBTI health topics appropriately, accurately and sensitively. Development of these resources should be done in collaboration with local clinicians whom are already providing specialised LGBTI healthcare in order to incorporate their expertise, and with local LGBTI organisations to take into account the diverse experiences and lived realities of LGBTI people. In South Africa, a textbook should be developed, tailored to the specific legislative, social and political context. Such a textbook will facilitate standardised learning of accurate information while also providing a basis for student assessment. While Malawi may not require a textbook until more formal curriculum restructuring is achieved, case studies, brochures, and materials for students (for example, a brochure explaining the right to health for LGBTI people) should be developed to support stand-alone educational interventions.

• Expand the evidence base: based on the findings of this report, it is evident that undergraduate LGBTI health-related health professions education is at best inconsistent and at worst non-existent. Further research should provide an expanded evidence base for the advocacy and curriculum reform intervention recommended by participants, such as examining the impact of including LGBTI health-related topics on student attitudes, knowledge and skills, provide evidence of the impact of specific teaching interventions and/ or curriculum reform, and analyse the current competency level of graduating health professionals for providing quality care to LGBTI patients.

Funders

- Facilitate learning circles or 'communities of practice' for health professions educators and LGBTI organisations: Build on existing relationships with LGBTI organisations and in-service healthcare providers to explore the creation of an 'interest group' of educators teaching LGBTI health in both countries, and facilitate exchange and mutual learning for educators and LGBTI organisations.
- Provide strategic resources for LGBTI teaching, research and advocacy: Participants were concerned about lack of financial resources to implement additional subject matter in their teaching. Strategic use of resources to assist educators and curriculum stakeholders would improve quality and encourage timely introduction of LGBTI health topics into undergraduate medical and nursing teaching. Financial resources for evidence-based advocacy, and partnerships between educators and LGBTI organisations can support the process of curriculum reform as recommended above.
- Place emphasis on local resources: Participants emphasised the importance of having resources that
 teach about LGBTI people and health in local context—for example, framing LGBTI people's rights and
 ability to access healthcare in the local legal frameworks and cultural beliefs and values that students may
 experience.

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APPENDICES

Appendix I:

Inclusion of LGBTI health-related content into South African health professions curricula

Course	Potential LGBTI content	Educational outcomes	
Patient-provider interaction training	Discuss professional behaviour and non-judgmental care with regard to sexual orientation and gender identity. Address students' attitudes towards non-heteronormative identities. Include LGBTI patients, or patients with same-sex partners in case studies and patient-provider communication exercises History-taking: Teach gender-neutral language ('partner' instead of 'wife/husband', etc.) Taking sexual histories: Include information	Awareness of sexual and gender minorized identities, heteronormativity, trans- and homophobia as impacting or access to healthcare Recognition of professional standards a conduct of care with regard to sexual argender minorities Ability to provide culturally competent, non-judgmental care to sexual and geneminority patients	
Human biology and	about sexual orientation, gender identity and non-heteronormative sexual practices Discuss sexual orientation and gender	Awareness of sexual and gender minority	
development	identity as part of physiological psychosocial development	identities Understanding of development and influences on sexual orientation and gender identity	
Public health and primary healthcare	Use rights-based frameworks to address sexual orientation and gender identity with regard to: • Access to healthcare • Social determinants of health	Understanding of sexual orientation and gender identity as social determinants of health Ability to assess the social context and health risk factors of sexual and gender minority patients	
	Health disparities	Knowledge of health disparities and the impact of discrimination and social exclusion	
Paediatrics	Discuss gender behaviour and gender norms Discuss the difference between sexual orientation and gender identity in sexual development case studies Discuss the impact of homophobia, family and peer pressure on adolescent mental	Understanding of development and influences on sexual orientation and gender identity Ability to differentiate between biological sex and socially constructed gender, and assess sociocultural impact of the latter Understanding of the impact of	
	health	discrimination and social exclusion on the health of teenage sexual and gender minority patients Ability to provide clinically competent care to young sexual and gender minority patients	

	 including cancer screenings Higher risks of sexual violence, and subsequent HIV/ STI risks Discuss health prevention needs of transgender men 	
Psychiatry	Discuss the historical pathologisation of LGBTI identities and impact thereof Address the psychological impact of social and internalised homophobia Discuss mental health risks of sexual and gender minority patients Discuss sexual and gender minority patients' experience of violence and health consequences	Understanding of historical context and resulting barriers to care for sexual and gender minority patients Ability to provide clinically competent care to sexual and gender minority patients
Urology	Discuss health prevention needs of gay men and transgender women	Ability to provide clinically competent care to sexual and gender minority patients
Infectious diseases	Include epidemiological information about HIV prevalence among men who have sex with men Discuss adequate prevention methods for people engaging in non-heteronormative sex	Ability to provide clinically competent care to sexual and gender minority patients

