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# Staff competence in caring for LGBTQ+ patients in the paediatric emergency department

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## ABSTRACT

**Objective** This study aimed to assess the competency of paediatric emergency department (PED) multidisciplinary staff in caring for LGBTQ+ (lesbian, gay, bisexual, transgender, queer/questioning, + inclusive of all identities) adolescents.

**Design** This was an observational study within which participants were required to complete the LGBT-Development of Clinical Skills Scale self-assessment tool of clinical competence.

**Setting** It was conducted across three PEDs and one urgent care centre pertaining to the Children's Health Ireland healthcare group.

**Participants** Doctors, nurses and healthcare workers were eligible to participate. Exclusion criteria: non-front facing staff; prior completion of an eLearning module intended to serve as a future educational intervention.

**Main outcome measures** Participants were assessed on: (1) attitudinal awareness towards LGBTQ+ individuals; (2) knowledge of LGBTQ+ health issues and (3) clinical preparedness in caring for LGBTQ+ patients. Each domain is scored out of a maximum of 7 points.

**Results** 71 eligible participants completed the study. 40/71 (56%) were doctors, and 31/71 (44%) were nurses. The mean score for attitudinal awareness was 6.54/7 (SD 0.59), indicating overall positive attitudes. The mean score for knowledge was lower (5.34/7, SD 1.03) and lowest for clinical preparedness (3.39/7, SD 0.94). Participants were less confident in caring for transgender than LGB patients and scored very low when asked if they had received adequate training in caring for transgender young people (2.11/7).

**Conclusions** This study demonstrates positive attitudes towards LGBTQ+ patients among PED staff. However, there was a gap in knowledge and clinical preparedness. Increased training in caring for LGBTQ+ young people is necessary.

## INTRODUCTION

In Ireland, a 2019 study estimated that 13% of young people under the age of 23 identify as LGBTQ+ (lesbian, gay, bisexual, transgender, queer/questioning, with the + signifying we are inclusive of all sexual and gender identities not included in the LGBTQ acronym).<sup>1</sup> The most common age of first identifying as LGBTQ+ in Ireland is 12 years old, with the average age of first disclosing one's LGBTQ+ identity being 14.<sup>2</sup> Stonewall's Unhealthy Attitudes, published in 2015, highlighted inequalities in healthcare for LGBTQ+ patients in the UK, with one in seven avoiding treatment for fear of discrimination.<sup>3</sup> These statistics are

## WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ LGBTQ+ (lesbian, gay, bisexual, transgender, queer/questioning, + inclusive of all identities) young people are a vulnerable group that are at risk of healthcare inequality.
- ⇒ Healthcare professionals from various backgrounds have reported a lack of formal training in caring for LGBTQ+ individuals.

## WHAT THIS STUDY ADDS

- ⇒ This is the first time competence in caring for LGBTQ+ patients has been assessed in Paediatric Emergency Medicine practitioners.
- ⇒ Participants held positive attitudes towards LGBTQ+ young people but were less confident in their knowledge of specific health issues. They self-reported low levels of clinical preparedness.

## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE, OR POLICY

- ⇒ While positive attitudes among staff are extremely encouraging, a lack of knowledge or skills can have a negative impact on the effectiveness of a healthcare encounter.
- ⇒ Formal training is required to achieve clinical competence. This study is intended to serve as a baseline for an online educational intervention.

mirrored in Ireland; three-quarters of Irish LGBT+ people feel healthcare providers lack knowledge and sensitivity to LGBTQ+ issues, with almost 50% seeking LGBT+ friendly clinicians because of bad experiences.<sup>4</sup> Specific barriers to accessing health services include: fear, healthcare providers' lack of understanding of LGBTQ+ issues and medical professionals' lack of appropriate language.<sup>4</sup> LGBTQ+ health issues are inconsistently included in healthcare curricula and as a result, many healthcare professionals lack formal training in caring for LGBTQ+ individuals.<sup>5-7</sup> A recent European study, which included responses from both the UK and Ireland, demonstrated that both healthcare providers and patients were concerned by this educational gap.<sup>8</sup> Deficits in knowledge and clinical preparedness have been demonstrated in both emergency medicine and paediatric trainees in the USA,<sup>9-11</sup> while this is comparatively less well studied in our context.<sup>12</sup>

