Medical Teacher

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/imte20

Twelve tips for LGBT+-inclusive undergraduate and postgraduate medical education

Luke Muschialli, Santino Coduri-Fulford, Zoë Garbett & Dean J Connolly

To cite this article: Luke Muschialli, Santino Coduri-Fulford, Zoë Garbett & Dean J Connolly (2025) Twelve tips for LGBT+-inclusive undergraduate and postgraduate medical education, Medical Teacher, 47:1, 43-49, DOI: 10.1080/0142159X.2024.2344617

To link to this article: https://doi.org/10.1080/0142159X.2024.2344617

MEDICAL TEACHER
2025, VOL. 47, NO. 1, 43–49
https://doi.org/10.1080/0142159X.2024.2344617

MEDICAL TEACHER
Taylor & Francis
Taylor & Francis Group

TWELVE TIPS

Twelve tips for LGBT+-inclusive undergraduate and postgraduate medical education

Luke Muschialli[a,b], Santino Coduri-Fulford[c], Zoë Garbett[d] and Dean J Connolly[e]

[a]University of Cambridge, Cambridge, United Kingdom; [b]UCL Medical School, UCL, London, United Kingdom; [c]University Hospitals Sussex NHS Foundation Trust, Brighton and Hove, United Kingdom; [d]North Central London Integrated Care Board, London, United Kingdom; [e]Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, United Kingdom

ABSTRACT

Sexual and gender minority (LGBT+) populations continue to experience worse health outcomes and reduced healthcare access compared to their cisgender, heterosexual counterparts, perpetuated by a lack of sufficient LGBT+-specific healthcare education within medical schools. Developing educational material that encourages self-reflective, proactive, and affirmative practice has been identified as a mechanism for increasing the quality of doctor-patient relationships and breaking down barriers in healthcare access for LGBT + communities. In this article, we provide twelve tips for those designing and delivering undergraduate and postgraduate medical curricula. We summarise evidence-based approaches to inclusive care, key overarching concepts that curricula should include and common issues to be avoided. We hope these tips provide a standard against which existing curricula and teaching practices can be appraised and form the basis of future educational material.

ARTICLE HISTORY
Received 13 September 2023
Accepted 15 April 2024

KEYWORDS
Assessment; general; curriculum; community-oriented; curriculum; planning; discipline; general; learning outcomes; health promotion

Introduction

According to recent census data, sexual (e.g. lesbian, gay, or bisexual) and gender (e.g. transgender (trans), non-binary or gender expansive; TGE) minorities (collectively, LGBT+) represent 3-4% and 0.3% of the adult population, respectively (Statistics Canada 2022; Office for National Statistics 2023). LGBT + communities experience higher rates of health problems such as cardiovascular disease, poor mental health, and obesity (Struble et al. 2010; Fredriksen-Goldsen et al. 2013; Flentje et al. 2020), and have reduced healthcare access compared to cisgender, heterosexual counterparts (Hafeez et al. 2017). Policies and clinical practice guidelines which fail to recognise the population-specific needs of LGBT + people (Hunt et al. 2018), anticipated or enacted discrimination when accessing healthcare (Dean et al. 2016) and poor provider knowledge (Korpaisarn and Safer 2018) perpetuate these inequalities.

Clinicians lacking training in LGBT + health report discomfort when treating LGBT + patients, manifesting in practices that can isolate patients, such as reduced eye contact and avoiding questions about identity (Gisondi and Bigham 2021; Lien et al. 2021). The *Outcomes for Graduates document* produced by the United Kingdom (UK) General Medical Council introduces a professional mandate for educators to ensure that graduates have an understanding of social determinants of health and are able to adapt their practice to incorporate these (General Medical Council (GMC) 2020). Despite this, there is a marked lack of LGBT + health education within medical schools (Obedin-Maliver et al. 2011; Parameshwaran et al. 2017; Arthur et al. 2021; Barber et al. 2023). Even when taught, education is often inadequate, due to lack of consistency across curricula (McCann and Brown 2018), a vulnerability to opt-in bias (Barber et al. 2023) and a lack of mechanisms to assess the extent of behaviour change (Hunt et al. 2019). Encouragingly, there is a strong desire among medical students for more teaching on LGBT + healthcare (Arthur et al. 2021; Barber et al. 2023), and there are noted benefits of incorporating LGBT+-specific teaching into medical education. Responses to a cross-sectional survey of 113 mental health staff practicing in the UK suggest that mandatory awareness training for staff is the most effective way to engage LGBT + youth in mental health services (Hughes 2018), and a systematic review of 13 LGBT + educational interventions in United States (US) medical schools found that all programs reported participants' comfort providing effective healthcare to LGBT + participants improved because of the intervention (Utamsingh et al. 2017). An integration of LGBT+-inclusive practices from faculty also increases students' reported feelings of support within medical schools (Linley et al. 2016), with likely implications for LGBT + medical student retention.

It is vital that curricula incorporate LGBT+-specific teaching, with content being community-driven, person-centred, and empowering for medical students. We propose *Twelve Tips*, collaboratively designed from a review of the extant medical education literature and the collective education and public health experience of the authors, for medical educators involved in the design, implementation, and delivery of undergraduate and postgraduate medical curricula, to encourage high quality, evidence-based approaches to teaching LGBT + health that will ensure doctors are confident delivering LGBT+-affirmative care.

