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# “I don't know much about providing pharmaceutical care to people who are transgender”: A qualitative study of experiences and attitudes of pharmacists

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## ABSTRACT

**Background:** Globally, with the increased visibility, the number of transgender people accessing healthcare services has risen in the last decade. Although pharmacists are required to provide equitable and respectful care to all patients, their experiences interacting with trans and gender-diverse (TGD) people and attitudes towards the provision of care are largely unknown.

**Objectives:** This study aimed to determine the experiences and attitudes of pharmacists providing care to TGD people in Queensland, Australia.

**Methods:** Within a transformative paradigm, this study used semi-structured interviews conducted in person, over the phone, or through the Zoom app. Data were transcribed and analyzed by applying the constructs of the Theoretical Framework of Accessibility (TFA).

**Results:** A total of 20 participants were interviewed. Analysis revealed all seven constructs across interview data, with affective attitude and self-efficacy being the most frequently coded constructs, followed by burden and perceived effectiveness. The least coded constructs included ethicality, intervention coherence, and opportunity cost. Pharmacists had positive attitudes towards providing care and interacting professionally with TGD people. Prime challenges in delivering care were being unaware of inclusive language and terminology, difficulty building trusted relationships, privacy and confidentiality at the pharmacy, inability to locate appropriate resources, and lack of training in TGD health. Pharmacists felt rewarded when they established rapport and created safe spaces. However, they requested communication training and education to improve their confidence in delivering care to TGD people.

**Conclusion:** Pharmacists demonstrated a clear need for further education on gender-affirming therapies and training in communication with TGD people. Including TGD care in pharmacy curricula and continuous professional development activities is seen as an essential step towards pharmacists improving health outcomes for TGD people.

## 1. Introduction

In Australia, some population groups are considered vulnerable or disadvantaged.<sup>1</sup> People in these groups experience significant inequities in accessing and receiving health care.<sup>1</sup> These groups include people who are homeless, Aboriginal and Torres Strait Islander, lesbian, gay, bisexual, transgender, intersex, queer, asexual (LGBTIQ+), culturally and linguistically diverse, prisoners, children, older adults, and people with disability or mental health conditions.<sup>1,2</sup> Pharmacists are easily accessible and trustworthy health professionals well-positioned to facilitate access to healthcare services for high-risk population groups, including people belonging to transgender and gender-diverse (TGD) communities.<sup>3</sup>

Sex, usually assigned at birth as male, female, or intersex, is determined by the biological attributes of an individual based on chromosomes, gene expressions, hormone levels, and reproductive organs.<sup>4</sup> Gender is a combination of the socially constructed characteristics, roles, behaviors,

expressions, and identities of girls, women, boys, men, and gender-diverse people.<sup>4</sup> People whose assigned sex at birth is different from their gender identity may identify as TGD.<sup>5</sup> About 0.5–4.5% of adults worldwide identify as TGD.<sup>6</sup> Exact statistics about how many people in Australia are TGD are not available. However, an Australian study of individuals in grades 10–12 found that about 2.3% of these young people were TGD.<sup>7</sup>

The vulnerability of the TGD population is highlighted in a study by Bretherton et al. where nearly three-quarters of the 928 TGD participants were diagnosed with lifetime depression and about 63% with anxiety.<sup>8</sup> Additionally, about 63% of individuals had previously self-harmed, and 43% attempted suicide.<sup>8</sup> Globally, several other studies have reported similar health disparities for TGD people, potentially affecting their ability to access healthcare.<sup>9–13</sup>

TGD individuals have reported various challenges in navigating the healthcare system, often facing discrimination, stigma, and marginalization during healthcare encounters.<sup>8,14–17</sup> Some TGD people have stated that

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they have delayed or avoided accessing necessary care due to previous negative experiences in healthcare settings, including pharmacies, instead resorting to online or street suppliers.<sup>14</sup> This situation may be explained by findings suggesting that although pharmacists provided advice and medications for a variety of health conditions, they were less confident and comfortable while delivering care for people who were TGD.<sup>18–21</sup>

