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| **Barriers to Health Care for the LGBTQ Population** | | | | | | |
| **Articles** | **Abbreviations:**  **LGBTQ+ =** lesbian, gay, bisexual, transgender, intersex, queer or related identities **GNC=** gender non-conforming  **PT**= physical therapy/physiotherapy **SO =** sexual orientation  **EHR=** electronic health record **SGM**= sexual and gender minority  **BRFSS**= Behavioral Risk Factor Surveillance System **HRQOL**= health related quality of life  **LGB**= lesbian, gay and bisexual. **TGNC**= transgender and gender non-conforming people  **QOL**= quality of life | | | | | |
| **Author/Year** | **Purpose** | **Design** | **Subjects** | **Measurements** | **Results** | **Strengths/**  **Limitations** |
| Ross and Setchell, 20191 | To determine and understand the experiences of people who identify as LGBTQ+ in physiotherapy and how these experiences can be improved. | Qualitative design around a purpose-built anonymous online survey that gathered demographic data and data regarding experiences of PT relating to their identity as LGBTQ+ | *Inclusion Criteria:*  -18 or older  -self-identify as LGBTQ+  -attended PT in Australia  -English speaking  114 participants w/108 meeting eligibility criteria, ages 19 to 75 years old | *Qualitative Analysis:* Four major themes were identified in analysis of survey responses  1. *assumptions* – of sexual orientation and gender identity (everyone is cis-gender and straight) 2. *proximity and exposure of bodies* – manual therapy or therapist observation of bodies was uncomfortable  3. *discrimination* – actual reports of discrimination and fear of discrimination due to homophobic remarks and misgendering  4. *lack of knowledge about transgender health issues* – not understanding of trans-specific health concerns, patients had to educate providers  Participants ranked their support for 6 proposed strategies for improving LGTBQ+ experiences in PT. The top favored ideas included therapists receiving diversity training and further education on LGBTQ+ specific health issues, and using images that show a range of different genders and sexualities.  The major finding in this study is the PT environment lacks inclusivity of LGBTQ+ individuals and nearly all survey responses indicated some instance of this sentiment | | *Strengths:*  -first study to specifically explore LGBTQ+ individuals’ experiences in physical therapy  -highlights the need for more evidence-based curricula for physical therapists regarding health issues specific to LGBTQ+ people  *Limitations:*  -Conducted in Australia and results may not be generalized to the US or other countries as attitudes towards LGBTQ+ patients may differ  -convenience sample makes it unclear how common experiences reported in PT in this study are |
| Romanelli and Hudson, 20172 | The LGBTQ population is underserved and often poorly served within the healthcare system. This study looks at the contextual factors that prevent or facilitate health equity for this population. It considers the perspectives of different social groups involved in the care-seeking process in order to identify barriers, why they exist and their consequences on LGBTQ care-seekers. | Qualitative narrative research design that draws upon participants’ interviews to explore their health-related experiences and perceptions. These narratives allowed for the investigation into psychosocial, cultural and behavioral factors that play into the LGBTQ population’s health care experience and their barriers to care. | Participants were recruited via flyers posted in LGBTQ-centric heal and social service providers in New York City. Efforts were made to recruit from a wide range of social groups, so organizations serving elders, teens and the homeless were contacted for recruitment as well.  *Inclusion:*  -self-identified as LGBTQ+  -over 18 years old  -able to give consent  40 participants were included in the study, between 21 and 68 years old, the majority identifying as Black or Latinx and ‘poor’ socioeconomic status | The study was based on responses to 3 interview questions:  *1. Thinking about yourself and community members what do you think are the most pressing health concerns in LGBT communities?*  *2. What are the challenges for keeping healthy?*  *3. What do you think are the root causes of these health concerns?*  The responses to these questions were analyzed and findings were organized around barriers to care experienced by participants at both the system and individual level. The barriers discovered are as follows:  1. decreased health literacy and uninformed community health beliefs  2. lack of knowledge of service options and eligibility, unawareness of patients’ rights, and stigma around specific treatments  3. lack of services and difficulty accessing care, specifically those that were age specific (youth, aging) as well as a lack of mental health and preventative care  4. the affordability of services, where limitations in insurance coverage oftentimes made care unattainable  5. receiving inappropriate or inadequate care, due to poor interpersonal interactions with providers and a lack of knowledge on the part of the provider  In looking at the information surrounding these barriers, root causes were attributed to social structure factors, in that LGBTQ patients are navigating a system that was not created for or by them, or is in any way tailored to address their needs. There is lack of funding, lack of outreach, minimal provider education on LGBTQ health and maximal provider subscription to the gender binary.  Due to restricted access to care participants faced poorer health outcomes, such as higher incidence of HIV, STIs and depression. Additionally, transgender patients highlighted a further diminished availability of affirming providers, knowledgeable about transgender healthcare and therefore were less likely to engage with providers. | | *Strengths:*  -This study had a diverse group of participants from many different races and socioeconomic statuses  -results have implications for health care access and delivery for LGBT patients that can inform future practice guidelines, policy and research  *Limitations:*  -This study was centered around LGBTQ health care in NYC, which obviously does not translate to many other areas in the county, for example, rural NC.  -themes may exist in the larger LGBTQ community that were not present in this study sample  -little time was given to build rapport with participants which may have limited their engagement  -data was obtained purely qualitatively through interviews |
| Roberts & Fantz, 20143 | This review examines the barriers to healthcare that trans people often face, focusing on 4 main issues and how they can be addressed:  *Reluctance to disclose* stems from stigmas associated with gender nonconformity that lead to prejudice and discrimination. Trans people may be unwilling to disclose their gender identity, even in the realm of healthcare due to fear and anxiety surrounding the potential negative consequences. Negative experiences in healthcare can result in trans people delaying or avoiding necessary health services and therefore putting their own health at risk. Avoiding the healthcare system can lead to obtaining medicine and treatment from nontraditional/non-health care sources or forgoing care all together.  *Structural barriers* to care for the trans population are rather diverse depending on individual situations. These range from a lack of comfortable restroom access to lack of private inpatient rooms and inability to properly acquire patient gender identity on admission to the healthcare practice. Many practices have a binary male/female identification system, which is ineffective in collecting the most accurate information from individuals who are gender nonconforming. It is recommended that EHR should identify patients’ preferred name and pronouns as well as their gender identity in order for providers to best build rapport and provide quality care. Additionally, it is important for the EHR to have an accurate record of the patient’s medical transition history and current anatomy, again to provide the best quality care and ensure patients receive the proper screenings and treatments.  *Financial barriers* can hinder patients who identify as transgender even after addressing all other barriers. According to the 2010 National Transgender Discrimination Survey, 48% of transgender people delayed seeking medical care because they could not afford it. This population is twice as likely to be unemployed, limiting employer-based health coverage (and finances) and those who do have health insurance face significant limitations. Many insurance companies will exclude ‘transition-related care’ and will often include routine preventative services in this category. Additionally, many insurance companies have genders linked to organ systems and associated procedures and if a healthcare provider performs a procedure, it may not be covered by insurance due to incompatibility with identified gender.  *Lack of provider experience and resources* is related to the fact that health care environments are poorly adapted to the unique needs of the trans population which further contributes to limiting access. There is a global lack of knowledge on the part of healthcare providers regarding the unique health concerns that transgender patients face, such as a 4x risk of contracting HIV than in the general population, a higher incidence of drug and alcohol abuse and suicide or attempt rates as high as 40%. Healthcare providers receive little to no formal training to aid them in caring for the transgender population. The need for formal guidelines regarding transgender care has been identified due to the lack of information and resources in this area. It is vital that primary providers receive more training and education regarding the appropriate care of trans patients so that their health can be better managed. | | | | | |
| Gonzales and Henning-Smith, 20174 | To compare barriers to health care access between transgender/GNC adults and cisgender adults, using data from a large multistate sample as very little population-based research has been done regarding transgender and GNC healthcare. | Cross-sectional study based on data from the 2014-15 BRFSS in CO, CT, DE, GA, HI, ID, IL, IN, IA, KS, KY, LA, MD, MA, MN, MO, MT, NV, NY, OH, PA, TX, VT, VA, WV, WI, WY and Guam | This study used data from the 2014-2015 BRFSS health survey that included an optional module on sexual orientation and gender identity that 27 states and Guam included on their statewide surveys. Participants were asked if they considered themselves to be transgender and if they considered themselves to be a transgender woman, (n=724) transgender man (n=449), or transgender, GNC (n=270). Data from cisgender women (n=183370) and cisgender men (n=131080) was also examined. | In this study cisgender women were used as the reference point as they reported the lowest prevalence of barriers to care measured. Four barriers to care determined from the BRFSS surveys from adults of all genders were assessed and included; no health insurance, no usual source of care, unmet medical care need due to cost and no routine checkup Transgender and GNC adults more commonly reported education, income, and employment levels associated with barriers to care, such as lower levels of education and lower household income. Transgender women were more likely to have no health insurance than cisgender women and transgender men were more likely to have no health insurance, no usual source of care compared to cisgender women and GNC adults were more likely to have unmet medical needs due to cost as well as no routine checkups compared to cisgender women. It is likely that due to transgender and GNC adults being under or unemployed, they have less access to health insurance through jobs as compared to cisgender women. They also may experience difficulty enrolling in public health plans, or choose to avoid health insurance altogether as plans historically do not cover any transition-related care. Discrimination or lack of awareness on providers’ end may lead to uncomfortable situations for GNC adults, resulting in them avoiding the healthcare system all together.  