

# The current status of transgender health education in doctor of pharmacy curricula in North America

G. Lucy Wilkening, PharmD<sup>1</sup>

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## Abstract

Doctor of pharmacy programs across the country strive to prepare culturally competent pharmacy professionals who are trained to provide compassionate and evidence-based care to a variety of patients. Within the Accreditation Council for Pharmacy Education 2016 *Standards and Key Elements for the Doctor of Pharmacy Degree*, pharmacy schools are charged with the task of developing professionals who can identify and diminish health care disparities. Transgender persons represent one of the most underrepresented and underserved communities within the modern health care system, yet very little information is available for training future pharmacists to care for the transgender community. A literature search using the MeSH terms transgender persons or trans-sexualism and pharmacy education was conducted, and it revealed 1 article published by Parkhill and colleagues in the *American Journal of Pharmacy Education*. A Google® search of the phrase “transgender education in pharmacy school” was conducted and produced 1 additional published article as well as an online transgender education program launched in November 2016. The following commentary outlines the current literature and practices that involve integration of transgender health education into pharmacy schools in North America and a discussion on areas for future study.

**Keywords:** pharmacy education, LGBTQ health education, transgender health disparities

<sup>1</sup> (Corresponding author) Assistant Professor, Department of Pharmacy Practice, University of the Incarnate Word, Feik School of Pharmacy, San Antonio, Texas, [wilkenin@uiwtx.edu](mailto:wilkenin@uiwtx.edu), ORCID: <http://orcid.org/0000-0002-2247-1466>

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## Introduction

The transgender community has recently been brought to the forefront of the mainstream media, and this has served as a springboard for starting long-overdue conversations about the societal stigmatization of transgender persons, including by that of the US health care system. The Department of Health and Human Services has listed improving the health and overall well-being of the lesbian, gay, bisexual, and transgender (LGBT) community as a goal of the Healthy People 2020 Initiative.<sup>1</sup> Some initiatives encompassed within this directive include appropriate inquiry by health care

providers about a patient’s sexual orientation and gender identity as a means of improving patient-provider interactions and regular use of care, providing adequate social services to reduce suicide and homelessness among LGBT youth, and also providing medical students with adequate training in order to provide competent care.<sup>1</sup> Transgender individuals, that is, people whose gender identity differs from that of their biological sex,<sup>2</sup> are highly underrepresented and underserved within modern health care settings even when compared to bisexual, lesbian, and gay individuals.<sup>3</sup> For example, the 2015 US Transgender Survey, published in 2016 by the National Center for Transgender Equality,<sup>4</sup> surveyed 27 715 transgender people and found that nearly one fourth of respondents did not see a physician when needed due to fear of being mistreated and endorsed problematic issues with insurance coverage due to their transgender identity. Further, one third of participants who had seen a health care professional within the previous 12 months endorsed having at least 1 negative experience, including such things as refusal of treatment, verbal harassment, or

having to educate the provider about how to provide care to a transgender person.<sup>4</sup> Given these findings and an ever-evolving LGBTQ (Q denotes *queer*) community, incorporation of LGBTQ education into allied health programs is of great importance.

There is a lack of research regarding the means by which LGBTQ topics should be integrated into pharmacy school curricula, especially transgender health care topics. In the Accreditation Council for Pharmacy Education (ACPE) 2016 *Standards and Key Elements for the Doctor of Pharmacy Degree*, Standard 3 discusses graduates' approach to patient care.<sup>5</sup> Within this standard, ACPE defines that "The graduate [should be] able to recognize social determinants of health to diminish disparities and inequalities in access to quality care."<sup>5</sup> Further, a recent survey study of community pharmacy residents conducted by Leach and Layson-Wolf<sup>6</sup> reported that this cohort of pharmacists (1) identified discrimination and a lack of provider education as major barriers to transgender healthcare, (2) overwhelmingly believed (82.7%) that community pharmacists play an important role in transgender health management, and (3) supported integrating transgender health into pharmacy education.<sup>6</sup> Given the role of cross-sex hormones and other medications in transgender health care, pharmacists are uniquely positioned to provide critical education on both medication and overall health maintenance in a community-based setting.<sup>3,7</sup> Positive interactions with appropriately educated pharmacists may also serve as opportunities to repair health care relationships and establish rapport with transgender persons. The following aims to describe the current status of transgender health education in North American pharmacy schools as well as a discussion on areas for future study.

