Lesbian, Gay, Bisexual, Transgender, and Queer Patients: Collegiate Athletic Trainers’ Perceptions

Emma A. Nye, DAT, LAT, ATC*; Ashley Crossway, DAT, LAT, ATC†; Sean M. Rogers, DAT, LAT, ATC‡; Kenneth E. Games, PhD, LAT, ATC§; Lindsey E. Eberman, PhD, LAT, ATC§

*Drake University, Des Moines, IA; †Nazareth College, Rochester, NY; ‡California State University, Northridge; §Neuromechanics, Interventions, and Continuing Education Research (NICER) Laboratory, Indiana State University, Terre Haute

Context: Research suggests that patients who identify as lesbian, gay, bisexual, transgender, or queer (LGBTQ) are at risk for certain conditions and denied equal access to health care in physician offices compared with their heterosexual counterparts. However, little evidence exists regarding the treatment of LGBTQ student-athlete patients in the athletic training clinic and the role the athletic trainer (AT) plays in these health care experiences.

Objective: To explore the perceptions of ATs treating LGBTQ student-athlete patients.

Design: Cross-sectional study.

Setting: Web-based survey.

Patients or Other Participants: A total of 1077 collegiate and university ATs completed the survey (5685 e-mails distributed, 1214 surveys started, access rate = 21.4%, completion rate = 88.7%).

Main Outcome Measure(s): Demographic information and level of agreement in 3 areas (approach, quality of care, and comfort) were obtained on a 5-point Likert scale. We asked ATs their likeliness of providing guidance to student-athletes about navigating their sexuality generally and as it related to athletic participation, if they thought they provided equal health care to a student-athlete who identified as LGBTQ, how comfortable they were treating LGBTQ student-athlete patients, and how comfortable they thought student-athlete patients would be seeking care from them or from providers in their clinic.

Results: Overall, we found differences among groups for sexual orientation, gender, religion, and the existence of interpersonal contact with LGBTQ friends or family for approach, quality of care, and comfort. We also identified 2 main themes indicating ATs’ desire for more training and education, specifically in caring for transgender student-athletes and providing patient-centered care with professionalism, regardless of gender identity or sexual orientation.

Conclusions: Although differences existed among demographic groups, ATs had a generally positive view of treating LGBTQ student-athlete patients and wanted more training and education on the specific needs of this population.

Key Words: diversity, health care, gender, sexuality, inclusion

Key Points
- We identified influences of sexual orientation, gender, religion, and interpersonal relationships with lesbian, gay, bisexual, transgender, and queer friends and family on the approach, quality of care, and comfort provided by athletic trainers to lesbian, gay, bisexual, transgender, and queer student-athletes.
- Athletic trainers want more training and education to meet the needs of their transgender patients.
- Collegiate and university athletic trainers were aware of their need to provide patient-centered care, regardless of gender identity or sexual orientation.
were denied equal health care treatment in physicians’ offices and hospitals (24%), emergency rooms (13%), and mental health clinics (11%) and by emergency medical technicians (5%) and drug treatment programs (3%).

Correspondingly, 28% of participants reported verbal harassment in a physician’s office when seeking medical care. This discrimination is a major deterrent to accessing health care services, negatively affecting the health of these individuals.

Health care disparities have been well documented in the health care literature; however, little research exists on the unique needs of lesbian, gay, bisexual, transgender, and queer (LGBTQ) patients participating in collegiate athletics. Lesbian, gay, bisexual, and transgender athletes face a multifaceted and heteronormative culture in athletics, which may have negative effects, both physically and mentally.

Previous researchers evaluated the effect of a coach’s role on athletes’ perception of inclusiveness. Using the Coach Athlete Relationship Questionnaire, they found coach’s role on athletes’ perception of inclusiveness. Using Qualtrics software, we constructed a 19-item questionnaire to assess the approach, quality of care, and perceived comfort.

Our research questions were:

1. Does the comfort of ATs with a family or friend who identifies as LGBTQ differ in treating a student-athlete patient who identifies as LGBTQ?
2. Are ATs with different religious affiliations less comfortable treating a student-athlete who identifies as LGBTQ?
3. Are ATs, in general, less comfortable treating a specific member of the LGBTQ community?
4. Why do ATs feel the way they do regarding their approach, quality of care, and perceived comfort?

METHODS

Participants

Collegiate and university ATs (N = 1077; men = 420, women = 653, female to male = 2; 2 individuals did not provide data) with various years of experience, religious affiliations, and levels of education participated in this study (Table 1). Each participant was asked to complete the questionnaire regarding his or her perceptions of providing care to patients who identified as LGBTQ. We did not collect any identifying participant or institutional information. The Indiana State University Institutional Review Board approved this study. A random sample of participants was recruited through the e-mail addresses provided by the National Athletic Trainers’ Association (NATA). We sent e-mails to individuals who were identified as working in the collegiate setting. Athletic trainers working in any other practice setting or not working clinically were excluded from the study. In total, 5685 e-mails were sent to ATs using Qualtrics software (Qualtrics LLC, Provo, UT); 1214 individuals began the study (Table 1). Each participant was asked to complete the questionnaire regarding his or her perceptions of providing care to patients who identified as LGBTQ.

