Part of the Solution to Address Sexual and Gender Minority Health and Health Care Disparities: Inclusive Professional Education

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Abstract

Background and Purpose. The public health perspective regarding sexual and gender minority health has continued to expand beyond the hallmark AIDS crisis in the 1980s. Sexual and gender minorities experience various health and healthcare disparities for a variety of reasons. A 2017 national survey indicated that 8% of lesbian, gay, bisexual, and queer (LGBQ) respondents had been refused care by a health care provider in the last year because of their sexual orientation, and 29% of transgender identified individuals were refused care.¹ Healthcare provider attitudes and behaviors contribute significantly to some of these disparities. This perspective piece provides a synopsis of the public health/population health challenge with health disparities in these populations and a call for action to have professional health education be more inclusive of content pertinent to the health and treatment of sexual and gender minorities. This perspective also provides a summary of educational recommendations and sample curricular objectives to assist ease of integration into health professional education, regardless of discipline. A framework of pedagogy and delivery of curricula is beyond the scope of this perspective piece. Position and Rationale. In seeking solutions to impactful ways of achieving health and healthcare equity in these communities, one solution has to be on the educational and academic side of health professions. In its broadest sense, the literature suggests a strong positive association between education and health from a socioecological model perspective. This perspective piece speaks directly to the subset of how education can have a direct impact on health disparities through the health care provider's interpretation and use of information learned/not learned. Discussion and Conclusion. Based on pedagogical principles in education and literature suggesting positive associations between impact on health disparities and health professional education, 2 it is concluded that health professional education - regardless of discipline - should be inclusive of sexual and gender minority content to address this significant gap in knowledge, awareness, and skill in health delivery for these populations.

Introduction

From an educational and population health perspective, the foundation of health care professional education has been non-inclusive of health care discussions regarding sexual and gender minorities (SGM) and the health disparities that exist within these populations.^{3–6} In fact, the inclusion of this content has not been included or studied in all health disciplines, but where it has, it reveals a significant gap.^{7–9} In the last decade, the medical literature has started to unravel and discover the very real health care needs that go along with these identities. Since sexual and/or gender identities are not a required demographic data point to collect, data and research in healthcare regarding discrimination and health disparities is markedly limited. From the latest demographic statistics that we do have, conservative estimates put the collective populations within these spectrums at ~ 4.1% of the U.S. population; however it's important to note this number is not inclusive of all identities within these populations.¹⁰ The data around

health disparities/equity that we do have indicates pervasive and statistically significant numbers of both discrimination and health disparities among these populations.^{11,12}

The literature also supports the very real correlate of healthcare provider discrimination and bias to perpetuation of health disparities in these populations, specifically in delaying health care or not seeking health care altogether.^{13–16} While the educational research is mixed on the impact of cultural competency education in translating to improved healthcare delivery, it does indicate a positive association in acquiring new knowledge, improved attitudes and skills, and enhanced patient experience.^{17,18} We also have limited to no data regarding sexual and gender minority inclusive cultural competency education for health care professional education and its impact.¹⁷ Cohen and Syme advocated for more research exploring to what extent educational interventions can address health inequities, noting that this is an area of infancy in the research realm.¹⁹ Alcaraz and colleagues go further in describing a framework to help advance research and interventions focused on health equity, inclusive of sexual and gender minority health.²⁰ Cameron et al., also take a deeper dive into structural competency and delivery of educational curricula in a context that hopes to expand identity-based health needs in a meaningful and truly impactful way.²¹

Throughout the professional educational curricula in healthcare (physical therapy, medical, nursing, occupational therapy, speech, chiropractic, etc.) there is limited to no time dedicated to learning about cultural competency or health disparities regarding these populations.²² That has to change. Some programs dedicate numerous hours and lectures to rare diseases and conditions: the likelihood of encountering one of these in one's professional career are minimal. However, healthcare professionals will all treat patients with identities in sexual and gender minorities. Most professionals likely won't be comfortable doing so and may identify a lack of preparation in the professional curriculum as one reason. Implicit and explicit bias has also been identified in the literature as a contributor to discriminatory practice among healthcare providers.^{14,16,23} When looking at these gaps in curricula for our healthcare professionals, one can argue that the approach to fill them should be multi-faceted, and at minimum start with requiring professional education to be inclusive of these populations' health needs and characteristics. The American Association of Medical Colleges (AAMC) has published a monograph with sexual and gender minority competencies for medical professional curricula, which this author summarizes for generalization to all disciplines.¹⁴ This commentary establishes the necessity of healthcare professional education to be inclusive of sexual and gender minority content to specifically address the healthcare disparities that providers directly contribute to: implicit/explicit bias, discrimination, and cultural incompetence.