Appendix II:

Study methodology

Online mapping survey

Survey content

Based on a methodology previously piloted at UCT, a survey instrument was designed on SurveyMonkey™ for an online mapping process to identify LGBTI health-related content in the curricula of medical schools in South Africa and Malawi (See Appendix II). The online survey aimed to identify the following:

- 1. Existing LGBTI health-related content and assessment in undergraduate curricula;
- 2. Lecturers and clinical educators currently teaching LGBTI health-related topics;
- Gaps in existing curricula, measured against the recommendations for LGBTI-inclusive health professions
 education issued by the Association of American Medical Colleges (Association of American Medical
 Colleges 2014) and recommendations for local adaptation thereof (A Müller 2015); and
- 4. Opportunities to introduce LGBTI health-related content into existing curricula.

Survey sampling and recruitment

Using a cross-sectional study design, all medical schools and undergraduate nursing programmes (public and private) in South Africa and Malawi were targeted.

Following a well-established distribution strategy (Müller 2013; Obedin-Maliver, Goldsmith, et al. 2011)gay, bisexual and transgender (LGBT the link to the online survey was emailed to the Deans and Heads of Department of the medical schools, to all principals of the nursing programmes, and to other leadership at the institutions identified as point people for faculty contact. Each recipient was asked to forward the survey email to department members teaching undergraduate medical or nursing students. Additionally, the research team contacted faculty members known to be teaching LGBTI health topics. When emailed staff responded to refer other faculty members, the study team followed up with these referrals through phone and/or email.

Following initial email contact, up to three additional emails and three follow-up phone calls were made with individuals who did not respond initially. All contacts were emailed three times and attempted to be contacted by phone at least one time.

Survey data analysis

All survey responses were collected by SurveyMonkey™ and analysed using Microsoft Excel.

One-on-one interviews

Interview content

The one-on-one interviews captured qualitative data through an open-ended interview schedule (see Appendix III) to describe the following key focus areas:

For curriculum development and reform stakeholders:

- Authority in charge of curriculum reform, responsibilities, and processes of curriculum development within and between stakeholder organisations and agencies;
- Awareness and understanding of LGBTI health-related issues;
- Attitudes toward inclusion of LGBTI health-related content into existing curricula;
- Perceived barriers to and facilitators of such inclusions; and
- · Recommendations for future programmatic work around undergraduate LGBTI health training.

For lecturers and clinical educators currently teaching LGBTI health-related content:

- Pedagogical approach to content, content assessment and teaching resources used;
- Student responses to LGBTI health-related content;
- Own strategies to include LGBTI health-related content into curriculum;
- Teaching environment with regards to institutional support, interpersonal interactions and challenges experienced when teaching LGBTI health-related content;
- Perceived barriers to and facilitators of such inclusions; and
- Recommendations for future programmatic work around undergraduate LGBTI health training.

For lecturers and clinical educators currently not teaching LGBTI health-related content:

- Perspectives on whether LGBTI content should be taught, and how
- Perceived barriers to including LGBTI health topics in teaching
- · Recommendations for future programmatic work around undergraduate LGBTI health training
- If they have taught LGBTI health topics in the past, but teach them no longer, explore the reasons why they no longer teach the subject, what they used to teach, and what their experience was teaching LGBTI health topics

Interview sampling and recruitment

Key stakeholders from the following categories were interviewed:

- Key stakeholders in curriculum development and reform, as identified through the desk review. The
 stakeholders may include, but are not limited to, officials at the South African Nursing Council and the
 Nurses and Midwives Council in Malawi, department heads and deans in medical and nursing faculties, and
 other identified individuals who influence curriculum design, as we anticipate the mechanisms of curriculum
 design may vary from institution to institution.
- Lecturers and clinical educators currently teaching LGBTI health-related content, as identified through the online survey.
- Lecturers and clinical educators not currently teaching LGBTI health-related content, as identified through the online survey, to better understand barriers to providing education in this topic.