CONTACT Luke Muschialli lgm35@cam.ac.uk, luke.muschialli@icloud.com. University of Cambridge, Cambridge, United Kingdom; UCL Medical School, UCL, London, United Kingdom

Tip 1

Empower effective allyship

A narrative of empowerment must be integrated into medical education, emphasising the role of medical students, regardless of their own identity, in driving positive change in LGBT + healthcare. Students are more motivated to engage in content which they perceive to be relevant to them and their future work (Albrecht and Karabenick 2018), and previous undergraduate medical education initiatives emphasising the importance of clinicians optimising LGBT + healthcare have been efficacious in promoting behaviour change (Kelley et al. 2008). The role of individual physicians in generating change is well noted as a positive driver of LGBT + healthcare outcomes. For example, a study of Filipino trans women living with HIV found that clinicians' use of gender-affirming language was associated with greater adherence to both anti-retroviral therapy (ART) and medical monitoring of gender-affirming hormone therapy (Restar et al. 2019). Emphasising to students the importance of inclusive practice in facilitating improved healthcare engagement and health outcomes, and the avenues through which positive change occurs, can empower allyship (i.e. actively supporting LGBT + communities) and is likely to improve students' engagement in affirmative practice and further LGBT + education.

Tip 2

Introduce and normalise inclusive, additive communication throughout curricula

Incorrect language (e.g., using the wrong names or personal pronouns) is a barrier to care for LGBT + patients (Röndahl et al. 2006), and has been directly linked to negative healthcare outcomes for LGBT + communities, including suicide (Russell et al. 2018). Uncertainty surrounding culturally competent language is an area of discomfort for many clinicians caring for LGBT + patients (Parameshwaran et al. 2017). Use of appropriate language builds rapport, strengthening the doctor-patient relationship (Braybrook et al. 2023; Coulter-Thompson 2023), and within educational spaces, use of inclusive language from faculty facilitates a more positive learning environment (Linley et al. 2016). For students to harness these benefits, educators should incorporate inclusive, non-bioessentialist (i.e., language that does not imply that healthcare requirements are biologically pre-determined) and additive language throughout curricula (Riddington 2020). LGBT+-inclusive language is not intended to further isolate other marginalised groups within healthcare, and thus the importance of additive language (e.g., *women* ***and*** *other pregnant people, breast* ***and*** *chest feeding)* should be taught, and the importance of patient preference for language use emphasised (Green and Riddington 2020). In addition to teaching core principles of inclusive language (e.g. correct use of pronouns), patient-centred adaptability should be incorporated into clinical communication training. What constitutes culturally competent LGBT + terminology is constantly evolving and there is no "one size fits all" approach. Teaching techniques such as echoing language (i.e., integrating terms used by the patient into the language of a consultation), leading with neutral terms (e.g., using pronouns such as "they/them") before adapting according to patients' preferences, and using affirmative non-verbal communication (e.g., avoiding changes in facial expression suggesting surprise or discomfort following patient disclosure of identity) will ensure students are adequately equipped for inclusive practice while standards of inclusive language for LGBTQ+ people continue to evolve (Braybrook et al. 2022; 2023). As one trans patient affirms, *"any sort of doubt at all, don't be afraid to ask"* (Braybrook et al. 2023).

Tip 3

Encourage reflective, person-centred and evidence-based practice

The practice of ensuring care is up-to-date is commonplace in medicine, but often overlooked in LGBT + healthcare (Henriquez and Ahmad 2021). A lack of up-to-date provider knowledge means LGBT + patients are often expected to navigate a complex healthcare system without guidance, forming a barrier to care (Torres et al. 2015). Medical students and doctors should be empowered to reflect on their confidence and knowledge in treating LGBT + patients and to continually update their practice in line with patient need and developments in evidence and practice guidelines (Coulter-Thompson 2023), while maintaining a critical and analytical approach to appraising policy, considering the political and social climate they are being published in. This is of particular importance considering the recent recession of LGBT + healthcare and social justice (Madrigal-Borloz 2023). However, it is important to not place the onus to educate doctors on the LGBT + community. This creates an undue burden on a population already experiencing greater than average difficulty navigating daily life (Torres et al. 2015). Rather, educators should teach students to be honest about their limitations in knowledge, communicate a willingness to learn and develop, and highlight resources from which students can get up-to-date information on LGBT + social issues, health disparities and community-specific care (Braybrook et al. 2022). Some examples include Stanford University's online course on teaching LGBT + Health (Stanford Medicine 2021), and *Gender Spectrum*'s tips for encouraging gender inclusive practice (Gender Spectrum 2023).