Pharmacists can provide information about gender-affirming hormonal medicines, adverse effects, and the timeline for physical changes to TGD people seeking hormonal therapy for gender affirmation.<sup>3</sup> Recent data suggests that the average Australian visits pharmacies at least 18 times yearly, placing pharmacists at the forefront of access to healthcare.<sup>22</sup> Pharmacists, therefore, have a role to play in caring for TGD people, including reminding them of necessary screening tests and monitoring while using gender-affirming hormonal therapies.<sup>3</sup> Many preventative services offered through community pharmacies, such as blood pressure monitoring, blood glucose and cholesterol testing, smoking cessation advice, vaccinations, and weight management, may be beneficial for TGD people in maintaining and enhancing their health outcomes.<sup>3,23</sup>

Studies exploring TGD individuals' perceptions of pharmacy services have reported that most TGD people believed that pharmacists could play an integral role in their healthcare by providing information about medications, including gender-affirming hormonal medications, associated adverse effects, and their management, conducting medication reviews, and identifying drug interactions.<sup>19,24</sup> However, many TGD people perceived that pharmacists lack education about gender-affirming therapies and other TGD health issues and appropriate communication with TGD people.<sup>14,19,24</sup> Although pharmacists can play an essential role in TGD healthcare, there is limited research about their attitudes towards and current practices of providing care to TGD people and how they perceive their role in TGD healthcare.

No study has investigated the attitudes and experiences of Australian pharmacists delivering care for TGD people exclusively. Given the significance of pharmacy services in the healthcare of TGD people, such an investigation is essential to ensure that TGD people are treated equally and receive appropriate services through Australian pharmacies. Therefore, this study aimed to determine the experiences and attitudes of pharmacists providing care to TGD people in Queensland, Australia.

## 2. Methods

The transformative paradigm encourages social change for underrepresented groups,<sup>25</sup> thus providing an appropriate theoretical framework for this study focused on the care for people who are TGD. Designed by this transformative lens, the study was conducted based on the ethical standards of social justice and human rights.<sup>25</sup> The chosen qualitative approach is consistent with transformative research, as it enables exploration of the experiences and attitudes of pharmacists reflective of the cultural norms, attitudes, and practices in place and the required knowledge and attitudes necessary to offer respectful, appropriate, and acceptable care for a vulnerable group such as TGD people.<sup>25</sup>

For this qualitative study, a semi-structured interview guide (Supplementary Material 1) was designed based on the available literature.<sup>3,5,16,19,26</sup> The interview guide was emailed to the participants before the interview. Distributing interview questions in advance encouraged a collaborative approach, engaging the participants by allowing them to organize their ideas and recall experiences of delivering care to TGD people.<sup>27</sup> However, while it can be argued that the earlier provision of an interview guide may reduce the spontaneity of the conversation, this was not evident during data collection.

### 2.1. The research team and reflexivity

The principal researcher (SC), a Doctor of Philosophy (Ph.D.) candidate, conducted interviews with the participants. SC is a registered pharmacist practicing in a community setting and has experience working with TGD people, and SC has undertaken comprehensive training in cultural safety

and pharmacotherapy for TGD people. RR and BG, as the supervisors of this study, are experienced research academics with clinical backgrounds in nursing and pharmacy. All researchers are cisgender women and acknowledge that the reality of lived experiences as a member of the TGD community must encompass many more variables than they can imagine. They understand that accessing care from various healthcare settings may be challenging for many TGD people and have explored these challenges faced by the TGD community members accessing care from pharmacies.<sup>24</sup> In this study, they strive to understand the reality of pharmacists' experiences while providing care to TGD people.

All researchers believe that gender identity is not only binary but a spectrum, and all healthcare professionals are responsible for respecting people's gender identity and providing non-judgmental care. Researchers engaged in reflexive practices throughout the research process, ensuring that their knowledge and perspectives about transgender healthcare would not pose any expectations on data collection or influence analysis or interpretation of the data. Such practices included reflexive journaling by SC, regular research meetings during analysis where codes and themes were critiqued among the research team, and preliminary discussion of findings with other pharmacists.

Reflexive journal entry (10th May 2021).

“When participants wanted to check if they have been doing the right thing when interacting with TGD people, it was difficult to refrain from commenting and going back to data collection without influencing their answers. Most of the time, I said – let's finish this interview first and then we can discuss more about your approach.”

