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Addressing Health Disparities and Cultural Competency in Reproductive Health Through Active Learning in the University of Puerto Rico, School of Medicine

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ABSTRACT

Lesbian, gay, bisexual, transgender and queer (LGBTQ) individuals face health disparities linked to societal stigma, discrimination, and denial of their civil and human rights which impact reproductive health. Previous pregnancy, induced abortion, and hormonal contraceptive use are common among women who report sex with women, regardless of self-identification as lesbian. LGBTQ have higher risk of smoking, use illicit drugs or have alcohol related problems. Methods: A faculty development training addressed methods and skills for teaching cultural competence and eliminate health disparities. Faculty facilitated a small group active learning activity, including a vignette and a reflective self-evaluation, for medical students to provide better health care services to LGBTQ women in childbearing age. A pre-test and post-test were administered. Analysis was performed using Statistix8.0. Results: A total of 115 second year medical students were included in the educational activity. Subjects included 101 students (87%) on the pretest and 104 students (90%) on the post-test. Subjects showed an overall improvement in knowledge (89% correct answers pre-test, 100% post-test).

Keywords: Health Disparities, Medical Education, Bisexuals and Lesbian, Cultural Competence, Health Care Services

INTRODUCTION

Lesbian, gay, bisexual, transgender and queer (LGBTQ) individuals face health disparities linked to societal stigma, discrimination, and denial of their civil and human rights, which impact their general health. Among the minorities underserved by today's healthcare system, this population may be the least studied, and the least understood by healthcare providers. Hispanics

represent the fastest growing ethnic segment of the lesbian, gay, bisexual, and transgender community in the United States and are disproportionately burdened by related health issues and limited political support from Hispanic medical organizations (Sánchez, et al. 2014). Latino patients face many barriers to shared decision making with their providers. They are also affected disproportionately by health conditions such as obesity, intimate partner violence and mental health (Baig, et al. 2016).

High-quality evidence is often lacking regarding optimal preventive care measures both in medical areas that fail to identify differences in need between LGBTQ and heterosexual patients, and in those more specific to the LGBTQ population. As this community gains more visibility in U.S. society, more organizations are working to remedy past failures to collect data and to explore differences in health outcomes compared with that in the heterosexual society (Floyd, et al. 2016). Most research comparing substance abuse between this community shows higher use by these individuals (Cochran, et al. 2012). Smoking, alcohol and substance abuse may be used as a way to cope with the stress induced by societal homophobia and discrimination against sexual minorities (Fogel, et al. 2012). Individuals from this community may also use drugs and alcohol to escape feelings of loneliness and depression, to help "build courage" to approach potential partners, and because of environmental marginalization. Members of the LGBTQ community often experience financial and cultural barriers to accessing optimal health care. They may encounter barriers to receiving needed care as a result of fear that medical service will be refused or that they will experience discrimination based on sexual orientation and identity. Health Disparities issues that affect LGBTQ are associated to social stigma, rejection by family members, abuse and violence, stress, lack of health insurance and discrimination. Previous pregnancy, induced abortion, and hormonal contraceptive use are common among women who report sex with women (Marrazzo, et al. 2004).

Barriers to adequate service for LGBTQ patients include lack of competent providers. The American Medical Association has mandated physicians to become educated on health care disparities and to engage in nondiscriminatory practice. Mosack, et al. (2013) studied 420 lesbians, gay, bisexual, queer and heterosexual women and found that those participants whose healthcare providers purportedly knew of their sexual orientation reported greater satisfaction with their healthcare providers and greater comfort discussing their sexual health than those whose providers were presumably unaware. Medical students receive very little background or training on LGBTQ health-related issues. When such training is provided, it is often in the form of lectures and includes very little clinical exposure to the LGBTQ community. There is need for better tools and training to ensure that physicians understand the unique health issues encountered by this community, which do not only involve sexual health, and to help them develop specific, effective communication skills (Awosogba, et al. 2011).