Tip 4

Place LGBT + patients are the heart of curricula

One evidence-based approach to LGBT + healthcare education is incorporating LGBT + stories, placing lived experience, which resonates with learners, at the heart of curricula (Kelley et al. 2008). Students report that attending focus groups with LGBT + individuals is one of the best ways to learn about patient experience and access (Arthur et al. 2021), and including LGBT + patients in training leaves longer lasting, and more positive impressions on medical students (Kelley et al. 2008; Utamsingh et al. 2017). Curricula could also integrate the experience of LGBT + medical students, and provide an opportunity for reciprocal peer teaching (Krych et al. 2005), which

LGBT + students have previously reported as an avenue for feeling more supported in classroom settings (Linley et al. 2016). However, when integrating LGBT + individuals into the creation and delivery of educational material, the risk of burdening LGBT + communities with the responsibility of education should again be noted. Many previous successful educational initiatives cite the largely voluntary work of committed LGBT + faculty and students as their driving force, in both teaching of material and advocating for its inclusion, often without compensation (Tollemache et al. 2021). It is important that when accessing the benefits of co-creation, we recognise the efforts of LGBT + communities with appropriate compensation and support.

Tip 5

Include LGBT + populations throughout medical curricula

Education surrounding the healthcare needs of LGBT + people has historically been confined to specific specialities (e.g. HIV and genitourinary medicine), which is not only reductive, compromising necessary development of much needed healthcare for LGBT + people, but also feeds into damaging stereotypes of LGBT + communities, creating biased clinicians and further barriers to care (Garcia et al. 2020; Pattinson et al. 2021). LGBT + people experience disparities across all health domains and will be treated by clinicians from all disciplines (Meads et al. 2012). TGE people receiving gender-affirming care, for example, may encounter general practitioners, mental health services, endocrinologists, plastic surgeons, urologists, gynaecologists and social workers, all of whom will require education on gender-inclusive communication (Korpaisarn and Safer 2018). Affirmative practice is therefore vital in all disciplines to combat interdisciplinary health inequities (Barber et al. 2023). Highlighting LGBT + populations across all educational disciplines will increase doctors' awareness of LGBT + people and their needs, ensuring affirmative action is incorporated across specialities. Integrating LGBT + health education throughout curricula would also prevent the need to create additional teaching sessions in an already busy course (Cooper et al. 2018) and circumvent the risk of opt-in bias, where the least knowledgeable about LGBT + health might not participate (Barber et al. 2023).

Tip 6

Naturally incorporate LGBT + individuals into medical assessment

A noted limitation of previous LGBT + health education is the failure to adequately introduce mechanisms for assessing knowledge retention and behaviour change (Hunt et al. 2019). Although assessment is not the only way to ensure information retention and development, it is an established process with which medical schools are familiar, can be easily adapted and can evidence the efficacy of teaching material (Barber et al. 2023). Integration of LGBT + communities into assessment should be accompanied by the introduction of knowledge appraisal techniques on LGBT + care that avoid the aspect of obligation that accompanies traditional examinations, such as reflective practice (Lim et al. 2023). Assessment of LGBT + content will counter-act the aforementioned opt-in bias present in current non-mandated, non-assessed LGBT + teaching (Barber et al. 2023), ensure standardisation of base knowledge of LGBT + care among students (Hunt et al. 2019) and increase the amount of time dedicated to students' learning these topics (Pereira et al. 2016). LGBT + individuals should be naturally incorporated into scenario-based assessment of medical students, a mechanism that has been shown to increase demonstratable skills and facilitate greater engagement in LGBT + healthcare topics (Eckstrand et al. 2012; Altneu et al. 2020). Scenarios such as encountering sexual minority couples in fertility services or having TGE patients represented in physical examination scenarios, will facilitate LGBT + inclusion in a natural way.

Tip 7

Incorporate LGBT+-inclusive research throughout curricula

Since the emergence of evidence-based medicine as the dominant paradigm in healthcare (Sackett et al. 1996), medical educators have been tasked with training doctors to conduct and understand empirical research to make informed decisions. The LGBT + research landscape is expanding (Sweileh 2022), beyond the historical body of medical literature set to pathologise LGBT + identity (MacKinnon 2018). It is important when educating students about LGBT + health, that they are signposted to reputable, affirmative studies. It is also important to highlight to students the continued exclusion of LGBT + populations from medical research. Publications investigating the demographic representation within randomised controlled trials (NIHR 2022) and specific research themes (Connolly et al. 2023) have identified very limited inclusion of LGBT + patients in highly funded and impactful general population research. This exclusion perpetuates the invisibility of LGBT + people within healthcare, as "*if we're not counted, we don't count*" (LGBT Foundation 2021). Highlighting the exclusion of LGBT + people from medical research, the importance of their representation in general population research (including smaller populations, such as non-binary people) and gold-standard measures of sexual orientation and gender identity (SOGI) (Reisner et al. 2014; Bauer et al. 2017) will ensure students are articulate, well-informed advocates for the systematic inclusion of LGBT + people in their research.