### 2.2. Participants and recruitment

Purposive convenience sampling was utilized to recruit pharmacists from various locations ranging from rural and remote areas to metropolitan cities to provide data about their interactions with TGD people in diverse community pharmacy locations.<sup>28</sup> The sampling was purposive in terms of the locations of the individuals invited to participate in the study and the specification of their profession (Table 1). Convenience sampling of the University Pharmacy database supplemented access to potential participants in rural and regional Queensland. Sixty potential participants were contacted by email, provided a detailed information sheet, and invited to participate. Nine participants were recruited after the first email. A reminder email was sent two weeks after the initial email, which resulted in the recruitment of additional 12 participants. Out of 21 participants, one

**Table 1**  
Demographic information of participants ( $n = 20$ ).

	N = 20
<b>Gender</b>	
Female	15
Male	5
<b>Age</b>	
21–30 years	11
31–40 years	7
41–50 years	0
51–60 years	2
<b>Location and MMM classification*</b>	
Very remote communities, MM 7	2
Large rural towns, MM 3	1
Large regional city, MM 2	12
Metropolitan area, MM 1	5
<b>No. of years working as a pharmacist</b>	
0–5	10
6–10	6
10–15	1
15–20	1
More than 20	2

\*Note: The MMM (Modified Monash Model) classification defines the geographical location by its remoteness and population size. MM 1 indicates a metropolitan area, while MM 7 indicates a very remote area.<sup>36</sup>

could not attend the interview for an unknown reason. All participants had previously encountered TGD people in their practices. According to the participant's preference, interviews were scheduled and conducted face-to-face, over the phone, or via the Zoom software program. Written informed consent was obtained prior to the interview. The face-to-face interviews were conducted either at the participants' workplace or at the cafe of their choice.

### 2.3. Data collection

Based on the interview guide, semi-structured interviews were conducted between February 2021 and June 2021. At the beginning of the interview, demographic information such as age, gender, geographical location, and years of experience working as a pharmacist was collected from the participants. After the broad questions, follow-up questions were asked to acquire a more in-depth response from the participant or to address any ambiguities.<sup>29</sup> The interviews were digitally audio-recorded, then professionally transcribed. SC checked the accuracy of transcripts by listening to the recorded interviews and matching the content with transcripts.

### 2.4. Data analysis

Data were anonymized before being thematically analyzed. The seven constructs of the TFA were utilized to generate themes deductively (Table 2).<sup>30</sup> SC completed the initial coding, and a double-coding process was conducted with a second researcher (RR) to ensure intercoder reliability.<sup>29</sup> First, transcriptions were read to understand participants' experiences providing healthcare to TGD people. In the next step, the transcriptions were read again and coded. Codes related to the same topic were combined to identify themes. The themes were reviewed with the third researcher (BG). As a result of reviewing the themes, some were merged, and others were subdivided and then the established themes were categorized into the seven overarching constructs of the TFA.<sup>30</sup> When data showed recurring themes and no new issues were arising, data saturation was considered to have been reached, and data collection was terminated.<sup>31,32</sup> Data-derived primary themes were emailed to a selection of pharmacist participants. After a discussion with other pharmacists, they confirmed that the primary themes were valid representations of their perspectives. This consultation affirmed their partnership in the research, improving the credibility of the findings.

The Standards for Reporting Qualitative Research (SPQR)<sup>33</sup> were used to report this study (Supplementary Material 2).

### 2.5. Ethics approval

The Human Research Ethics Committee of James Cook University approved this study (Approval no. H8265). Having been notified that their

participation was voluntary, their data were confidential and that they could withdraw at any stage, knowing that any unprocessed data could be removed, all participants provided written consent prior to the interview. Additionally, verbal consent was obtained at the commencement of the interview.

## 3. Results

### 3.1. Participants

Twenty pharmacists participated in this study. Although convenience sampling was used to attain an equal number of participants from all geographical locations, most pharmacists responding to the study invitation were from regional areas. Additionally, most participating pharmacists were younger with experience of fewer than ten years. This demographic of the sample is however consistent with a snapshot of the statistics from 2020 that indicates more than 42% of pharmacists practicing in Australia are under 35 years of age.<sup>34</sup> Also, more open attitudes of early career pharmacists (with less than ten years of experience) towards inclusion and diversity of LGBTIQ+ people may be another factor for participating in the study. The recent publication of the Pharmaceutical Society of Australia's 'Equality Position Statement' was driven by early career pharmacists,<sup>35</sup> indicating a higher acceptance and willingness of younger pharmacists to provide inclusive care.