This study provides baseline estimates of barriers to care that need to be addressed in public policies affecting transgender and GNC individuals. Having more data and research regarding this population’s access and experience with health care can help inform policy changes. | | *Strengths*  -uses data from one of the first federally sponsored health surveys to collect information on transgender care and had a large population-based sample  -identifies barriers to care for transgender and GNC populations  -begins to narrow the wide gaps in data collection and knowledge regarding healthcare and the transgender and GNC community  *Limitations*  -all responses were self-reported which could lead to recall and response bias  -only includes non-institutionalized adults with a landline or cell phone, leaving out adults who are homeless, in medical facilities or are incarcerated  -data was collected over the phone and participants may have been hesitant to disclose their gender identity  -there is very little research on the extent of transgender and gender identity misclassification in health surveys  -southern states were under-represented in this data and that is an area with more hostile policy regarding GNC and transgender people |
| Brooks, Llewellyn, Nardarzynski, et al., 20185 | To understand the barriers and facilitators of disclosing sexual orientation experienced by LGBT patients in healthcare environments, as these can lead to further health disparities in this population. Disclosure of SO in health care links minority stress faced by this population and the fundamental cause theory in accessing appropriate services. In identifying these factors, modifications can be made in order to ensure proper care. | Mixed method systematic review that includes qualitative, quantitative and mixed method papers. | Studies were included if their participants were 18 and over, identified as LGBT, had a same-sex relationship or were attracted to members of the same sex. It included 31 studies with a total of 2442 participants.  Studies that had data regarding barriers and/or facilitators to disclosure of SO to a healthcare professional were included and those that did not specify disclosure in a health care setting were excluded. Transgender, though a gender identity rather than SO was included, as authors were unable to separate this data.  Studies had to be in English, published after 2000 and all reviews, commentaries and conference abstracts were excluded. | Four overarching themes were identified in this review:  *The moment of disclosure*: This could be considered either a barrier or facilitator depending on the patient attitude, as some felt it relevant to their care to disclose, while others did not and could lead to problems. Provider communication plays a role and if inclusive language is used with welcoming body language this could be a facilitator, as opposed to heteronormative language and unfriendly body language being a barrier. Written disclosure was seen as a facilitator but limiting as often times choices were not all inclusive to a broad spectrum of SO. Heteronormative assumptions was a major barrier, particularly in the context of sexual health when only heterosexually appropriate advice was given.  *Perceived outcome of disclosure:* Fear of discrimination or receiving poor or unequal care were the main reasons patients chose not to disclose their SO. They feared negative personal reactions from their healthcare provider and breeches in patient-provider confidentiality. Many also did not want their SO documented in their medical records.  *Healthcare professional factors*: Many patients were more likely to disclose their SO to a provider with whom they had a longstanding relationship with, or who identified as LGBT themselves. If a provider was viewed as an ally and accepting to the LGBT community, this could be a facilitator of disclosure.  *Environmental factors*: Many patients only disclosed their SO in sexual health clinics and not in primary care settings. Additionally, military, religious-affiliated and group treatment settings were all seen as barriers to disclosure. Seeing symbols and materials in an environment such as a rainbow sign or Human Rights Campaign logo were facilitators to disclosure while religious symbols or icons in a healthcare setting was a barrier. | | *Strengths:*  -first review to include male and female participants and participants from any sexual LGBT subgroup  -identifies modifiable barriers to disclosing SO  -identifies the disadvantages to patient care that not disclosing can have  *Limitations:*  -mixed method and qualitative studies contain weak evidence  -participants in each study were largely higher income, middle-age, well educated, white people who in general are more likely to disclose their SO  - participants need to have disclosed their SO before being recruited to studies so may not have the same barriers and facilitators as those who have not disclosed at all |
| Fredricksen-Goldsen, Kim, and Barkan, 20126 | To examine the prevalence of disability among lesbian, gay and bisexual adults and the relationship between disability and sexual orientation | Cross-sectional study based on BRFSS telephone interviews. The CDC designed BRFSS to investigate health conditions and behaviors of adult US residents. | BRFSS data from respondents 18 and older living in Washington State was analyzed. This data is collected annually by telephone interview of randomly selected non-institutionalized English or Spanish speaking adults. Data from 2003, 05, 07 and 09 was analyzed. | Disability was measured by asking participants if they are limited in any way, in any activity due to physical, mental or emotional problems. They were also asked if they had health problems that required them to use special equipment (ex. a cane or hospital bed). Sexual orientation was measured by respondents selecting from heterosexual/  Straight/homosexual/gay/lesbian, bisexual, or other, though ‘other’ responses were not analyzed.  Health conditions were measured by asking respondents if they had been told by a health professional that they had a chronic health issue, or obesity and health risk behaviors were assessed by inquiring about smoking and exercise habits. The number of days one experienced poor physical health was measured by asking “For how many days during the past 30 days was your physical health not good?” and mental health was assessed in a similar manner. | Lesbian, gay and bisexual adults showed a higher prevalence of disability than those identifying as heterosexual. Among LGB adults, 36% of women and 30% of men were disabled, along with a higher prevalence of disability in younger ages in the LGB population. Lesbian and bisexual women were more likely to be smokers, be obese, report more frequent poor physical health, have arthritis and asthma as well as frequent mental distress than heterosexual women. Gay and bisexual men were more likely to be smokers, and experience more frequent poor physical and mental health, as well as more likely to be obese than heterosexual men.  Lesbian and bisexual women were 1.9-2.7 more likely to be disabled compared to heterosexual women. Bisexual men were 2.7 times more likely to experience disability than heterosexual men, but there was no clinical significance between gay men and heterosexual men in regards to the likelihood of disability. LGB adults demonstrated overall higher odds of disability, with a higher likelihood of developing disability at a younger age (18-30) than their heterosexual counterparts. Higher mental distress which is more prevalent in LGB adults could lead to higher incidence of poor physical health, as can an increased likelihood of health risk behaviors. Creating health promotion efforts that focus on quitting smoking, addressing obesity and improving mental health may be one strategy helpful in improving QOL and decreasing disability. | *Strengths*  -first study that uses population-based data to examine disability prevalence in the LGB population  -focuses on solely on LGB population  -focuses specifically on disability prevalence in the LGB population  -identifies modifiable health behaviors that can be addressed to help reduce disability in this population  *Limitations:*  -BRFSS data doesn’t include information on important covariates of disability such as HIV or cofounders such as discrimination  -the data available from the BRFSS does not allow for relationships to be explored between disability and risk factors over time  -Sample size was limiting, as it was focused on one specific region of the country |
| Casey et al., 20197 | To examine reported experiences of discrimination against LGBTQ adults in the United States, which contribute to poor health outcomes. It aims to allow comparisons by race and ethnicity within the LGBTQ population as negative health outcomes are likely to be magnified for individuals from multiple minority backgrounds. | Cross-sectional probability-based telephone survey that was performed nationally and included 489 LGBTQ adults (18+) from a sample of 3453 US adults. The survey consisted of 25 questions about lifetime personal experiences with and perceptions of discrimination. Seeking medical care and police services were two areas particularly examined, due to fear of being discriminated against in these environments. | 489 self-identified LGBTQ adults who are 18 or older This sample includes 282 white respondents, 201 racial/ethnic minority respondents, as well as a sample of 86 transgender adults (23%). Demographics for this sample were similar demographically to LGB adults in other national, population-based samples, allowing results to be generalized to the US adult population, though there is the likelihood of underreporting among the US adult LGBTQ population. | LGBTQ racial minorities were less likely to have a college degree, make more than 25K per year and have health insurance than white LGBTQ respondents. The majority of all LGBTQ adults report experiencing interpersonal discrimination with 57% reporting verbal slurs, 53% experiencing microaggressions related to their sexual orientation or gender identity, 57% stating that they or an LGBTQ friend had been threatened or harassed because of their identity and 51% reported sexual harassment or violence due to their identity. One third (34%) of LGBTQ participants reported being verbally harassed in a public bathroom, and 32% were told that they would be unwelcome in a neighborhood or place to live because they are LGBTQ. 18% reported avoiding seeking healthcare due to anticipated discrimination and 16% reported facing discrimination in health care encounters, while 22% reported discrimination in other domains of life such as seeking housing or applying for jobs or college. LGBTQ racial/ethnic minorities were more than 2x as likely to personally experience discrimination due to their LGBTQ identity as well as race-based microaggressions and slurs. In regards to the transgender subsample specifically, 38% of transgender adults state they have experienced slurs, and 28% report microaggressions. One in five transgender adults reported that they have avoided seeking healthcare due to fear of discrimination because of their gender identity and 10% reported personally experiencing discrimination due to their gender identity.  This study identified 4 key findings:  1.LGBTQ adults in the US experience pervasive discrimination in many areas of their lives  2. Institutional discrimination is prevalent in health care  3.LGBTQ racial/ethnic minorities are significantly more likely to report more forms of discrimination  4.Both national policy and local initiatives need to take steps to address this widespread discrimination on both institutional and interpersonal levels. At minimum, medical and medical admin staff training on cultural competency regarding the LGBTQ community should be improved as well as improving data collection on sexual orientation and gender identity. | | *Strengths*  -probability sampling design  -breadth of questions asked regarding LGBTQ-based discrimination in both interpersonal and institutional experiences  -addresses LGBTQ racial/ethnic minorities and the additional burden this population faces  examines the experiences of racial/ethnic minorities  -identifies types of discrimination LGBTQ adults face, and the prevalence of each type  *Limitations*  -Cover only a subset of discrimination and harassment that LGBTQ people experience  -Does not account for current levels of discrimination as it focuses on lifetime experiences  -sexual harassment and violence are often underreported in phone surveys and the true prevalence may be higher than found in this survey  -low response rate to survey, though is still likely an accurate estimate of study population  -Transgender respondents reports of discrimination were not separated by gender identity and sexual orientation as the study could not distinguish between the two |