## Methods

A PubMed Central literature search on November 28, 2016, using the MeSH terms transgender persons or transsexualism and pharmacy education was conducted. This search revealed 1 article published by Parkhill and colleagues<sup>3</sup> in the *American Journal of Pharmacy Education* in 2014. A Google search of the phrase "transgender education in pharmacy school" was conducted, and results were reviewed for relevance. The Google search produced 1 additional published article as well as an online transgender education program launched in November 2016. Opinion pieces and calls for action were not included in this commentary.

## Results

A study conducted by Mandap and colleagues<sup>8</sup> aimed to describe the extent to which LGBTQ topics are covered in

pharmacy school curricula. From November 2011 to January 2012, curriculum deans (or equivalent) from US schools of pharmacy were invited to report the amount of LGBT health content taught in their respective schools using a 14-item questionnaire.<sup>8</sup> Out of 125 invited schools, 28 responded to the survey, and only 14% of respondents claimed *good* or *very good* coverage of LGBT content. Fifty-four percent of participants reported no coverage of LGBT health content in required didactic courses, and 68% reported no coverage in experiential courses.<sup>8</sup> When LGBT health content was present, the preponderance of topics covered were human immunodeficiency virus (71%) and/or sexually transmitted infections (non-human immunodeficiency virus; 46%) in LGBT people. Overall, resources for faculty development for teaching LGBT health content were very low (18%).<sup>8</sup> Respondents believed that incorporating material that highlighted LGBT health care disparities and having faculty who were willing and able to teach such content would be the optimal strategies for improving coverage in their curriculum.<sup>8</sup> Overall, this study<sup>8</sup> was limited by a small sample size and likely selection bias given the lack of randomization of pharmacy school locations. However, results of this study<sup>8</sup> highlight the significant lack of LGBT content in pharmacy school curricula, especially as it relates to health care disparities, barriers to care, and unique health risks.

In another study by Parkhill and colleagues<sup>3</sup> at the Wegmans School of Pharmacy, the authors evaluated the utility of a patient panel discussion in 2014. As a part of a required first year pharmacy student (P1) course, students attended a 1-hour lecture on LGBT terminology as well as a 2-hour panel discussion composed of 4 transgender individuals who described their health care experiences. Students completed preintervention and postintervention surveys as well as a self-reflective paper on the experience. The authors<sup>3</sup> reported that following the panel discussion, 91% of students could describe methods for showing respect to transgender patients and felt that the learning experience was very good or excellent. Additionally, qualitative analysis of self-reflective papers demonstrated themes of "optimizing interactions with transgender patients in the pharmacy" as well as "understanding the transgender population."<sup>3</sup> Importantly, student self-awareness was significantly improved following completion of this academic activity given that zero students reported "none" or "little knowledge" about LGBT issues in the post survey and 86% of students self-reported that they knew "a lot" after completing this course. One potential limitation of the project was that the class and reflections were mandatory, which may have led to student responses that were not genuine. However, negative feedback on the self-reflective survey was reported, suggesting that students were presented an opportunity to give feedback candidly.<sup>3</sup> Overall, the authors<sup>3</sup> concluded that the panel discussion served as

an effective tool for improving student self-reported awareness and education about transgender patients.

An innovative project, termed TransEd, was released in November 2016 by both the Department of Family Medicine and the Michael G. DeGroot School of Medicine of McMaster University and the University of Waterloo School of Pharmacy. TransEd provides postsecondary health care students with an online transgender health learning experience and is advertised as “freely available to interested health care programs.”<sup>9</sup> The program itself comprises 8 sections, including Introduction, The Healthcare Landscape, Clinical Best Practices, Assessment, Psychosocial Health, Medication, and Surgical & Resources. The online nature of the program allows students to review any and all of the 8 sections, learn at their own pace, and complete online learning assessments in an environment of their choosing. Recorded interviews with trans men, trans women, and health care providers specialized in trans health care are available for viewing as well as discussions on best practices. Additionally, TransEd has included a facilitators’ guide, which affords educators the opportunity to learn about transgender health and suggestions on how to integrate these topics into their existing curricula. Interested individuals may request access to the TransEd module by completion of a short Google form at <http://www.transeducation.ca>.