The Literature and SGM Health Disparities

Operationally, this author speaks to lesbian, gay, bisexual, and transgender (LGBT) health disparities because some of the identities included in the inclusive terms "sexual and gender minorities" have not been studied to date. The literature specifically speaks to the following identities in health disparity research: LGBT. It is purported that LGBT health disparities stem from a sociocultural environment that devalues these minority identities.²⁴ Meyer and Frost apply the minority stress model to health outcomes: minority stress is based on the premise that prejudice and stigma directed toward sexual and gender minorities brings about unique stressors and these cause adverse health outcomes manifested as health disparities.²⁵ This commentary speaks specifically to education being a public health answer to having an impact on these

disparities, primarily because provider behaviors and attitudes have a direct correlation on disparities in these communities.¹ As we gain more insight into the health of these populations, we continue to note drastic and significant health disparities across the spectrums of these communities. Of note, there is strong literature looking into resilience factors as attributes of positive contributors to health in these communities.^{26–30} Table 1 provides a summary of some key health and health care disparities, which this author has adapted from the AAMC publication.¹⁴

Health Disparity	Prevalence/Statistic	Populations Affected
Obesity	2x risk compared with heterosexual women ³¹	Lesbian and bisexual women
Asthma	1.5 times the risk compared to heterosexual counterparts	LGB adults
Cardiovascular disease	>2 times the risk compared to heterosexual counterparts ³²	LGB adults
	Significant elevations in biomarkers of cardiovascular disease compared to heterosexual men	Young GB men
Smoking	>2 times the risk compared to heterosexual counterparts ³³	Bisexual individuals
	Higher prevalence versus population as whole ³²	LGBT population
Physical disability	Increased likelihood at younger age than heterosexual counterparts ³⁴	LGB individuals
	2x the risk compared to heterosexual women	Lesbian women
	3x the risk compared to heterosexual men and women	Bisexual men and women
HIV/AIDS and other STIs	Elevated risk for HIV/AIDs and other STIs ³⁵	Gay men and transgender women
Cancer	Increased anal cancer rates primarily due to increased risk for HPV ³⁶	Gay and bisexual men and men who have sex with men
	Increased breast cancer; increased fatal breast cancer	Lesbian and bisexual women
	Cervical cancer primarily due to elevated risk for HPV	Lesbian and bisexual women
	Colon and rectal cancer primarily due to elevated risk factors	Lesbian and bisexual women
	Lung cancer; further research needed as to reason	LGBTQ individuals

Table 1: Overview of Health and Health Care Disparities in Sexual and Gender Minority Populations (Adapted and Modified from AAMC, 2014)

	Prostate cancer; further research needed as to reason	Men who have sex with men
Lifetime risk of violent victimization and maltreatment; Lifetime exposure to traumatic experiences	Higher risk than heterosexual and cisgender individuals ^{37–40}	LGBTQ individuals
Substance use/abuse	>2x more likely to have used any illicit drug in past year ⁴¹	Lesbian, gay, bisexual individuals
	Increased binge-drinking ⁴¹	Adult LGBT individuals
	90% more likely to use substances than heterosexual adolescents ^{42,43}	LGB adolescents
Risk behavior likelihood	Less likely to practice safer sex than heterosexual counterparts ⁴⁴	Young gay men
	 >4x incidence of risky sexual practices/unsafe practices compared to white peers⁴⁵ >1/3 prevalence in hazardous weight 	Lesbian and bisexual youth who identify as "mixed" race/ethnicity LGB youth
	 21/3 prevalence in hazardous weight control behaviors⁴⁶ Less engagement in moderate/vigorous physical activity or participation in sports 	LGBT youth
Depression, anxiety	than non-LGBT counterparts47Significantly increased risk than non-LGBcounterparts48~4x risk of depression49	GB adult men and LGB youth Non-treated transgender
Suicide ideation / attempts	2-4x risk of suicide ideation compared with heterosexual men ⁵⁰	individuals GB men
	2x more likely to have suicide ideation and 4x more likely to make serious suicide attempts requiring medical attention than heterosexual counterparts ⁵¹	LGB youth
	14% prior suicide attempt; 50.8% transgender male suicide attempts; 41.8% nonbinary individuals; 29.9% transgender females; 27.9% questioning individuals; 17.6% females; 9.8% males ⁵²	LGBTQ youth
Healthcare discrimination and mistreatment	33% of transgender respondents experienced a negative interaction with a healthcare provider ⁵³	Transgender individuals
	Refusal of Care: 8% LGB respondents experienced refusal of care;	LGBT individuals