| Ayhan et al., 20208 | Determine discrimination experiences of SGM individuals, as well as attitudes toward SGM among health care staff; it also aims to identify the causes, risk factors and consequences of experiencing discrimination | Systematic review conducted across PubMed, Cochrane Library and Science Direct from May to Sept 2016 | This search included all peer-reviewed papers written in English, with no date restriction as all research was considered relevant. The research had to consist of original quantitative data and discuss discrimination, inequalities, potential barriers to care and attitudes toward SGM individuals in health care settings. 30 articles reviewed were included as they met these criteria, and 18 of the studies had been published in the last decade. | This review identified 3 main findings in regards to the health care experiences of SGM individuals.  *1.Discrimination against SGM individuals in in health care settings*  The types of discrimination encountered by SGM mainly included refusal of needed medication due to sexual orientation and gender identity and discriminatory attitudes of health care providers. Those who also belonged to ethnic minority groups faced double stigmatization, though this has only been researched in a small number of studies. Men who identify as a sexual minority report more negative experiences than other subgroups due to the risk of HIV transmission. Transgender individuals who use hormone therapy or undergo gender affirmation surgery experience more discrimination than transgender patients who do not. Transgender patients also report delays in medication and being exposed to verbal and physical violence in their healthcare examination. One study found that discrimination against the transgender population was more likely to occur in a hospital setting. The outcomes of negative health care experiences for SGM individuals included postponing health care needs and avoiding health care services out of fear of stigmatization  *2. The importance of disclosure to health care staff*  Many SGM individuals do not disclose their gender identity or sexual orientation to health care staff due to fear of stigmatization and therefore receiving poorer health care. One study found that there is a negative link between disclosing and being satisfied with health care services, due to again, stigmatization.  *3. Awareness of homophobia and transphobia among health care professionals*  Studies determined that nurses generally had more positive attitudes toward SGM patients than doctors. Psychiatrists, medical doctors and podiatrists have overall positive attitudes, while surgeons and orthopedists have negative attitudes. Additionally, health care providers have more negative attitudes toward transgender individuals than other sexual minority subgroups. | | *Strengths*  -used studies with only quantitative data  -focused solely on studies regarding the health care experience of SGM  -identifies that health care professionals need to be more sensitive to the needs of SGM individuals and more knowledgeable about their health care needs.  *Limitations*  -Most articles were provided low-level quantitative evidence  -Many studies used convenience sampling which makes the results difficult to generalize to a larger population  -No validated scale to quantify the discrimination experienced by SGM individuals  -Across studies, various measures to quantify health care staff attitudes toward SGM individuals, resulting in a lack of consistency |
| Baker, 20199 | To compare the HRQOL between US transgender and cisgender adults using data from the BRFSS | This study used a probability sample of the transgender population and is a cross-sectional study based on the data acquired from the BRFSS in the Sexual Orientation and Gender Identity module from 2014-2017 in the United States. | Of the BRFSS sample, transgender individuals made up .55% of it, which is roughly equivalent to 1.27 million transgender individuals. | Compared to cisgender adults, more transgender adults reported smoking cigarettes and physical inactivity, while fewer transgender individuals reported having health insurance coverage. Transgender adults were also more inclined to report a lower HRQOL in the past 30 days due to poor health or mental distress, and reported more days of combined poor physical and mental health and activity limitation There are obviously great health disparities that affect the transgender population that need to be addressed by both health care providers and policy makers. | | *Strengths*  -identifies severe health and HRQOL disparities that affect the transgender population  *Limitations*  -generalization of these results are limited due to the fact that all states and territories do not field the BRFSS Sexual Orientation and Gender Module |
| Teti, Kerr et al., 2021 | To address the critical need for more research regarding the well-documented health disparities faced among TGNC individuals, as transgender medicine is still a fairly new field. Understanding TGNC experiences in healthcare is crucial to improve education and provide better quality care, therefore improving health outcomes for the TGNC population. | Qualitative scoping review of studies addressing TGNC people’s experiences receiving physical health care | Consisted of 35 qualitative studies that included 1,607 TGNC participants 16-64 years old.  Inclusion criteria:  -articles had to be peer-reviewed  -written in English  -based on studies performed in the US between Jan. 1, 2008 and Dec. 31, 2018  -use of qualitative methods  -study samples of at least 50% trans people or GNC people  -description of physical health care experiences are a major finding in the study | A theme analysis was done of the literature included in the review and 3 major themes were identified- health care challenges, health care needs and TGNC resources and strengths.  Challenges included lack of provider knowledge/sensitivity, lack of competency, hostile treatment environments, stigma, and financial and insurance barriers. Due to inadequate education of healthcare providers, TGNC often are not provided medically necessary treatment such as cancer screenings, STI education, and in extreme cases emergency medical care. TGNC patients also often face frequent harassment, misgendering, and hostile responses from healthcare providers. The lack of provider knowledge can also lead to sustained long-term lack of physical healthcare due to fear avoidance behavior or refusal to seek basic preventative health care. A lack of appropriate medical care often time resulted in reportable avoidable injury, illness and in extreme cases, death. The TNGC population is less likely to have medical insurance and additionally the gender affirming care many need are not covered by insurance either. Financial burden can also hinder TGNC’s ability to seek prerequisite health care for gender affirming care, again leading to preventable long-term health issues.  Needs consisted of improved care and knowledge from providers, peer support, patient autonomy and patient-informed practices. The lack of training and awareness of health care providers ultimately result in adverse healthcare experiences for TGNC patients. Providers who are not properly educated about gender identity and biological anatomy often provide care that was overly invasive or not medically necessary. The consequences of poor health system experiences carry across the lifespan and are seen in the domains of biological, psychological and social health.  TGNC strengths includes persistence as a self-advocate, resilience despite adversity in life and in health care and willingness to grow from adversity. Positive influences such as peer support, patient informed practice and patient autonomy are important in this regard. | | *Strengths*  -this review focuses on all aspects of physical health to create a full picture of physical health faced by the TGNC people within the healthcare system  -Only studies from the US are included, which is significant as experiences of TGNC vary across different cultures.  *Limitations*  -Many studies addressed a very wide range of ages which does not allow for research points to be focused on distinct health concerns for specific age groups  -many studies did not include the experiences of ethnic and racial minorities  -transgender and GNC were studied together in many articles, though specific groups may have different experiences.  -many studies were survey based which does not allow for experiences to be explored in depth. |
| **Conclusions:** Overall, the LGBTQ population faces more health disparities and inequalities than cisgender, heterosexual individuals. This is due to many factors, the main ones being discrimination due to homophobia and transphobia with health care providers, as well as their decreased knowledge of LGBTQ specific care.1,2,4 LGBTQ individuals are more likely to avoid seeking health care when they needed to out of fear of being mistreated or receiving less than adequate care. This leads to overall poorer health outcomes and lower HRQOL in this population, especially since many do not receive preventive care for this reason.4,8,9 Additionally, the LGBTQ population has increased mental health needs as compared to heterosexual and cisgender individuals, with an increased incidence of depression, anxiety, substance use and higher suicide rates.1,2 In order to mitigate such issues, it is imperative that stable, safe and comfortable access to health care is available and readily used.4 In looking at subgroups within the LGBTQ individuals, the transgender population is the most marginalized and underserved population in medicine, facing many barriers to care such as decreased health insurance coverage and lack of provider knowledge.4,9 Additionally, those who identify as LGBTQ and as racial/ethnic minorities also face further discrimination and health disparities compared to white LGBTQ identifying individuals.7,8 | | | | | | |