A strategic convenience sampling method was used to recruit participants, using three main methods:

- 1. Professional networks: the professional background, expertise and network of the lead researcher (Dr Alex Müller) facilitated contact with the relevant stakeholder organisations in South Africa. COC Netherlands assisted the researchers in identifying key organisations in South Africa and Malawi.
- 2. Survey volunteers: survey respondents were asked whether they would like to participate in an interview. Those who agreed were contacted to participate.
- 3. Desktop review: stakeholder organisations identified by the research team were contacted based on publicly available contact information.

The research team additionally broadened the sample using a snowball methodology, with these initial informants providing other contacts for interviews.

Interview data analysis

Coding of the narrative data was conducted by one GHJRU researcher. The recorded interviews were coded using the qualitative analysis software Nvivo 11. Thematic analysis was also used to organise the data. These initial themes were based on the interview guide as well as additional themes that emerged from the data, which were included when deemed relevant to the research questions by the research team.

Ethical and regulatory compliance

Research ethics approval

Ethical approval for the study was provided by the Human Research Ethics Committee at the University of Cape Town prior to beginning data collection (HREC Reference number 662/2015).

Institutional access

During the desk review process, the research team learned that the provincial governments in South Africa were responsible for the public nursing education institutions (NEIs) in their provinces. Therefore, provincial approval was requested for each of the nine provinces. Public NEIs were contacted about the survey only once the appropriate provincial approval was received.

The National Health Research Database (NHRD) is an online platform, which assists researchers in applying for provincial approvals (http://nhrd.hst.org.za). The research team found the online platform to be a useful tool with a few minor drawbacks. Firstly, the NHRD uses a standard application process for all nine provinces, making it easy to prepare the application without requirements to reformat or answer different questions for different provinces. Secondly, the NHRD facilitates online submission of all

information and documents, eliminating the need to mail or courier applications. Thirdly, the NHRD is updated regularly, which allows researchers to check on the status of their applications at any time, as well as download the approval documents when ready. This saves time for the researchers who do not need to phone or email the province to receive updates on their applications. Lastly, should a researcher need to contact the Province, updated contact information is available on the NHRD website.

Overall, the NHRD facilitated a speedy approval process for this project. A table outlining the time for approval in each province is available in Appendix V. In seven of the provinces, approval was received within three months, five of which were available within one month.

There were many delays with KwaZulu-Natal and Western Cape approvals. In KwaZulu-Natal, however, these delays were not due to the province, but due to the additional step required by KwaZulu-Natal to have letter of support from the KwaZulu-Natal College of Nursing in order to perform research within their NEIs. The process to receive this letter defaulted to email and phone requests, which were less efficient than the NHRD database, therefore extending the waiting period. Once the letter of support was received, the province issued the approval very quickly, only a few days later. In the Western Cape, provincial approval was not granted in the timeframe for this research, and was still pending at the time of writing this report.

One drawback in the approval process was that, despite the streamlined NHRD process, a couple of provinces required additional steps. In Limpopo, they requested that the research team courier hard copies of the application and that the documents only be uploaded online once the hard copies had been approved. In the Western Cape, an additional form, "Annexure 2," was required and an additional application form was also required for Gauteng, both of which duplicated much of the information recorded in the NHRD process. It is unclear whether these systems will become further streamlined and standardised over time.

Overall, it terms of research planning approximately three months should be allotted to requiring provincial approval in South Africa. If the research is in KwaZulu-Natal or the Western Cape, up to six months should be allotted. These waiting times are a possible barrier to including public NEIs in future research, as private institutions were immediately accessible.

Process of Obtaining Informed Consent

Online survey

Participants who followed the link to the online survey were directed to an online information and consent statement. Only after they responded to a question stating they agreed to proceed to the survey based on the information and consent statement, were they be directed to the beginning of the survey.

One-on-one surveys

Participants who completed an interview were provided with an information sheet and informed consent form to read. When required by the participants' institution, institutional approval was sought and confirmed prior to the interview.