Tip 8

Highlight environmental drivers of healthcare engagement and teach the damage of cis-heteronormativity

Environmental factors, whether physical (i.e., the clinical environment) or structural (i.e., policy), are determinants of healthcare engagement (Grossman and D'Augelli 2006; Henriquez and Ahmad 2021). Medical students who lack an understanding of the role these play in engaging LGBT + patients may be inadequately equipped to provide inclusive healthcare. Cis-heteronormativity refers to the

systemic assumption that individuals identify as cisgender and heterosexual. Environmental cis-heteronormativity was identified as a precipitant of poorer healthcare engagement almost three decades ago (Perrin and Kulkin 1996) and still manifests in a number of ways (Coulter-Thompson 2023). These include restriction of patients to facilities or services aligned with their birth-assigned sex (e.g., absence of gender-neutral spaces, lack of provision for TGE patients accessing gendered screening services), absence of sexual orientation and gender identity (SOGI) monitoring on intake and assessment forms and a lack of infrastructure which enforces the use of both colleagues' and patients' correct names and pronouns (Goldenberg et al. 2021; Kirjava et al. 2023). As one non-binary patient articulated when navigating this environment, *"the message is, you don't actually exist"* (Henriquez and Ahmad 2021). Medical students should be exposed to patient narratives surrounding the challenges of healthcare engagement in cis-heteronormative environments, and doctors should be supported to acquire the skills to challenge this infrastructure through rigorous quality improvement work (Coren et al. 2011; Braybrook et al. 2023). This will empower both students and doctors to become articulate and informed advocates for reform as they progress through their career.

Tip 9

Emphasise the continued influence of historical discrimination of LGBT + communities

Just as environmental factors at the level of the individual clinic impact healthcare engagement, the social and political climate in which doctors practice continues to influence healthcare engagement for LGBT + people. It is important for students to understand how the legacy of significant historical events such as the AIDS pandemic (Gil et al. 2021), the pathologisation of LGBT + communities (Connors et al. 2020), anti-LGBT + sentiment stemming from post-colonial legislation (Kirjava et al. 2023) or legislation prohibiting teaching or discussion about LGBT + communities in educational settings (Lee 2019; Truss et al. 2023) continue to impact participation in healthcare, manifesting in behaviours such as avoidance of services and non-disclosure of minoritised sexual and gender identities (Tollemache et al. 2021). Impressing upon students the significant impact a community's social and political circumstances have upon their ability to engage with healthcare and obtain equitable outcomes is essential. Highlighting examples of how students can work to counter-act anticipated discrimination stemming from these experiences, such as articulately explaining the relevance of questions about SOGI while avoiding asking inappropriate or irrelevant questions (Cahill et al. 2014; Braybrook et al. 2023), will likely begin to mitigate the impact of these previous negative experiences, and improve patient trust and engagement, and doctor-patient relationships.

Tip 10

Encourage unconscious bias identification

With markedly differing attitudes towards and exposure to LGBT + communities across society (IPSOS 2021), students will enter medical education with different experiences with and opinions towards LGBT + populations (Wahlen et al. 2020), which, if unaddressed, can have an impact on engagement with education and future practice (Stroumsa et al. 2019). Adverse biases affect individual doctor-patient relationships, as well as population-wide quality of care through perpetuating pre-existing barriers (Kelley et al 2008), and combined with a lack of training, bias can make individuals more likely to marginalise LGBT + individuals in clinical settings (Kirjava et al. 2023). Unconscious bias can also exacerbate intersectional inequalities within LGBT + communities (Bachmann and Gooch 2018). Clinicians have previously described particular hesitance when discussing SOGI with older people, people with religious beliefs and people of colour (Braybrook et al. 2023), restricting access to the benefits for the doctor-patient relationship of status disclosure among these already disproportionately marginalised communities (Cloughessy et al. 2018). Medical education should encourage self-reflection in students, and should promote discussions in supportive and individualised small group settings about preconceived opinions and subconscious biases in collaboration with intersectionally diverse students and educators (Morris et al. 2019; Tollemache et al. 2021). These should be mediated by a facilitator who can provide articulate, evidence-based responses to students' beliefs, and teach strategies for reducing the impact of unconscious biases on care, such as perspective-taking (Morris et al. 2019).

Tip 11

Promote an intersectional approach to treating LGBT + individuals

LGBT + healthcare experiences and inequity vary enormously between and within community sub-groups, and healthcare inequity is not equally distributed across the LGBT + population (Bachmann and Gooch 2018). The unique healthcare inequities and barriers for SOGI intersect, with trans individuals also identifying as lesbian, gay or bisexual being more likely to report mistreatment in healthcare (Seelman et al. 2021). LGBT + identity also intersects with other axes of inequality generating differing healthcare experiences, with LGBT + people of colour and those with disabilities reporting worse healthcare experiences and outcomes than white and able-bodied LGBT + people, respectively (Bachmann and Gooch 2018). Intersectionality recognises these multiple aspects of identity, and how a combination of these factors will result in unique experiences of discrimination and marginalisation (Goldenberg et al. 2021). To teach LGBT + healthcare without incorporating intersectionality is to erase the experiences of the most marginalised in LGBT + communities. Through integrating intersectionality into LGBT + health teaching, the principles of health equity as well as the importance of patient-centred and adaptive practice will be further emphasised, and students will be better equipped to serve all marginalised groups.

Tip 12

Teach how to get it wrong

One barrier to effective care for the LGBT + patient is clinicians' fear of offending patients with incorrect language or a lack of knowledge, which can lead to avoidance and perceived insensitivity in patient encounters (Braybrook et al. 2023). With language and care needs of LGBT + patient populations constantly evolving, it is very likely that all students and doctors will experience a scenario in which they "*get it wrong*". How they approach this situation has important implications for the resulting doctor-patient relationship, as glossing over errors risks negating the impact of incorrect language or practice on the patient, diminishing the importance of their identity. Conversely, over-apologising can shift the focus of conversation from the patient's health condition to reassuring an embarrassed doctor (Braybrook et al. 2022). Students should be taught, both in didactic teaching and through standardised patient encounters, how to acknowledge their mistakes without displaying any indifference, correct themselves by asking the patient for their preferred language or care, and continue with the clinical encounter, ensuring that they integrate the correct terminology or practice (Braybrook et al. 2022). In this way, doctors will communicate to the patient their adaptive and respectful approach to care, which will foster a stronger doctor-patient relationship.

