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Sexual health assessments in nursing practice: Quantitative analysis
of nurses' behaviors and perceptions

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Departmental Honors Thesis

The University of Tennessee at Chattanooga

Nursing

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Abstract

Sexual health is an important yet often neglected component of patient care. Most research on sexual health assessment and its place in nursing occurred from the 1970s to the early 2000s, leaving a gap in understanding nurses' current attitudes and beliefs toward assessing patients' sexual health. Frequencies by which sexual health assessments (SHA) are performed by nurses today is also unknown. In this study, we aimed to provide an updated understanding of attitudes, beliefs, and practices of nurses regarding SHA. An online-based Likert-scale survey was administered via social media platforms for professional nurses to complete. Results indicate that nurses are comfortable and confident in performing sexual health assessments and that most participants (N =140) believe sexual health is a nursing responsibility. However, results also indicate that nurses' frequency of performing SHA is less than it should be and additional training or education is needed to address this disparity. Statistically significant differences in participants' comfort, confidence, and frequency ($p < .05$) with SHA were demarcated based on their reported generational group, clinical specialty, professional role, gender, and education level. Based on these preliminary results, we conclude additional studies are needed to address barriers to assessing sexual health and incorporating this component of health into patients' plans of care.

Sexual health assessments in nursing practice: Quantitative analysis
of nurses' behaviors and perceptions

Upon admission to the hospital, patients are assessed by nurses to obtain pertinent information such as allergies, current medications, lifestyle habits such as smoking or alcohol use, vital signs, a history of chronic health conditions, infections or illnesses, and what issue caused hospital admission (Berman, Snyder, & Frandsen, 2016). However, healthcare providers' assessment of patients' sexual health is often superficial; failures to assess sexual health result in missed opportunities in identifying sexually transmitted infections (STIs), counseling a patient on contraceptive use, or referring to specialists (Nusbaum & Hamilton, 2002). These gaps in assessment indicate patients are generally inadequately assessed for sexual health deficits. Previous research suggests that nurses are uncomfortable addressing sexual health with patients, that barriers exist preventing sexual health conversations with patients, or that strategies to facilitate SHAs should be implemented to mediate sexual health screening deficits (Bdair & Constantino, 2017).

Sexual health is a delicate topic for many, but it is imperative to assess patients in a matter-of-fact and sensitive manner (Nusbaum & Hamilton, 2002). This assessment is particularly important due to asymptomatic natures of most STIs (Centers for Disease Control and Prevention [CDC], 2017). Asymptomatic STIs include chlamydia and gonorrhea, which are the most prevalent STIs as approximately 1.5 million cases of chlamydia occurred in 2017 (CDC, 2017a). Similarly, the CDC estimates 1.1 million people in the United States (US) are currently living with human immunodeficiency virus (HIV) but are unaware of being infected, given HIV's often asymptomatic nature after initial exposure, and infrequent offers by health care providers for HIV testing (CDC, 2017a).

Purpose

Given the gap in screening patients for sexual health care deficits, we aimed to quantify attitudes, beliefs, and practice behaviors of professional nurses regarding sexual health assessment of patients. Using questions both from the Sexuality Attitudes and Beliefs Survey (SABS) developed by Reynolds and Morris and questions curated by the primary investigator (PI), participating nurses were asked to identify their attitudes and beliefs toward completing sexual health assessments and the frequency of doing so. It is hypothesized that nurses are now comfortable in performing sexual health assessments but that the frequency in which this is performed is still lacking in practice.

Literature Review

The five most common barriers toward completing a sexual health assessment with patients reported by nurses in previous research are as follows: a conflict with the nurse's personal values and beliefs, lack of education in performing such an assessment, sex-related topics being seen as taboo and feelings of discomfort, fears of the patient's reaction, and feeling as though this component of health was not necessary or pertinent to patient care (Reynolds & Magnan, 2005; Minoia, 2017; Dattilo & Brewer, 2005). A majority of research also resides in five main categories that include post-myocardial infarction or post-surgical patients, oncology patients, nursing students, individuals with non-heterosexual sexual orientation and identity, and older adults.