If the interview happened over the phone or on Skype, the informed consent form was emailed to the participant to read. Participants were allowed time to ask questions about the form and the researcher conducting the interview reviewed key points from each section of the informed consent form with the participants, prior to beginning the interview. Once all of the participant's questions had been answered, they were asked if they agreed to participate. If they agreed, the participant was asked to send a signed *informed consent form* to the researcher.

All participants were offered a copy of the *informed consent form* to keep. Signed informed consent forms are stored in a file in a locked office at the GHJRU.

Privacy and Confidentiality

In reporting on the data, the research team has removed identifying information of the participants completing the survey and/or one-on-one interviews. Some participants in the one-on-one interviews agreed to be listed as key informants. A list of their names and institutions can be found in Appendix V.

Appendix III:

Survey questions

The Gender Health and Justice Research Unit at the University of Cape Town, in partnership with COC Netherlands, is mapping how topics of lesbian, gay, bisexual, transgender and intersex (LGBTI) health are taught across South Africa and Malawi in undergraduate training programmes for medical and nursing students. We are doing a survey of existing content in the curricula of undergraduate medical and nursing programmes. Please fill out our quick survey to let us know if you currently teach content on LGBTI health.

LGBTI health teaching includes:

- Sexual orientation and gender identity: lesbian, gay, bisexual, transgender and intersex (LGBTI)
- Social determinants of health, as related to sexual orientation and gender identity
- Specific health concerns for LGBTI people such as safer sex, mental health, and gender affirming treatment

If you don't teach any of this, please still enter the survey and answer "No" to question 7.

This survey should not take more than ten minutes to complete. The outcomes of the survey will be used to inform new curriculum on LGBTI health, and may be published in academic literature, in which case your answers will be anonymised. We can email you a report with the outcomes of this survey. If you wish to receive this report, please provide your email address at the end of the survey.

Please do not hesitate to contact us if you have any questions. If you have questions about your rights as research participant, please contact the Faculty of Health Sciences Human Research Ethics Committee, Room E52-54 Groote Schuur Hospital Old Main Building, Observatory 7925, phone (021) 406 6338 or email shuretta.thomas@uct.ac.za.

To begin, please complete the 3 eligibility questions below.

Do you teach any of the following?

· Definition and theories of sexual orientation and gender identity

· Clinical skills and competencies for providing care to LGBTI people (ie. taking a history)

1. Do you teach at a medical school or nursing school/college in South Africa or Malawi?
□ Yes □ No
2. Do you teach undergraduate medical or nursing students?
□ Yes □ No
Do you agree participate in this survey, based on the information outlined above?(this will be regarded as your informed consent to participate in this survey)
☐ Yes ☐ No, thank you
ABOUT YOU
4. Do you teach for a medical school or nursing college/school?
☐ Medical school ☐ Nursing college/school
5. Which medical school or nursing college/school do you teach for?
6. What department do you teach for and what is your position?
Department: ————————————————————————————————————
7. How many students do you teach on average, per year?
Number of students:
LGBTI HEALTH TOPICS

44

- · Social determinants of health (social exclusion, stigma, and discrimination related to LGBTI people)
- · Sexual violence, domestic violence and/or intimate partner violence, as it relates to LGBTI people
- · Barriers to access to health care for LGBTI people
- · Alcohol, tobacco, or other drug use for LGBTI people
- · Sexually Transmitted Infections, including HIV and safer sex for LGBTI people
- · Chronic disease risk for LGBTI populations
- · Disorders of Sex Development (DSD)/ Intersex
- · Transgender health, transitioning (e.g. male-to-female, female-to-male) and gender affirming treatment [hormonal/surgical—also known as sex/ gender reassignment surgery (SRS)]
- · LGBTI adolescent health
- · Mental health in LGBTI people
- · Bringing LGBTI people into the classroom to challenge stereotypes and assumptions
- · Other topics affecting LGBTI people