### 3.2. Coding

Applying the constructs of the TFA to interview data enabled the exploration of several factors that may have influenced pharmacists' provision of care to TGD people. All seven constructs were identified in the data. Pharmacists demonstrated high acceptability of delivering care to TGD people and displayed positive attitudes towards the provision of non-judgmental and respectful person-centered care. Although most pharmacists faced challenges such as not knowing how to communicate with TGD people and inadequate knowledge of gender-affirming therapies, all pharmacists were eager to improve their understanding of TGD care.

Affective attitude and self-efficacy were the most frequently coded constructs in all twenty interviews, followed by burden and perceived effectiveness, coded in at least thirteen interviews (Table 2). The least coded constructs included ethicality, intervention coherence, and opportunity cost, coded in a minimum of four interviews. Quotations from the data representing each construct are illustrated in Table 3.

Overall, pharmacists had positive attitudes towards providing healthcare services to TGD people and treated them professionally and with respect. Most pharmacists believed their duty of care was to provide non-judgmental and respectful care to everyone, regardless of gender. However, several pharmacists found communicating with TGD people without offending them challenging. Some pharmacists were apprehensive about making assumptions about people's gender identities when their visual appearance did not match their prescription medication. Additionally, they were concerned about whether they could identify TGD people based on their physical appearance. A few pharmacists wanted to clarify whether the person, who may be TGD, knew the indication for the hormonal medicine. However, these pharmacists hesitated to address this issue to avoid appearing confrontational. Occasionally, when the names of TGD people did not match the names on their healthcare cards, pharmacists felt uncertain about initiating the conversation required for resolving the discrepancies.

Burden represented minimal effort required to participate in the provision of care for TGD individuals. Some pharmacists recognized that TGD people may have previously experienced stigma or marginalization in their lives and believed a considerable effort was required to establish trust in their relationships with TGD people.

Ethicality determined whether the delivery of care for TGD people was compatible with their cultural and religious values. Some pharmacists felt responsible for providing inclusive and safe spaces for TGD people.

**Table 2**  
Data analysis applying TFA constructs.

Construct of TFA	Definition	Code frequency
Affective attitude	How an individual feels about taking part in an intervention	39
Burden	Perceived amount of effort that is required to participate in the intervention	27
Ethicality	Extent to which the intervention has a good fit with an individual's value system	4
Intervention coherence	Extent to which the participant understands the intervention and how it works	16
Perceived effectiveness	Extent to which the intervention is perceived as likely to achieve its purpose	27
Opportunity cost	Extent to which benefits, profits, or values must be given up to engage in intervention	7
Self-efficacy	Participant's confidence that they can perform the behavior(s) required to participate in the intervention	105