Conclusion

Healthcare disparities continue to impact LGBT + populations, and with the current rise in anti-LGBT + sentiment (Home Office 2021; Human Rights Watch 2023; Madrigal-Borloz 2023), there is a risk of these widening in the coming years. Doctors are not currently equipped to consistently provide culturally competent care to LGBT + patients, due in part to insufficient provision of LGBT+-specific education within undergraduate and postgraduate medical training. Although systemic discrimination and the exclusion of LGBT + people from healthcare is an endemic, which requires centralised, institutional reform (Bachmann and Gooch 2018), providing clinicians with the appropriate tools to deliver person-centred, culturally competent care will ensure inequities are not perpetuated in clinical encounters. Incorporating the principles discussed in this article into all stages of medical education will ensure that inclusive, empowering, and affirmative care is at the core of future doctors' practice.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.

Notes on contributors

Luke Muschialli is associated with University of Cambridge, Cambridge, United Kingdom and UCL Medical School, UCL, London, United Kingdom.

Santino Coduri-Fulford is associated with University Hospitals Sussex NHS Foundation Trust, Brighton and Hove, United Kingdom.

Zoë Garbett is associated with North Central London Integrated Care Board, London, United Kingdom.

Dean J. Connolly is associated with Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, United Kingdom.

ORCID

Luke Muschialli http://orcid.org/0000-0001-5704-1776
Santino Coduri-Fulford http://orcid.org/0009-0005-1204-7433
Dean J Connolly http://orcid.org/0000-0002-3139-4263

References

Albrecht JR, Karabenick SA. 2018. Relevance for learning and motivation in Education. J Exp Educ. 86(1):1–10. doi:10.1080/00220973.2017.1380593.

Altneu E, Grieco CA, Verbeck N, Davis JA, Clinchot DM. 2020. LGBTQ+ Health—a novel course for undergraduate students. Med Sci Educ. 30(2):971–976. doi:10.1007/s40670-020-00958-5.

Arthur S, Jamieson A, Cross H, Nambiar K, Llewellyn CD. 2021. Medical students' awareness of health issues, attitudes, and confidence about caring for lesbian, gay, bisexual and transgender patients: a cross-sectional survey. BMC Med Educ. 21(1):56. doi:10.1186/s12909-020-02409-6.

Bachmann C, Gooch B. 2018. LGBT in Britain: health Report. Stonewall. https://www.stonewall.org.uk/system/files/lgbt_in_britain_health.pdf

Barber A, Flach A, Bonnington J, Pattinson EM. 2023. LGBTQ+ healthcare teaching in UK Medical Schools: an investigation into Medical Students' understanding and preparedness for practice. J Med Educ Curric Dev. 10:23821205231164893. doi:10.1177/23821205231164893.

Bauer GR, Braimoh J, Scheim AI, Dharma C. 2017. Transgender-inclusive measures of sex/gender for population surveys: mixed-methods evaluation and recommendations. PLOS One. 12(5):e0178043. doi:10.1371/journal.pone.0178043.

Braybrook D, Bristowe K, Timmins L, Roach A, Day E, Clift P, Rose R, Marshall S, Johnson K, Sleeman K, et al. 2022. ABC of LGBT + Inclusive Communication: A guide for health and social care professionals [Internet]. [accessed 2023 Aug 27]. https://www.kcl.ac.uk/nmpc/assets/research/projects/abc-lgbt-inclusive-communication.pdf.

Braybrook D, Bristowe K, Timmins L, Roach A, Day E, Clift P, Rose R, Marshall S, Johnson K, Sleeman KE, et al. 2023. Communication about sexual orientation and gender between clinicians, LGBT + people facing serious illness and their significant others: a qualitative interview study of experiences, preferences and recommendations. BMJ Qual Saf. 32(2):109–120. doi:10.1136/bmjqs-2022-014792.

Cahill S, Singal R, Grasso C, King D, Mayer K, Baker K, Makadon H. 2014. Do ask, do tell: high levels of acceptability by patients of routine collection of sexual orientation and gender identity data in four diverse American Community Health Centers. PLOS One. 9(9):e107104. doi:10.1371/journal.pone.0107104.

Cloughessy K, Waniganayake M, Blatterer H. 2018. "This is our family. we do not hide who we are": stigma and disclosure decisions of lesbian parents in Australian early childhood settings. J GLBT Family Stud. 14(4):381–399. doi:10.1080/1550428X.2017.1362617.

Connolly DJ, Coduri-Fulford S, Tugulu C, Yalew M, Moss E, Yang JC. 2023. Sexual orientation and gender identity reporting in highly cited current alcohol research. LGBT Health [Internet]. [accessed 2024 Apr 10]. doi:10.1089/lgbt.2023.0085.