29% of transgender respondents experienced refusal of care ⁵⁴	
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The Literature and SGM Content in Health Professional Education

Two recent systematic reviews of sexual and gender minority inclusive education in the health professions reinforce the conclusions that education and training of healthcare providers and students will improve skills and ultimately may lead to improved quality of healthcare for sexual and gender minorities.^{6,7} These systematic reviews also concluded that our professional education curricula have a long way to go to be inclusive of this content, consistent with delivery of this content in all disciplines, and establishing a conceptual model for best practice of curricula implementation. In the AAMC monograph, the authors discuss numerous challenges and advancements to education reform in this area. Of note in the barriers and challenges is that they are multi-factorial, and combine both lack of mentoring/modeling in clinical practice with absence of faculty willing and able to teach relevant content in the didactic curriculum.¹⁴ There is no current requirement of this content in health professional literature as a stand-out component, rather, it is often implied as covered under other areas, such as cultural competency or domains of competency for history taking, etc. The literature suggests is that this is not nearly comprehensive enough to address the core knowledge and skills needed to provide patientcentered care for these populations. Most of the literature supporting the necessity and preliminary effectiveness of sexual and gender minority inclusive curricula has been done in the medical community. All health disciplines need to follow suit in opening their curricula and their research to supporting these communities in their health. Given the direct and significant contribution to health disparities by provider discrimination and bias, health professional education can serve to increase awareness and knowledge of these communities to help inform best practices in health delivery and help foster a more affirming climate and approach in training and delivery.

The author fully acknowledges the complexity and numerous other aspects around culture and climate that also need to be addressed when making curricular shifts. This commentary is meant to be a succinct snapshot of advocating for educational interventions to be one of the public health answers to health disparities in SGM communities, fully recognizing the many layers of implementation challenges from societal to individual level barriers. It is beyond the scope of this commentary to discuss delivery recommendations, curricular models, pedagogical influences to delivery. This commentary aims to provide a summary of recommendations for content and scope only. There is no best-practice model validated to date regarding curricula integration. One of the most comprehensive models/guides to date is AAMC's 2014 publication utilizing competency domains for medical education. That publication is the foundation for the summary below, given that it extensively synthesized the available literature and utilized a broad panel of experts. Table 2 provides a summary of recommendations for health professional educational curricular threads, regardless of discipline. This content crosses all health disciplines, and can be individualized and contextualized discipline-specific, however, the curricular threads noted in this summary are considered integral to all disciplines.

Table 2. Summary of Recommendations for Health Professional Education Curricular Threads

(Expanded Upon from AAMC, 2014)

Area of Domain	Recommendations for	Sample Objectives for Outcomes of
of Practice Patient Care	Content Include terminology and practices specific to SGM populations	Education Develop effective rapport with all patients utilizing inclusive language and practices that avoid assumption-based terminology.
	Teach health disparities and health equity specific to SGM populations	that avoid assumption-based terminology.
Knowledge for Practice	Apply biophysical scientific principles fundamental to health	"Define and describe the differences among: sex and gender; gender expression and gender identity; gender nonconformity, and gender dysphoria; and sexual orientation, sexual identity, and sexual behavior. ¹⁴ "
	Apply principles of social- behavioral sciences to principles of patient care	"Understand and describe historical, political, institutional, and sociocultural factors that may underlie health care disparities experienced by SGM populations. ¹⁴ "
	Teach investigatory and analytic approach to clinical situations inclusive of sexual and gender minorities	"Recognize the gaps in scientific knowledge and identify various harmful practices that perpetuate the health disparities for patients in the SGM populations. ¹⁴ "
Practice-Based Learning and Improvement	Teach self-awareness and reflection to identify strengths, deficiencies and limits in one's knowledge and expertise	"Demonstrate the ability to elicit feedback from individuals who identify within SGM populations about their health experiences and identify opportunities for change to improve care (e.g. inclusive language on intake forms). ¹⁴ "
	Teach critical appraisal and application of evidence related to patient health	Include important clinical questions pertinent to SGM populations as they emerge when seeking the literature to inform clinical decisions.
Interpersonal and Communication Skills	Cultural humility and competency content inclusive of these populations Teach trauma-informed care and practices	Demonstrate knowledge of current terminology respectful of SGM populations when describing patient care or establishing rapport with patients.
	Skill based content on demonstrating insight and understanding about emotions and human responses to emotions that	"Understand that implicit bias and assumptions about sexuality, gender, and sex anatomy may adversely affect verbal, nonverbal, and/or written communication strategies involved in patient care, and engage in effective corrective self-