Previous research has shown that nurses tend to neglect asking patients about sexual health concerns or providing education to those who need counsel (Minoia, 2017). Evidence from these studies shows that nurses are often uncomfortable and hesitant given the private nature of the topic (Minoia, 2017). A study found that in a coronary care unit, only 52% of

nurses included counseling to their myocardial infarction patients (Waterhouse, 2016). Omitting sexual counseling is significant due to stress put on the heart by sexual activity and without proper education on when to resume sexual practices, patients are at an increased risk of post myocardial infarction complications (Waterhouse, 2016).

Several studies have been conducted on oncology nurses' attitudes and behavior toward sexual health assessment. One study found that on an oncology floor, 90% of nurses had offered counseling to less than 10 patients in the last six months, and 25% of nurses never offered any counseling (Waterhouse, 2016). Kotronoulas et al. found that although oncology nurses recognized discussing sexual health with their patients as an important nursing role, they often avoided or failed to address their patients' concerns (Kotronoulas et al, 2009). Jonsdottir et al. developed an educational program and investigated the nurses' attitudes and practices before and after implementation over the course of 16 months (Jonsdottir et al., 2015). The program included workshops, educational meetings, and a staff pocket-guide to assist nurses in navigating the sensitive topic effectively. At the conclusion of the study, investigators found that 90% of the participants reported that communicating with their patients about sexuality was a nursing responsibility (Jonsdottir et al., 2015). Unfortunately, only 10-16% of participants reported "discussing sexuality-related issues with more than 50% of patients," with the most common barriers to this conversation being lack of training and the sensitivity of the topic (Jonsdottir et al., 2015, p. 27). This suggests a need for additional education on how to communicate sexual health information properly to a patient that nurses find accessible and useful. Cancer diagnoses have significant impacts on the lifestyle habits of an individual, thus proper guidance is necessary to maintain patient safety, normalcy, and to promote a high quality of life. However,

evidence shows that there are still obstacles to providing that care on oncology floors and among all nursing specialties.

Another study found that when confronted by patients' sexual problems, nurses felt ill-prepared to develop a care plan for them (Wood, 1967). The author emphasizes that embarrassed and anxious nurses or other health care providers augment these feelings in their patients, closing off communication and presenting another barrier to providing important patient care (Wood, 1967). This study, published in 1967, offers historical reference to the sexual revolution that occurred in the United States in the 1960s. It is referred as the sexual revolution due to the rise of more liberal ideas surrounding sexuality and acceptance of it into society, as well as the introduction of the birth control pill (Bailey, 1997). As ideas surrounding sexual health began to change and it became more relevant in healthcare, the first barriers toward sexual health assessment were identified in this study and revealed that there may be a need for greater inclusion of this information into nursing school curriculum.

Regarding the level of preparation that nursing schools provide to students concerning sexual health, it was found that professors in 14 schools of nursing reported that they often felt they had greater knowledge of human sexuality over their students (Fontaine, 1976). However, when inquired about how frequently they ask routine questions concerning sexual history and health, "60% replied that they seldom or never asked," (Fontaine, 1976, p. 75). The majority of instructors omitting this portion of assessment suggests that education on this component of care was not included in the nursing school curriculum. It also indicates the difficulty even experienced nurses have with discussing this sensitive topic and that patients may not receive the full scope of care that they require. The results of a study of senior nursing students found four core themes: (a) sexual health was deemed as an essential component to holistic care, (b)

discomfort was experienced while assessing the patient's sexual health, (c) assessment of sexual health was only warranted when pertaining to primary diagnosis, and (d) the belief that the assessment was less important than the assessment of other body systems (Dattilo & Brewer, 2005). This is important in that nursing students may not be receiving the education needed to confidently and sensitively acquire this important information. They are not building the skills needed to approach this topic in their professional career and are taught that it is not important if it does not pertain to the primary diagnosis.

Another study concluded that while greater knowledge of sexual health prepares nursing students to have sensitive conversations with their patients, having a positive attitude toward sexual health and confidence in resolving patients' sexual health concerns is essential to effectively care for patients (Sung, Huang, & Lin, 2018). One researcher identified that a difficult obstacle to overcome with nursing students is a negative attitude toward sexuality and sexual health. It was emphasized that there is a need to provide opportunities for students to "express and challenge their beliefs, opinions, and attitudes within safe and supportive learning opportunities... [because] knowledge alone is not enough to influence practice," (Bell & Bray, 2014, p. 516). These studies suggest that perhaps there is still a gap in nursing school curriculum to prepare students for difficult and sensitive conversations with their patients, affecting future patient care.