## Discussion

In November 2014, the Association of American Medical Colleges<sup>10</sup> published its first set of guideline recommendations for training physicians to care for gender nonconforming, differences of sex development (DSD), and LGBT individuals. This guideline aims to provide medical schools with education about the health needs of DSD, LGBT, and gender nonconforming people; a discussion on how to integrate this content into the curriculum; a framework for facilitation; and a list of national resources.<sup>10</sup> As a result, many medical schools now include a median of 5 hours of LGBT health topics in their curriculum although covered content and perceived quality varies by institution.<sup>11</sup> Unfortunately, no such guideline yet exists for pharmacy schools. In a publication referenced earlier, Leach and Layson-Wolf<sup>6</sup> found that more than 70% of community pharmacy resident participants were not educated about transgender health care in school and were overwhelmingly unconfident in their ability to competently provide care for this demographic. Historically, undereducation of pharmacy and other allied health students on transgender health care issues may, in part, be due to an unintentional lack of perceived need. Current prevalence studies indicate that roughly 0.3% of the US population is transgender<sup>12</sup>; however, this figure likely disproportionately represents

only individuals who are seeking treatment for gender dysphoria or who are pursuing surgical correction of primary sex traits.<sup>13</sup>

Prior research<sup>14</sup> has shown that educational programs, such as experiential rotations or elective courses, can positively influence student attitudes and future encounters with stigmatized populations. Similarly, use of discussion panels, standardized patients (ie, patient actors), and virtual patient technology have all been investigated as means of evaluating trainee communication and interaction with unique patient populations, all with encouraging results.<sup>3,15-17</sup> Given the current state of transgender health education in pharmacy schools, coverage of even basic information using any combination of these tools presents a significant learning opportunity, for example, the use of appropriate terminology and importance of asking patients for their preferences. Similarly, students should understand that being transgender is not a psychiatric illness; rather, gender dysphoria, or the marked discomfort associated with the incongruence of one’s gender biology and gender identity, is a psychiatric disorder according to the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition.<sup>18</sup> Ultimately, students should know that language and attitude can have significant impacts on patient-provider interactions, irrespective of the professional’s background in formal training on the subject.

Research on integrating transgender health education into pharmacy schools should occur with the Association of American Medical Colleges “Integrating LGBT and DSD content into medical school curricula” guidelines in mind. Information on faculty development, curricular integration, student-based outcomes (ie, attitude and knowledge gaps), and minimum competency standards are all needed. Comparisons of didactic-based learning against more interactive forms of pedagogy are certainly indicated with particular emphasis in assessing the impact of these educational interventions on direct patient care. Investigations of PharmD student communication and interaction with transgender patients at different times in the curriculum would also be useful in understanding if students’ intrinsic biases change throughout the course of training. For example, the study by Parkhill and colleagues<sup>3</sup> was effective in presenting P1 students to this diverse patient population but included students who were neither trained in the health care settings nor introduced to pharmacotherapeutics courses; thus, the scope of questions asked was limited. Additionally, assessments of experiential-based learning with the transgender community would be useful in determining what role this type of experience has on patient care. For example, a previous survey study by Gable and colleagues<sup>19</sup> demonstrated that use of mental health experiential-based electives had positive impacts on

student perception, social distance, and stigmatized views. Ultimately, pharmacy educators and practitioners should collaborate together to solve problems leading to transgender health care barriers rather than contributing to them by stagnating in our educational endeavors.

## Conclusion

Guidelines for training pharmacists in transgender health are needed in order to keep the profession relevant with the changing dynamics of the US population and to promote research-based education and care for this underserved demographic.