Connors J, Casares MC, Honigberg MC, Davis JA. 2020. LGBTQ health disparities. In: Lehman JR, Diaz K, Ng H, Petty EM, Thatikunta M, Eckstrand K, editors. The Equal Curriculum [Internet]. [place unknown]: Springer International; [accessed 2023 Sep 5]; p. 13–31. doi:10.1007/978-3-030-24025-7_2.

Cooper MB, Chacko M, Christner J. 2018. Incorporating LGBT Health in an undergraduate medical education curriculum through the

construct of social determinants of health. MedEdPORTAL. 14: 10781. doi:10.15766/mep_2374-8265.10781.
Coren JS, Coren CM, Pagliaro SN, Weiss LB. 2011. Assessing your office for care of lesbian, gay, bisexual, and transgender patients. Health Care Manag . 30(1):66–70. doi:10.1097/HCM.0b013e3182078bcd.
Coulter-Thompson EI. 2023. Bias and discrimination against lesbian, gay, bisexual, transgender, and queer parents accessing care for their children: a literature review. Health Educ Behav. 50(2):181–192. doi:10.1177/10901981221148959.
Dean MA, Victor E, Guidry-Grimes L. 2016. Inhospitable healthcare spaces: why diversity training on LGBTQIA issues is not enough. J Bioeth Inq. 13(4):557–570. doi:10.1007/s11673-016-9738-9.
Eckstrand K, Lomis K, Rawn L. 2012. An LGBTI-inclusive sexual history taking standardized patient case. MedEdPORTAL. doi:10.15766/mep_2374-8265.9218.
Flentje A, Heck NC, Brennan JM, Meyer IH. 2020. The relationship between minority stress and biological outcomes: a systematic review. J Behav Med. 43(5):673–694. doi:10.1007/s10865-019-00120-6.
Fredriksen-Goldsen KI, Kim H-J, Barkan SE, Muraco A, Hoy-Ellis CP. 2013. Health disparities among lesbian, gay, and bisexual older adults: results from a population-based study. Am J Public Health. 103(10):1802–1809. doi:10.2105/AJPH.2012.301110.
Garcia J, Vargas N, Clark JL, Magaña Álvarez M, Nelons DA, Parker RG. 2020. Social isolation and connectedness as determinants of well-being: global evidence mapping focused on LGBTQ youth. Glob Public Health. 15(4):497–519. doi:10.1080/17441692.2019.1682028.
Gender Spectrum. 2023. Gender Spectrum [Internet]. [accessed 2023 Aug 27]. https://genderspectrum.org/.
General Medical Council (GMC). Outcomes for Graduates. 2020. [Internet]. [place unknown]. https://www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/outcomes-for-graduates/outcomes-for-graduates.
Gil RM, Freeman TL, Mathew T, Kullar R, Fekete T, Ovalle A, Nguyen D, Kottkamp A, Poon J, Marcelin JR, et al. 2021. Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) Communities and the Coronavirus Disease 2019 pandemic: a call to break the cycle of structural barriers. J Infect Dis. 224(11):1810–1820. doi:10.1093/infdis/jiab392.
Gisondi MA, Bigham B. 2021. LGBTQ+ health: a failure of medical education. Can J Emerg Med. 23(5):577–578. doi:10.1007/s43678-021-00185-w.
Goldenberg T, Gamarel KE, Reisner SL, Jadwin-Cakmak L, Harper GW. 2021. Gender affirmation as a source of resilience for addressing stigmatizing healthcare experiences of transgender youth of color. Ann Behav Med. 55(12):1168–1183. doi:10.1093/abm/kaab011.
Riddington GH. 2020. Perinatal Care for Trans and Non-Binary People [Internet]. [place unknown]: Brighton and Sussex University Hospitals NHS Trust. https://www.whatdotheyknow.com/request/725889/response/1738104/attach/6/MP005%20Perinatal%20Care%20for%20Transgender%20Non%20Binary%20People.pdf?cookie_passthrough=1.
Grossman AH, D'Augelli AR. 2006. Transgender Youth. J Homosex. 51(1):111–128. doi:10.1300/J082v51n01_06.
Hafeez H, Zeshan M, Tahir MA, Jahan N, Naveed S. 2017. Health care disparities among lesbian, gay, bisexual, and transgender youth: a literature review. Cureus. 9(4):e1184. doi:10.7759/cureus.1184.
Henriquez NR, Ahmad N. 2021. "The Message Is You Don't Exist": exploring lived experiences of rural lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ) people utilizing health care services. SAGE Open Nursing. 7(23779608211051174): 237796082110511. doi:10.1177/23779608211051174.
Home Office. 2021. Hate Crime, England and Wales, 2020 to 2021 [Internet]. [place unknown]; [accessed 2023 Sep 5]. https://www.gov.uk/government/statistics/hate-crime-england-and-wales-2020-to-2021/hate-crime-england-and-wales-2020-to-2021.
Hughes M. 2018. Health and well being of lesbian, gay, bisexual, transgender and intersex people aged 50 years and over. Aust Health Rev. 42(2):146–151. doi:10.1071/AH16200.
Human Rights Watch. 2023. #Outlawed "The Love that Dare Not Speak Its Name." LGBT Rights [Internet]. [accessed 2023 Sep 10]. https://features.hrw.org/features/features/lgbt_laws/.
Hunt L, Vennat M, Waters JH. 2018. Health and wellness for LGBTQ. Adv Pediatr. 65(1):41–54. doi:10.1016/j.yapd.2018.04.002.