LGBTQ+ young people are an extremely vulnerable group. The 2016 LGBT Ireland Report revealed that more than half of Irish LGBTQ+ young people



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self-harm; two in three seriously consider suicide; and one in three have attempted suicide with the average age of first suicide attempt at just 15 years of age.<sup>2</sup> Minority stress arising from marginalisation and lack of societal acceptance have significant impacts on mental health among LGBTQ+ young people.<sup>2 13</sup> Paediatric emergency department (PED) staff may be the first healthcare providers that LGBTQ+ young people have contact with in times of psychological distress. However, our literature search, conducted in April 2022, did not reveal any published comprehensive assessment of clinical competence in PED staff in caring for LGBTQ+ young people. The aim of this study was to assess the clinical competence of previously untrained PED multidisciplinary staff in caring for LGBTQ+ individuals.

## METHODS

Clinical staff (doctors, nurses and healthcare assistants) working at three PEDs and one paediatric urgent care centre (collectively known as the Department of Paediatric Emergency Medicine (PEM)) within the solitary regional paediatric hospital group (Children's Health Ireland) were invited to participate, between 5 May 2021 and 27 September 2021. The study was originally planned to be open for 1 month, but the Irish healthcare service suffered a major ransomware cyberattack on 14 May 2021, causing major disruption to health services and computer systems.<sup>14</sup> The study was therefore extended until computer systems were back online.

Participants were asked to provide information regarding demographics and level of clinical training. They were then invited to complete the LGBT-Development of Clinical Skills Scale (LGBT-DOCSS) self-assessment tool. The LGBT-DOCSS is a self-assessment tool of clinical competence in working with LGBTQ+ patients across three domains: attitudes, knowledge and clinical preparedness. It is well-validated: demonstrating content, concurrent, convergent, discriminant and construct validity. It has strong internal reliability (overall score  $\alpha=0.86$ , attitudinal awareness  $\alpha=0.8$ , knowledge  $\alpha=0.83$  and clinical preparedness  $\alpha=0.88$ ).<sup>15</sup> It has been widely used to assess the clinical competence of healthcare professionals who work with LGBTQ+ individuals including within paediatric healthcare.<sup>16</sup> It consists of 18 questions using a Likert scale (1=strongly disagree to 7=strongly agree). Eight of the questions are reverse-scored. Composite average scores for each of the domains are calculated, with a maximum score in each domain of 7. Higher scores indicate greater levels of competence. Some questions were modified to include reference to children and young people.

Clinical competence is defined across the three listed domains for the following reasons. Attitudinal awareness of the personal and societal prejudicial attitudes and biases faced by LGBTQ+ individuals allows caregivers to be perceptive to the negative impact this can play on physical and emotional health and healthcare encounters. Knowledge of specific LGBTQ+ health issues allows care to be individually tailored. The development of clinical skills with a particular focus on respectful use of pronouns and appropriate history taking allows LGBTQ+ patients to be treated effectively. Numerous healthcare organisations have developed clinical competency guidelines for working with LGBTQ+ patients focusing on these core domains.<sup>15 17 18</sup>

The study was administered via the online platform Qualtrics, an electronic data capture platform that is fully compliant with Good Clinical Practice, 21 CFR Part 11, GDPR, 20 ISO 27001 and ISO 9001.<sup>19</sup> Participants were invited via email. Branching logic was incorporated to ensure full consent was

obtained before participants answered further questions. Data were anonymised using unique identifiers.

Participants were eligible to participate if they were working as a doctor, nurse or healthcare assistant within the Department of PEM at Children's Health Ireland hospital group. To maintain anonymity due to small numbers of healthcare assistants employed at the time, nurses and healthcare assistants were classed as one group. Non-front facing staff were excluded as the LGBT-DOCSS measures clinical competence. Participants who did not fully complete both the LGBT-DOCSS and demographic questions were excluded. The data from this study served as a baseline for a future educational intervention which included an existing education resource; the Irish Health Service Executive (HSE) eLearning Module 'LGBT+ Awareness and Inclusion Training: The Basics'.<sup>20</sup> Therefore, participants were excluded if they had previously completed this eLearning module. This study therefore aimed to determine the clinical competence of untrained paediatric staff in the Department of PEM.