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| **Cultural Humility, Bias Education and Awareness and Needs of the LGBTQ Community Among Healthcare Providers** | | | | | | | |
| **Articles** | **Abbreviations:**  **LGBT-DOCSS:** Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale  **OT**: Occupational therapy. **PCP:** Primary care provider  **PA:** Physician assistant **IEP**: interprofessional educational simulation  **SW:** Social work | | | | | | |
| **Author/Year** | **Purpose** | **Design** | **Subjects** | **Measurements** | | **Results** | **Strengths/Limitations** |
| Bidell, 201711 | To further the development of competent LGBTQ clinical services by the creation of a reliable and valid LGBT self-assessment for healthcare providers, that takes into consideration clinical skills, attitudinal awareness and basic interdisciplinary knowledge- LGBT-DOCSS | This is a measurement validation study assessing the modifications to the Likert scale and the content within the assessment. It combined 3 studies which examined item development and factor analyses, reliability estimates and test-retest reliability, and construct validity. | **Study 1& 3:** 564 mental health and primary care medicine providers and trainees in the US and UK  **Study 2:**  27 undergrad psychology and medical students in the UK | Findings from the 3 studies included support the reliability and validity of the LGBT-DOCSS in 3 subscales; clinical preparedness, attitudinal awareness, and basic knowledge regarding LGBT health disparities. It also demonstrated good internal consistency overall, including within the 3 subscales. Study 3 demonstrated evidence of content and discriminant validity with low levels of response bias. Its findings also provide the initial support that the LGBT-DOCSS is a sensitive measure of transgender-based prejudice. It was indicated that further research must be done to determine if the LGBT-DOCSS is in fact empirically robust in its structure. The author states clearly that the LGBT-DOCSS was not developed to be a high-stakes assessment, where one passes or fails, but intended to guide research and trainings, as well as exploring clinician characteristics. It can be used to promote providers’ self-exploration of their own LGBT clinical preparedness, awareness and basic knowledge. | | | *Strengths*  -focuses on a LGBT specific assessment, of which there are very few  -contributes to the health and well-being of LGBT people who are looking for quality care  -developing the LGBT-DOCSS provides the opportunity for tailoring learning objectives to strengthen healthcare providers work with LGBT patients  *Limitations*  -Lack of diversity in healthcare workers that participated in these studies; no nurses, nurse practitioners, physician assistants, allied health workers, or social workers  -Small sample sizes  -only included English speakers  - solely relies on self-reporting and no other feedback or input; hard to discern implicit bias  -Difficult to define what constitutes LGBT competent |
| Nowaskie, Patel & Fang, 202012 | The purpose of this study was to understand the gaps in healthcare students’ LGBT cultural competency, determine if differences exist in LGBT cultural competency, patient exposure and education in dental, medical, SW, OT, pharmacy, PT and PA students, and examine how the experimental variables influence these students’ cultural competency.  There are no known studies evaluating LGBT competency across these healthcare disciplines and it is necessary to recommend educational initiatives. | A cross-sectional study regarding healthcare students at 3 different universities across the United States completed a survey of demographics, how many LGBT patients they have cared for or worked with, how many hours of LGBT education they have received at their current school, and how many hours of LGBT education they have received ever, as well as the LGBT-DOCSS.  Participation was voluntary and anonymous. | Convenience sampling was utilized to recruit participants as the survey was emailed to contacts at health professional schools at 3 different universities in the US.  A total of 1701 healthcare students completed the survey with response rates varying across disciplines. | Students reported higher attitudinal awareness than basic knowledge and clinical preparedness, and higher basic knowledge than clinical preparedness on the LGBT-DOCSS, with SW with the highest overall scores and dentistry with the lowest. PA students reported the most LGBT patient exposure, and again dental students reported the lowest. SW students also received the more education regarding LGBT health and OT received the lowest. PT had the 3rd least amount of experience annually working with LGBT patients and the 3rd least annual LGBT curricular hours. | OT, pharmacy, PT and PA students had substantially lower overall LGBT-DOCSS and basic knowledge compared to medical and SW students, and reported working with less than 5 LGBT patients annually with less than 1 hour of LGBT educational curriculum annually. Exposure to LGBT patients and curriculum are important factors to healthcare students’ cultural competency. Studies have shown that curricular education can be effective in improving LGBT-specific attitudes, preparedness, and knowledge in dental, medical and pharmacy students. Therefore, increasing LGBT patient exposure, through panel discussions, conferences and seminars, placing students in LGBT healthcare clinics and promoting safe spaces for LGBT patients institutionally could all be beneficial in improving cultural competence in these students. Increasing LGBT curricular hours could be achieved through journal clubs, increasing the number of standard lectures on the topic, hosting relevant guest speakers and identifying free extracurricular modules. | | *Strengths*  -First multicenter, multidisciplinary assessment of multiple healthcare students’ levels of LGBT cultural competency.  -First known study to examine LGBT cultural competency of OT, pharmacy, PT and PA students  - identifies significant differences in LGBT cultural competencies that exist across health care disciplines  - recognizes that inadequate experience with LGBT patients and insufficient LGBT curricula results in reduced LGBT cultural competence  -involves physical therapy students  *Limitations*  -Relied on convenience sampling and there may have been bias in who distributed and took the surveys  - Only 3 universities in the country were represented and it is hard to say how these results can be generalized  -Less OT, PT and PA students were recruited so generalization of this population is less reliable  - Quality of education was not self-reported and may be just as important to consider as quantity |
| McCann & Brown, 201813 | To examine the education and training requirements of health practitioners, identify good practice examples and to make recommendations for developments in practice, research education and training. It also intendeds to identify the educational needs of healthcare students and professionals and the approaches used in their education regarding LGBT+ health. | Systematic review examining the experiences of healthcare professionals, students and educators regarding the needs of the LGBT+ population. This included studies that used quantitative, qualitative or mixed method approaches | Inclusion criteria was academic journals and peer reviewed empirical studies that were written in English. The studies had to be focused specifically on education of undergraduate students, healthcare professionals, and educators regarding LGBT+ issues. There was a total of 22 studies included in the review, most of which (18) were conducted in the USA. | After analyzing the studies, 4 major themes were identified  1. *Cultural competency and inclusivity*  Issues exist in the development of cultural competence which would allow practitioners to care for patients in a culturally responsive, sensitive and inclusive manner. This could be due to lack of confidence, negative attitudes, biases and preconceptions regarding LGBT+ people. Nursing and allied health programs and practices are predominantly ‘heterosexist’ and in need of adequate education and training initiatives. A thorough LGBT+ curriculum can offer a specific focus on communication and interpersonal skills, health knowledge and terminology, and cultural competency. This will provide the skills necessary to give affirming, respectful and inclusive care.  *2. Existing knowledge of LGBT+ health related issues*  Many studies revealed limited inclusion of LGBT+ health in the curriculum for health professionals, shining a light on the need for professional development in the specific needs and concerns of LGBT+ people. This includes developing LGBT+ sensitive education materials, challenging negative and stereotypical beliefs regarding the LGBT+ population and building confidence and skill. Assessments should be given in school in order to develop skills in sexual history taking, formulating appropriate interventions and increasing self-awareness of inclusive practices.  *3. Curriculum developments and outcomes*  This review identifies a need for formal research and evaluation of the integration of LGBT+ needs within a health curriculum. There are no post-curricular evaluations that review and identify the impact and outcomes achieved in the inclusion of LGBT+ health in a program. Longitudinal studies and curriculum evaluations can identify the impact this has on medical practice, as well as including the experiences of LGBT+ patients as they are treated by students educated in these curriculums.  *4. Evidence of best practice in education delivery and evaluation*  Information from existing research can inform future curricular developments. A range of methods of education were used in studies to support development of cultural competence in caring for LGBT people. Experiential exercises using interview scenarios have been shown to be successful, as have student led sessions that include presentations, patient panels and group discussion. An important component for any approach is the full backing of professional regulatory bodies in including LGBT+ content in the curriculum | | | *Strengths*  -identifies important issues that need to be addressed to ensure students and healthcare professionals meet the distinct health needs of the LGBT+ population  -identifies areas of best practice about LGBT+ health is a useful starting point for educators  *Limitations*  -limited number of studies  -no international or mulit-centered studies  -no studies on any specific LGBT+ subgroup  -no longitudinal studies identifying impact of LGBT+ health in education |
| Aleshire, Ashford, Fallin-Bennett, Hatcher, 201914 | To review current literature that describes PCP attitudes towards LGBTQ people, as their actual or perceived discriminatory mindset can lead to poor treatment or health outcomes, as they often serve as the health care system’s entry point | Narrative literature review of peer-reviewed research articles published in English from 2005 to 2017 that include PCP attitudes specifically toward sexual or gender minorities. This resulted in 8 articles meeting review criteria | This review identified that PCP’s oftentimes felt it was a barrier to deliver healthcare when a patient identified as non-heterosexual, yet over time these attitudes may be changing. Additionally, PCPs often dismiss sexual and gender identity as irrelevant to care in order to avoid seeming discriminatory, yet the LGBT population faces significant health disparities and health challenges that could be addressed by a healthcare provider. They are more likely to be disabled at a younger age, have a higher rate of psychiatric disorders, tobacco use, substance abuse and suicidal ideation and attempts. Lesbian and bisexual women are less likely to be screened for breast cancer, cervical cancer or sexually transmitted infections and gay and bisexual men account for more than half of the individuals living with HIV in the USA. Increased knowledge about LGBTQ people, health and health care has been shown to be predictive of more positive attitudes towards this population. Though, one study found that despite medical students indicating comfort with LGBTQ patients, they rarely asked about gender identity, sexual health or orientation, indicating that comfort with LGBTQ people doesn’t always translate to culturally competent care. Providing opportunities to increase this knowledge should be a prerequisite to improve healthcare for these gender minorities. Ensuring that all health care forms and electronic health records contain gender inclusive language is another step to avoid heterosexism in healthcare settings | | | | *Strengths*  -identifies implications for further research and further education of health care providers  -fills in a gap in research examining PCP’s attitudes toward LGBT patients  *Limitations*  -small number and types of studies included in the review  -studies took place over a short period of time and did not indicate evolution of attitudes over time  -sampling bias and voluntary response bias in all reviewed studies  - all studies were unique which was hard to generalize the review findings |