Instrumentation

Using Qualtrics software, we constructed a 19-item questionnaire to assess the approach, quality of care, and perceived comfort of ATs with student-athletes who identified as LGBTQ. The questionnaire aimed to address...
gaps in the current literature and answer the research questions. We identified a panel of 4 experts (2 survey experts and 2 experts in the area of LGBTQ student-athlete–AT relationships) to conduct a content analysis. The panel made suggestions for revisions (predominantly grammatical) and after making those changes, we conducted a pilot study with ATs at a Midwest NCAA Division I institution to establish internal consistency and determine the feasibility of the study. Eighteen ATs completed the pilot study. This allowed us to identify any navigation problems within the tool. The pilot study also revealed that the average time to completion was reasonable (5–10 minutes). Overall, the tool demonstrated excellent overall internal consistency (Cronbach's *α* = 0.918) and reasonable internal consistency for each of the populations assessed (lesbian [women] = 0.577, gay [men] = 0.659, bisexual = 0.672, transgender = 0.734, and queer = 0.727).

We asked 7 demographic questions to characterize our participants. Additionally, we asked 3 questions specific to previous LGBTQ experiences. These consisted of 1 question regarding the AT’s exposure to student-athletes who identified as LGBTQ, 1 question regarding the AT’s exposure to a friend or family member who identified as LGBTQ, and 1 question regarding previous education or training on caring for LGBTQ athletes. We created 7 matrices to address our variables of interest, with 5 populations represented in each matrix: (1) lesbian (women), (2) gay (men), (3) bisexual, (4) transgender, and (5) queer. Participants were asked to answer the question for each of the 5 population items using a 5-point Likert scale.

The variables of interest were level of approach, quality of care, and comfort. Approach and quality of care were assessed with 1 question each regarding the differences from or similarities to providing health care for a student-athlete who identified as LGBTQ versus heterosexual. Level of comfort was assessed with 5 questions regarding the AT's likeliness of providing health care to a student-athlete who identified as LGBTQ; how comfortable that student would be seeking care from him or her as a health care professional, as well as from the clinic; and how comfortable the AT would be providing guidance to student-athletes about navigating their sexuality, both personally and as it related to athletic participation. These questions were intended to gather information on ATs' level of comfort discussing specific needs of the LGBTQ population. We had 2 open-ended items for each construct to allow the ATs to provide any explanation or rationale for their perceptions. We asked participants to “please explain why you feel the way you do” after the Likert-scale questions on approach, quality of care, and comfort.

### Statistical Analysis

We conducted analyses to calculate the characteristics of central tendencies to evaluate the approach, quality of care, and level of comfort from ATs’ perceptions of student-athletes who identified as LGBTQ. We performed comparative analyses among sexual orientation, gender, years of experience, interpersonal contact, and religion using Mann-Whitney *U* or Kruskal-Wallis tests on the items that addressed our variables of interest (approach, quality of care, and level of comfort). We performed nonparametric statistics (Mann-Whitney *U* and Kruskal-Wallis tests) because the groups were of unequal sizes. Partial data were used in the analysis, and the number of participants was indicated throughout the results for each analysis. Participants often began a questionnaire but responded only to specific items or discontinued responding at their discretion. This is their right as research participants and aligns with the principle of voluntariness in the Belmont Report. As such, the number of respondents may vary with each question. This missing data were not random, which made it difficult to eliminate bias using missing data-management techniques. Partial data-analysis techniques are consistently used throughout the literature. Significance was set a priori at *P* < .05.

We performed a process of inductive coding to develop themes from the qualitative feedback. We systematically evaluated the data using codes to group common themes in the open-ended responses. Two reviewers read each participant comment and met to discuss their findings and develop a codebook. They then coded responses using the consensus codebook until data saturation occurred. When consensus was not achieved, a third reviewer was consulted. The findings were audited by an experienced qualitative researcher to establish credibility. For the question regarding comfort working with an LGBTQ patient or how comfortable a patient might be seeking care

---

### Table 1. Participant Demographics (N = 1077)*

| Characteristic               | Frequency (%) |
|-----------------------------|---------------|
| **Sex (n = 1075)**          |               |
| Male                        | 420 (39.1)    |
| Female                      | 653 (60.7)    |
| Female to male              | 2 (0.2)       |
| **Years of experience (n = 1066)** |             |
| 0–1                         | 79 (7.4)      |
| 2–5                         | 305 (28.6)    |
| 6–10                        | 227 (21.3)    |
| 11–20                       | 272 (25.5)    |
| >20                         | 183 (17.2)    |
| **Religious affiliation (n = 1065)** |            |
| Christian                   | 659 (61.9)    |
| Non-Christian               | 17 (1.6)      |
| Nonreligious                | 285 (26.8)    |
| Not practicing              | 104 (9.8)     |
| **Highest degree earned (n = 1074)** |           |
| Bachelor’s                  | 146 (13.6)    |
| Master’s                    | 790 (73.6)    |
| Clinical doctorate          | 15 (1.4)      |
| Academic doctorate          | 123 (11.5)    |

*Not all participants answered all questions.*
from an AT’s clinic, we received 883 responses. For the question specifically regarding how comfortable an AT would feel providing guidance on navigating sexuality, we received 839 responses.

**RESULTS**

A large majority (n = 844, 78.9%) of participants indicated that they had a close friend or family member who identified as LGBTQ, and 771 (71.6%) indicated they had worked with another AT who identified as LGBTQ. Overwhelmingly, participants (n = 1021, 94.8%) reported they had worked with a patient or AT who identified as LGBTQ. The majority of ATs identified as heterosexual (n = 913, 84.8%), whereas a smaller demographic identified as lesbian (n = 103, 9.6%), gay (n = 482, 44.8%), bisexual (n = 444, 41.2%), transgender (n = 482, 44.8%), and queer (n = 477, 44.3%) individuals. In terms of approach, ATs strongly disagreed that their approach or quality of care would differ when treating a patient who identified as LGBTQ (Table 2). Most ATs agreed that they would feel comfortable providing care to a student-athlete who identified as LGBTQ (Table 2). Athletic trainers also commented that they believed a student-athlete would feel comfortable seeking care both from them, as health care professionals, and from their clinic (Table 2). A large portion of our participants reported that they had received no formal training on the needs of lesbian (n = 444, 41.2%), gay (n = 444, 41.2%), bisexual (n = 455, 42.2%), transgender (n = 482, 44.8%), or queer (n = 477, 44.3%) individuals. Very few participants reported that they had received formal training on the needs of lesbian (n = 115, 10.7%), gay (n = 109, 10.1%), bisexual (n = 107, 9.9%), transgender (n = 103, 9.6%), or queer (n = 96, 8.9%) individuals.