**Table 3**  
Themes, constructs and illustrative quotes.

Related themes	Construct	Quotes
Non-judgmental care Apprehension	Affective attitude	<p>“Don't be judgmental, just don't be fazed. Just say, oh, I just wanted to know. You've got to be professional and friendly. You just talk to them like you talk to anyone else, they're still a person, just like anyone else.” (P4).</p> <p>“I think that as a pharmacist, we need to provide health care to anybody in the same way, so I wouldn't have any personal conflicts with providing them with this service. With transgender people - depending on what stage of transition they're at, sometimes I feel scared to approach it because I don't want to do the wrong thing and upset them.” (P14).</p> <p>“The most challenging thing is not wanting to overstep and to assume. Sometimes you can look at a person, and I'm pretty sure that they're transgender, but other times, people pass, and you can't tell. Sometimes you have to acknowledge those questions, but then you don't want to go and ask a question that people could think is offensive.” (P15).</p> <p>“The patient's name on their Medicare card was different to the script. That was a bit of an awkward conversation, and I'd like to know how to handle that sort of situation better.” (P9).</p>
Stigma Difficulty in establishing trust	Burden	<p>“It was trying for them to get the confidence that we weren't judging. We just wanted to help them on their journey as best as possible, so it was probably my assumption here and everywhere that there is a lot of stigma.” (P1).</p> <p>“Just making sure that they feel safe and that they can ask me the questions and that I will not be judging them for their decision, or I will not be insensitive to how they feel. That's the hardest part for me creating that sort of trust rapport. For transgender people, I believe that it is hard because they have had a lot of setbacks. So, they take a lot longer to trust people.” (P13).</p>
Religious beliefs Inclusive and supportive environment	Ethicality	<p>“I'm quite well known in our community to have Christian faith. So that person [a TGD person known to the pharmacist through his involvement with the Church] might see that as a stumbling block to trusting me as a healthcare professional, but the patient has trust in me and feels comfortable seeking out our assistance.” (P20).</p> <p>“...because I had one patient whom I knew before transitioning, and I'd seen a couple of times over the years. He said, oh, for the first time, I rang in for the script, and I was scared about what you were going to say. I'm like, it doesn't change who you are. I'm just happy that you got it sorted out. So, I think having somewhere where he could come where he was supported was really important.” (P19).</p>
Learning from exposure to TGD people Respectful and gender-affirming language	Intervention coherence	<p>“I have a friend who is transitioning too, and so her experiences have actually helped me to go, oh, okay, so this is something that's really important. One of the patients that I actually asked did have a preferred name; he almost started crying because he was going through stuff at his work, and he's like my work won't even use my preferred name.” (P19).</p> <p>“I know people who are transgender in my personal life, and I go to sort of rainbow family groups. So, I'm socialized to a lot of that stuff in a way that most people aren't because that's part of my community. Some people want to be called by their pronouns and some people are happy to just be referred in a general way if you're not sure. Other people don't mind, you know, getting misgendered and it's such a broad thing out there.” (P15).</p> <p>“Sometimes we openly ask - Hi, my name is [de-identified]. What name do you prefer? And that's an easy way to overcome that, but sometimes I haven't got to that stage of building a relationship yet, and you're waiting to call out the prescription. I just use their last name. I say - a prescription for such and such address using their last name. Don't even need to go there.” (P3).</p>
Pleasant pharmacy experience for TGD people Pharmacy revisited by TGD people	Perceived effectiveness	<p>“I would want them to feel comfortable in the pharmacy and that they were referred to in the correct way, like using the name on the prescription and identifying with them as they wish to be identified, and for them not to feel any judgment or prejudice... know that they have a positive experience at the pharmacy.” (P11).</p> <p>“She hadn't shaved for the day, her hair was a mess, she just started crying, and she was having a tough day. It's just like, oh sweetie, what's going on? Probably not coming across as very professional, but more one-on-one, so rather than being that stern pharmacist, they can't relate to or can talk to. That's how you create a relationship with people and make a difference” (P19).</p> <p>“They're happy with your interaction, and they're happy with the advice that you give them, or you can look at things together and work things out together, that they feel confident and comfortable about their medication and what it's going to do for them. Then knowing that they're going to come back to see you and you're going to continue on their journey with them and see how things change.” (P6).</p>
Comfort and confidence Gender-affirming therapy knowledge deficits Unfamiliar with available resources and guidelines	Self-efficacy	<p>“But I think the greatest challenge I think for anyone in health care, the pharmacist and the pharmacy assistants, is how do we approach these transgender people, what happens if I make a mistake with identifying gender, or name, and things like that.” (P20).</p> <p>“It's quite difficult to educate a person if you don't really know what you're telling them. So, I find it hard to talk to them as well maybe, because I feel like I'm not comfortable telling them anything because I don't know much.” (P12).</p> <p>“If the person wanted to have an in-depth conversation with me about what they were prescribed and why, and what else they could be prescribed, I don't think that I would be able to answer their questions because I don't really know myself what the treatment protocols are and what the doses are.” (P11).</p> <p>“There's nothing in our resources that covers that [transgender care], like your AMH [Australian Medicines Handbook] and the APF [The Australian Pharmaceutical Formulary] things. (P6).</p>
Privacy and confidentiality Engaging TGD people in educational interventions	Opportunity cost	<p>“When it's busy, and there are lots of other people in the store, and sometimes there's also people that are within earshot, and you want to make sure you're providing them with the same service, and I guess courtesy that you would provide to anyone else when you're communicating with that - you know, confidential or private issues or anything like that.” (P9).</p> <p>“We probably need some more education and firsthand experience to have actual people come and talk to us and say what they think or what they prefer, to share their individual experiences, and just even have some healthcare workers that do deal with transgender patients sort of explain from their perspective and may be explain what things we need to be aware of.” (P2).</p>