## References

1. Healthy People 2020, Office of Disease Prevention and Health Promotion, US Department of Health and Human Services [Internet]. Lesbian, gay, bisexual and transgender health overview [cited 2016 Aug 26]. Available from: <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=25>
2. World Professional Association for Transgender Health [Internet]. Standards of care for the health of transsexual, transgender, and gender nonconforming people; 2012 [cited 2016 Aug 26]. Available from: [http://www.wpath.org/site\\_page.cfm?pk\\_association\\_webpage\\_menu=1351](http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=1351)
3. Parkhill AL, Mathews JL, Fearing S, Gainsburg J. A transgender health care panel discussion in a required diversity course. *Am J Pharm Educ.* 2014;78(4):81. DOI: [10.5688/ajpe78481](https://doi.org/10.5688/ajpe78481). PubMed PMID: [24850943](https://pubmed.ncbi.nlm.nih.gov/24850943/).
4. James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. The Report of the 2015 US Transgender Survey. Washington: National Center for Transgender Equality; 2016.
5. Accreditation Council for Pharmacy Education. Accreditation standards and key elements for the professional program in pharmacy leading to the Doctor of Pharmacy Degree; 2015 [cited 2016 Nov 29]. Available from: <https://www.acpe-accredit.org/pdf/Standards2016FINAL.pdf>
6. Leach C, Layson-Wolf C. Survey of community pharmacy residents' perceptions of transgender health management. *J Am Pharm Assoc (2003).* 2016;56(4):441-5.e6. DOI: [10.1016/j.japh.2016.03.008](https://doi.org/10.1016/j.japh.2016.03.008). PubMed PMID: [27245854](https://pubmed.ncbi.nlm.nih.gov/27245854/).
7. Knezevich EL, Viereck LK, Drincic AT. Medical management of adult transsexual persons. *Pharmacotherapy.* 2012;32(1):54-66. DOI: [10.1002/PHAR.1006](https://doi.org/10.1002/PHAR.1006). PubMed PMID: [22392828](https://pubmed.ncbi.nlm.nih.gov/22392828/).
8. Mandap M, Carrillo S, Youmans SL. An evaluation of lesbian, gay, bisexual, and transgender (LGBT) health education in pharmacy school curricula. *Curr Pharm Teach Learn.* 2014;6(6):752-8. DOI: [10.1016/j.cptl.2014.08.001](https://doi.org/10.1016/j.cptl.2014.08.001).
9. University of Waterloo, McMaster University. TransEd [Internet]. Educating health-care students about transgender patients [cited 2016 Nov 30]. Available from: <https://uwaterloo.ca/stories/educating-health-care-students-about-transgender-patients>
10. Association of American Medical Colleges [Internet]. Integrating LGBT and DSD content into medical school curricula. 2015 AAMC videos and resources. Washington: Association of American Medical Colleges [cited 2016 Nov 30]. Available from: <https://www.aamc.org/initiatives/diversity/449506/integratingcontent.html>
11. Obedin-Maliver J, Goldsmith ES, Stewart L, White W, Tran E, Brenman S, et al. Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *JAMA.* 2011;306(9):971-7. DOI: [10.1001/jama.2011.1255](https://doi.org/10.1001/jama.2011.1255). PubMed PMID: [21900137](https://pubmed.ncbi.nlm.nih.gov/21900137/).
12. Reed B, Rhodes S, Schofield P, Wylie K. Gender variance in the UK: Prevalence, incidence, growth and geographic distribution [Internet]. June 2009. Available from: <http://www.gires.org.uk/assets/Medpro-Assets/GenderVarianceUK-report.pdf>
13. Zucker KJ, Lawrence AA, Kreukels BPC. Gender dysphoria in adults. *Annu Rev Clin Psychol.* 2016;12(1):217-47. DOI: [10.1146/annurev-clinpsy-021815-093034](https://doi.org/10.1146/annurev-clinpsy-021815-093034). PubMed PMID: [26788901](https://pubmed.ncbi.nlm.nih.gov/26788901/).
14. Kuhnigk O, Hofmann M, Böthern AM, Haufs C, Bullinger M, Harendza S. Influence of educational programs on attitudes of medical students towards psychiatry: effects of psychiatric experience, gender, and personality dimensions. *Med Teach.* 2009;31(7):e303-10. DOI: [10.1080/01421590802638048](https://doi.org/10.1080/01421590802638048). PubMed PMID: [19811138](https://pubmed.ncbi.nlm.nih.gov/19811138/).
15. Wilkening GL, Gannon JM, Ross C, Brennan JL, Fabian TJ, Marcsisin MJ, et al. Evaluation of branched-narrative virtual patients for interprofessional education of psychiatry residents. *Acad Psychiatry.* 2017;41(1):71-5. DOI: [10.1007/s40596-016-0531-1](https://doi.org/10.1007/s40596-016-0531-1). PubMed PMID: [26976401](https://pubmed.ncbi.nlm.nih.gov/26976401/).
16. Shah H, Rossen B, Lok B, Londino D, Lind SD, Foster A. Interactive virtual-patient scenarios: an evolving tool in psychiatric education. *Acad Psychiatry.* 2012;36(2):146-50. DOI: [10.1176/appi.ap.10030049](https://doi.org/10.1176/appi.ap.10030049). PubMed PMID: [22532209](https://pubmed.ncbi.nlm.nih.gov/22532209/).
17. Gelman A, Amin P, Pletcher J, Fulmer V, Kukic A, Spagnoletti C. A standardized patient case: a teen questioning his/her sexuality is bullied at school. *MedEdPORTAL Publications.* 2014;10:9876. DOI: [10.15766/mep\\_2374-8265.9876](https://doi.org/10.15766/mep_2374-8265.9876).
18. American Psychiatric Association. Gender dysphoria. In: *Diagnostic and statistical manual of mental disorders.* 5th ed. Arlington (VA): American Psychiatric Publishing; 2013.
19. Gable KN, Muhlstadt KL, Celio MA. A mental health elective to improve pharmacy students' perspectives on mental illness. *Am J Pharm Educ.* 2011;75(2):34. PubMed PMID: [21519423](https://pubmed.ncbi.nlm.nih.gov/21519423/).