Descriptive statistics were analysed using Microsoft Excel. Further analysis was conducted through GraphPad.<sup>21</sup> Informed consent was required for all participants.

## RESULTS

A total of 253 staff members were invited to participate via email. There were 200 initial respondents (79%). Sixty out of 200 (30.5%) met the initial exclusion criteria: of whom, 59/200 (29.5%) had previously completed the HSE eLearning module. Sixty-nine out of 140 (49%) of eligible respondents failed to initiate the study successfully, of whom, 62 did not proceed past a series of questions ensuring adequate understanding of the study. No participants declined to consent to the study. A further seven eligible participants failed to complete the combination of demographic questions and LGBT-DOCSS. Seventy-one out of 140 (51%) of eligible participants completed both questionnaire and self-assessment tool and were included for analysis. Consort diagram is detailed in [figure 1](#).

Baseline demographic information is represented in . Forty out of 71 (56.3%) respondents were doctors, while 31/71 (43.7%) were nurses or healthcare assistants. The respondents represented an experienced group of healthcare professionals with a median of 6 years of clinical experience (IQR 5–11 years). Six out of 71 (8.5%) participants had received prior training in looking after LGBTQ+ patients, while only 1/71 (1.4%) had received prior training specifically in looking after LGBTQ+ children and young people [table 1](#).

## LGBT-DOCSS scores

The breakdown of scores across individual questions and domains is demonstrated in [table 2](#).

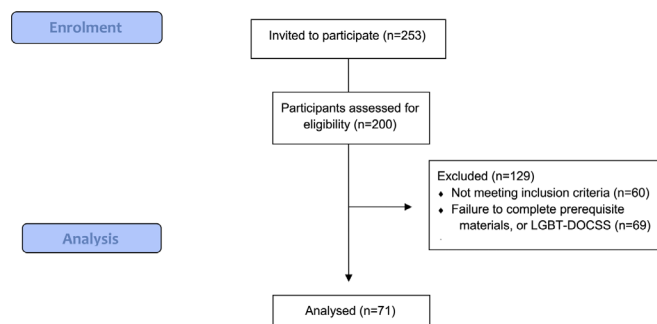


Figure 1 CONSORT flow diagram.

**Table 1** Baseline characteristics

Total	n=71
Doctors	n=40 (56.3%)
Nurses/healthcare assistants	n=31 (43.7%)
Professional experience	
Median years of clinical experience	6 years (IQR 5–11)
Any prior training in looking after LGBT+ patients	n=6 (8.5%)
Any prior training in specifically looking after LGBT+ children and young people	n=1 (1.4%)
Do you or someone you are close to (friend/family member/partner) identify as gay, lesbian or bisexual?	Yes, n=61 (85.9%)
Do you or someone you are close to (friend/family member/partner) identify as transgender or gender non-conforming?	Yes, n=7 (9.9%)
LGBTQ+, lesbian, gay, bisexual, transgender, queer/questioning, + inclusive of all identities.	

Mean total LGBT-DOCSS score across all domains was 5.05/7 (SD 0.54). Respondents' mean composite score for attitudinal awareness was 6.54 out of a maximum possible score of 7 (SD 0.59). The mean composite score for basic knowledge of LGBTQ+ health and mental health disparities was 5.34/7 (SD 1.03). The mean composite score for clinical preparedness was 3.39/7 (SD 0.94). Specific questions in this domain demonstrated higher scores in questions regarding caring for lesbian, gay and bisexual patients versus transgender or gender non-conforming young people. For example, staff-rated competence in discussing sexual orientation yielded a mean score of 4.2/7, compared with 3.8/7 for discussing gender identity. Respondents scored lowest when asked if they had received adequate training to care for transgender young people (2.21/7).