☐ Yes (please specify their contact details) _

8. Do you teach a	any of these topics?			
☐ Yes, I teach	one or more of the abov	e topics □ No, I do	not teach any of the al	pove topics
9. Why are LGBTI	health topics not includ	ed in your teaching/cu	ırriculum? (please tick a	ll that apply)
☐ LGBTI healt	h topics are not relevant	to my discipline		
□ I do not hav	e the knowledge and/or	training to teach LGB1	ΓI health topics	
□ I do not hav	e teaching materials on I	_GBTI health topics		
□ I do not hav	e institutional support to	teach LGBTI health to	ppics	
□ I feel uncom	nfortable teaching LGBTI	health topics		
☐ There is stu	dent resistance to being	taught LGBTI health to	opics	
Other (pleas	se specify):			
10. You are almos	st at the end of this surve	ey-however, this quest	ion is very important!	
topic is taught in whether the topi	· · · · · · · · · · · · · · · · · · ·	format of your teaching for students.	ng, how you assess you	ght, the number of hours the r students on the topic, and ch year of study.
Topic Year of study	Number of hours spent on topic in this year of study	Format of teaching	Assessment type	Mandatory or elective?
Explanation of "othe	er" responses above: —			
12. If you would like	to receive the outcomes	of this survey, please	enter your email addre	ss here:
13. Can we contact y health teaching?	you for a follow-up interv	riew to learn more abo	out your work, experien	ce and views on LGBTI
□ No □ Yes	. My email address/phon	e number is:		
-	of other people teaching Malawi, could you please	•	_	cal or nursing students in
□ I do not kno	ow of others teaching LGI	BTI health topics.		

Appendix IV:

One-on-one interview questions

Introduction

Thank you for agreeing to talk to me about sexual and gender minority health teaching. My name is ______, I work at the Gender, Health and Justice Research Unit at the University of Cape Town, and I am one of the main researchers of this project.

We, in partnership with COC Netherlands, are mapping how topics of lesbian, gay, bisexual, transgender and intersex (LGBTI) health are taught across South Africa and Malawi in undergraduate training programmes for medical and nursing students

LGBTI health teaching includes:

- Sexual orientation and gender identity: lesbian, gay, bisexual, transgender and intersex (LGBTI)
- Social determinants of health, as related to sexual orientation and gender identity
- Specific health concerns for LGBTI people such as safer sex, mental health, and gender affirming treatment

Key information

• Institution, position, and name (if agrees to be named)

Questions for educators teaching LGBTI health topics

- 1. What LGBTI content do you teach?
 - a. How have you approached teaching LGBTI health content?
 - b. What resources and materials do you use in your teaching?
 - i. Prompt: partner with LGBTI organisations?
 - c. How do you assess your students' knowledge of the LGBTI health content that you teach?
- 2. How long have you been teaching LGBTI health-related topics?
 - a. How did you decide to start teaching LGBTI health content?
 - b. What role did your institution play in this?
- 3. Can you tell me about your students' reactions to the LGBTI content you teach?
 - a. Can you provide me with specific examples?
 - b. What has been your experience with students who are LGBTI?
- 4. Can you tell me about the reactions from others working in your faculty to the LGBTI content you teach?
 - a. What interpersonal exchanges have you had with other faculty members regarding this content?
- 5. What challenges have you faced in teaching LGBTI health?
 - a. Can you name any specific instances or barriers you have faced?
- 6. What do you feel has helped facilitate your teaching of LGBTI health topics?
- 7. Based on your experience, how should medical/nursing students learn about LGBTI health?
 - a. What should they know by graduation?
 - b. How should they be taught? (i.e. pedagogy)
 - c. When in their studies should they be taught LGBTI health content?
- 8. Do you have any other recommendations for teaching LGBTI health content to nursing/medical students?
- 9. Do you know of other educators who are also teaching LGBTI health content to undergraduate nursing/medical students?
 - a. Would you be able to provide their contact details?

Questions for educators NOT teaching LGBTI health topics

- 1. Please tell me about your perspective on whether LGBTI health topics should be included in nursing/medical training.
- 2. Have you taught LGBTI health topics to undergraduate nursing/medical students in the past?
 - (if yes)
 - a. What did you teach?
 - b. Tell me about why you no longer teach these topics?
 - c. What challenges have you faced in teaching LGBTI health?
 - d. Can you name any specific instances or barriers you have faced?
- 3. Based on your experience, how should medical/nursing students learn about LGBTI health?
 - a. What should they know by graduation?
 - b. How should they be taught? (i.e. pedagogy)
 - c. When in the curriculum should they be taught LGBTI health content?
- 4. At your institution, who would be responsible for introducing LGBTI content to the curriculum for nursing/medical students?
 - a. How do you think they would react to such a request?
- 5. Do you have any other recommendations for teaching LGBTI health content to nursing/medical students?
- 6. Do you know of other educators who are teaching LGBTI health content to undergraduate nursing/medical students?
 - a. Would you be able to provide their contact details?

