




Fifth year medical students' education, confidence and learning needs related to healthcare provision for sexual and gender minority patients: a cross-sectional survey

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ABSTRACT

Introduction. Education on health care for patients with diverse sexual orientation, sex characteristics and gender identities is lacking in Aotearoa's medical schools. **Aim.** This study surveyed fifth-year medical students at the University of Otago Wellington (UOW) about confidence in providing health care to lesbian, gay, bisexual, transgender, queer, intersex and asexual (LGBTQIA+) patients to identify learning needs. **Methods.** This anonymous cross-sectional survey was designed with input from an advisory group (community members, education, research and subject matter experts). It was administered on paper during class, using Likert scales (level of agreement) and open-ended questions. All fifth-year medical students at the UOW campus were invited to participate in May 2021. Data were analysed in Microsoft Excel (Microsoft Corporation) and free-text comments were analysed using template analysis. **Results.** In total, 74.7% (71/95) of students completed a survey. Participants lacked knowledge and confidence in their consultation skills with LGBTQIA+ patients and did not feel they had enough teaching in this area. Most ($\geq 78.8\%$) were comfortable with common terms, but half or fewer could explain intersex, gender affirmation and Takatāpui. Free-text comments revealed learning needs relating to consultation skills, ways to approach this topic with sensitivity, and a desire to learn more about the cultural context. **Discussion.** Medical students view LGBTQIA+ health care as an important topic and want opportunities to improve knowledge and confidence in this area. Students lack confidence in consulting with LGBTQIA+ patients, suggesting that more education focused on practical experience and interactions with real patients would be of benefit.

Keywords: communication skills, healthcare, LGBTQIA+, medical education, medical education research, primary care, survey, undergraduate.

Introduction

Discrimination and lack of healthcare provider knowledge related to lesbian, gay, bisexual, transgender, queer, intersex and asexual (LGBTQIA+) health care contribute to reduced help seeking and poorer physical and mental health outcomes compared with the general population.¹ Many do not access health care and feel uncomfortable discussing gender identity with their general practitioner (GP).² When a young person feels comfortable discussing their gender identity and health needs with their GP, there is a positive correlation with their general and mental health.³

Implementation of sexuality and gender teaching into the undergraduate medical curriculum can increase student knowledge, awareness, and comfort with providing care.^{4,5} In Aotearoa, medical schools deliver limited content relating to LGBTQIA+ health care,⁶ and it mostly focuses on sexuality rather than gender.⁷ Medical doctors must be equipped with the communication skills and knowledge to meet the needs of LGBTQIA+ patients and to create consultation environments where patients feel welcome and safe to talk openly.

WHAT GAP THIS FILLS

What is already known: LGBTQIA+ patients face barriers accessing appropriate health care. Education on health care for patients with diverse sexual orientation, sex characteristics and gender identities is lacking in Aotearoa's medical schools.

What this study adds: Medical students view teaching on LGBTQIA+ health care as important, but feel education is lacking. They want to feel more comfortable in their consultation skills with LGBTQIA+ patients, they lack confidence in their knowledge of transgender health care, and worry about inadvertently causing offence.

Medical students at the University of Otago spend the first 3 years of their program in Dunedin, then in one of three campuses across Aotearoa for their advanced learning years. We surveyed fifth-year students at the University of Otago Wellington (UOW) campus to identify their learning needs in relation to LGBTQIA+ health care.

Methods

Participants and recruitment

All UOW campus fifth-year students ($n = 95$) were invited to complete an anonymous survey in May 2021 during class. Those who were absent were subsequently emailed an invitation to complete the survey online. This study was approved by the University of Otago Human Ethics Committee (Ref: D20/443, 22 December 2020).

Survey design and development

The brief cross-sectional survey was designed to explore students' knowledge of common LGBTQIA+ terminology, level of confidence in consulting with LGBTQIA+ patients, and previous experiences of medical education on this topic. Four open-ended questions invited free-text comments on LGBTQIA+ education and healthcare experiences (see survey in Supplementary File S1). Input into the survey was sought from an advisory group that included academics and health professionals representing the LGBTQIA+ community, subject matter experts and education expertise. A fifth-year medical student pre-tested the survey and provided feedback that was incorporated into the final version.