### Table 2. Participants’ Perceptions of Approach, Quality of Care, and Comfort (Mean ± SD)

| Question                                                                 | Lesbian | Gay    | Bisexual | Transgender | Queer  |
|--------------------------------------------------------------------------|---------|--------|----------|-------------|--------|
| Approach                                                                 |
| Does your approach to providing health care change when providing health care to a student-athlete who identifies as ______ as compared to a heterosexual student-athlete? | 1.37 ± 0.81 | 1.34 ± 0.81 | 1.38 ± 0.81 | 1.60 ± 0.98 | 1.44 ± 0.86 |
| Quality of Care                                                           |
| Does the quality of health care you provide differ between a student-athlete who identifies as ______ as compared to a heterosexual student-athlete? | 1.12 ± 0.54 | 1.12 ± 0.54 | 1.12 ± 0.54 | 1.17 ± 0.59 | 1.15 ± 0.56 |
| Comfort                                                                  |
| How comfortable would you feel providing health care to a student-athlete who identifies as the following? | 4.88 ± 0.51 | 4.86 ± 0.54 | 4.87 ± 0.50 | 4.64 ± 0.78 | 4.78 ± 0.64 |
| How comfortable would a student-athlete who identifies as ______ feel seeking care from you as a health care professional as compared to a heterosexual student-athlete? | 4.78 ± 0.61 | 4.76 ± 0.62 | 4.77 ± 0.62 | 4.68 ± 0.72 | 4.71 ± 0.68 |
| How comfortable would a student-athlete who identifies as ______ feel seeking care from your clinic as compared to a heterosexual student-athlete? | 4.65 ± 0.73 | 4.62 ± 0.75 | 4.61 ± 0.74 | 4.52 ± 0.85 | 4.57 ± 0.81 |
| How comfortable would you feel if a student-athlete who identifies as ______ seeks your guidance for navigating his or her sexuality? | 3.42 ± 1.45 | 3.34 ± 1.14 | 3.39 ± 1.14 | 3.23 ± 1.17 | 3.29 ± 1.12 |
| How comfortable would you feel if a student-athlete who identifies as ______ seeks your guidance for navigating his or her sexuality specifically regarding athletic participation? | 3.80 ± 1.10 | 3.78 ± 1.10 | 3.78 ± 1.07 | 3.56 ± 1.13 | 3.69 ± 1.10 |

### Sexual Orientation

The LGBTQIA and heterosexual ATs differed in regard to their perceived comfort in treating lesbian (P < .002), gay (P < .001), bisexual (P < .001), transgender (P < .001), and queer (P < .002) individuals. Additionally, the LGBTQIA and heterosexual ATs differed in regard to their perception of how comfortable a student-athlete would feel seeking care from them as a health care professional for lesbian (P < .001), gay (P < .001), bisexual (P < .001), transgender (P < .004), and queer (P < .001) individuals but not in comfort seeking care from their clinic. Athletic trainers who identified as LGBTQIA felt more comfortable than heterosexual ATs providing guidance on navigating the student-athletes’ sexuality in general and as it related to athletic participation for student-athletes who identified as lesbian (P < .001), gay (P < .001), bisexual (P < .001), transgender (P < .001), and queer (P < .001).

### Gender

Athletic trainers in general did not perceive that their approaches to LGB and queer individuals were different, but female ATs noted differences in their approach to transgender individuals (P = .028; Table 3). Male ATs indicated that the quality of their care changed significantly with all LGBTQ individuals (Table 3). Female ATs described being more comfortable providing guidance for navigating sexuality generally and as it related to sport participation among lesbian (P < .001), gay (P < .003), bisexual (P < .001), transgender (P = .005), and queer (P = .001) individuals (Table 3). Compared with their male counterparts, female ATs described feeling more comfortable providing care for lesbian (P = .014), gay (P < .001), and bisexual (P = .002) individuals. Female ATs also believed that LGBTQ individuals would feel more...
comfortable seeking care from them and their clinic than did their male counterparts (Table 3).

**Religion**

Athletic trainers indicated that their approach to providing health care was not influenced by religion when treating lesbian (P = .603), gay (P = .676), bisexual (P = .309), transgender (P = .276), or queer (P = .364) patients. Similarly, religious differences did not influence ATs' perceived quality of health care for lesbian (P = .356), gay (P = .324), bisexual (P = .356), transgender (P = .141), or queer (P = .104) patients.

Religion influenced ATs’ comfort in treating gay patients (χ² = 8.596, P = .035), whereas those with no religious affiliation were more comfortable treating gay patients than were Christians (P = .009). Similarly, religion influenced comfort in treating queer patients (χ² = 8.792, P = .032), as ATs with no religious affiliation were statistically more comfortable than Christians (P = .009) and those whose religion was not listed (P = .009; Table 4).