Questions for key-informants/stakeholders in curriculum design

- 1. Are you aware of any people teaching in medical/nursing training programmes in South Africa or Malawi that address LGBTI health topics? Tell me about them.
- 2. What do you think would be barriers to incorporating LGBTI health topics in medical and nursing training curriculums?
- 3. What do you think would facilitate incorporating LGBTI health topics in medical and nursing training curriculums?
- 4. What role, if any, would you see yourself/your organisation play in developing existing undergraduate nursing/medical curricula to incorporate LGBTI health topics?
 - a. If a CSO: Do you already work with other organisations, colleges, or universities on this issue?
 - b. If a curriculum developer: Do you already work with civil society organisations or NGOs on this issue?
- 1. Based on your experience, how should medical/nursing students learn about LGBTI health?
 - a. What should they know by graduation?
 - b. How should they be taught? (i.e. pedagogy)
 - c. When in the curriculum should they be taught LGBTI health content?
- 2. Do you have any other recommendations for teaching LGBTI health content to nursing/medical students?
- 3. Do you know of other educators who are teaching LGBTI health content to undergraduate nursing/medical students?
 - a. Would you be able to provide their contact details?

Appendix V:

Table of participant characteristics

South Afric		h Africa	ca Malawi	
Item	n	%	n	%
	85		15	
Do you teach for a medical school or nursing college/school?				
Medical school	6	7.1%	2	13.3%
Nursing college/school	79	92.9%	13	86.7%
What is your position?				
Dean	0	0.0%	1	6.7%
Principal/HOD	25	29.4%	5	33.3%
Senior lecturer/lecturer/professor	48	56.5%	5	33.3%
Senior tutor/tutor	5	5.9%	2	13.3%
Preceptor	0	0.0%	1	6.7%
Medical officer (who teaches)	7	8.2%	1	6.7%
How many students do you teach on average, per year?				<u> </u>
Mean (SD)	159	190.3133	225	284.246
Median (IQR)	100	60200	200	100-225
Range	17-1500		12-1200	
Do you teach LGBTI health topics?				
Yes	44	51.8%	5	33.3%
No	40	47.1%	9	60.0%
Missing	1	1.2%	1	6.7%
Why are LGBTI health topics not included in your teaching/				
curriculum? (please tick all that apply)				
LGBTI health topics are not relevant to my discipline	19	47.5%	0	0.0%
I do not have the knowledge and/or training to teach LGBTI health	9	22.5%		
topics			3	33.3%
l do not have teaching materials on LGBTI health topics	13	32.5%	0	0.0%
I do not have institutional support to teach LGBTI health topics	7	17.5%	1	11.1%
I feel uncomfortable teaching LGBTI health topics	2	5.0%	1	11.1%
There is student resistance to being taught LGBTI health topics	0	0.0%	1	11.1%
Other:	0			
Not in curriculum	9	22.5%	3	33.3%
Topic that is taught:				
Definition and theories of sexual orientation and/ or gender identity	3	6.8%	3	60.0%
Clinical skills/competencies for providing care to LGBTI people (ie.	3	6.8%		
taking a history)			0	0.0%
Domestic violence and/or intimate partner violence, as it relates to	6	13.6%		
LGBTI people			1	20.0%
Sexual violence, as it relates to LGBTI people	4	9.1%	0	0.0%
Social determinants of health (social exclusion, stigma, discrimination	7	15.9%		
of LGBTI people)			2	40.0%
Barriers to access to health care for LGBTI people	2	4.5%	3	60.0%
Alcohol, tobacco, or other drug use for LGBTI people	4	9.1%	0	0.0%