### Internal reliability

Internal reliability of the LGBT-DOCSS scale used in this PED context was calculated using Cronbach's alpha. Results indicated strong internal reliability in the attitudes domain ( $\alpha=0.81$ ), and acceptable internal reliability for total score ( $\alpha=0.75$ ), knowledge ( $\alpha=0.79$ ) and clinical preparedness ( $\alpha=0.75$ ).

### DISCUSSION

This multisite study demonstrates that in an untrained group of PEM multidisciplinary staff, attitudes towards LGBTQ+ young people were very positive. Contextually, Ireland has seen a significant societal shift in recent years, becoming the first country to legalise gay marriage by national referendum in 2015<sup>22</sup> and electing its first openly gay Taoiseach (prime minister) in 2017.<sup>23</sup> There is a broad acceptance for LGBTQ+ identities in Ireland, but the evidence would suggest that on a societal level, there is more support for groups that are seen as more normative, such as gay men and lesbian women, than there is towards bisexual, transgender or gender non-conforming individuals.<sup>24</sup> In our study, scores for attitudinal awareness towards transgender young people were similar to those regarding lesbian, gay and bisexual patients.

Staff were less confident in their basic knowledge of LGBTQ+ health disparities including awareness of the specific barriers to access faced by LGBTQ+ youth. This has important implications for their ability to signpost LGBTQ+ patients to appropriate resources and make appropriate onward referrals. The domain with the lowest mean composite score was clinical preparedness. There was a consistent trend for respondents to provide a lower score regarding their preparedness for caring for transgender young people when compared with LGB individuals.

**Table 2** LGBT-Development of Clinical Skills Scale (LGBT-DOCSS) self-assessment scores

	Total score (max 7)
<b>LGBT-DOCSS Mean Score</b>	<b>Mean Score: 5.05 (SD 0.54)</b>
<b>Attitudinal Awareness</b>	<b>Mean Score: 6.54 (SD 0.59)</b>
I think being transgender is a mental disorder.*	6.33
A same-sex relationship between two men or two women is not as strong and committed as one between a man and a woman.*	6.62
LGB individuals must be discreet about their sexual orientation around children.*	6.17
When it comes to transgender individuals, I believe they are morally deviant.*	6.63
The lifestyle of an LGB individual is unnatural or immoral.*	6.73
People who dress opposite to their biological sex have a perversion.*	6.66
I would be morally uncomfortable caring for an LGB child or young person.*	6.65
<b>Knowledge</b>	<b>Mean Score: 5.34 (SD 1.03)</b>
I am aware of institutional barriers that may inhibit transgender children and young people from using healthcare services.	5.24
I am aware of institutional barriers that may inhibit LGB children and young people from using healthcare services.	5.00
I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared with heterosexual individuals.	5.61
I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental health problems compared with cisgendered (people whose sense of gender is the same as that given to them at birth) individuals.	5.54
<b>Clinical Preparedness</b>	<b>Mean Score: 3.39 (SD 0.94)</b>
I would feel unprepared talking with an LGB child or young person about issues related to their sexual orientation or gender identity.*	3.77
I have received adequate training to care for transgender children and young people.	2.11
I have received adequate training to care for LGB children and young people.	2.32
I have experience caring for LGB children and young people.	4.04
I feel competent to have a conversation with an LGB young person presenting to the emergency department about their sexual orientation as part of their clinical assessment.	4.23
I feel competent to have a conversation with a transgender child or young person presenting to the emergency department about their gender identity as part of their clinical assessment.	3.80
I have experience caring for transgender children and young people.	3.46
Scores calibrated using a 7-point Likert scale where a score of 1=strongly disagree and score of 7=strongly agree: higher scores indicate increased positive attitudes knowledge or clinical preparedness.	
*Questions marked with an asterisk are scored inversely where a score of 1=strongly agree and score of 7=strongly disagree.	
LGBTQ+, lesbian, gay, bisexual, transgender, queer/questioning, + inclusive of all identities.	