The University of Puerto Rico School of Medicine Hispanic Center of Excellence offers the Professional Certificate "Medical Education: Eliminating Health Disparities in Health Care" to course directors or faculty members with active participation in courses given to medical students or residents. The overall goal of this activity is to provide focused education to faculty in the integration of health disparities, knowledge, practice and attitudes in the school of medicine curriculum to contribute to the elimination of health disparities. Faculty members from the Neonatology Section participated in this educational program. As a requirement of the Professional Certificate, the faculty members needed to develop and present an innovative

curricular work plan integrating health disparities and cultural sensitivity issues in the school's medical education program and clinical practice in their area of choice. The Neonatology Section faculty members participate in the Mechanisms of Disease Course given to second year medical students. As part of this course the students participate in a small group discussion analyzing the effects of alcohol, tobacco and drugs during pregnancy. The faculty members identified this small group learning experience as a feasible one for including an educational activity to increase the level of LGBTQ cultural competency and provide better reproductive health care services to LGBTQ individuals. In this study we aimed to compare second year medical student's knowledge about the health disparity issues that affected LGBTQ individuals as well as students' attitudes toward the community before and after an educational intervention.

METHODS

Faculty members received a case-based educational activity to improve their knowledge in how cultural issues directly impact both research and patient care. Simulations and vignettes were used to enable the faculty to address health disparities issues affecting LGBT individuals and to analyze clinical decision making that may impact this group. The faculty was provided with opportunities to learn effective methods and skills for teaching about cultural competence and also for applying them to their clinical practice and research.

Students were assigned readings about the effects of alcohol, tobacco and drugs during pregnancy, definition of health disparities, stigma, health issues of the LGBTQ population and sexually transmitted diseases (STDs) to be completed prior to the participation in the small group activity. During the 2-hour active learning educational intervention those subjects were openly discussed based on patient scenario. The reflective self-evaluation was used as a method of examining assumptions that the medial (adult) students possess and then, promote introspection and the questioning of those beliefs. A validated, anonymous pre-test and post-test addressing health disparity issues that affected LGBTQ individuals was given to each student. The pre-test and post-test's content was the same. The tests included six questions, four were about knowledge, definition of health disparities, stigma, health issues of LGBTQ population and STDs. There were also two questions about attitudes of the medical student toward treating the LGBTQ population and their capacity of separating their own values in order to take care of LGBTQ individuals. The subjects were divided in 12 groups with 12 neonatology faculty members. Each group consisted of ten students and one facilitator. The pre-test was given by the faculty member at the beginning of the activity and was answered anonymously. The post-test was answered after the small group activity using the Blackboard system. The University of Puerto Rico Medical Sciences Campus Institutional Review Board approved the study. Differences among groups were analyzed using t-test and chi-square. The analysis was performed using Statistix 8.0.

RESULTS

One hundred one subjects answered the pre-test. No demographic data was recorded during our study but medical students' age range in this class from 22-26 years. The post-test was answered by 104 subjects. Table 1 shows the students' knowledge prior to and post intervention period. The subjects showed improvement in their general knowledge about health disparity issues in the LGBTQ community answering correctly 99% of the questions as compared to 88.9% before the intervention ($p<0.000$). Knowledge about the definition of health disparity was similar in the

post intervention period (98% vs. 100%; p=0.353). The stigma issues that affect the community were learned during the activity (93% vs. 100%; *p*=0.0024). Improvement in knowledge about health issues affecting LGBTQ individuals was evident (73% vs. 95%; *p*=0.0002).

Table 1: Results of pre-test and post-test about knowledge

Students Knowledge	**Pre-Test**	**Post-Test**	***p* value**
Health Disparities Definition	98%	100%	0.353
Health care disparities affecting the LGBTT	93%	100%	0.024
LGBTT Reproductive and sexual health issues	73%	95%	0.0002
Reproductive and sexual health care and sexually transmitted diseases	91%	96%	0.009

Seventy-eight percent of the subjects felt more comfortable talking to LGBTQ individuals as compared to 71% prior to the activity. Nevertheless, 1% of subjects answered feeling not comfortable at all talking to patients of the community prior to the active learning activity. After the activity, 100% of the subjects felt comfortable talking to LGBTQ individuals (Table 2). After the small group activity, 80% of the subjects answered feeling capable of separating their own values in order to take care of LGBTQ patients (Table 3).