Pharmacists with christian beliefs did not consider their religious beliefs a barrier to providing care to TGD people. For a pharmacist who grew up in a religious environment, their perspective of the world enabled them to create an open and safe environment for TGD people.

The anticipated or experienced opportunity costs involved the extent to which benefits, profits, or values needed to be given up providing care for TGD people. Some pharmacists indicated that pharmacy is a busy environment, so maintaining privacy and confidentiality of conversations with patients in the community pharmacy setting may be difficult. Many recognized that it was vital to provide all patients, including TGD people, with the opportunity to talk about their concerns privately, offering professional and respectful care in a pharmacy setting. Many pharmacists identified that

community engagement was necessary to transform pharmacy practice, stating that real-life experiences of TGD people might empower them to approach TGD people more confidently. While using the expertise of TGD people about their lived experiences to educate healthcare professionals, the TGD people may incur an opportunity cost by disclosing their gender identity. Some pharmacists recommended practical experiences such as placements at pharmacies or clinics specialized in TGD care as an essential component of education about TGD health and culture.

Perceived effectiveness was coded when pharmacists were satisfied with their interaction with TGD people. For some pharmacists creating a connection and ensuring TGD people received respectful and non-judgmental care was a high priority. A few pharmacists recognized that

gender-affirming care as lifesaving. While delivering professional services, by being empathetic, they built a trusted relationship with a TGD person. One pharmacist was happy when they played an active role in improving mental health outcomes for TGD people. Pharmacists were gratified when TGD people engaged in the conversations and asked for their opinions and advice, enabling them to continue to provide care.

Intervention coherence and self-efficacy appeared to be related. While providing care to this population group, pharmacists who demonstrated the use of appropriate language while communicating with TGD people were more confident. On the other hand, pharmacists who were awkward or unsure in their interactions with TGD people were less confident. Confusion about using preferred names and pronouns, not knowing whether their actions or words might offend, and lacking knowledge about gender-affirming therapies and resources for TGD people increased the complexity of providing care. Pharmacists deemed communication training necessary for improving their confidence to communicate with TGD people. Many pharmacists recommended that all pharmacy staff should receive communication training for the pharmacy to be seen as inclusive and welcoming to all TGD people.

Intervention coherence was coded when pharmacists demonstrated an understanding of gender-affirming language or knowledge of gender-affirming therapies. Pharmacists who had some exposure to TGD people in their practice or personal lives were more knowledgeable about gender-affirming language and displayed a better understanding of the gender-affirming journeys of TGD people. Although these pharmacists possessed linguistic skills, most wanted to improve their knowledge of gender-affirming therapies. Three pharmacists noted that the electronic medication records and dispensing software usually only offered binary categories (male or female) for entering gender and did not provide options to enter preferred names. One pharmacist described “making notes in the dispensing software” about preferred names and gender as a possible solution.

The self-efficacy construct explored the confidence level of pharmacists and the factors affecting their confidence in providing care for TGD people. Using pronouns and preferred names presented some challenges for pharmacists, fearing that they would use the wrong name or the wrong pronoun because they did not know the preferences of TGD people and did not possess the necessary skills or confidence to ask. Most pharmacists did not learn about TGD healthcare during their university degree or through CPD activities, and some felt less comfortable and less confident in their interactions with TGD people because of their perceived knowledge deficits.

Most pharmacists were unfamiliar with gender-affirmation guidelines and other resources to support TGD people. With the absence of information about gender-affirming medications in reference sources, such as the Australian Medicines Handbook<sup>37</sup> and Therapeutic Guidelines, utilized in healthcare practice settings, many pharmacists did not know where and how to find more information about these medications. Therapeutic Guidelines have recently included a small section about TGD care with links to TGD healthcare resources.<sup>38</sup> Given the time constraints, some pharmacists suggested that in addition to CPD training, having accessible, useful TGD resources in the pharmacy would improve care delivery to TGD people.