It is important to highlight that attitudinal awareness is only one facet of clinical competency. Positive attitudes do not necessarily translate to patient perceptions of competent healthcare professionals for several reasons. Deficits in knowledge and skills result in the onus falling on LGBTQ+ young people to act as educators during healthcare encounters.<sup>25</sup> Furthermore, without adequate knowledge practitioners may hold implicit biases despite self-reported positive attitudes.<sup>15, 26</sup> For example, gender non-conforming young people have been reported to feel disrespected and frustrated during healthcare encounters and pressurised to conform to binary gender norms.<sup>27</sup>

Where the LGBT-DOCSS has been applied to various groups of healthcare professionals and healthcare students, similar trends have emerged with high scores for attitudes, moderate levels of knowledge and low levels of clinical preparedness.<sup>15 16 28–30</sup> Numerous studies have also highlighted that confidence in working with transgender young people is a particular area of shortcoming.<sup>9 16</sup> Paediatric nurses and physicians self-report a lack of knowledge and skills in discussing gender-related topics with patients.<sup>31</sup> Even healthcare professionals who have frequent contact with transgender youth feel more education is needed. Paediatric nurse practitioners in the USA report low levels of formal education in caring for transgender youths, despite frequently encountering them in practice.<sup>32</sup> In Ireland, staff working within Child and Adolescent Mental Health Services report limited knowledge or experience in supporting transgender youth.<sup>33</sup> There is an identified need for postgraduate educational interventions across healthcare disciplines.<sup>34 35</sup>

### How this study is unique

To our knowledge, this is the first time the LGBT-DOCSS self-assessment tool has been applied to either an emergency department or PED setting. This study has additionally described the educational need in a cohort of clinicians lacking formal LGBTQ+ training. Encouragingly, 29.5% of staff had already voluntarily completed the Health Service Executive eLearning module suggesting a desire of staff working within the Department of PEM to seek training in caring for LGBTQ+ patients.

### Limitations and challenges

The participation rate of the study out of those invited for initial enrolment was 79% (n=200/253). However, the completion rate of eligible participants was 51% (n=71/140). In May 2021, shortly after the study was launched, the Irish Health Service Executive was subjected to a major ransomware cyberattack, causing extensive disruption to the technological infrastructure nationally.<sup>14</sup> This had a significant impact on participation and completion rates from participants, whom were initially contacted via work email address to which they no longer had access.

Ethical stipulations were placed on demographic data collected due to concerns about the ability to identify participants and relatively small number of staff at each site. Information on respondents' sexual or gender orientation was not collected precluding analysis on the impact on responses. Due to the small number of healthcare assistants working across sites, these staff members were placed in the same category as nursing staff to preserve anonymity. This precludes comparison between the two groups (doctors and nursing staff/healthcare assistants) due to the differing levels of background education and training between nurses and healthcare assistants.

The LGBT-DOCSS is a self-assessment tool of competence. It does not include input from colleagues and importantly patients. As such, the predictive validity of the tool has not been assessed. High scores may not correlate with patients' perception of clinical competency. Healthcare providers may hold unconscious implicit biases that are not accounted for by the LGBT-DOCSS.<sup>15</sup>

### Implications

This study highlights a gap in knowledge and skills in PEM staff in caring for LGBTQ+ young people. Adolescence is a key phase in the exploration of identity.<sup>36</sup> LGBTQ+ youth face significant mental and physical health disparities,<sup>2</sup> compounded by societal barriers to healthcare access arising from a sense that they must

conceal their identity.<sup>25</sup> PEM staff may be the first healthcare professionals that these young people encounter. While attitudes towards LGBTQ+ young people may be positive, lack of cultural competence and humility among healthcare professionals may leave LGBTQ+ young people frustrated and fearful of encountering negative reactions.<sup>25 27</sup>

How much education or patient hours are required to achieve competence in caring for LGBTQ+ individuals remains unclear.<sup>19 30 31</sup> This study has demonstrated the areas which require the most intervention; basic knowledge, clinical preparedness and caring for transgender and gender non-conforming young people. It is intended to serve as a baseline for an online educational intervention. The authors believe that educational interventions in this area need to be coproduced with members of the LGBTQ+ community to be comprehensive and responsive. As a department, we wish to educate staff and engage with patients in a meaningful way through formal patient and public involvement in research initiatives.