Table 2: Feeling comfortable talking to LGBTT patients (*p* = 0.6931)

Comfortable talking to LGBTT patients	**Pre-test**	**Post-test**
Completely comfortable	71%	78%
A little comfortable	26%	20%
Not comfortable at all	1%	0%
I'm not sure	2%	2%
Never exposed to LGBT	1%	2%

Table 3: Separation from their own values (*p* = 0.6593)

Separation from their own values	Pre-test	Post-test
Completely capable	73%	80%
A little capable	22%	16%
Not capable at all	2%	1%
I'm not sure	2%	1%
Never exposed	1%	1%

DISCUSSION

Despite increasing awareness of the social determinants of health, health care disparities among sociocultural groups persist. Cultural stereotypes may not be consciously endorsed, but their mere existence influences how information about an individual is processed and leads to unintended biases in decision-making, so called "implicit bias". All of society is susceptible to these biases, including physicians. Research suggests that implicit bias may contribute to health care disparities by shaping physician behavior and producing differences in medical treatment along the lines of race, ethnicity, gender or other characteristics (Chapman, et al. 2013). Literature suggests that lesbians, gay men and bisexuals have significant health disparities compared with heterosexuals. Although the reasons may be a contributing factor in both accessing and receiving care (Dorsen, et al. 2016). For example, though overt racism has declined, groups that benefit from social privilege still exhibit implicit biases, feeding into health care disparities. When presented with evidence that inequities persist, disagreement about the causes of disparities or poor health outcomes may remain (Calasanti, et al. 2004).

In 2009, Henry Ford Health System initiated the Healthcare Equity Campaign both to raise employees' awareness of inequalities related to the social determinants of health and to increase their motivation to reduce them (Holm, et al. 2012). The team designed the exercise to enhance participants' awareness of privilege in their lives and work, to improve their understanding of the impact of privilege on their own and others' lived experiences as a step beyond cultural competence toward cultural humility, and to encourage them to leverage their advantages to reduce health care inequities. Evaluations showed the exercise's potential as a powerful learning experience that might enhance a variety of equity- or diversity-related trainings, and also showed that participants considered this exercise a highlight of the training (Holm, et al. 2016). To eliminate inequalities, health care providers must acknowledge how their handling of cultural differences impacts patients, (Sue, et al. 2007) and not presume that standards of objectivity, professionalism, and service immunize them from bias. Helping providers recognize their own biases without activating psychological defenses is difficult (Holm, et al. 2016).

In an effort to address healthcare disparities in LGBTQ populations, many hospitals and clinics including our school of Medicine, institute diversity training meant to increase providers' awareness of and sensitivity to this patient population. Despite these efforts, many healthcare spaces remain inhospitable to LGBTQ patients and their loved ones. Even in the absence of overt forms of discrimination, LGBTQ patients report feeling anxious, unwelcome, ashamed, and distrustful in healthcare encounters. Dean, et al. (2016) argues that these negative experiences are produced by a variety of subtle, ostensibly insignificant features of healthcare spaces and interpersonal interactions called microaggressions. Microaggressions, whether intentional or unintentional, are verbal, nonverbal, behavioral, or environmental indignities that communicate hostile, derogatory, or negative connotations about a particular culture. The term originated in 1970's regarding racial microaggressions. This group of investigators also identified heteronormative microaggressions common to healthcare settings and specified how they negatively impact LGBTQ patients and that with standard diversity training cannot sufficiently address heteronormative microaggressions. These kinds of microaggressions take place when an LGBTQ person is assumed to be heterosexual, or when they are encouraged to act in gender-conforming ways. Heterosexuals don't realize that it is common for them to assume someone is straight, unless proven otherwise. Despite these challenges, healthcare institutions and providers must take responsibility for heteronormative microaggressions and take steps to reduce their

frequency and mitigate their effects on LGBTQ care. They concluded by offering strategies for problem solving at the level of medical education, institutional culture and policy, and individual awareness (Dean, et al. 2016).