Analysis

Survey data were entered into the Qualtrics^{XM} online survey platform (Qualtrics International Inc) then exported into Microsoft Excel (Microsoft Corporation) for collation and analysis. Ethnicity data were re-coded to report prioritised ethnicity for people reporting more than one ethnic group.⁸

Response frequencies were tabulated (number, percentage) for all survey items. Free-text comments (186 responses were provided to four open-ended questions) were analysed using template analysis,⁹ with initial coding undertaken by RC for individual questions, which were subsequently combined into one set of themes (agreed upon by all authors).

Results

The survey was completed by 71 fifth-year medical students (74.7%, 71/95). The demographic characteristics of participants are shown in Table 1.

Knowledge of terminology

Fig. 1 presents students' level of agreement with statements asking about knowledge of LGBTQIA+ terminology. There was a reasonably high level of comfort in feeling able to explain common terms, with over 78.8% agreeing they could explain six out of nine commonly used terms to a fellow medical student. The term with the lowest level of understanding was 'Takatāpui' (a Māori term meaning 'intimate companion of the same sex.' It has been reclaimed as an umbrella term to embrace all Māori who identify with diverse sexes, genders and sexualities),¹⁰ which only 25.4% felt they could explain to a fellow student.

Table 1. Demographic characteristics of participating fifth-year medical students.

Characteristics	Total sample ($n = 71$)	
	n	%
Gender		
Female	39	54.9
Male	26	36.6
Non-binary	1	1.4
Not stated	5	7.0
Age band (years)		
20–24	60	84.5
25–29	5	7.0
30–36	3	4.2
Not stated	3	4.2
Ethnic group		
Māori	13	18.3
Pacific	6	8.5
European	40	56.3
Asian	11	15.5
Middle Eastern, Latin American and African	1	1.4

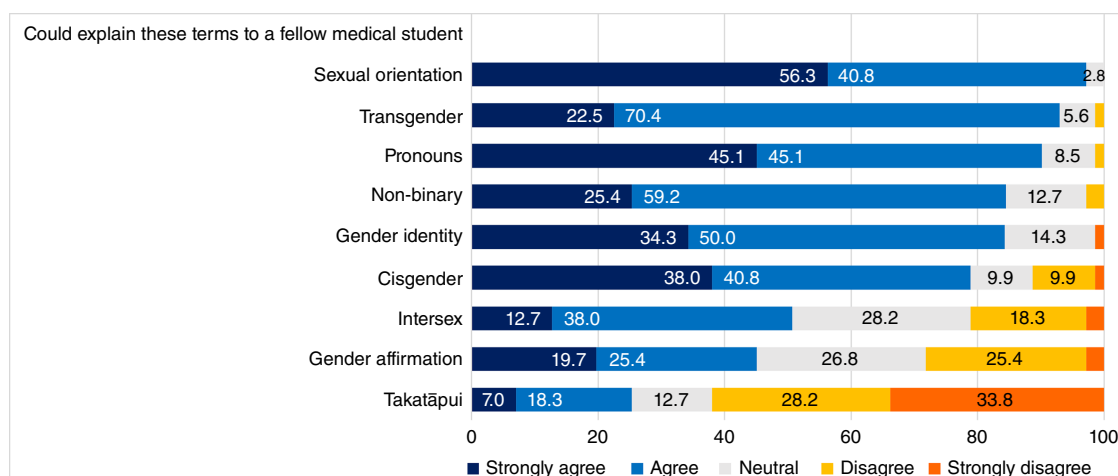


Fig. 1. Percentage of participants agreeing with statements about their ability to explain terms to a fellow medical student.