| Morris et al., 201915 | To determine the effectiveness of programs intended to reduce healthcare student or provider bias toward LGBTQ patients | Systematic review or original studies focused on reducing healthcare student or provider biases towards LGBTQ individuals | To be included in the review a study had to assess LGBTQ related bias, include medical, nursing or dental students or practicing professionals, and include a training program designed to promote culturally competent care for LGBTQ patients. It had to be written in English and published between March 2005 and Feb 2017. This resulted in 13 studies to be included. Quality ratings for 8 studies fell in the moderate to high range and the remaining 5 were low due to risk of bias. | *Impact of interventions on knowledge:*  Programs intended to increase knowledge of the LGBT community and associated health care issues used lectures, readings, videos, interviews and presentations by LGBTQ people along with group discussions. The topics addressed included sexual orientation, gender identity, sexual history taking, LGBTQ terminology, disclosure of gender identity and sexual orientation, discrimination and prejudice and the impact they have on LGBTQ health, factors affecting medical access and care, myths and stereotypes, transgender medical care and legal concerns particularly in regard to elder LGBTQ patients. Gains in knowledge were assessed with non-standardized measures such as multiple choice or true/false tests and Likert scales. Overall programs demonstrated a significant increase in knowledge across all disciplines.  *Impact of interventions on attitudes:*  To promote a more positive attitude toward LGBTQ patients, perspective-taking exercises, videos of firsthand accounts of LGBTQ patients describing discrimination they’ve faced in healthcare settings, and patient panels of LGBTQ individuals were used. The results of these training programs were variable as some demonstrated significant positive changes in attitude while others showed no change or anecdotal change. Additionally, researchers found it hard to quantitively assess changes in implicit bias, as well.  *Impact of interventions on comfort level*:  These interventions consisted of scripted interview exercises, training in sexual history taking, role play, small group discussions and perspective taking exercises. Overall these programs resulted in increased comfort levels and decreased anxiety among students and providers. All of the studies utilizing small groups and interview practice skills were very effective in increasing comfort levels.  Educational programs can be effective in increasing knowledge about LGBTQ healthcare and increasing comfort levels in treating this population, particularly if members of the LGBTQ community are involved in this training. Practicing necessary skills in a low-stakes environment is a strategy that can improve comfort levels in students and providers. This study supports a LGBTQ curriculum for healthcare students and professionals in order to address implicit bias towards this community. | | | *Strengths:*  -addresses a gap in literature on effective strategies used to reduce effects of implicit bias toward the LGBTQ population in healthcare students and providers  -Offers a blueprint that can be used to train students and practicing providers on how to be aware of and how to mitigate their biases  *Limitations:*  -study findings do not address impact of training on patient outcomes  -studies in the review do not address timing and dosage of training and debiasing programs  - studies do not address the retaining of this knowledge and empathy over time  - many of the studies included were low quality  -no studies included examined the impact of training on patient satisfaction |
| McCave et al., 201916 | To determine the effectiveness of a team-based IEP in order improve patient-centered care and reduce the health disparities faced by the transgender population in healthcare settings. | Cross-sectional study performed 2x over 2 years. Materials for the IEP case were created by the authors of the study, consulting with transgender individuals to ensure authenticity and avoiding stereotyping. | In the 2017 event 48% of the students were OT, 2% were medical, 9% were PT, 37% were PA, 4% were SW and 1% were healthcare administration. There was a total of 161 participants.  In 2018, 26% were OT, 21% were medical, 19% were PT, 18% were PA, 8% were nursing, 8% were SW with a total of 333 participants. Over the 2 years, the IEP had a total of 494 students participate, with the number doubling in the 2nd year. | Medical, PA, OT, SW, nursing and PT students were placed on healthcare teams and emailed basic information regarding the typical roles of healthcare providers on a team and best practices and terminology affirming to transgender patients. The event began with 2 transgender people who shared their personal stories with the students and provided a Q&A opportunity. Students watched a 10 min ED video simulation, went to breakout rooms to discuss the case and then conducted a discharge meeting with the patient. They were then given feedback, debriefed, and took a post-event survey regarding their learning from the IEP. | 93% of student responses in the post-event survey indicated that the inclusion of transgender speakers sharing their stories was useful. 62% found the video simulation useful, while 68% found the small group debriefing useful. 85% found value in the discharge planning meeting with the patient. Students reacted overwhelmingly positive to the IEP activities and in the 2 years of data acquired 90% agreed with the core competencies set out in the workshop, identifying that their preparation to have an affirming practice working on an interprofessional team to discharge a transgender patient was at 93%. They identified their preparation in effective communication and collaboration to effectively meet the needs of a transgender patient at 91%. Overall, students rated themselves prepared to engage in behaviors consistent with the core competencies in interprofessional practice.  This study shows that centering the voices of transgender individuals and providing interactive opportunities are key to developing learning activities to improve health care for transgender patients.  Having an opportunity to hear directly from local transgender healthcare patients and then being able to practice patient interaction in a low-stakes setting allowed for students to figure out how to provide affirmative care to a transgender patient. | | *Strengths:*  -calls attention to the negative impact of stigma while promoting competency in interprofessional practice  -involves physical therapy students  *Limitations:*  -The data could have social desirability bias  -impact of the IEP was not measured in actual clinical settings or longitudinally |
| Burch, 200817 | The purpose of this study is to explore the self-efficacy, knowledge and attitudes of health care providers who treat people with spinal cord injuries, who identify as LGBT. It also designed a diversity training program and measured the effects on participants perception of their ability to change knowledge levels and attitudes regarding sexual orientation and gender identity. | This study uses an evaluative, cross-sectional design. It uses the transtheoretical model to identify healthcare workers’ readiness to provide care to LGBT patients with SCI. | 402 health care professionals including nurses, PTs, OTs, physicians, PAs, PTAs, OTAs. The majority of participants were PTs and OTs between 21 and 40 years old. Participants worked in 7 acute and subacute facilities in the US that serve patients recovering from SCI | In this study, a pre-briefing diversity questionnaire was given, and following a video detailing issues that health care providers confront when providing care to the LGBT population was shown. After the video, a post-briefing questionnaire was given, followed by a discussion by participants to foster an interdisciplinary dialogue on the topic of sexual orientation and gender identity diversity. The study examined the stage of participants’ thinking about diversity in sexual orientation, their knowledge level, their self-efficacy in treating patients with SCI who identify as LGBT, the inclusion of information regarding LGBT health consideration in past education, and lastly a self-report on the brief diversity training video.  The study determined that 79% of participants had never considered sexual orientation diversity with regard to patients with SCI. 68% reported low to average knowledge to providing care to SCI patients who identify as LGBT. 97% reported 0-40% self-efficacy levels for providing services to people with SCI who are LGBT. This is significant as if health care providers do not perceive a lack of knowledge about a minority group as important, they will not likely make a positive behavioral change. An implication for PT education is to consider if enough is being done to include sexual orientation and gender diversity in educational programs. A second implication is to consider if outcome measures exist to identify relationships between inclusion of LGBT content in educational curriculums and behavior in clinic caring for diverse patients. The findings suggest PT education curriculums should increase strategies that lead to increased respect to people with diverse sexual orientation and gender identity. The study also indicates that PTs, PTAs, OTs and SLPs are less likely to have attitudes of respect towards patients with SCI who identify as LGBT, when compared to nurses. | | | *Strengths:*  -study specifically examines PT attitudes towards LGBT patients (maybe the only study that examines PT attitudes towards the LGBT population)  -suggests that the field of PT needs to grow extensively to provide better LGBT care  *Limitations*  -From 2008, and much has changed in the way of LGBTQ rights, perceptions and language in the past 12 years |
| Copti et al., 201618 | To address the fact that health care professionals neglect to recognize the specialized needs and cultural considerations of LGBTQ people and to highlight the profession of physical therapy and physical therapy educational institutions have an obligation and opportunity to include these cultural considerations in both addressing the needs of LGBTQ patients but also LGBTQ students pursuing PT. | Some of the most prevalent factors contributing to negative health risks and outcomes for LGBTQ patients stem from the stress from the discrimination and prejudice this population faces, along with providers who are uninformed, insensitive and have the idea that people who are LGBTQ are ‘just like everyone else.’ It is significantly important that educations, clinicians and students are aware of and sensitive to these factors in order to understand how they contribute to health care disparities for the LGBTQ community. Physical therapists must be able to provide patients with unbiased and culturally competent care and are not immune to prejudice. While PT’s may think sexual and gender identities do not matter because the musculoskeletal system is the same regardless, need to take into consideration the health risks this population faces as well as recognize the crucial role that one’s gender identity or sexual orientation can play, particularly in transgender patients as their gender identity has been found to comprehensively affect all adaptive, physical and psychosocial aspect of their lives. It is crucial that PTs be knowledgeable about the risks and challenges this population faces due to the number of states providing direct access to physical therapy, and PTs are in a unique position of spending more time with patients and tend to develop a closer relationship with them and they maybe the provider an LGBTQ patient asks difficult questions regarding health to. An examination in curriculums found large deficit in content in health care education in addressing the needs of LGBTQ people, which can help explain some of the disparities in health care. The inclusion of LGBTQ specific content could lead to positive outcomes with students feeling more confident in caring for this population and a more culturally inclusive curriculum. While there is no precedent in place in the physical therapy education system for educational interventions to improve care and outcomes for LGBTQ patients, research has been done within the medical school environment. Students should be trained in the correct usage of language and terminology for patients who are LGBTQ and secondly be able to identify and examine the unique health care disparities and challenges this population faces. Implementing training in the recognition and understanding of how implicit bias of a health care provider can affect patient care is another important step to a culturally comprehensive education. | | | | | *Strengths*  -Specific physical therapy practice focus  -Suggestions for how to improve LGBTQ cultural competence and care within the scope of practice of physical therapists  *Limitations*  -not quantitative/qualitative research |
| **Conclusions:** There is a dearth of research regarding the cultural competency of physical therapists when it comes to the health care of the LGBTQ population, however similar research regarding other health care professions can be considered. It is important for physical therapists to be aware of the increased health risks within this population as well as the discrimination, bias and insensitivity of providers that LGBTQ patients face.18 There are significant gaps in health care students’ education regarding cultural competence, across most all disciplines including nursing, OT, PT, PA and MDs. These gaps can lead to increased health disparities within this population.13,15,18 Interventions to close this gap could include lectures done by LGBTQ individuals, IEP simulation experiences caring for a transgender or GNC patient, interview exercises, practice in taking sexual histories and collecting SOGI data.13–15 Including more specific LGBTQ content in the curriculum for health care students, as well as promoting continuing education opportunities in this area can lead to more confidence in carrying for this population as well as better health outcomes for LGBTQ identifying patients.14,15,18 The LGBT-DOCSS is a valid and reliable outcome measure that can be used as a self-assessment or a tool to guide what educational interventions may be most appropriate for particular settings or groups. It can be useful to measure the outcome of following educational interventions as well.11,12 | | | | | | | |