#### 4. Discussion

This study provides insight into the experiences and attitudes of pharmacists in Queensland, Australia, towards the provision of care to TGD people. Although pharmacists displayed positive attitudes about delivering care to TGD people, they identified significant barriers while providing such care. These key barriers included lack of inclusion of TGD care in usual pharmacy resources, absence of or minimal introduction to TGD care in pharmacy education, unfamiliarity with the language and TGD culture, and inability to record details about preferred names, pronouns, and gender identities along with the assigned sex at birth for TGD people in electronic medication records and dispensing software.

Pharmacists identified that deficiencies in their knowledge about TGD care may negatively affect the care they provide. This is consistent with findings from a few previous studies, which revealed that TGD healthcare

remained a major knowledge gap for pharmacists, who are unaware of the specific healthcare needs of TGD individuals, lacking confidence and comfort in advising about gender-affirming hormonal therapy, and requiring education in TGD healthcare.<sup>18–21,39</sup> Additionally, pharmacists in our study indicated increased awareness about appropriate language through education about TGD cultural sensitivity and communication skills might improve their delivery of care to TGD people.

Providing person-centered and culturally competent care in pharmacies requires awareness of TGD culture.<sup>3</sup> It is important that pharmacists and staff receive education on cultural awareness to identify and avoid prejudices and presumptions regarding TGD people and challenge their own internal biases.<sup>3,40</sup> Such education should include concepts of gender and sex, gender identity, the use of non-gendered language, and asking for preferred names and personal pronouns.<sup>3,40</sup> Knowing gender-affirming language may assist pharmacists in communicating more effectively with TGD people and prevent pharmacists from misgendering and deadnaming these individuals.<sup>23</sup>

Although previous research has reported that people with religious affiliations or firm religious beliefs may be intolerant towards TGD people,<sup>19,41</sup> pharmacists in our study showed acceptance of TGD culture and people. Given that these pharmacists may have participated because of their open attitudes, more extensive future studies may be necessary to determine religiosity and its effect on the care provision for TGD people. Societal attitudes towards TGD people may be influenced by the culture of the country.<sup>42,43</sup> Australia is a multicultural nation, and pharmacists may have more accepting attitudes towards TGD people because of their exposure to a variety of cultures. The community environment and the community itself may affect communication with TGD people. Pharmacists may be able to provide better treatment to TGD people by being exposed to a more accepting community that acknowledges cultural differences.

TGD stigma has been associated with limited access to healthcare and poorer health in TGD people compared to their cisgender counterparts.<sup>44</sup> In a previous study, a very small number of Australian programs were identified that targeted stigma reduction for LGBTIQ communities.<sup>45</sup> Findings from this study could contribute to the development of a program or campaign aimed at educating health professionals and the broader society along with development of national and international policies that may be necessary to change societal attitudes towards TGD communities. Professional organizations for health professionals should consider designing and implementing access to care and anti-discrimination policies. These strategies may assist in reducing stigma and discrimination against TGD people and support social inclusion and recovery.<sup>45</sup>

Sharing the experiences of TGD people with healthcare professionals to increase awareness of TGD culture may enhance the healthcare experiences of the broader TGD population. It is becoming increasingly evident that patient involvement is a critical component of the education of healthcare professionals, as many health professional educators advocate for increasing patient involvement in their teaching.<sup>46–49</sup> The active participation of actual patients in health professional training (patient-led education) enables patients to share their experiences of receiving healthcare.<sup>47</sup> Therefore, the inclusion of the voices of TGD people in designing educational interventions and participating in educational activities would respect the pharmacist/TGD patient partnership in promoting equity in healthcare for TGD people and enable them to share their expertise.<sup>50</sup> Practical experience working with TGD people during training may also be a valuable addition to the theoretical foundations of healthcare professional education. As suggested by our data, collaboration with TGD community members would provide insight into their health problems and obstacles experienced and enable understanding of the components of respectful and culturally sensitive care.