Area of Domain	Recommendations for	Sample Objectives for Outcomes of
of Practice	Content	Education
	allow self-development in interpersonal interactions	reflection processes to mitigate those effects. ¹⁴ "
Professionalism	Cultural humility and competency content and behaviors inclusive of these populations.	Recognize and sensitively address all patients' and families' health traditions and beliefs, and understand the possible effect on diverse forms of sexuality and gender/gender identity.
	Confidentiality and patient privacy with circumstances unique to these populations Ethics and accountability to patients, society, and the profession	Recognize and follow the unique aspects of confidentiality with SGM populations and utilize appropriate consent practices. "Accept shared responsibility for eliminating disparities, overt bias, and develop policies and procedures that
		respect all patients' rights to self- determination. ¹⁴ "
Systems-Based Practice	Teach advocacy for quality patient care and patient care systems	Demonstrate knowledge about legal and systemic barriers to health and resultant discriminatory practices that inhibit optimal health outcomes for SGM populations.
	Teach the coordination of patient care to specifically target disparity impact	"Identify and partner with community resources that provide support to SGM populations to help eliminate bias from health care and address community needs. ¹⁴ "
	Teach practices to effect change on behalf of SGM populations on a systems level	"Explain how homophobia, transphobia, heterosexism, and sexism affect health care inequalities, costs, and outcomes. ¹⁴ "
Interprofessional Collaboration	IPE cultural competency practices relative to establishing and maintaining respectful climates/cultures, dignity, diversity, and ethical integrity	Utilize interprofessional communication and collaboration in providing culturally competent, patient-centered care to the SGM populations and participate effectively as a member of an interdisciplinary health care team.
Personal and Professional Development	Self-reflection content thread regarding personal and professional development goals	"Critically recognize, assess, and develop strategies to mitigate one's own implicit biases in providing care to SGM individuals and recognize the contribution of bias to increased iatrogenic risk and health disparities. ¹⁴ "

Conclusion

The cultural shift in education is great, however, the alternative to this cultural shift is not acceptable. Romanelli provides a candid summary: "the root causes of system-level barriers were

all attributed to social-structural factors that worked to exclude and erase LGBT people from the institutions that shape the health and mental health systems⁵⁵." This commentary establishes the necessity for all health professional discipline education to be inclusive of a sexual and gender minority thread throughout all content domains, however, assessment of that learning and direct impact to patient care is not necessarily addressed here. There is a paucity of literature on true assessment and direct patient impact of cultural competency education, and essentially no literature on the impact of sexual and gender minority inclusive education. Ethics are not optional when you are a healthcare provider, and it is long past due that we include all patient populations in the education and training of health care professionals. The four principles of health care ethics - autonomy, beneficence, non-maleficence, and justice - do not stop short of inclusion of sexual and gender minority patients. There is no doubt, we have to do better in every aspect of health with these populations, and one public health answer is to ensure that our professional education curricula are inclusive and outcome based for patient-centered care with these populations.