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| **Considerations for LGBTQ Care Across the Lifespan** | | | | | | |
| **Articles** | **Abbreviations:**  **MVPA**; moderate/vigorous physical activity  **LGB:** lesbian, gay and bisexual | | | | | |
| **Author/Year** | **Purpose** | **Design** | **Subjects** | **Measurements** | **Results** | **Strengths/**  **Limitations** |
| Calzo et al., 201419 | To examine adolescent hours per week of moderate and vigorous physical activity, as well as team sport participation by sexual orientation and explore contributions of gender nonconformity and low self-esteem to possible sexual orientation differences | Cohort study where participants participated in a baseline questionnaire and sent a questionnaire annually from 1996-2001 and biannually until 2005. | Participants were from the Growing Up Today Study (GUTS) that began in 1996.They were 9-14 at baseline, and the study consisted of 7,507 females and 5,272 males. | *Sexual Orientation:* assessed beginning in 199 and updated with each assessment. In 1999, 87.1% identified as completely heterosexual, 4.9% as mostly heterosexual, 1% as gay, lesbian or bisexual and .4% as unsure.  *MVPA:*  Participants recorded time spent in 14 to 16 sports/activities, with scores capped at 40 hours per week to exclude improbable responses.  *Team Sport Participation:*  Beginning in 2001, the question, “How many times do you participate in team sports?”  *Athletic Self-Esteem*  Assessed from 1996-2001 focusing on participants’ perceptions of their own athletic ability compared to their peers by ranking how true 5-6 statements were about their athletic abilities.  *Gender Nonconformity:*  Assessed in 2005 and 2007 using 4 items to evaluate gender expression prior to age 11.  *Covariates:*  Asthma and obesity were also examined as covariates of MVPA | Gay and bisexual males were found to engage in 2.62 fewer hours a week of MVPA than completely heterosexual males and similarly, GNC males also engaged in less MVPA.  Lesbian, bisexual and mostly heterosexual females engaged in 1.21-1.77 fewer hours per week of MVPA than completely heterosexual females but GNC females engaged in more MVPA.  Sexual minority males and females reported lower athletic self-esteem than their heterosexual counterparts, which was another strong predictor of MVPA. This indicates that more effort needs to be made promote MVPA in sexual minorities in order to reduce negative health outcomes as adults. Interventions to address this could be to make sports teams a safer place for sexual minorities, a greater range of activities to choose from in physical education, finding sexual minority role models to inspire increased physical activity. | *Strengths*  -addressed a gap in research in identifying the physical activity levels of sexual minority youth  *Limitations*  -most children were white and children of nurses  -average hours per week of MVPA exceeded or met recommended amount  -data was collected in 1999-2005 and the cultural climate has changed since then with more professional athletes coming out  -language with GNC males/females is confusing |
| Macapagal, Bhatia, & Greene, 201620 | Factors regarding healthcare access, use and experiences are not well studied with emerging adults who identify as LGBTQ, who have unique barriers to care. This study seeks to identify these challenges for this population. | Longitudinal study looking at a community sample from a mid-western city, looking at the health and development of LGBTQ youth. Recruitment was done through incentivized snowballing and community outreach. Participants answered questionnaires regarding their healthcare experiences from June 2012 to March 2013. | 206 participants from who were 18-29 (13-24 at baseline) and identified as LGBTQ. They provided written consent and participated in diagnostic mental health interviews conducted by trained research assistants. | Sociodemographic were assessed, including sexual orientation and birth and current gender identity. Alcohol use, major depressive disorder and PTSD were also assessed. Items assessing healthcare were drawn from public health surveys or developed by the research team. It evaluated access to healthcare and healthcare use patterns, usually source of healthcare, time since last check-up, as well as presence of health insurance. Lastly, items assessed healthcare experiences related to patients’ LGBTQ identity such as if they disclosed their identity to their PCP, have been denied treatment, received unequal treatment or been harassed due to their identity. | The majority of participants identified as a racial or ethnic minority (86%). Transgender individuals consisted of 10% of the sample. 43% reported being uninsured and 26% not having a usual place of care. 68% reported having a checkup in the last year and 63% had disclosed their LGBTQ identity to their PCP. More than half reported using drugs or alcohol (56%) and 31% met the criteria for depression or PTSD. Participants rated their mental and physical health as average with HIV positive individuals reporting poorer mental health than those HIV negative. 8% of participants reported being HIV positive. Most reported somewhat to very easy access to care, with 46.1% reporting public or community clinics as their usual place of care. Those who identified as a racial/ethnic minority tended to report lacking a regular place of care. 84% were not denied service or received unequal treatment because of their identity, though transgender patients were more likely to face this sort of discrimination. Most participants also denied postponing or avoiding seeking healthcare due to LGBTQ discrimination, though again transgender patients were more likely to delay care for this reason.61.% reported disclosing their LGBTQ identity to their PCP having a neutral effect on their care, with 30.8% reporting a positive effect. Transgender patients were more likely to report it having a negative effect. | *Strengths*  -examined a population that was racially diverse as well as LGBTQ  -identified that younger members of the LGBTQ community may face different or additional barriers than older individuals in this population  *Limitations*  -participants were recruited from a single urban area, which may limit the generalizability of the results.  -study was based participant perceptions of healthcare experiences rather than objective measures. |
| Baams, 201821 | To identify patterns of adversity in adolescents and recognize health disparities within these experiences for LGBTQ adolescents | Cross-sectional state-wide anonymous survey in MN, done in 2016 | 2016 Minnesota Student Survey that had 81885 participants enrolled in grades 9 and 11 from a total of 348 schools. Sexual orientation, gender identity and gender nonconformity were assessed in this survey, as well as domestic violence, sexual abuse, race and ethnicity. | This study determined that both male and female LGBTQ adolescents had higher scores of cumulative childhood adverse experiences, with a higher level of GNC associated with higher scores of cumulative childhood adverse experiences compared to heterosexual and cisgender adolescents. Those adolescents with higher levels of GNC were more likely to experience patterns of abuse, as were bisexual identifying individuals. Youth who have experienced polyvictimization (at home and outside of the home) are more likely to have negative outcomes, such as poor mental health and increased physical health risks later in life. Awareness of these patterns of childhood adversity in the LGBTQ youth population could help physicians and health care professionals recognize and monitor these experiences. | | *Strengths*  -focuses on the commonality of childhood adversity experiences in the LGBTQ youth population specifically.  -findings are useful to health care providers who may be the first to see these adolescents in their practices.  -indicates that more research on health disparities in this population is needed  *Limitations*  -data is cross-sectional and does not allow further exploration of effects of childhood adversity  -does not explore when adverse childhood events occur and whether these events are directly related to sexual orientation, gender identity or gender expression  -data cannot be generalized to youth who do not attend school, as this is a school-based sample.  -cannot be generalized to other geographical locations as all data was gathered from the state of MN |
| Fredriksen-Goldsen, et al., 201422 | To address key competencies needed to provide a blueprint for action to address the needs of LGBT older adults, their families and their communities. Additionally, it intends to outline specific strategies to promote culturally competent practice with LGBT older adults and their families. | Narrative review outlining competencies developed on a review of existing LGBT health and aging literature. In assessing these the question was posed, “What particular skills, knowledge or attitudes are uniquely necessary for culturally competent practice with LGBT older adults at the required generalist level?” | Providers must analyze personal and professional attitudes toward sexual orientation, gender identity and age. They should regularly assess their attitudes and beliefs and understand how they impact their ability to deliver competent and unbiased care. Providers should also understand how larger social and cultural contexts have negatively impacted LGBT older adults. Many have spent years concealing their sexual orientation and gender identity but it is important to recognize the unique individual experiences people have had. It is important to keep in mind that the issue of aging is generally ignored when studying sexual and gender minorities, and they have had a lifetime of not only general stressors but minority stressors as well, and LGBT older adults are generally invisible in LGBT communities that have a focus on the younger population. Lifetime experiences of discrimination and victimization are associated with poor mental health, physical health and disability among older LGBT adults. Providers should be comfortable with the array of language and terms used within this population and using them properly, as well as using the terms patients specifically prefer, which may differ among LGBT older adults. This can be done with active listening skills as many welcome opportunities to communicate preferred vocabulary. It should be recognized that many health and human services adopt a sexuality-blind norm when treating older adults, and sexual history is overlooked and this lack of attention to one’s sexual orientation and gender identity can negatively impact the delivery and quality of medical care. Just as important, all assessments and standardized forms should be reviewed to be LGBT inclusive. It is also important for providers to be culturally competent in LGBT issues and help to advocate for policies that foster the worth of LGBT older adults. | | | *Strengths*  -outlines 10 core competencies with specific strategies that can be used to improve professional practice and improve well-being of older LGBT adults  -provides a blueprint for action to address the growing needs of LGBT older adults, their families and their communities  *Limitations*  -resources described might not be relevant or available to all settings  - no qualitative data to support effectiveness |