Findings from this study suggest that experiential placements for undergraduate pharmacy students at the multidisciplinary clinic for TGD people or pharmacies that specialize in this area may provide a better understanding of pharmacists' roles in TGD care and enhance the confidence of future pharmacists in delivering pharmaceutical services to TGD people.<sup>51</sup> A recent study indicated that interdisciplinary education (IPE) in TGD care

was beneficial for participating graduate healthcare professionals to improve their skills and knowledge to provide care for TGD people.<sup>52</sup> In this learning session, graduate healthcare learners were provided with a structured opportunity to develop expertise in the four core interprofessional practice competencies: values and ethics, roles and responsibilities, interprofessional communication, and teamwork. Team members were exposed to the diverse roles and responsibilities of their colleagues, practicing communication skills and teamwork through team huddles and discharge planning meetings.<sup>52</sup> Given the importance of providing holistic team-based care to TGD people, such IPE activities, including pharmacists and pharmacy students, should be planned. Although scheduling placements for pharmacy students at pharmacies or clinics with a specialized interest in TGD care may improve their understanding, finding such opportunities for every pharmacy student may be challenging. A recent study of Australian pharmacists showed a demand for education about the healthcare of lesbian, gay, bisexual, transgender, and intersex (LGBTI) people.<sup>18</sup> Future research is necessary to determine the impact of such educational interventions on pharmacy practice.

Active participation in patient care has been associated with improving pharmacists' job satisfaction.<sup>53</sup> More specifically, pharmacists in this study were gratified when they engaged in meaningful interactions with TGD people. However, the lack of effective communication between TGD people and pharmacists is likely to lead TGD people to distrust pharmacists and community pharmacies, likely affecting care-seeking behaviors. Some TGD people have preferred minimum or no interaction with pharmacists and staff.<sup>18</sup> Such avoidance behaviors may serve as coping mechanisms to circumvent unpleasant interactions.<sup>5</sup>

While other health professions have raised this issue, this is the first study of pharmacists that identified technical barriers posed by electronic medication records and dispensing software. These barriers can be addressed by updating software to include additional fields such as preferred names, pronouns, assigned sex at birth (male, female, intersex), and gender (male, female, transgender, non-binary, and other with a free-text option). This change may assist in recording accurate information about TGD people visiting pharmacies and other healthcare settings avoiding misgendering and improving the quality use of medications. For example, accurate information about assigned sex at birth and gender identity may assist in calculating appropriate doses for renally cleared medications for a TGD individual taking gender-affirming hormonal therapy.

#### 4.1. Limitations

Only Australian participants, primarily from Queensland, provided the data for the study, so the findings may not apply to other settings. The generalizability of these findings may be impacted by variations in cultural and societal perspectives towards TGD individuals and differences in pharmacy settings in various countries. Although two participants openly disclosed belonging to the LGBTIQ community, our study lacked the participation of TGD pharmacists. The involvement of TGD pharmacists could have provided more insight into TGD care as providers and receivers of such care from pharmacies.

## 5. Conclusion

Although pharmacists have a significant role in addressing disparities in TGD health, they may inadvertently contribute to these disparities because of insufficient TGD culture-related knowledge. Pharmacists in our study displayed positive attitudes towards providing care for TGD people. As recognized by these pharmacists, the transformation of pharmacy practice is crucial for delivering equitable and respectful care for TGD people. Developing trust with TGD people was challenging, indicating a lack of understanding of TGD health and gender-affirming language and terminology. When pharmacists meaningfully engage with TGD people, meaningful interactions result. Implementing educational strategies for pharmacy students, pharmacy staff, and pharmacists will stimulate more innovative approaches to providing gender-affirming care in pharmacy practice.

There is a need to consider incorporating training on TGD care into the pharmacy curriculum and continuing pharmacy education activities. This will provide better educational opportunities for pharmacists, who will then be less likely to discriminate against TGD patients and more likely to deliver gender-affirming care for TGD patients, including preventative healthcare measures that are easily accessible through pharmacies. By providing respectful, gender-affirming, safe, and compassionate TGD care, pharmacists can enhance the health of their community, contribute to the well-being of individuals and help to foster a more inclusive environment at the pharmacy.

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## Declaration of Competing Interest

The authors declare no conflict of interest.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.rcsop.2023.100254>.

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