# A Brief Learning Experience Designed to Increase Nursing Students' Knowledge of and Attitudes Toward LGBT Health Care

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Abstract— This study examined the effect of a brief learning experience on nursing students' knowledge of and attitudes toward providing care to Lesbian, Gay, Bisexual and Transgender (LGBT) individuals. The Nursing Students' Knowledge of and Attitudes toward LGBT Healthcare (NKALH) survey was administered to a convenience sample of 41 senior nursing students enrolled in a community health course. At pretest, there were significant knowledge deficits (20% of the questions were answered correctly) and low attitude scores toward LGBT healthcare needs existed. At posttest, students' knowledge scores increased to 84%; attitude scores increased slightly, but not significantly (p = 0.07). Among the students who participated in the study, none felt they would be unable to care for an LGBT individual.

Keywords- knowledge, attitudes, LGBT, health care, nursing students

#### I. INTRODUCTION

With the Affordable Care Act, access to quality health care is being mandated for all individuals, including sexually diverse individuals. Yet despite increases in the number of known lesbian, gay, bisexual and transgender (LGBT) individuals, research has shown that health care providers have inadequate knowledge of their health care needs [1]. Unfortunately, there is little education about LGBT health concerns in medical schools, schools of public health or nursing programs. Few studies have examined students' knowledge of and attitudes toward LGBT healthcare [2-4], and even fewer have examined the infusion of LGBT content into nursing curricula. One program in Florida addresses LGBT aging issues in the curriculum [5]; and a program at John Hopkins has infused LGBT content into the baccalaureate program [6]. However, these programs did not report the effectiveness of the infusion of LGBT content into their curricula. Few if any studies to date have examined the effects of a brief learning experience on nursing students' knowledge of and attitudes toward providing LGBT health

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At our university, a curriculum review indicated, that students in our nursing program had inadequate knowledge of and inappropriate attitudes toward LGBT health care [3] and LGBT content was lacking in course content. This article describes a brief learning experience with LGBT health care issues that we implemented in a senior community based course and the effects of this activity on students' knowledge of and attitudes toward providing care to LGBT individuals. We also looked at correlations between knowledge, attitudes and students' demographic characteristics.

### II. METHODS

#### A. Design

This research utilized a pre-test post-test design to examine the effect of a brief learning experience designed to increase nursing students' knowledge of and attitudes toward providing LGBT health care. The pre-test post-test design is the preferred method to measure the degree of change as the result of a treatment or intervention.

## B. Sample and Setting

The sample for the study was undergraduate nursing students enrolled in a community health course during their last semester in a baccalaurete program at a university located in the southeastern region of the United States. One week before the brief learning experience, all students in class that day were approached to participate in the study, and all consented and took the pre-test (n=41) yet one week later 3 withdrew before the learning experience began, leaving 38 (93%) who completed the posttest survey.

# C. Brief Learning Experience: Said Another Way

Prior to this learning experience, there was no course content that addressed LGBT content with undergraduate nursing students. For this brief learning experience, a PowerPoint presentation entitled "Said Another Way" was developed to introduce information on LGBT health care. Content for the Power Point presentation was based on information found in the Healthy People 2010 Companion Document for LGBT Health and Fenway Institute LGBT Education Modules [7-8]. The presentation covered information on health concerns such as cancer, obesity, depression, sex reassignment surgery, tobacco use, suicide, hepatitis A, HIV, nutrition, hormone therapy, heart disease, and violence. Content validity of the presentation was conducted with two nurses and one transgender female knowledgeable about LGBT health care concerns. A content validity index (CVI) score of 1 was obtained, indicting universal agreement on the final version of the PowerPoint content. According to Lynn [9], with 5 or less reviewers the CVI score should be equal to 1.00.

One week before the learning experience, students were given an opportunity to develop questions to ask someone who self-identified as LGBT. We invited an African-American female transgender individual to come and speak with the students. The questions were sent to the speaker in advance, and she reviewed them and approved all, as acceptable. One week later, the guest speaker discussed her experiences as a transgender female after the PowerPoint presentation. The questions provided were asked and answered by the guest speaker. The brief learning experience lasted approximately 2 hours.

#### D. Procedure

After receiving Institutional Review Board approval, on the day of the learning experience an informed consent statement was read aloud to the students and they were told that those who returned completed questionnaires were considered to give informed consent. The students who remained in class then completed the 73-item Nursing Students' Knowledge and Attitudes toward LGBT Healthcare (NKALH) survey [3]. The first 37 questions on the NKALH survey assessed knowledge of LGBT health care using a true, false, don't know format. Correct responses were coded as 1 and incorrect and don't know responses were coded as 0. The next 25 questions examined students' comfort in providing LGBT health care, using a 5-point Likert scale (1-strongly agree to -5- strongly disagree). Adding the mean scores on each subscale and dividing by 4, we were able to calculate the total mean attitude score. Higher scores indicate more positive attitudes and greater comfort and willingness in providing LGBT care. Cronbach alpha for this instrument was 0.77. Alpha scores of 0.70 and higher are considered accepted for new surveys [10]. Cronbach alpha scores for subscales of attitudes were: comfort in providing care (n = 7questions; alpha 0.85); uncomfortable about providing care (n = 4 questions, alpha 0.80), willingness to provide care (n = 6 questions, alpha 0.70), and unwillingness to provide care (n = 11 questions, alpha 0.07). The remaining 11 questions asked participants to provide demographic information, to make comments, and to identify whether they personally knew someone as LGBT. The survey took 15 minutes to complete.

#### E. Results

The sample was primarily female (98%), 22 to 25 years of age (61%), self-identified as heterosexual (98%), and Caucasian (68%). Most had 0-5 years of health care experience (93%), and most personally knew someone who self-identified as LGBT (88%).