Christian and nonreligious ATs’ comfort levels differed when providing guidance to lesbian (χ² = 17.854, P = .000), gay (χ² = 14.327, P = .002), bisexual (χ² = 18.734, P = .000), transgender (χ² = 11.814, P = .008), and queer (χ² = 14.165, P = .003) patients about navigating their sexuality. Nonreligious ATs felt more comfortable than did Christian ATs in treating queer patients (P = .009; Table 4). Religion also influenced the comfort providing guidance about navigating sexual identity with respect to athletic participation, as Christian ATs were less comfortable than nonreligious ATs with lesbian (P = .001), gay (P = .001), bisexual (P < .001), transgender (P = .007), and queer (P = .001) patients (Table 4). Nonpracticing or nonreligious ATs were more comfortable providing such guidance in regard to athletic participation than non-Christian ATs to lesbian (P = .047) and queer (P = .039) patients. The ATs’ perceptions about whether their lesbian (P = .242), gay (P = .188), bisexual (P = .248), transgender (P = .094), and queer (P = .091) patients were comfortable with them as clinicians did not differ. Similarly, the perceived comfort of patients with the AT’s clinic for lesbian (P = .242), gay (P

### Table 3. Comparison by Gender for Approach, Quality of Care, and Comfort**  

| Statement | Population | Mode | Female (n = 597) | Male (n = 373) | P Value |
|-----------|------------|------|-----------------|----------------|---------|
| Does your approach to providing health care change when providing health care to a student-athlete who identifies as ___? | Lesbian | 1 | 1.37 ± 0.80 (1–5) | 1.34 ± 0.78 (1–5) | .788 |
| Does the quality of health care you provide differ between student-athletes who identify as ___? | Gay | 1 | 1.38 ± 0.81 (1–5) | 1.36 ± 0.79 (1–5) | .795 |
| | Bisexual | 1 | 1.10 ± 0.49 (1–5) | 1.14 ± 0.54 (1–5) | .898 |
| | Transgender | 1 | 1.15 ± 0.56 (1–5) | 1.18 ± 0.58 (1–5) | .028 |
| | Queer | 1 | 1.13 ± 0.51 (1–5) | 1.16 ± 0.55 (1–5) | .550 |
| | Lesbian | 1 | 1.10 ± 0.49 (1–5) | 1.14 ± 0.54 (1–5) | .014 |
| | Gay | 1 | 1.10 ± 0.49 (1–5) | 1.14 ± 0.54 (1–5) | .017 |
| | Bisexual | 1 | 1.11 ± 0.51 (1–5) | 1.14 ± 0.52 (1–5) | .014 |
| | Transgender | 1 | 1.16 ± 0.57 (1–5) | 1.17 ± 0.56 (1–5) | .033 |
| | Queer | 1 | 1.13 ± 0.53 (1–5) | 1.15 ± 0.53 (1–5) | .039 |
| How comfortable would you feel providing health care to a student-athlete who identifies as the following? | Lesbian | 5 | 4.92 ± 0.39 (1–5) | 4.85 ± 0.56 (1–5) | .014 |
| | Gay | 5 | 4.93 ± 0.36 (1–5) | 4.79 ± 0.64 (1–5) | <.001 |
| | Bisexual | 5 | 4.92 ± 0.39 (1–5) | 4.82 ± 0.59 (1–5) | .002 |
| | Transgender | 5 | 4.68 ± 0.71 (1–5) | 4.60 ± 0.85 (1–5) | .544 |
| | Queer | 5 | 4.82 ± 0.56 (1–5) | 4.74 ± 0.70 (1–5) | .089 |
| How comfortable would a student-athlete who identifies as ___ feel seeking care from you? | Lesbian | 5 | 4.84 ± 0.51 (1–5) | 4.67 ± 0.74 (1–5) | <.001 |
| | Gay | 5 | 4.84 ± 0.52 (1–5) | 4.64 ± 0.75 (1–5) | <.001 |
| | Bisexual | 5 | 4.84 ± 0.51 (1–5) | 4.65 ± 0.75 (1–5) | <.001 |
| | Transgender | 5 | 4.75 ± 0.62 (1–5) | 4.55 ± 0.84 (1–5) | <.001 |
| | Queer | 5 | 4.79 ± 0.59 (1–5) | 4.60 ± 0.79 (1–5) | <.001 |
| How comfortable would a student-athlete who identifies as ___ feel seeking care from your clinic? | Lesbian | 5 | 4.68 ± 0.68 (1–5) | 4.59 ± 0.80 (1–5) | .190 |
| | Gay | 5 | 4.66 ± 0.71 (1–5) | 4.57 ± 0.81 (1–5) | .113 |
| | Bisexual | 5 | 4.67 ± 0.69 (1–5) | 4.58 ± 0.81 (1–5) | .216 |
| | Transgender | 5 | 4.54 ± 0.83 (1–5) | 4.40 ± 0.87 (1–5) | .441 |
| | Queer | 5 | 4.60 ± 0.78 (1–5) | 4.53 ± 0.84 (1–5) | .234 |
| How comfortable would you feel if a student-athlete who identifies as ___ seeks your guidance for navigating his or her sexuality? | Lesbian | 4 | 3.56 ± 1.14 (1–5) | 3.21 ± 1.14 (1–5) | .788 |
| | Gay | 4 | 3.49 ± 1.13 (1–5) | 3.22 ± 1.15 (1–5) | .795 |
| | Bisexual | 4 | 3.53 ± 1.14 (1–5) | 3.21 ± 1.14 (1–5) | .898 |
| | Transgender | 3 | 3.35 ± 1.17 (1–5) | 3.03 ± 1.17 (1–5) | .028 |
| | Queer | 4 | 3.42 ± 1.17 (1–5) | 3.10 ± 1.16 (1–5) | .550 |
| How comfortable would you feel if a student-athlete who identifies as ___ seeks your guidance for navigating his or her sexuality specifically regarding athletic participation? | Lesbian | 4 | 3.89 ± 1.05 (1–5) | 3.65 ± 1.08 (1–5) | <.001 |
| | Gay | 4 | 3.86 ± 1.05 (1–5) | 3.65 ± 1.10 (1–5) | .003 |
| | Bisexual | 4 | 3.87 ± 1.05 (1–5) | 3.64 ± 1.08 (1–5) | <.001 |
| | Transgender | 3 | 3.66 ± 1.12 (1–5) | 3.45 ± 1.15 (1–5) | <.001 |
| | Queer | 4 | 3.78 ± 1.09 (1–5) | 3.55 ± 1.12 (1–5) | .001 |