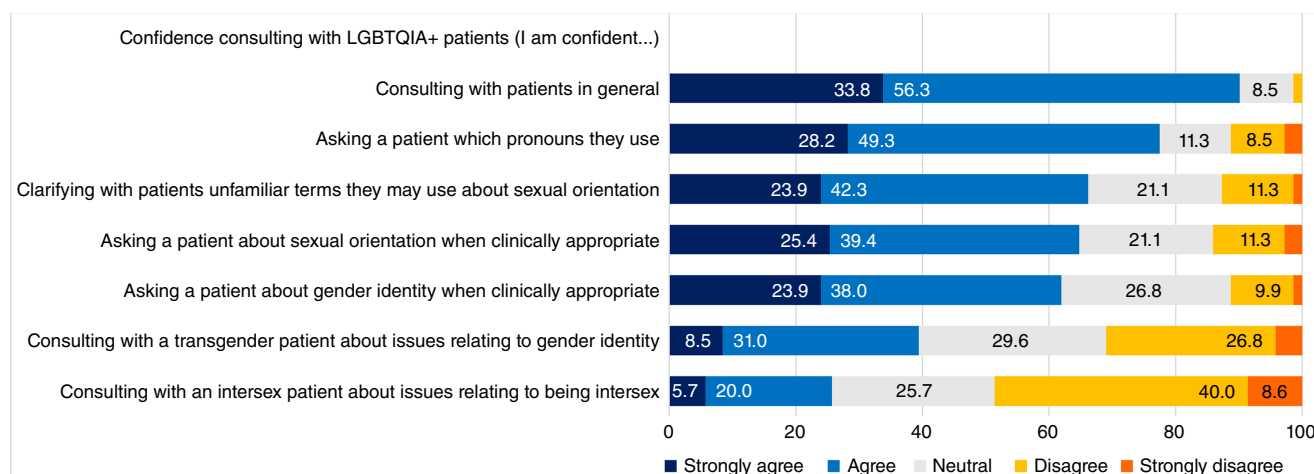


Fig. 2. Percentage of participants agreeing with statements about their confidence consulting with LGBTQIA+ patients.

Confidence consulting with LGBTQIA+ patients

The percentage of participants agreeing with statements about their confidence consulting with LGBTQIA+ patients are shown in Fig. 2. The majority (90.1%) of participants felt confident in consulting with patients in general (i.e. NOT specific to LGBTQIA+ patients). Confidence was lower for all topics related to consultation with LGBTQIA+ patients. When it came to consulting with transgender patients on gender identity issues, 39.5% felt confident with this, and only one-quarter (25.7%) felt confident to consult on issues relating to being intersex.

Education received about LGBTQIA+ healthcare

Fig. 3 presents percentages of participants agreeing with statements about LGBTQIA+ healthcare education received at medical school. Almost all students (94.4%) agreed that

teaching about LGBTQIA+ health care is important in medical school, but most students did not feel that they had received enough teaching about this area of health care. Two-thirds of the group (65.2%) reported that most of their education on this topic was from outside of medical school.

Participant comments about learning gaps and areas identified for future learning

Table 2 presents a summary of themes identified from comments about aspects that healthcare students feel least confident about, and areas identified for future learning (with illustrative quotes). Regarding medical school education about caring for LGBTQIA+ patients, 26 participants noted that they had 'very little', 'not enough' or that this education was 'non-existent'. Several participants provided positive comments about specific teaching sessions that they