Hunt R, Bates C, Walker S, Grierson J, Redsell S, Meads C. 2019. A systematic review of UK educational and training materials aimed at health and social care staff about providing Appropriate Services for LGBT + People. Int J Environ Res Public Health. 16(24):4976. doi:10.3390/ijerph16244976.
IPSOS. 2021. LGBT + Pride 2021 Global Survey [Internet]. [place unknown]; [accessed 2023 Sep 5]. https://www.ipsos.com/sites/default/files/ct/news/documents/2021-06/lgbt-pride-2021-global-survey-ipsos.pdf.
Kelley L, Chou CL, Dibble SL, Robertson PA. 2008. A critical intervention in lesbian, gay, bisexual, and transgender health: knowledge and attitude outcomes among second-year medical students. Teach Learn Med. 20(3):248–253. doi:10.1080/10401330802199567.
Kirjava SA, Rawal D, Xia A, Moshin M. 2023. Contemporary LGBTQ+ content that should be included in allied health professions education. Discov Educ. 2(1):6. doi:10.1007/s44217-023-00029-y.
Korpaisarn S, Safer JD. 2018. Gaps in transgender medical education among healthcare providers: a major barrier to care for transgender persons. Rev Endocr Metab Disord. 19(3):271–275. doi:10.1007/s11154-018-9452-5.
Krych AJ, March CN, Bryan RE, Peake BJ, Pawlina W, Carmichael SW. 2005. Reciprocal peer teaching: students teaching students in the gross anatomy laboratory. Clin Anat. 18(4):296–301. doi:10.1002/ca.20090.
Lee C. 2019. Fifteen years on: the legacy of section 28 for LGBT + teachers in English schools. Sex Education. 19(6):675–690. doi:10.1080/14681811.2019.1585800.
LGBT Foundation. 2021. Monitoring Sexual Orientation and Trans Status. LGBT Foundation - Monitoring [Internet]. [accessed 2023 Aug 27]. https://lgbt.foundation/monitoring.
Lien K, Vujcic B, Ng V. 2021. Attitudes, behaviour, and comfort of Canadian emergency medicine residents and physicians in caring for 2SLGBTQI + patients. CJEM. 23(5):617–625. doi:10.1007/s43678-021-00160-5.
Lim JY, Ong SYK, Ng CYH, Chan KLE, Wu SYEA, So WZ, Tey GJC, Lam YX, Gao NLX, Lim YX, et al. 2023. A systematic scoping review of reflective writing in medical education. BMC Med Educ. 23(1):12. doi:10.1186/s12909-022-03924-4.
Linley JL, Nguyen D, Brazelton GB, Becker B, Renn K, Woodford M. 2016. Faculty as Sources of Support for LGBTQ College Students. College Teaching. 64(2):55–63. doi:10.1080/87567555.2015.1078275.
MacKinnon KR. 2018. Pathologising trans people: EXPLORING the roles of patients and medical personnel. TIA. 11(4):74–96. doi:10.3798/tia.1937-0237.1826.
Madrigal-Borloz V. 2023. United Nations Independent Expert on protection against violence and discrimination based on sexual orientation and gender identity: Country visit to the United Kingdom of Great Britain and Northern Ireland (24 April – 5 May 2023) [Internet]. London. https://www.ohchr.org/sites/default/files/documents/issues/sexualorientation/statements/eom-statement-UK-IE-SOGI-2023-05-10.pdf.
McCann E, Brown M. 2018. The inclusion of LGBT + health issues within undergraduate healthcare education and professional training programmes: a systematic review. Nurse Educ Today. 64:204–214. doi:10.1016/j.nedt.2018.02.028.
Meads C, Carmona C, Kelly MP. 2012. Lesbian, gay and bisexual people's health in the UK: a theoretical critique and systematic review. Diversity Equality Health Care. 9:19–32.
Morris M, Cooper RL, Ramesh A, Tabatabai M, Arcury TA, Shinn M, Im W, Juarez P, Matthews-Juarez P. 2019. Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. BMC Med Educ. 19(1):325. doi:10.1186/s12909-019-1727-3.
NIHR. 2022. Randomised controlled trial participants: Diversity Data Report [Internet]. [place unknown]: National Institute for Health and Care Research. https://www.nihr.ac.uk/documents/randomised-controlled-trial-participants-diversity-data-report/31969.
Obedin-Maliver J, Goldsmith ES, Stewart L, White W, Tran E, Brenman S, Wells M, Fetterman DM, Garcia G, Lunn MR. 2011. Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. JAMA. 306(9):971–977. doi:10.1001/jama.2011.1255.
Office for National Statistics. 2023. Gender identity, England and Wales: Census 2021 [Internet]. [accessed 2023 Sep 5]. https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/genderidentity/bulletins/genderidentityenglandandwales/census2021.

Parameshwaran V, Cockbain BC, Hillyard M, Price JR. 2017. Is the lack of specific lesbian, gay, bisexual, transgender and queer/questioning (LGBTQ) health care education in medical school a cause for concern? Evidence from a survey of knowledge and practice among UK Medical Students. J Homosex. 64(3):367–381. doi:10.1080/00918369.2016.1190218.