References

- Center for American Progress (CAP). (2017). National Survey of LGBT People. Retrieved on February 9, 2019, from https://www.americanprogress.org/issues/lgbt/news/2017/05/02/429529/widespreaddiscrimination-continues-shape-lgbt-peoples-lives-subtle-significant-ways/
- Nesbitt, S., & Palomarez, R. E. (2016, April 21). Review: Increasing awareness and education on health disparities for health care providers. *Ethnicity & Disease*, 26(2), 181– 190. <u>PubMed https://doi.org/10.18865/ed.26.2.181</u>
- Bidell, M. P. (2017). The lesbian, gay, bisexual, and transgender development of clinical skills scale (LGBTQ-DOCSS): Establishing a new interdisciplinary self-assessment for health providers. *Journal of Homosexuality*, 64(10), 1432–1460. https://doi.org/10.1080/00918369.2017.1321389 PubMed
- 4. Daley, A., & MacDonnell, J. A. (2015, May). 'That would have been beneficial': LGBTQ education for home-care service providers. *Health & Social Care in the Community*, 23(3), 282–291. PubMed https://doi.org/10.1111/hsc.12141
- 5. Grosz, A. M., Gutierrez, D., Lui, A. A., Chang, J. J., Cole-Kelly, K., & Ng, H. (2017, January). A student- led introduction to lesbian, gay, bisexual, and transgender health for first-year medical students. *Family Medicine*, *49*(1), 52–56. <u>PubMed</u>
- Sekoni, A. O., Gale, N. K., Manga-Atangana, B., Bhadhuri, A., & Jolly, K. (2017, July 19). The effects of educational curricula and training on LGBT-specific health issues for healthcare students and professionals: A mixed-method systematic review. *Journal of the International AIDS Society*, 20(1), 21624. <u>PubMed https://doi.org/10.7448/IAS.20.1.21624</u>
- McCann, E., & Brown, M. (2018, May). The inclusion of LGBT+ health issues within undergraduate healthcare education and professional training programmes: A systematic review. *Nurse Education Today*, 64, 204–214. <u>PubMed</u> https://doi.org/10.1016/j.nedt.2018.02.028
- 8. Obedin-Maliver, J., Goldsmith, E. S., Stewart, L., White, W., Tran, E., Brenman, S., . . . Lunn, M. R. (2011, September 7). Lesbian, gay, bisexual, and transgender-related content in

undergraduate medical education. *Journal of the American Medical Association*, 306(9), 971–977. PubMed https://doi.org/10.1001/jama.2011.1255

- Parameshwaran, V., Cockbain, B. C., Hillyard, M., & Price, J. R. (2017). Is the lack of specific lesbian, gay, bisexual, transgender and queer/questioning (LGBTQQ) health care education in medical school a cause for concern? Evidence from a survey of knowledge and practice among UK medical students. *Journal of Homosexuality*, 64(3), 367–381. <u>PubMed</u> https://doi.org/10.1080/00918369.2016.1190218
- Gates, G. J., & Newport, F. (2012, Oct 18). Special report: 3.4% of US adults identify as LGBT. Retrieved from http://www.gallup.com/poll/158066/special-report-adults-identifylgbt.aspx
- Cahill, S., & Makadon, H. (2014, March). Sexual orientation and gender identity data collection in clinical settings and in electronic health records: A key to ending LGBT health disparities. LGBT Health, 1(1), 34–41. <u>PubMed https://doi.org/10.1089/lgbt.2013.0001</u>
- 12. Egginton, A. (n.d.). Working with LGBTQ Patients: The Importance of Increasing Cultural Competency Part 1. Retrieved on February 9, 2019, from https://ndnr.com/bacterialviral-infections/working-with-lgbtq-patients-importance-increasing-cultural-competency/
- 13. Anti-LGBT Discrimination in US Health Care | HRW. (n.d.). Retrieved February 9, 2019, from https://www.hrw.org/report/2018/07/23/you-dont-want-second-best/anti-lgbt-discrimination-us-health-care
- 14. Association of American Medical Colleges. (2014). Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD: A Resource for Medical Educators. Retrieved February 9, 2019, from https://members.aamc.org/eweb/upload/LGBTDSD%20Publication.pdf

 Grant, J. M., Mottet, L. A., & Tanis, J. (2011). Injustice at Every Turn: A Report of the National Transgender Discrimination Survey; National Center for Transgender Equality. Retrieved February 9, 2019, from https://www.ncgs.org/research/database/injustice-atevery-turn-a-report-of-the-national-transgender-discrimination-survey/