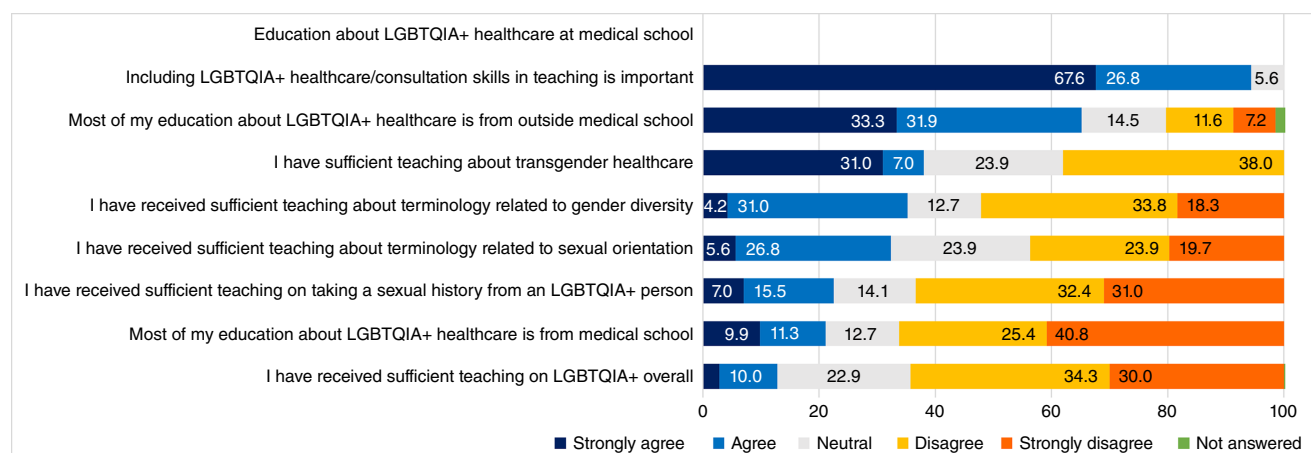


Fig. 3. Percentage of participants agreeing with statements about receipt of LGBTQIA+ healthcare education at medical school.

had found useful. Others stated that opportunities to learn in the context of actual patients from the LGBTQIA+ community were limited, but would be valuable.

Discussion

Our results show that UOW fifth-year medical students lack confidence in consulting with LGBTQIA+ patients, and this is particularly evident in areas relating to transgender and intersex health care. Their lack of confidence in these specific areas related to a perceived lack of teaching, resulting in a lower level of knowledge about transgender and intersex health. Participants reported lack of confidence in consultations did not necessarily relate to clinical knowledge level, but instead to ways of forming trusting relationships and engaging with patients. Students were keen to do the right thing and provide optimal care, but feared they would say the wrong thing or appear judgemental.

These findings suggest students have similar levels of confidence in asking patients about sexual orientation or gender identity (around two-thirds in agreement), but very few students felt they had enough overall teaching on LGBTQIA+ health. This finding differs from some overseas surveys – a UK survey of 252 medical students found that confidence in discussing sexuality increased with each year of study, but confidence in discussing gender identity did not.¹¹

Two sessions in the UOW fifth-year curriculum that aim to teach students about diversity of gender, sexuality and sex characteristics were specifically mentioned as positive learning experiences by survey participants. One of these, a session taught by a health professional who is also an LGBTQIA+ community member, gives students the opportunity to go through case studies¹² and consider their own implicit bias, and the other is focused on consultations with simulated patients.¹³ Given students reported lack of confidence, knowledge and education in this area, it is likely that

a greater number of opportunities for practical and clinical exposure would be valued.

One reason for lower levels of confidence can be a perceived complexity with LGBTQIA+ patients compared to heterosexual and cisgender patients, and a fear of causing unintentional offense. Addressing any preconceived judgements, by providing practical experience with patients, could improve medical student confidence and begin to address unconscious bias.¹⁴ Studies in the US found that higher exposure to LGBTQIA+ patient contacts related to higher levels of preparedness and knowledge,¹⁵ and saw positive changes in knowledge and attitudes among medical students who took part in a panel session with LGBTQIA+ community members.⁴

Our survey findings highlight a clear need for more teaching in this area. One way to address lack of staff subject matter expertise is to include community members in teaching to build on the knowledge and strengths both can bring to the classroom.^{16,17} In doing so, it is essential to include cultural diversity, as our results show that understanding of Māori terms relating to diversity of sexual orientation and gender identity is lacking.