Pattinson EM, McDermott E, Eastham R, Hughes E, Johnson K, Davis S, Pryjmachuk S, Jenzen O, Mateus C. 2021. Tackling LGBTQ+ youth mental health inequality: mapping mental health support across the UK. The British Student Doctor. 5(3):20–29. doi:10.18573/bsdj.289.

Pereira D, Flores MA, Niklasson L. 2016. Assessment revisited: a review of research in Assessment and Evaluation in Higher Education. Assess Eval High Educ. 41(7):1008–1032. doi:10.1080/02602938.2015.1055233.

Perrin EC, Kulkin H. 1996. Pediatric care for children whose parents are gay or lesbian. Pediatrics. 97(5):629–635. doi:10.1542/peds.97.5.629.

Reisner SL, Conron KJ, Tardiff LA, Jarvi S, Gordon AR, Austin SB. 2014. Monitoring the health of transgender and other gender minority populations: validity of natal sex and gender identity survey items in a U.S. national cohort of young adults. BMC Public Health [Internet]. 14[accessed 2023 Sep 5](1):14. doi:10.1186/1471-2458-14-1224.

Restar AJ, Santamaria EK, Adia A, Nazareno J, Chan R, Lurie M, Sandfort T, Hernandez L, Cu-Uvin S, Operario D. 2019. Gender affirmative HIV care framework: decisions on feminizing hormone therapy (FHT) and antiretroviral therapy (ART) among transgender women. PLOS One. 14(10):e0224133. doi:10.1371/journal.pone.0224133.

Röndahl G, Innala S, Carlsson M. 2006. Heterosexual assumptions in verbal and non-verbal communication in nursing. J Adv Nurs. 56(4):373–381. doi:10.1111/j.1365-2648.2006.04018.x.

Russell ST, Pollitt AM, Li G, Grossman AH. 2018. Chosen name use is linked to reduced depressive symptoms, suicidal ideation and behavior among transgender youth. J Adolesc Health. 63(4):503–505. doi:10.1016/j.jadohealth.2018.02.003.

Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. 1996. Evidence based medicine: what it is and what it isn't. BMJ. 312(7023):71–72. doi:10.1136/bmj.312.7023.71.

Seelman KL, Vasi A, Kattari SK, Alvarez-Hernandez LR. 2021. Predictors of healthcare mistreatment among transgender and gender diverse individuals: Are there different patterns by patient race and ethnicity? Soc Work Health Care. 60(5):411–429. doi:10.1080/00981389.2021.1909201.

Stanford Medicine MR. 2021. Teaching LGBTQ+ Health. Stanford Medicine Educational Technology [Internet]. [accessed 2023 Aug 27]. https://mededucation.stanford.edu/courses/teaching-lgbtq-health/.

Statistics Canada. 2022. Sex at birth and gender - 2021 promotional material [Internet]. [accessed 2023 Sep 5]. https://www.statcan.gc.ca/en/census/census-engagement/community-supporter/sex-birth-gender.

Stroumsa D, Shires DA, Richardson CR, Jaffee KD, Woodford MR. 2019. Transphobia rather than education predicts provider knowledge of transgender health care. Med Educ. 53(4):398–407. doi:10.1111/medu.13796.

Struble CB, Lindley LL, Montgomery K, Hardin J, Burcin M. 2010. Overweight and obesity in lesbian and bisexual college women. J Am Coll Health. 59(1):51–56. doi:10.1080/07448481.2010.483703.

Sweileh W. 2022. Bibliometric analysis of peer-reviewed literature on mental health and well-being of LGBT adolescents. MHSI. 26(4):374–388. doi:10.1108/MHSI-02-2022-0013.

Tollemache N, Shrewsbury D, Llewellyn C. 2021. Que(e) rying undergraduate medical curricula: a cross-sectional online survey of lesbian, gay, bisexual, transgender, and queer content inclusion in UK undergraduate medical education. BMC Med Educ. 21(1):100. doi:10.1186/s12909-021-02532-y.

Torres CG, Renfrew M, Kenst K, Tan-McGrory A, Betancourt JR, López L. 2015. Improving transgender health by building safe clinical environments that promote existing resilience: results from a qualitative analysis of providers. BMC Pediatr. 15(1):187. doi:10.1186/s12887-015-0505-6.

Truss E, Patel P, Paisley I, Doyle-Price J, Johnson C, Fletcher N, Cates M, Bradley B, Hunt T, Millar R, et al. 2023. Health and Equality Acts (Amendment) Bill [Internet]. [place unknown]. https://bills.parliament.uk/bills/3560.

Utamsingh PD, Kenya S, Lebron CN, Carrasquillo O. 2017. Beyond sensitivity. lgbt healthcare training in U.S. Medical schools: a review of the literature. Am J Sex Educ. 12(2):148–169. doi:10.1080/15546128.2017.1298070.

Wahlen R, Bize R, Wang J, Merglen A, Ambresin A-E. 2020. Medical students' knowledge of and attitudes towards LGBT people and their health care needs: impact of a lecture on LGBT health. PLOS One. 15(7):e0234743. doi:10.1371/journal.pone.0234743.