In view of addressing strategies to improve problem solving strategies toward the health disparities that LGBTQ population confronts, we were able to identify a suitable course to develop and implement an educational activity for medical students and faculty to promote better strategies in order to provide better healthcare services to LGBTQ individuals. An educational intervention in small group active learning format was successful in improving medical students' knowledge about health disparities. These students showed adequate knowledge about the general definition of health disparities prior to the educational activity. Our school is making efforts to include health disparities issues on the academic curriculum since first year in order to optimize general health and healthcare of these patients. LGBTQ health issues including stigma, reproductive and sexual health and sexually transmitted diseases were emphasized. Studies involving physicians suggest that unconscious bias may be related to clinical decision-making and may predict poor patient-physician interaction. In our study, although most medical students felt comfortable talking to the LGBTQ population, there is still 2% who are not sure about their feelings even after participating in the educational activity.

CONCLUSION

An educational intervention in small group active learning format was successful in improving second year medical students' knowledge about LGBTQ health issues including stigma, reproductive and sexual health and sexually transmitted diseases. Although there was a tendency of improvement in their feelings and attitudes toward the LGBTQ community, there is still a need to develop other strategies to increase education regarding LGBTQ culture, healthcare needs, and stigma issues. Future projections include the study of other factors, which may be associated to the students' attitude and feelings about the LGBTQ community, such as age, gender, religion among others as well as the implementation of strategies to address medical students' attitudes that may impact LGBTQ health care.

REFERENCES

Awosogba T, et al. (2011). Prioritizing health disparities in medical education to improve care. *Academic Medicine*, 86(11), 134.

Baig AA, et al. (2016). Addressing Barriers to Shared Decision Making Among Latino LGBTQ Patients and Healthcare Providers in Clinical Settings. *LGBT Health*, 3(5), 335-41.

Calasanti T. (2004). Feminist gerontology and older men. *Journals of gerontology.Series B,Psychological sciences and social sciences Gerontological Society of America*. 59, 305-314.

Chapman EN, Kaatz A, Carnes M. (2013). Physicians and Implicit Bias: How Doctors May Unwittingly Perpetuate Health Care Disparities. *Journal of General Internal Medicine*, 28**(**11**),** 1504-10.

Cochran SD, Grella CE, Mays VM. (2012). Do substance use norms and perceived drug availability mediate sexual orientation differences in patterns of substance use?

Results from the California Quality of Life Survey II. *Journal of Studies on Alcohol and Drugs*, 73(4), 675-85.

Dean MA, Victor E, Grimes LG. (2016). Inhospitable Healthcare Spaces: Why Diversity Training on LGBTQIA Issues Is Not Enough. *Journal of bioethical inquiry*. (7), 1176.

Dorsen C. (2016). Open arms, conflicted hearts: nurse practitioner's attitudes towards working with lesbian, gay and bisexual patients. *Journal of Clinical Nursing*, 25, 3716–727. doi: 10.1111/jocn.13464.

Floyd SR, Pierce DM, Geraci SA. (2016). Preventive and Primary Care for Lesbian, Gay and Bisexual Patients. *American Journal of the Medical Sciences*, 352(6), 637-643.

Fogel SC, Calman L, Magrini D. (2012). Lesbians' and bisexual women's definition of health. *Journal of Homosexuality*, 59(6), 851-63.

Holm AL, Gorosh MR, Brady M. (2016). Recognizing Privilege and Bias: An Interactive Exercise to Expand Health Care Providers' Personal awareness. *Academic Medicine,92(3),360-364*, doi:10.1097/ ACM.0000000000001290.

Marrazzo JM, Stine K. (2004) Reproductive health history of lesbians: implications for care. *American Journal of Obstetrics and Gynecology*, 190(5), 1298-304.

Mosack KE, Brouwer AM, Petroll AE. (2013). Sexual Identity, Identity Disclosure, and Health Care Experiences: Is There Evidence for Differential Homophobia in Primary Care Practice? *Womens Health Issues*, 23(6), e341–e346.

Sánchez JP, Sola O, Ramallo J, Sánchez NF, Dominguez K, Romero- Leggott V. (2014). Hispanic Medical Organizations' Support for LGBT Health Issues. *LGBT Health*, 1(3), 161-164.

Sue DW, Capodilupo CM., Torino GC, Bucceri JM, Holder AMB, Nadal KL, Esquilinet M. (2007). Racial microaggresions in everyday life: Implications for clinical practice. *American Psychologist*, 62, 271-286.