Strengths and limitations

This is one of the first surveys of LGBTQIA+ education and student confidence to be undertaken in a NZ medical school. The response rate was good, and the majority of participants provided free-text comments, which expanded on and helped to provide context around some of the forced choice questions. Over a quarter of the students who completed the survey were of either Māori or Pacific ethnicity. Although we asked about knowledge of Māori terminology, we did not ask about Pacific cultural terms (but acknowledge this also needs to be included in NZ medical education). Some questions about gender identity did not have an equivalent question about sexual orientation, making it hard to draw comparisons in some areas. A limitation of the survey

Table 2. Themes (with illustrative quotes) identified in free-text responses to open-ended questions about learning gaps and future learning needs.

Topic	Theme	Illustrative quotes
Learning gaps – aspects of delivering health care to a LGBTQIA+ person that students reported feeling less confident or nervous about	General consultation skills	<ul style="list-style-type: none"> – If the LGBTQIA+ person had experienced discrimination in the healthcare system before, how to broach this/acknowledge. [01] – Asking about gender identity and establishing pronouns in a sensitive way. [51] – Being sensitive, knowing when it is clinically relevant, understanding barriers to health care. [64]
	Consultation skills related to sexual health	<ul style="list-style-type: none"> – How to conduct a sexual history in a way that is non-judgemental. [91] – Might not do well explaining needing cervical smears to a man with a cervix who may be uncomfortable with the topic. [04] – HIV, PrEP, education about anal sex or oral sex for LGBTQIA and straight couples. [87]
	Delivering care in a non-judgemental, sensitive manner	<ul style="list-style-type: none"> – Asking about people's gender/sexual identities without offending people, worried about not knowing terminology/specific issues coming across as incompetent, offensive, or not being able to help the patient. [08] – Offending someone by accident, having unconscious/conscious bias. [20] – Sensitive approaching matter – feel I could easily offend even though my intentions are not to offend. Feel I do not understand enough to know if I am being sensitive. [43]
	Understanding terminology	<ul style="list-style-type: none"> – I feel less confident in my ability to know the right things to say in order to get the terminology etc. right. [42] – I feel that if I had a better understanding of the terminology, I would be more confident. I don't want to say the wrong thing. [80] – I don't understand a lot of the different gender terms. [81]
	Transgender health care	<ul style="list-style-type: none"> – Most things, but specifically issues related to sex-specific services in someone who is transgender. [09] – Know very little about 'transitioning' protocols. [40] – Navigating clinical pathways for gender/sex transitioning. [45]
	Intersex health care	<ul style="list-style-type: none"> – Intersex issues, explaining issues to parents (if paediatric patient). [77] – Understanding the physiology i.e. of intersex. [82] – Intersex, takatāpui, what are the important issues and red flags. [14]
Future learning needs – LGBTQIA+ issues respondents would like to learn more about	Wider social, cultural and contextual issues	<ul style="list-style-type: none"> – Abuse in the community. [81] – Stigma in health care. [64] – Maori, Pacific and other cultures ideas around gender and sexuality. [48] – Psychosocial, things that can be improved. [39] – Understanding barriers to health care. [64] – Need to know things that are commonly classed as stigmatising/offensive and how to avoid these things. [08]
	Transgender health care	<ul style="list-style-type: none"> – Transition surgeries, hormonal replacement therapy. [87] – Treatment options for transgender patients. [30] – Cervical screening, prostate screening for transgender individuals. [65]
	Learning from LGBTQIA+ communities	<ul style="list-style-type: none"> – Discuss it more with people who are part of the LGBTQIA+ community. [80] – I think practical real-world experience would be good but hard to get sensitively. [50]

sample is that it included only one of the three campuses providing teaching to fifth-year students, so the experience described by this group might not reflect teaching and learning needs across the entire medical school.

Conclusions

Fifth-year medical students lack confidence in consulting with LGBTQIA+ patients and feel that education is lacking

in medical school. To address areas of low confidence and potential student unconscious bias, medical schools should consider including teaching sessions with a focus on LGBTQIA+ consultation skills, and more exposure to sexual and gender minority patients.

Supplementary material

Supplementary material is available [online](#).

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Data availability. The data that support this study cannot be publicly shared due to ethical or privacy reasons and may be shared upon reasonable request to the corresponding author, if appropriate.

Conflicts of interest. The authors report there are no competing interests to declare.

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