| Fredriksen-Goldsen et al., 201223 | Investigate the influence of key health indicators, risk, and protective factors on health outcomes (general health, disability, and depression) in LGB adults | Cross-sectional survey conducted by sending an invitation letter through 11 different agencies to older adults (50+) to take the Caring and Aging with Pride study survey from June to November 2010. A total of 2560 surveys were distributed in this timeframe | This study included a sample size of 2,349 which was made up of 829 lesbian and bisexual women and 1,520 gay and bisexual men. There were no transgender participants included in this survey, as this study was focused on sexual orientation rather than gender identity. 87% of participants were white, 1/3 had a household income at or below 200% of the federal poverty level, with bisexual males and females more likely to be at or below 200% of the federal poverty level than gay and lesbian male and females. | Standardized measures of health outcomes were used when possible in this study. Health outcomes included poor general health, disability, and depression while key health indicators include routine check-up, financial barriers to health care, obesity, smoking, excessive drinking and physical activities. Risk factors include lifetime victimization, internalized stigma, and sexual identity concealment and protective factors include social support and size of social network. The results of the survey were viewed through a ‘resiliency framework.’ | Lesbian and bisexual women were more likely to have an annual routine check-up but were more likely to be obese than gay and bisexual men, though gay and bisexual men reported higher incidence of smoking, excessive drinking, rates of lifetime victimization and more internalized stigma along with less social support and smaller social networks. It is important to note bisexual women reported lower rates of physical activity than lesbian women as well. 22% of all LGB older adults surveyed reported poor general health, 45% had a disability and 29% experienced depressive symptoms.  *Poor General Health*  This study indicates that financial barriers to health care, smoking, and obesity increased the likelihood of overall poor general health, though having an annual check-up and engaging in physical activity decreases these odds. Lifetime victimization and internalized stigma also were significantly associated with poor general health and as social support and networks decreased, odds of poor health increase.  *Disability*  Lesbian and bisexual women were more likely to be disabled than gay and bisexual men, with financial barriers to health care, smoking, and obesity increasing the odds of disability and engaging in physical activity decreasing them. As the extent of lifetime victimization and internalized stigma increase, the odds of disability also increase.  *Depression*  Financial barriers to health care and smoking increased the odds of depression symptoms, while physical activity decreased those odds. Lifetime victimization and internalized stigma are heavily related to depression, while social support and social networks, decreased the odds of depressive symptoms. | *Strengths*  -addresses a critical need to better understand the health of LGB adults and aging  -identifies key health indicators as well as risk and protective factors that can significantly predict LGB older adults’ general health  *Limitations*  -Service users of agency services are over-represented and those not connected to agencies may have different experiences and more socially isolated  -non-representative sample that cannot be generalized to a broader population of LGB older adults  -LGB older adults living in rural areas are likely under-represented in this study  -Cross sectional nature of the study limits understanding of the health and aging of LGB adults, which would be better understood with a longitudinal study |
| Fredriksen-Goldsen et al., 201324 | The purpose of this study is to examine the physical and mental health of transgender older adults and identify modifiable factors that lead to health risks in this population | Cross-sectional survey of lesbian, gay, bisexual and transgender older adults (50+), identifying the effects of gender identity on physical health, disability, depression and perceived stress. This was conducted by sending an invitation letter through 11 community-based agencies to older adults (50+) to take the Caring and Aging with Pride study survey from June to November 2010 | Of the LGBT older adults (50+) that returned the survey, 174 or 7% self-identified as transgender and are included in this study. Transgender identity was assessed by 2 questions, are you transgender? how old were you when you first considered yourself transgender? | Health outcomes were physical health, disability, depressive symptoms and perceived stress. Key health indicators were financial barriers to health care, fear of accessing health care, smoking, lack of physical activity and obesity. Risk factors included lifetime internalized stigma, victimization and sexual minority concealment. Protective factors included social support, social network size, positive feelings of LGBT community belonging, and religious and spiritual activities | 22% of transgender older adult participants reported experiencing financial barriers to health services and 40% reported fearing accessing health services outside the LGBT community. Rates of obesity and lack of physical activity were significantly higher in transgender older adults than in in non-transgender older adults. Transgender older adults also reported higher rates of lifetime victimization and internalized stigma compared to non-transgender older adults, with an average of 11 instances compared to an average of 6 instances of LGB older adults. The most common types of discrimination were verbal insults, followed by being threatened of physical violence, not being hired for a job, being denied or provided inferior healthcare, being denied a promotion and being hassled by the police. Transgender older adults report lower levels of social support and community belonging than non-transgender LGB older adults. Transgender older adults reported significantly poorer physical health, a higher likelihood of having a disability, significantly higher levels of depressive symptoms and perceived stress than non-transgender participants. Additionally, there was a strong correlation between gender identity and fear of accessing health services. These findings show noteworthy, yet modifiable mediators for the increased risks in the physical and mental health of transgender older adults. | *Strengths*  -first study to examine the physical and mental health of transgender older adults  -identifies modifiable factors that account for health risks in this population  -identifies that reducing stigma and victimization are important steps to reducing health risks in transgender older adults  -analysis of risk factors demonstrate highest proportion of the effect gender identify has on health outcomes  *Limitations*  -service users of the agencies that sent out studies are over-represented  -nonprobability sample and the findings cannot be generalized to older transgender adults in general  -transgender older adults who live in rural areas are underrepresented  -in the past transgender older adults were urged by health care professionals to keep quiet about their gender transition and may not respond or self-identify for studies such as this  -does not allow for an examination of health trends over time as a longitudinal study would |
| **Conclusions:** Different age groups of the LGBTQ population face different issues and difficulties regarding health care and navigating the health care system, particularly LGBTQ youth and LGBTQ older adults. LGBTQ youth have a higher incidence of sexually transmitted diseases, as well as depression and suicide ideation. They are more likely to report discrimination and bullying than their heterosexual and cisgender peers, have a higher likelihood of substance abuse and are less likely to be physically active which can all lead to negative health outcomes.19–21 Additionally, this population is more likely to face childhood adversity including psychological abuse, sexual abuse and physical abuse inside and outside the home. This higher incidence of childhood adversity can lead to greater mental and physical health risks later in life.21 LGBTQ older adults also face unique growing healthcare needs as a history of marginalization and discrimination with the addition of aging puts this population in a position of vulnerability.22 Transgender older adults have the highest rate of victimization compared to cisgender LGB adults and also face higher rates of disability, stress and poor mental and physical health. LGB older adults have higher rates of poor mental health and disability than heterosexual counterparts.22–24 More research is indicated for this population due to their significant health disparities and specific interventions should be developed in order to address them, as many risk factors associated with poor health outcomes are modifiable.22–24 | | | | | | |