Note: The authors have chosen to use the acronym LGBTQ+; 'lesbian, gay, bisexual, transgender; queer/questioning with + signifying we are inclusive of all sexual and gender identities not included in the LGBTQ acronym'. We have used this acronym to refer broadly to all sexual and gender diverse individuals. We acknowledge that each of these letters (and many more) represents a distinct patient population with individualised healthcare needs. (Adapted from Roth *et al.*<sup>9</sup>)

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**Contributors** DH, MJB and AH conceptualised this study and wrote the study design protocol. DH, MJB, SD and PF promoted the study during the recruitment phase and recruited participants from the Paediatric Emergency Departments and Urgent Care Centre. STK analysed the results of the study and drafted this manuscript. All authors reviewed and advised on the content of the manuscript. DH is guarantor of the overall content of the manuscript.

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**Competing interests** None declared.

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**Data availability statement** All data relevant to the study are included in the article or uploaded as supplementary information.

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## REFERENCES

- Dooley B. My world survey 2: the national study of youth mental health in Ireland. Dublin UCD School of Psychology and Jigsaw; 2019.
- Higgins A, Doyle L, Downes C, et al. The Igbtireland report: national study of the mental health and wellbeing of lesbian, gay, bisexual, transgender and intersex people in Ireland. 2016. Available: <http://hse.ie/eng/services/list/4/mental-health-services/connecting-for-life/publications/lgbt-ireland-pdf.pdf>
- Somerville C. Unhealthy attitudes: the treatment of LGBT people within health and social care services. United Kingdom Stonewall; 2015.
- Mayock P, Bryan A, Carr N, et al. Supporting LGBT lives: A study of the mental health and well-being of lesbian, gay, bisexual and transgender people 2009; 2009.
- McCann E, Brown M. The inclusion of LGBT+ health issues within undergraduate healthcare education and professional training programmes: a systematic review. *Nurse Educ Today* 2018;64:S0260-6917(18)30100-X:204–14..
- Obedin-Maliver J, Goldsmith ES, Stewart L, et al. Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *JAMA* 2011;306:971–7.
- Wahlen R, Bize R, Wang J, et al. Medical students' knowledge of and attitudes towards LGBT people and their health care needs: impact of a Lecture on LGBT health. *PLoS One* 2020;15:e0234743.
- McGlynn N, Browne K, Sherriff N, et al. Healthcare professionals' assumptions as barriers to LGBTI healthcare. *Cult Health Sex* 2020;22:954–70.
- Roth LT, Garcia M, Soren K, et al. An unmet need for paediatric LGBTQ training. *Clin Teach* 2021;18:547–51.
- Moll J, Krieger P, Heron SL, et al. Attitudes, behavior, and comfort of emergency medicine residents in caring for LGBT patients: what do we know? *AEM Educ Train* 2019;3:129–35.
- Bristol S, Kostelec T, MacDonald R. Improving emergency health care workers' knowledge, competency, and attitudes toward lesbian, gay, bisexual, and transgender patients through interdisciplinary cultural competency training. *J Emerg Nurs* 2018;44:S0099-1767(17)30375-6:632–9..
- Donisi V, Amaddeo F, Zakrzewska K, et al. Training healthcare professionals in LGBTI cultural competencies: exploratory findings from the health4lgbti pilot project. *Patient Educ Couns* 2020;103:S0738-3991(19)30551-8:978–87..
- de Vries JMA, Downes C, Sharek D, et al. An exploration of happiness within the Irish LGBTI community. *Journal of Gay & Lesbian Mental Health* 2020;24:40–76.
- Health Service Executive. Conti cyber attack on the HSE: independent post incident review - executive summary and learnings for other organisations. Dublin HSE; 2021.