**Note:**  
1. Scale is reproduced in its original format.  
2. Scale: 1 = extremely uncomfortable, 2 = somewhat uncomfortable, 3 = neither comfortable nor uncomfortable, 4 = somewhat comfortable, 5 = extremely comfortable.  
3. Scale: 1 = definitely not, 2 = probably not, 3 = might or might not, 4 = probably yes, 5 = definitely yes.
Those with a close friend or family member who identified as LGBTQ were more comfortable providing care to a student-athlete who identifies as ___ feel seeking care from you?\textsuperscript{2h}

How comfortable would you feel providing health care to a student-athlete who identifies as ___ feel seeking care from your clinic?\textsuperscript{2d}

How comfortable would you feel if a student-athlete who identifies as ___ seeks your guidance for navigating his or her sexuality?\textsuperscript{2d}

How comfortable would you feel if a student-athlete who identifies as ___ seeks your guidance for navigating his or her sexuality specifically regarding athletic participation?\textsuperscript{2h,d}

Interpersonal Contact

Those with a close friend or family member who identified as LGBTQ were more comfortable providing care to a student-athlete who identifies as LGBTQ were more comfortable providing care to bisexual (P = .248), transgender (P = .094), and queer (P = .091) patients did not differ.

Interpersonal Contact

Those with a close friend or family member who identified as LGBTQ were more comfortable providing care to a student-athlete who identifies as LGBTQ were more comfortable providing care to bisexual (P = .013) and queer (P = .025) patients than ATs who were unsure of whether they had interpersonal contact with an LGBTQ individual. Those who had interpersonal contact with an LGBTQ individual also perceived that a patient who identified as lesbian (\(\chi^{2} = 20.724, P < .001\)), gay (\(\chi^{2} = 21.401, P < .001\)), bisexual (\(\chi^{2} = 20.820, P < .001\)), transgender (\(\chi^{2} = 21.734, P < .001\)), and queer (\(\chi^{2} = 21.626, P < .001\)) would feel comfortable seeking care from them as a health care professional (Table 5). The approach to and quality of care did not differ between ATs with a close friend or family member who identified as LGBTQ and those without.

In terms of comfort with guidance in navigating sexuality, those with a close friend or family member who identified as LGBTQ felt more comfortable with lesbian (\(\chi^{2} = 52.2057, P < .001\)), gay (\(\chi^{2} = 48.860, P < .002\)), bisexual (\(\chi^{2} = 48.852, P < .001\)), transgender (\(\chi^{2} = 44.226, P < .001\)), and queer (\(\chi^{2} = 46.719, P < .001\))
patients (Table 5). A similar trend was evident for comfort providing guidance as it related to athletic participation: those with a close friend or family member who identified as LGBTQ felt more comfortable with lesbian ($\chi^2 = 36.629$, $P < .001$), gay ($\chi^2 = 33.873$, $P < .001$), bisexual ($\chi^2 = 38.005$, $P < .001$), transgender ($\chi^2 = 30.441$, $P < .001$), and queer ($\chi^2 = 34.001$, $P < .001$) patients (Table 5).

**OPEN-ENDED RESPONSES**

The purpose of our study was to evaluate ATs’ perceptions of student-athlete patients who identified as LGBTQ. Throughout the qualitative portion of our study, we gained valuable insight into these perceptions, particularly about why ATs responded the way they did in their ratings of approach, quality of care, and comfort. Athletic trainers addressed their comfort in working with an LGBTQ patient and how they perceived the patient might feel seeking care from their particular clinics. We also asked participants to expand on their comfort regarding advising LGBTQ patients about navigating their sexuality. Two main themes emerged: resources and referral (36.4% of responses) and patient-centered care (46.2% of responses). Within the main theme of resources and referral, 2 subthemes arose: concerns regarding transgender patients (18.6% of responses within the theme) and lack of training and education (29.2% of responses within the theme). Within the main theme of patient-centered care, 2 subthemes emerged: holistic care (24.0% of responses within the theme) and professionalism (26.4% of responses within the theme).

**Resources and Referral**

Many ATs reported that although they lacked the proper education and training regarding the needs of LGBTQ student-athletes, they would seek out educational resources for both themselves and their patients. Some of the
resources ATs would seek out were the NCAA Web site, the campus counseling center, and campus policies regarding inclusion and diversity. For example, 1 AT stated,

I am not trained sufficiently in how to handle those issues, but I know enough to listen and direct them to the appropriate resources. In cases when that has happened, I stress that I am happy to listen but lack the skill to really help with those questions and refer to the appropriate resource.

**Training and Education.** A subtheme in the ATs’ feedback was a concern about their lack of training and education when addressing the needs of the LGBTQ population. Participants reported that they would be comfortable speaking with a student-athlete about the student-athlete’s gender identity if they had more training and access to educational resources. The majority of ATs indicated that they were willing to provide advice for LGBTQ student-athletes navigating their sexuality; however, they admitted they did not have the proper training to do so. One person noted, “I’m not sure I have proper training to advise [patients] on navigating issues regarding sexual preference or orientation. I would find resources/ others with specific training to help them.” Another respondent indicated, “I do feel that this would make a great lecture or Webinar, and I would certainly like to learn so that I can increase my cultural competency and awareness.”