- Sabin, J. A., Riskind, R. G., & Nosek, B. A. (2015, September). Health care providers' implicit and explicit attitudes toward lesbian women and gay men. *American Journal of Public Health*, 105(9), 1831–1841. <u>PubMed https://doi.org/10.2105/AJPH.2015.302631</u>
- Beach, M. C., Price, E. G., Gary, T. L., Robinson, K. A., Gozu, A., Palacio, A., . . . Cooper, L. A. (2005, April). Cultural competence: A systematic review of health care provider educational interventions. *Medical Care*, 43(4), 356–373. <u>PubMed</u> <u>https://doi.org/10.1097/01.mlr.0000156861.58905.96</u>
- Govere, L., & Govere, E. M. (2016, December). How effective is cultural competence training of healthcare providers on improving patient satisfaction of minority groups? A systematic review of literature. *Worldviews on Evidence-Based Nursing*, 13(6), 402–410. <u>PubMed https://doi.org/10.1111/wvn.12176</u>
- Cohen, A. K., & Syme, S. L. (2013, June). Education: A missed opportunity for public health intervention. *American Journal of Public Health*, 103(6), 997–1001. <u>PubMed</u> <u>https://doi.org/10.2105/AJPH.2012.300993</u>

- Alcaraz, K. I., Sly, J., Ashing, K., Fleisher, L., Gil-Rivas, V., Ford, S., . . . Gwede, C. K. (2017, February). The ConNECT Framework: A model for advancing behavioral medicine science and practice to foster health equity. *Journal of Behavioral Medicine*, 40(1), 23–38. <u>PubMed https://doi.org/10.1007/s10865-016-9780-4</u>
- Donald, C. A., DasGupta, S., Metzl, J. M., & Eckstrand, K. L. (2017, March). Queer frontiers in medicine: A structural competency approach. *Academic Medicine*, 92(3), 345– 350. <u>PubMed https://doi.org/10.1097/ACM.00000000001533</u>
- Burkhalter, J. E., Margolies, L., Sigurdsson, L. M., Walland, J., Radix, A., Rice, D., . . . Maingi, S. (2016). The National LGBT Cancer Action Plan: A white paper of the 2014 National Summit on Cancer in the LGBT Communities. *LGBT Health*, 3(1), 19–31. <u>https://doi.org/10.1089/lgbt.2015.0118</u>
- 23. Phelan, S. M., Burke, S. E., Hardeman, R. R., White, R. O., Przedworski, J., Dovidio, J. F., . . . van Ryn, M. (2017, November). Medical school factors associated with changes in implicit and explicit bias against gay and lesbian people among 3492 graduating medical students. *Journal of General Internal Medicine*, 32(11), 1193–1201. PubMed https://doi.org/10.1007/s11606-017-4127-6
- Bogart, L. M., Revenson, T. A., Whitfield, K. E., & France, C. R. (2014, February). Introduction to the special section on Lesbian, Gay, Bisexual, and Transgender (LGBT) health disparities: Where we are and where we're going. *Annals of Behavioral Medicine*, 47(1), 1–4. <u>PubMed https://doi.org/10.1007/s12160-013-9574-7</u>
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. In C. J. Patterson & A. R. D'Augelli (Eds.), *Handbook of psychology and sexual orientation* (pp. 252–266). New York, NY: Oxford University Press.
- Fredriksen-Goldsen, K. I., Kim, H.-J., Shiu, C., Goldsen, J., & Emlet, C. A. (2015, February). Successful aging among LGBT older adults: Physical and mental health-related quality of life by age group. *The Gerontologist*, 55(1), 154–168. <u>PubMed</u> <u>https://doi.org/10.1093/geront/gnu081</u>
- Fredriksen-Goldsen, K. I., Kim, H. J., & Barkan, S. E. (2012, January). Disability among lesbian, gay, and bisexual adults: Disparities in prevalence and risk. *American Journal of Public Health*, 102(1), e16–e21. <u>PubMed https://doi.org/10.2105/AJPH.2011.300379</u>
- Fredriksen-Goldsen, K. I., Emlet, C. A., Kim, H.-J., Muraco, A., Erosheva, E. A., Goldsen, J., & Hoy-Ellis, C. P. (2013, August). 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. *The Gerontologist*, 53(4), 664–675. <u>PubMed https://doi.org/10.1093/geront/gns123</u>
- 29. Kwon, P. (2013, November). Resilience in lesbian, gay, and bisexual individuals. *Personality and Social Psychology Review*, *17*(4), 371–383. <u>PubMed</u> <u>https://doi.org/10.1177/1088868313490248</u>
- Moody, C., & Smith, N. G. (2013, July). Suicide protective factors among trans adults. *Archives of Sexual Behavior*, 42(5), 739–752. <u>PubMed https://doi.org/10.1007/s10508-013-0099-8</u>