- Bidell MP. The lesbian, gay, bisexual, and transgender development of clinical skills scale (LGBT-DOCSS): establishing a new interdisciplinary self-assessment for health providers. *J Homosex* 2017;64:1432–60.
- Boskey ER, Taghinia AH, Ganor O. Self-Assessment of clinical competence with LGBT patients at a pediatric hospital. *Soc Work Health Care* 2019;58:547–56.
- Royal College of General Practitioner Northern Ireland. Guidelines for the care of lesbian, gay and bisexual patients in primary care. Belfast, Northern Ireland HSC; 2015.
- Royal College of General Practitioner Northern Ireland. Guidelines for the care of trans patients in primary care. Belfast, Northern Ireland HSC; 2015.
- Qualtrics. Utah, USA,
- Health Service Executive. LGBT+ awareness and inclusion: the basics. n.d. Available: [https://www.hseland.ie/ekp/servlet/ekp?CID=EKP000001695&LANGUAGE\\_TAG=0&TX=FORMAT1&POPUP=Y&PX=N&USERID=&SK=](https://www.hseland.ie/ekp/servlet/ekp?CID=EKP000001695&LANGUAGE_TAG=0&TX=FORMAT1&POPUP=Y&PX=N&USERID=&SK=)
- Dotmatics. GraphPad. San Diego, California,
- O'Caolli E, Hilliard M. Ireland becomes first country to approve same-sex marriage by popular vote. *The Irish Times*; 2015.
- McDonald H. Ireland's first gay prime minister leo varadkar formally elected. *The Guardian*; 2017. Available: <https://www.theguardian.com/world/2017/jun/14/leo-varadkar-formally-elected-as-prime-minister-of-ireland>
- Noone C, Hoey J, Silva Costa E, et al. Across the spectrum-attitudes towards minoritised genders and sexualities in Ireland attitudes towards minoritised genders and sexualities in Ireland; 2022.
- Higgins A, Downes C, Murphy R, et al. LGBT + young people's perceptions of barriers to accessing mental health services in Ireland. *J Nurs Manag* 2021;29:58–67.
- Sabin JA, Riskind RG, Nosek BA. Health care providers' implicit and explicit attitudes toward lesbian women and gay men. *Am J Public Health* 2015;105:1831–41.
- Lykens JE, LeBlanc AJ, Bocking WO. Healthcare experiences among young adults who identify as genderqueer or nonbinary. *LGBT Health* 2018;5:191–6.
- Nowaskie DZ, Patel AU. How much is needed? patient exposure and curricular education on medical students' LGBT cultural competency. *BMC Med Educ* 2020;20:490.
- Nowaskie DZ, Patel AU, Fang RC. A multicenter, multidisciplinary evaluation of 1701 healthcare professional students' LGBT cultural competency: comparisons between dental, medical, occupational therapy, pharmacy, physical therapy, physician assistant, and social work students. *PLoS One* 2020;15:e0237670.
- Nowaskie D. A national survey of U.S. psychiatry residents' LGBT cultural competency: the importance of LGBT patient exposure and formal education. *Journal of Gay & Lesbian Mental Health* 2020;24:375–91.
- Rider GN, McMorris BJ, Gower AL, et al. Perspectives from nurses and physicians on training needs and comfort working with transgender and gender-diverse youth. *J Pediatr Health Care* 2019;33:379–85.
- Collins CA. Pediatric nurse practitioners' attitudes/beliefs and knowledge/perceived competence in caring for transgender and gender-nonconforming youth. *J Spec Pediatr Nurs* 2021;26:e12321.
- Hodgins S, Byrne T, Spies M, et al. Knowledge and confidence of clinicians in Irish CAMHS when working with transgender youth; and the factors clinicians report will assist them in this work. *Ir J Psychol Med* 2020;2020:1–10.
- Greene MZ, France K, Kreider EF, et al. Comparing medical, dental, and nursing students' preparedness to address lesbian, gay, bisexual, transgender, and queer health. *PLoS One* 2018;13:e0204104.
- Zelin NS, Encandela J, Van Deusen T, et al. Pediatric residents' beliefs and behaviors about health care for sexual and gender minority youth. *Clin Pediatr (Phila)* 2019;58:1415–22.
- Brennan AMW, Barnsteiner J, Siantz ML de L, et al. Lesbian, gay, bisexual, transgendered, or intersexed content for nursing curricula. *J Prof Nurs* 2012;28:96–104.