**Transgender Student-Athletes.** Several ATs indicated that transgender athletes gave them more concern than lesbian, gay, bisexual, or queer athletes because of a lack of training. These responses provide insight regarding our third research question, “Will ATs, in general, be less comfortable treating a specific member of the LGBTQ community?” Although participants generally felt comfortable with LGB student-athletes, they had specific concerns regarding their comfort levels with transgender student-athlete patients. Many observed that, if given the proper information (eg, which pronouns to use, regulations affecting participation, effects of hormone therapy), they would feel much more comfortable in providing advice regarding identity navigation as it related to athletic participation. One AT remarked,

Transgender is something that I am less experienced with and do not have as much formal training in. I have peers who have helped athletes through their transition. If an athlete asked me about care regarding their transition, it is not something that I would have a lot of knowledge in but would do my best to help them through the process and continue to participate in sports if that is what they wanted.

**DISCUSSION**

The purpose of our study was to evaluate ATs’ perceptions of student-athlete patients who identified as LGBTQ. We examined ATs’ level of approach, quality of care, and comfort when treating student-athlete patients who identified as LGBTQ. Based on our results, the majority of ATs held positive views toward LGBTQ patients, yet we did see systematic differences with regard to gender, religion, and previous relationships, suggesting that ATs followed social norms as much as the general population. Our results are consistent with previous literature, regarding the perception of ATs providing care to student-athletes who identified as LGB, which suggested that gender, religion, and having a close friend or family member who identified as LGB played a role in their comfort. Our study is unique in that participants were asked to report their approach, quality of care, and comfort when treating not only LGB student-athletes but transgender and queer patients as well. Even with an overall positive opinion of LGBTQ student-athletes, some ATs still demonstrated prejudice and discrimination, particularly in relation to transgender people. The participants asked for more training and education to resolve their lack of awareness in treating transgender patients. We also saw, consistent with a previous investigation, that gender, religion, and previous interpersonal relationships played
systematic roles in influencing participants’ comfort with the LGBTQ population.

Prejudice and Discrimination

The concept that sexual prejudice and heteronormativity are commonplace in many intercollegiate athletic settings has been explored.7 Experts17 agreed that fear of discrimination caused athletes at various institutions to remain quiet about their sexuality. In response, the NCAA has been active in adopting nondiscriminatory practices and has worked diligently to promote conversation about the needs and experiences of LGBTQ student-athletes. However, ATs have been largely left out of the conversation as to how they can help in these areas. Among the NCAA policies is the LGBTQ Subcommittee statement18 supporting student-athletes, a document opposing all forms of discrimination against all individuals, as well as a call to action for straight allies to join the NCAA in speaking out about prejudice against LGBTQ athletes. Additionally, in 2012, the NCAA released a comprehensive LGBTQ resource, including best practices, LGBTQ terminology, and organizational resources for inclusivity.19 Among these best practices were procedures for creating inclusive athletic departments and teams focused on athletic administrators, coaches, and student-athletes.19 However, these documents specifically addressed prejudice in the locker room and on the court; no overarching policies exist regarding discrimination in the athletic training clinic. As such, the NCAA and NATA should work to develop nondiscriminatory policies for athletic training facilities and best practices for ATs and health care professionals involved in the health care of LGBTQ student-athletes. The athletic training clinic should abide by these nondiscriminatory polices and best practices commonly adopted by hospitals and other health care facilities. The Healthcare Equality Index has published a call to action for health care facilities to have a patients’ nondiscrimination policy or a patients’ bill of rights that includes the words sexual orientation and gender identity.20 which may be adopted for the athletic training clinic as well. Our findings suggest that overall, ATs held positive views, but prejudice and discrimination existed, even when inclusive policies were in place. Our results also indicate that more education and policies that extend into the realm of health care for LGBTQ student-athletes are still necessary.

Transgender Student-Athletes

Our study provides insight into the importance of addressing the specific needs of student-athletes who identify as transgender. A previous author21 indicated that transgender individuals may be hesitant to seek treatment because other transgender individuals have reported past discriminatory treatment by health care service providers. Additionally, physicians in general demonstrated negative opinions toward transgender women, and individuals who did not conform to traditional conceptions of sex and gender were more likely to be at risk for discrimination in the health care setting.21 The ATs we surveyed reported that their approach to treating a transgender patient would change, which may be explained by a lack of training and education on the specific needs of transgender patients. The participants indicated that they would feel more comfort-

able providing health care to and speaking about athletic participation with a student-athlete who identified as transgender if they had more training to do so, and most respondents stated that they had no formal training on LGBTQ concerns. This theme is consistent with earlier research,22 showing that health care professionals were not necessarily familiar with the terminology or distinctions within different communities. This lack of experience often led to unhelpful, uncomfortable, or hostile treatment experiences for the patient.22

Training and Education

Our participants reflected a general lack of training or education regarding any of the LGBTQ populations. To combat the lack of education, particularly for the treatment of transgender patients, several areas of training for health care professionals have been outlined, including awareness, appropriate language, and incorporation of diversity into the curriculum.25 Evidence suggests that nondiscriminatory policies and diversity training help to create an affirming, open environment for LGBTQ people by raising awareness of the concerns that affect them.23 Various LGBTQ interest groups have provided best practices for cultural competence when treating diverse populations.24 In light of current literature and political events, several health care organizations have implemented mandatory training in LGBTQ cultural competence for all employees in an effort to provide more equitable care for all.24 Many patient-centered communication standards and field guides have been pioneered by the Joint Commission and developed for hospitals and health care providers.24 These best practices and guides to providing patient-centered care for diverse populations are available to all health care disciplines and should be adopted by ATs as well.