Safer sex for LGBTI people	0	0.0%	0	0.0%
HIV in LGBTI people	5	11.4%	1	20.0%
Sexually Transmitted Infections (other than HIV) in LGBTI people	12	27.3%	2	40.0%
Chronic disease risk for LGBTI populations	2	4.5%	0	0.0%
Disorders of Sex Development (DSD)/ Intersex	3	6.8%		20.0%
·	0	0.0%	1	
Transgender health in general			0	0.0%
Gender affirming treatment (hormonal/surgical, AKA sex reassignment surgery (SRS))	1	2.3%	0	0.0%
LGBTI adolescent health	0	0.0%	0	0.0%
Mental health in LGBTI people	4	9.1%	1	20.0%
Bringing LGBTI people into the classroom	0	0.0%		0.0%
			0	
Other topic affecting LGBTI people (please specify below)	5	11.4%	0	0.0%
Number of separately taught health topics	61		14	
Year of study dedicated to a given health topic:				
1st	13	21.3%	6	42.9%
2nd	23	37.7%	6	42.9%
3rd	13	21.3%	2	14.3%
4th	11	18.0%	0	0.0%
5th	0	0.0%	0	0.0%
6th	0	0.0%	0	0.0%
Amount of time dedicated to a given health topic:				
1-2 hours	39	63.9%	6	42.9%
3-5 hours	8	13.1%	3	21.4%
5-10 hours	8	13.1%	3	21.4%
More than 10 hours	5	8.2%	2	14.3%
Format of teaching for a given health topic:				
Lectures	36	59.0%	8	57.1%
Seminar	1	1.6%	0	0.0%
	3	4.9%	1	
Workshop				7.1%
Group work	16	26.2%	2	
Bedside teaching	0	0.0%	0	0.0%
Other	4	6.6%	1	7.1%
Missing	1	1.6%	2	14.3%
Assessment type for a given health topic:				
MCQ	9	14.8%	3	21.4%
Open response questions	30	49.2%	6	42.9%
OSCE	3	4.9%	0	0.0%
None	3	4.9%	3	21.4%
Other	15	24.6%	0	0.0%
Missing	1	1.6%	2	14.3%
Was each given health topic mandatory or elective?				
was each given health topic mandatory of elective:		0.4.004	10	85.7%
Mandatory	53	1 82 00/		
Mandatory Elective	53 7	86.9%	0	0.0%

Appendix VI:

Key informants (named)

Name:	Organisation:	Country:
Grace Soko	Christian Health Association of Malawi	Malawi
Ishmael Makhuludzo	Centre for the Development of People	Malawi
Rodney Chalera	Centre for the Development of People	Malawi
Dunker Kamba	Centre for the Development of People	Malawi
Esau Kasonda	Ekwendeni College of Health Sciences	Malawi
Madeleen Jooste	Life College of Learning	South Africa
Roelien Els	Life College of Learning	South Africa
Salome Nel	Mediclinic	South Africa
Nelouise Geyer	Nursing Education Association (NEA)	South Africa
Daphney Conco	Independent consultant	South Africa
Prof Juan Nel	University of South Africa	South Africa
Dr Chivaugn Gordon	University of Cape Town	South Africa

Appendix VII:

South Africa provincial research approval process

South African province	Date submitted	Date approved	Approximate time for approval
Eastern Cape	02. October 2015	05. November 2015	1 month
Free State	02. October 2015	25. November 2015	2 months
Gauteng	02. October 2015	26. November 2015	2 months
Kwazulu-Natal	02. October 2015	03. February 2016	4 months
Limpopo	02. October 2015	18. December 2015	2.5 months
Mpumalanga	02. October 2015	05. October 2015	1 week
Northern Cape	02. October 2015	15. October 2015	2 weeks
North West	02. October 2015	01 December 2015	2 months
Western Cape	02. October 2015	Pending (as of 15 March 2016)	3-6 months

Appendix VIII:

Key resource documents for curriculum development

Authors/ title	Year	Country
Association of American Medical Colleges. Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD.	2014	United States
Müller, Alexandra. Strategies to include sexual orientation and gender identity in health professions education.	2015	South Africa
Makadon, Mayer, Potter, Goldhammer. The Fenway Guide to Lesbian, Gay, Bisexual and Transgender Health.	2007	United States
Snowdon, Shane. Checklist for LGBT Curriculum Inclusion	n.d.	United States

All these resource documents are available from the GHJRU authors upon request.