After the brief learning experience, there was a significant increase in student's knowledge of the health concerns of the LGBT population. Knowledge scores increased from 20% to 84% correct, except for questions pertaining to male to female reassignment surgery and removal of the prostate gland; breast cancer can still occur after bilateral reductive surgery for female to male transsexuals; lesbian patients do not need pap smears as frequently as heterosexual women; reimbursement of sex reassignment surgery by insurance companies; gay men are at increased risk for melanoma or other cancers due to psychogenic suppression of the immune response; and survival time among gay men with cancer is similar to that of the population at large. Significant increases in correct responses were seen on 20 of the 37 knowledge questions (  $p \le 0.05$ ).

Total mean attitude scores increased slightly but not significantly (x = 3.04 to 3.06, p = 0.70). Mean attitude scores decreased on subscales of being uncomfortable (x= 3.33 to 3.27, p = 0.58) and unwilling to provide care to LGBT individuals (x = 4.77 to 4.68, p = 0.81) and increased on subscales of being comfortable (x= 2.38 to 2.53, p = 0.41) and willing to provide care to LGBT individuals (x =4.76 to 4.83, p = 0.58). There was a significant correlation between knowledge of and attitudes toward LGBT health care concerns ( $r_s = 0.22 p = 0.04$ ). As knowledge scores increased, so did willingness and comfort in providing LGBT healthcare. There was also a significant correlation between personally knowing someone as LGBT and religion affiliation ( $r_{s=} 0.34 p = 0.02$ ), with more Protestant students personally knowing someone as LGBT. Students who personally knew LGBT individuals knew them as friends, co-workers, and/or relatives. None of the students who participated in the study felt they would be unable to care for an LGBT individual. However, many students reported not knowing whether they had cared for an LGBT patient. Students expressed appreciation for the opportunity to openly discuss health care concerns with a transgender individual.

#### III. DISCUSSION

This study examined the beginning attempts at one university to infuse LGBT health care content within a nursing curriculum. The results reported here represent the

effect of a brief learning activity on nursing students' knowledge of and attitudes towards LGBT health care concerns in one nursing class. The data were obtained using a true and false survey. The use of multiple true and false questions has been found to be valid in measuring knowledge acquisition during examinations [11]. It was promising to find that knowledge scores increased to 84% after this brief learning experience. One discouraging finding was that attitudes did not significantly improve after the encounter with a transgender female. We did not explore reasons why the 3 students left the class before the brief learning experience began since this was a voluntary assignment. While Vanderleest and Galper [12] found that attitudes improved after one education session, it may take more than one experience to change attitudes toward homophobia, heterosexism, and transgender individuals. Also, this study was conducted in a socially conservative region of the country and as found in another study [13], religion may have influenced attitudes toward a sexually diverse population. While not examined, homophobia and heterosexism attitudes may have existed among this group of students. Studies have shown that attitudes of homophobia and heterosexism have been found to exist among nursing students and faculty [14-15].

According to Lim and Bernstein [5] and Rhondahl [4], to improve care of LGBT individuals the first task of an educational program is to infuse information on LGBT healthcare into the curriculum and address existing knowledge deficits. While knowledge deficits existed before the educational session, we found that even after a brief education session students incorrectly answered questions pertaining to reassignment surgery, breast cancer, pap smears, and reimbursement costs, melanoma and other cancers, therefore we will need to emphasize these topics.

Sessions on LGBT related topics in medical schools average 5 hours (Obedin-Maliver et al [13], while our brief learning experience included only 2 hours of instruction. Our results clearly indicated that we might need to devote more time to this content in our curriculum. Our faculty can begin by weaving LGBT content within the curriculum. This content could be presented in Community Health, Family Health, Health Assessment, Human Diversity, Mental and Nursing Across the Life Span courses. Curriculum leaders can develop workshops to assist faculty to develop a pedagogical style that avoids using language that implies heterosexist classroom norms. According to the literature [11,16], other teaching strategies that we may incorporate are the use of LGBT manikins in simulations, case studies, journals, group projects, and nursing care plans. This type of training could assist students to address transgendered individuals by their preferred gender rather than their assigned birth gender and allow students opportunities to ask questions pertaining to a patient's sexual history. There should also be discussions of the Joint Commission's Accreditation of Hospitals Anti-LGBT discrimination rules. Partnerships with LGBT support groups could be developed to discuss ways to prevent discrimination by health care providers.

#### IV. LIMITATIONS

Our findings need to be generalized cautiously, given that ours was a convenience sample from a university in one geographic location. In addition, there was no comparison group. However, the results are encouraging and provide insight into where we need to focus further educational efforts. Schools of nursing can benefit from these findings, as more individuals will have access to affordable care and opportunities for health promotion education and screenings.

#### V. IMPLICATIONS

We saw significant improvement in knowledge scores. Students were able to identify several health care issues that would result in additional screening or patient education. They expressed overwhelmingly positive comments about having the opportunity to review these specific health issues. Before we can begin to educate nursing students about these health care concerns, faculty will need to recognize their own prejudices and biases as these can be communicated directly and indirectly to nursing students [15].

#### VI. CONCLUSION

Faculty at schools of nursing can use these findings when they begin to infuse LGBT content within their curriculum to see what works and what does not work. We hope to expand this effort to several courses in the undergraduate and graduate curriculum to prepare culturally competent nursing students involved with LGBT healthcare. As a profession that values diversity and embraces inclusiveness, we must prepare our students to meet the needs of all clients, regardless of their sexual orientation. It is evident that our attempts will require additional research and teaching strategies to begin to change attitudes. A follow-up study would include a two-group pretest-posttest design in which we also examine attitudes toward homophobia and heterosexism with a larger sample.

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