Gender and Religion

In general, male ATs were more likely to hold negative views of LGBTQ student-athletes than their female counterparts, providing more evidence of this discriminatory trend.23,26 We also found a trend that ATs who practiced Christianity held more negative views regarding comfort and approach to care, which may be problematic, as researchers27 noted a relationship between being exposed to homophobic messages such as shame and guilt and internalized homonegativity from religious sources. In previous studies,10,28 the groups with the most positive views toward LGB athletes were Catholics, those with no religious affiliation, and Jews. Our results indicated that ATs who were nonpracticing or nonreligious held the most positive views. Investigators29 have proposed a possible explanation for these positive viewpoints in that those individuals who were Jewish fostered a more liberal view toward the rights of minority groups. Similarly, among those with a religious preference, frequency of worship was related to antigay prejudice among those belonging to antigay denominations.28

Interpersonal Contact

Interpersonal contact with a person who identified as LGBTQ predicted attitudes better than any other demographic or social psychological variable.30 We, too, found
that those who had a close friend or family member who identified as LGBTQ were more likely to hold positive views. This may be explained by the fact that those who knew someone who identified as LGBTQ perceived that they had more knowledge about LGBTQ individuals and their rights. These factors were more likely to hold positive views. This may be explained by the fact that those who knew someone who identified as LGBTQ perceived that they had more knowledge about LGBTQ individuals and their rights.31 Those who had interpersonal contact with an LGBTQ friend or family member were exposed to diversity and perhaps would be more exposed to inclusivity. Also, positive attitudes correlated with increased familiarity.31 In recent years, the popular media have provided increased coverage of LGB people; increased familiarity has been proposed to generate a form of social contact, which correlates with empathy and attitude change.31 Another factor describing this relationship is the correlation between contact with a person who is “out” and those with an “alliance”; that is, those with a close friend or family member who identified as LGBTQ were inspired to become activists in order to protect those who were close to them.32 These relationships also serve to normalize homosexuality and challenge myths and stereotypes about LGBTQ people.32

Health and use of health care services among LGBTQ individuals appeared to be adversely affected by marginalization, and 30% of LGBTQ adults either did not seek health care services or lacked a health care provider. These statistics, however, may not be accurate in a student-athlete population because of the unique role sports medicine professionals play in the collegiate athletic setting. Yet fear of approaching the health care provider may persist, especially in heteronormative clinic environments. This gap offers ATs a unique opportunity to serve as the health care providers for these individuals. To supply patient-centered care, ATs should be trained in the unique needs and experiences of LGBTQ student-athletes. Resources should be developed and provided to ATs and student-athletes with regard to inclusivity in the athletic training facility as well as strategies for overcoming discrimination in the health care setting.

Several limitations were present in our study. Although we asked participants to select their religious affiliation, we did not ask about self-perceived religiosity or how strongly they identified with or how closely they practiced their individual religions. Another limitation was the potential for participant bias. Generally, the results of this survey were positive, and it is difficult to determine if the trend of positive perceptions occurred because those who completed our survey had an interest in or bias toward this topic.

CONCLUSIONS

Our participants’ responses about their overall approach, quality of care, and comfort in treating patients who identified as LGBTQ were promising. However, prejudice still exists in athletic training, especially regarding their approach to and comfort in treating transgender student-athletes. The majority of ATs indicated that they would feel more comfortable providing treatment and guidance to transgender student-athletes if they had more training and education. Most reported that they would likely refer student-athletes to the athletic administration or counseling center for the specific needs of this population. As the profession moves into a more patient-centered approach, if we are to treat LGBTQ student-athlete patients appropriately and successfully, we must develop more culturally competent clinicians and move the profession as a whole forward. The NATA should provide cultural competence training, and individual institutions and health care facilities should pursue diversity training and resources.

Many ATs acknowledged that their job was to treat the patient and not the patient’s sexual orientation or gender identity. Similarly, the majority of participants reported a sense of professionalism or a responsibility to behave professionally. Yet the results on professionalism were mixed: some ATs noted they would be professional and treat any student-athlete patient, whereas others commented it would be unprofessional to help a student-athlete patient navigate sexuality as it related to athletic participation. Overall, our results were positive, and many ATs were practicing holistically and inclusively. However, several participants indicated a level of bias and prejudice against the LGBTQ population. Athletic trainers should work to make themselves aware of their own potential biases and their athletic training clinics more inclusive by adopting nondiscriminatory policies and best practices for treating LGBTQ student-athlete patients.