**References**

1. Ross MH, Setchell J. People who identify as LGBTIQ+ can experience assumptions, discomfort, some discrimination, and a lack of knowledge while attending physiotherapy: a survey. *J Physiother*. 2019;65(2):99-105. doi:10.1016/j.jphys.2019.02.002

2. Romanelli M, Hudson KD. Individual and systemic barriers to health care: Perspectives of lesbian, gay, bisexual, and transgender adults. *Am J Orthopsychiatry*. 2017;87(6):714-728. doi:10.1037/ort0000306

3. Roberts TK, Fantz CR. Barriers to quality health care for the transgender population. *Clin Biochem*. 2014;47(10-11):983-987. doi:10.1016/j.clinbiochem.2014.02.009

4. Gonzales G, Henning-Smith C. Barriers to care among transgender and gender nonconforming adults. *Milbank Q*. 2017;95(4):726-748. doi:10.1111/1468-0009.12297

5. Brooks H, Llewellyn CD, Nadarzynski T, et al. Sexual orientation disclosure in health care: a systematic review. *Br J Gen Pract*. 2018;68(668):e187-e196. doi:10.3399/bjgp18X694841

6. Fredriksen-Goldsen KI, Kim H-J, Barkan SE. Disability among lesbian, gay, and bisexual adults: disparities in prevalence and risk. *Am J Public Health*. 2012;102(1):e16-21. doi:10.2105/AJPH.2011.300379

7. Casey LS, Reisner SL, Findling MG, et al. Discrimination in the United States: Experiences of lesbian, gay, bisexual, transgender, and queer Americans. *Health Serv Res*. 2019;54 Suppl 2:1454-1466. doi:10.1111/1475-6773.13229

8. Ayhan CHB, Bilgin H, Uluman OT, Sukut O, Yilmaz S, Buzlu S. A systematic review of the discrimination against sexual and gender minority in health care settings. *Int J Health Serv*. 2020;50(1):44-61. doi:10.1177/0020731419885093

9. Baker KE. Findings From the Behavioral Risk Factor Surveillance System on Health-Related Quality of Life Among US Transgender Adults, 2014-2017. *JAMA Intern Med*. April 2019. doi:10.1001/jamainternmed.2018.7931

10. Phillips C. How covid-19 has exacerbated LGBTQ+ health inequalities. *BMJ*. 2021;372:m4828. doi:10.1136/bmj.m4828

11. Bidell MP. The Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS): Establishing a New Interdisciplinary Self-Assessment for Health Providers. *J Homosex*. 2017;64(10):1432-1460. doi:10.1080/00918369.2017.1321389

12. Nowaskie DZ, Patel AU, Fang RC. A multicenter, multidisciplinary evaluation of 1701 healthcare professional students’ LGBT cultural competency: Comparisons between dental, medical, occupational therapy, pharmacy, physical therapy, physician assistant, and social work students. *PLoS One*. 2020;15(8):e0237670. doi:10.1371/journal.pone.0237670

13. McCann E, Brown M. The inclusion of LGBT+ health issues within undergraduate healthcare education and professional training programmes: A systematic review. *Nurse Educ Today*. 2018;64:204-214. doi:10.1016/j.nedt.2018.02.028

14. Aleshire ME, Ashford K, Fallin-Bennett A, Hatcher J. Primary care providers’ attitudes related to LGBTQ people: A narrative literature review. *Health Promot Pract*. 2019;20(2):173-187. doi:10.1177/1524839918778835

15. Morris M, Cooper RL, Ramesh A, et al. Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. *BMC Med Educ*. 2019;19(1):325. doi:10.1186/s12909-019-1727-3

16. McCave EL, Aptaker D, Hartmann KD, Zucconi R. Promoting affirmative transgender health care practice within hospitals: an IPE standardized patient simulation for graduate health care learners. *MedEdPORTAL*. 2019;15:10861. doi:10.15766/mep\_2374-8265.10861

17. Burch A. Health care providers’ knowledge, attitudes, and self-efficacy for working with patients with spinal cord injury who have diverse sexual orientations. *Phys Ther*. 2008;88(2):191-198. doi:10.2522/ptj.20060188

18. Copti N, Shahriari R, Wanek L, Fitzsimmons A. Lesbian, gay, bisexual, and transgender inclusion in physical therapy: advocating for cultural competency in physical therapist education across the united states. *Journal of Physical Therapy Education*. 2016;30(4):11-16. doi:10.1097/00001416-201630040-00003

19. Calzo JP, Roberts AL, Corliss HL, Blood EA, Kroshus E, Austin SB. Physical activity disparities in heterosexual and sexual minority youth ages 12-22 years old: roles of childhood gender nonconformity and athletic self-esteem. *Ann Behav Med*. 2014;47(1):17-27. doi:10.1007/s12160-013-9570-y

20. Macapagal K, Bhatia R, Greene GJ. Differences in healthcare access, use, and experiences within a community sample of racially diverse lesbian, gay, bisexual, transgender, and questioning emerging adults. *LGBT Health*. 2016;3(6):434-442. doi:10.1089/lgbt.2015.0124

21. Baams L. Disparities for LGBTQ and gender nonconforming adolescents. *Pediatrics*. 2018;141(5). doi:10.1542/peds.2017-3004

22. Fredriksen-Goldsen KI, Hoy-Ellis CP, Goldsen J, Emlet CA, Hooyman NR. Creating a vision for the future: key competencies and strategies for culturally competent practice with lesbian, gay, bisexual, and transgender (LGBT) older adults in the health and human services. *J Gerontol Soc Work*. 2014;57(2-4):80-107. doi:10.1080/01634372.2014.890690

23. Fredriksen-Goldsen KI, Emlet CA, Kim H-J, et al. The physical and mental health of lesbian, gay male, and bisexual (LGB) older adults: the role of key health indicators and risk and protective factors. *Gerontologist*. 2013;53(4):664-675. doi:10.1093/geront/gns123

24. Fredriksen-Goldsen KI, Cook-Daniels L, Kim H-J, et al. Physical and mental health of transgender older adults: An at-risk and underserved population. *Gerontologist*. 2014;54(3):488-500. doi:10.1093/geront/gnt021