- Conron, K. J., Mimiaga, M. J., & Landers, S. J. (2010, October). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health*, 100(10), 1953–1960. <u>PubMed https://doi.org/10.2105/AJPH.2009.174169</u>
- Lee, J. G., Blosnich, J. R., & Melvin, C. L. (2012, November). Up in smoke: Vanishing evidence of tobacco disparities in the Institute of Medicine's report on sexual and gender minority health. *American Journal of Public Health*, 102(11), 2041–2043. <u>PubMed</u> <u>https://doi.org/10.2105/AJPH.2012.300746</u>
- Hatzenbuehler, M. L., McLaughlin, K. A., & Slopen, N. (2013, June). Sexual orientation disparities in cardiovascular biomarkers among young adults. *American Journal of Preventive Medicine*, 44(6), 612–621. <u>PubMed</u> <u>https://doi.org/10.1016/j.amepre.2013.01.027</u>
- 34. Fredriksen-Goldsen, K. I., Hoy-Ellis, C. P., Goldsen, J., Emlet, C. A., & Hooyman, N. R. (2014). 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. *Journal of Gerontological Social Work*, 57(2-4), 80–107. PubMed https://doi.org/10.1080/01634372.2014.890690
- 35. Institute of Medicine (U.S.). Committee on Lesbian Gay Bisexual and Transgender Health Issues and Research Gaps and Opportunities. (2011). The health of lesbian, gay, bisexual, and transgender people: building a foundation for better understanding. Washington, DC: National Academies Press
- Tamargo, C. L., Quinn, G. P., Sanchez, J. A., & Schabath, M. B. (2017, October 7). Cancer and the LGBTQ population: Quantitative and qualitative results from an oncology providers' survey on knowledge, attitudes, and practice behaviors. *Journal of Clinical Medicine*, 6(10), 93. <u>PubMed https://doi.org/10.3390/jcm6100093</u>
- 37. Friedman, M. S., Marshal, M. P., Guadamuz, T. E., Wei, C., Wong, C. F., Saewyc, E., & Stall, R. (2011, August). A meta-analysis of disparities in childhood sexual abuse, parental physical abuse, and peer victimization among sexual minority and sexual nonminority individuals. *American Journal of Public Health*, 101(8), 1481–1494. <u>PubMed</u> <u>https://doi.org/10.2105/AJPH.2009.190009</u>
- 38. Herek, G. M. (2009, January). Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence*, *24*(1), 54–74. <u>PubMed</u> https://doi.org/10.1177/0886260508316477
- McLaughlin, K. A., Hatzenbuehler, M. L., Xuan, Z., & Conron, K. J. (2012, September). Disproportionate exposure to early-life adversity and sexual orientation disparities in psychiatric morbidity. *Child Abuse & Neglect*, 36(9), 645–655. <u>PubMed</u> <u>https://doi.org/10.1016/j.chiabu.2012.07.004</u>
- Bazargan, M., & Galvan, F. (2012, August 15). Perceived discrimination and depression among low-income Latina male-to-female transgender women. *BMC Public Health*, *12*, 663. <u>PubMed https://doi.org/10.1186/1471-2458-12-663</u>
- 41. Medley, G., Lipari, R., Bose, J., Cribb, D., Kroutil, L., & McHenry, G. (2016). Sexual Orientation and Estimates of Adult Substance Use and Mental Health: Results from the 2015

National Survey on Drug Use and Health. NSDUH Data Review. Retrieved from https://www.samhsa.gov/data/sites/default/files/NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015.htm