REFERENCES

1. Board on Population Health and Public Health Practice, & Institute of Medicine; Committee on Leading Health Indicators for Healthy People 2020. Leading Health Indicators for Healthy People 2020: Letter Report. Washington, DC: National Academies Press; 2011.
2. Dorsen C. An integrative review of nurse attitudes towards lesbian, gay, bisexual, and transgender patients. Can J Nurs Res. 2012;44(3):18–43.
3. Rondahl G. Students’ inadequate knowledge about lesbian, gay, bisexual and transgender persons. Int J Nurs Educ Scholarsh. 2009;6:article 11.
4. Fredriksen-Goldsen KL, Simoni JM, Kim HJ, et al. The health equity promotion model: reconceptualization of lesbian, gay, bisexual, and transgender (LGBT) health disparities. Am J Orthopsychiatry. 2014;84(6):653–664.
5. Grant JM, Mottet LA, Tanis J, Herman JL, Harrison J, Keisling M. National Transgender Discrimination Survey Report on Health and Health Care. Washington, DC: National Center for Transgender Equality and National Gay and Lesbian Task Force; 2010.
6. Boehmer U, Bowen DJ, Bauer GR. Overweight and obesity in sexual-minority women: evidence from population-based data. Am J Public Health. 2007;97(6):1134–1140.
7. Cunningham GB. LGBT inclusive athletic departments as agents of social change. J Intercollegiate Sport. 2015;8(1):43–56.
8. Miranda L, Murphy K, Long J, Dale G. Disconnected dyads: the distressed dynamics of the coach/athlete relationship in lesbian, gay, and bisexual intercollegiate athletes. DukeSpace Web site. https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/11976/Disconnected_Dyads.pdf?sequence=1. Accessed August 12, 2018.
9. Bennett H. The Experiences of Fully Disclosed Collegiate Student-Athletes Who Identify as Lesbian, Gay, Bisexual, or Transgender: A Qualitative Investigation [doctoral dissertation]. Murfreesboro: Middle Tennessee State University; 2015.
10. Ensign KA, Yiamouyiannis A, White KM, Ridpath BD. Athletic trainers’ attitudes toward lesbian, gay, and bisexual National Collegiate Athletic Association student-athletes. J Athl Train. 2011;46(1):69–75.
11. Johnson RL, Saha S, Arbelaez JJ, Beach MC, Cooper LA. Racial and ethnic differences in patient perceptions of bias and cultural competence in health care. J Gen Intern Med. 2004;19(2):101–110.
12. Cross TL, Bazron BJ, Dennis KW, Isaacs MR. Towards a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally Disturbed. Washington, DC: Child and Adolescent Service System Program Technical Assistance Center, Georgetown University Child Development Center; 1989.

13. Marra J, Covassin T, Shingles RR, Canady RB, Mackowiak T. Assessment of certified athletic trainers’ levels of cultural competence in the delivery of health care. *J Athl Train*. 2010;45(4):380–385.

14. Board of Certification for the Athletic Trainer. *BOC Standards of Professional Practice. Version 3.1*. Omaha, NE: Board of Certification; 2017.

15. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. *The Belmont Report. Ethical Principles and Guidelines for the Protection of Human Subjects of Research*. Washington, DC: Department of Health, Education, and Welfare; 1979.

16. Creswell JW, Poth CN. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 4th ed. Los Angeles, CA: SAGE Publications; 2017.

17. Griffin P. *Strong Women, Deep Closets: Lesbians and Homophobia in Sport*. Champaign, IL: Human Kinetics; 1998.

18. Coito W, Bodensteiner J, Feyerherm S, Snider D. NCAA LGBTQ subcommittee statement of affirmation. National Collegiate Athletic Association Web site. www.ncaa.org/about/resources/inclusion/lgbtq-resources. Accessed August 12, 2018.

19. Griffin P, Taylor H. *Champions of Respect: Inclusion of LGBTQ Student-Athletes and Staff in NCAA Programs*. Indianapolis, IN: National Collegiate Athletic Association; 2012.

20. HEI Core Four Leader Criteria. Human Rights Campaign Web site. http://www.hrc.org/hei/the-core-four-leader-criteria#.WPzUsaK1vIU. Accessed August 12, 2018.

21. Lombardi E. Enhancing transgender health care. *Am J Public Health*. 2001;91(6):869–872.

22. Lurie S. Identifying training needs of health-care providers related to treatment and care of transgendered patients: a qualitative needs assessment conducted in New England. *Int J Transgend*. 2005;8(2–3):93–112.

23. Finkel MJ, Storaasli RD, Bandele A, Schaefer V. Diversity training in graduate school: an exploratory evaluation of the Safe Zone project. *Prof Psychol Res Pract*. 2003;34(5):555–561.

24. Lim FA, Brown DV Jr, Justin Kim SM. Addressing health care disparities in the lesbian, gay, bisexual, and transgender population: a review of best practices. *Am J Nurs*. 2014;114(6):24–34.

25. Herek GM. Heterosexuals’ attitudes toward bisexual men and women in the United States. *J Sex Res*. 2002;39(4):264–274.

26. Herek GM, Capitiano JP. Black heterosexuals’ attitudes toward lesbians and gay men in the United States. *J Sex Res*. 1995;32(2):95–105.

27. Page MJ, Lindahl KM, Malik NM. The role of religion and stress in sexual identity and mental health among LGB youth. *J Res Adolesc*. 2013;23(4):665–677.

28. Fisher RD, Derison D, Polley CF, Cadman J, Johnston D. Religiousness, religious orientation, and attitudes towards gays and lesbians. *J Appl Soc Psychol*. 1994;24(7):614–630.

29. Hooghe M, Claes E, Harel E, Quintelier E, Dejaeghere Y. Anti-gay sentiment among adolescents in Belgium and Canada: a comparative investigation into the role of gender and religion. *J Homosex*. 2010;57(3):384–400.

30. Herek GM, Glunt EK. Interpersonal contact and heterosexuals’ attitudes toward gay men: results from a national survey. *J Sex Res*. 1993;30(3):239–244.

31. Flores AR. Attitudes toward transgender rights: perceived knowledge and secondary interpersonal contact. *Poli Groups Identities*. 2015;3(3):398–416.

32. Fingerhut AW. Straight allies: what predicts heterosexuals’ alliance with the LGBT community? *J Appl Soc Psychol*. 2011;41(9):2230–2248.

33. Quinn GP, Sutton SK, Winfield B, et al. Lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ) perceptions and health care experiences. *J Gay Lesbian Soc Serv*. 2015;27(2):246–261.

Address correspondence to Lindsey E. Eberman, PhD, LAT, ATC, Neuromechanics, Interventions, and Continuing Education Research (NICER) Laboratory, Indiana State University, 567 North 5th Street, Terre Haute, IN 47809. Address e-mail to lindsey.berman@indstate.edu.