- Kecojevic, A., Wong, C. F., Schrager, S. M., Silva, K., Bloom, J. J., Iverson, E., & Lankenau, S. E. (2012, November). Initiation into prescription drug misuse: Differences between lesbian, gay, bisexual, transgender (LGBT) and heterosexual high-risk young adults in Los Angeles and New York. *Addictive Behaviors*, 37(11), 1289–1293. <u>PubMed</u> <u>https://doi.org/10.1016/j.addbeh.2012.06.006</u>
- Marshal, M. P., Friedman, M. S., Stall, R., King, K. M., Miles, J., Gold, M. A., . . . Morse, J. Q. (2008, April). Sexual orientation and adolescent substance use: A meta-analysis and methodological review. *Addiction (Abingdon, England)*, 103(4), 546–556. <u>PubMed https://doi.org/10.1111/j.1360-0443.2008.02149.x</u>
- 44. Rhodes, S. D., McCoy, T., Hergenrather, K. C., Omli, M. R., & Durant, R. H. (2007). Exploring the health behavior disparities of gay men in the United States: Comparing gay male university students to their heterosexual peers. *Journal of LGBT Health Research*, 3(1), 15–23. <u>PubMed https://doi.org/10.1300/J463v03n01_03</u>
- Thoma, B. C., Huebner, D. M., & Rullo, J. E. (2013, December). Unseen risks: HIV-related risk behaviors among ethnically diverse sexual minority adolescent females. *AIDS Education and Prevention*, 25(6), 535–541. <u>PubMed https://doi.org/10.1521/aeap.2013.25.6.535</u>
- 46. Hadland, S. E., Austin, S. B., Goodenow, C. S., & Calzo, J. P. (2014, March). Weight misperception and unhealthy weight control behaviors among sexual minorities in the general adolescent population. *The Journal of Adolescent Health*, 54(3), 296–303. <u>PubMed</u> <u>https://doi.org/10.1016/j.jadohealth.2013.08.021</u>
- Calzo, J. P., Roberts, A. L., Corliss, H. L., Blood, E. A., Kroshus, E., & Austin, S. B. (2014, February). Physical activity disparities in heterosexual and sexual minority youth ages 12-22 years old: Roles of childhood gender nonconformity and athletic self-esteem. *Annals of Behavioral Medicine*, 47(1), 17–27. PubMed https://doi.org/10.1007/s12160-013-9570-y
- Lewis, N. M. (2009, December). Mental health in sexual minorities: Recent indicators, trends, and their relationships to place in North America and Europe. *Health & Place*, 15(4), 1029–1045. <u>PubMed https://doi.org/10.1016/j.healthplace.2009.05.003</u>
- Witcomb, G. L., Bouman, W. P., Claes, L., Brewin, N., Crawford, J. R., & Arcelus, J. (2018, August 1). Levels of depression in transgender people and its predictors: Results of a large matched control study with transgender people accessing clinical services. *Journal of Affective Disorders*, 235, 308–315. <u>PubMed https://doi.org/10.1016/j.jad.2018.02.051</u>
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008, August 18). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8, 70. <u>PubMed</u> <u>https://doi.org/10.1186/1471-244X-8-70</u>
- 51. Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., . . . Brent, D. A. (2011, August). Suicidality and depression disparities between sexual minority

and heterosexual youth: A meta-analytic review. *The Journal of Adolescent Health*, 49(2), 115–123. <u>PubMed https://doi.org/10.1016/j.jadohealth.2011.02.005</u>

- Toomey, R. B., Syvertsen, A. K., & Shramko, M. (2018, October). Transgender adolescent suicide behavior. *Pediatrics*, 142(4), e20174218. <u>PubMed</u> <u>https://doi.org/10.1542/peds.2017-4218</u>
- 53. James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *Executive Summary of the Report of the 2015 U.S. Transgender Survey*, National Center for Transgender Equality. Retrieved on February 9, 2019, from https://transequality.org/sites/default/files/docs/usts/USTS-Executive-Summary-Dec17.pdf
- 54. Mirza, S. A., & Rooney, C. (2018). "Discrimination Prevents LGBTQ People from Accessing Health Care," Center for American Progres. Retrieved on February 9, 2019, from https://www.americanprogress.org/issues/lgbt/news/2018/01/18/445130/discrimination-prevents-lgbtq-people-accessing-health-care
- 55. Romanelli, M., & Hudson, K. D. (2017). Individual and systemic barriers to health care: Perspectives of lesbian, gay, bisexual, and transgender adults. *The American Journal of Orthopsychiatry*, 87(6), 714–728. <u>PubMed https://doi.org/10.1037/ort0000306</u>

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