Another emerging topic that should be included with sexual health assessment is a patient's sexual orientation and gender identity that differ from their biological gender at birth. An integrative review of several studies about the attitudes and beliefs of nurses toward LGBTQ patients concluded that overall, "further research and policy making should aim to break down the culture of heteronormativity present in healthcare systems," (Stewart & O'Reilly, 2017, p.

76). Patients in these studies reported noticing language from nurses that indicated heteronormativity, such as nurses insisting a lesbian woman to take a pregnancy test or begin contraceptives. Other patients reported being told, “their illness was due to their sexual orientation or gender identity, particularly in cases of mental illness,” (Stewart & O’Reilly, 2017, p. 70). To care for patients holistically, mental health must be considered, and this includes addressing patients by their preferred pronouns and being sensitive to sexual orientations that are not heterosexual. This study suggests that there are still issues with being inclusive and respectful of non-heterosexual or cisgender individuals in the healthcare environment.

Another population that has been studied specifically in this vein of research are older adults (ages 65 years-old and greater). One researcher performed a qualitative research analysis involving registered nurses who cared for older adults in the primary health care setting. Though 60% of the participants reported working with older adults for 10 years or more, an outstanding barrier to having sexual health conversations with patients was a feeling of being insufficiently prepared to navigate it. Participants reported that their nursing education regarding sexual health pertained only to “contraception, maternal health, reproduction, fertility and sexually transmitted infections – the needs of younger clients,” (Moana, Crawford, & Isaac, 2017, p. 64). A common theme throughout literature on this topic is the understanding that sexual health assessment is important to holistic patient care but seems unattainable due to a lack of preparation. Sexual health is important for all patients but is frequently dismissed or ignored due to uncertainty in how to begin this conversation, issues regarding a nurse’s personal attitudes and beliefs, or general lack of knowledge on the subject and all it encompasses.

There are a few sexual assessment tools or surveys that have been developed to assist nurses and other health care professionals in addressing this topic. However, a majority of these

surveys focus primarily on function and satisfaction and disregard STIs, risk factors, and providing education to patients. One model, however, does include these components. The PLISSIT model was developed by the psychologist Jack Annon to address issues with sexuality and sexual health with patients. The acronym functions as a tool that provides four levels of intervention. P represents gaining permission from the patient to begin this sensitive conversation and allows the patient the opportunity to voice any concerns. This intervention should always take place in a private, quiet environment that ensures patient comfort. The “LI” in PLISSIT stands for providing limited information regarding the patient’s concern. This step provides information as to why this issue may be present and educates the patient on the possible etiologies and treatments for it. SS in PLISSIT stands for specific suggestions. At this level of intervention, recommendations and treatments are put into place to address the issue. And finally, the IT stands for intensive therapy, at which point the issue requires more than nursing care alone (Annon, 1976).

Research shows that the main populations the PLISSIT model is used for are older adults, post-surgical patients, and patients in remission after cancer. Older adults’ sexuality is often ignored due to the misconception that they no longer participate in sexual activity. However, a landmark study by Masters and Johnson disproved this notion as older adults reported continuing this activity throughout the life span. Additionally, the use of the PLISSIT model in post-surgical patients has shown positive outcomes in that nurses and case managers were able to identify patient concerns about sexuality after surgery and address these needs before discharge (Dixon & Dixon, 2006). The PLISSIT model is an easily accessible tool for nurses to use that “provides primary, early intervention and referral,” and “provides a safe, tolerant, and therapeutic environment for the discussion of sexual concerns,” (Dixon & Dixon, 2006, p. 105). Another

study focused specifically on post-mastectomy breast cancer survivors and found that utilizing the PLISSIT model with these patients improved both sexual function and quality of sexual life (Faghani & Ghaffari, 2016). It also found that its use could be beneficial in assessing the “sexual needs, weaknesses, and strengths” of couples affected by cancer diagnosis (Faghani & Ghaffari, 2016, p. 4850). The PLISSIT model is an appropriate framework to use with every patient, though it appears that it is not utilized as often as it could be.

Through the review of these studies, the core barriers to completing a sexual health assessment have been identified as a lack of comfort, confidence, and knowledge or training. While it is useful to identify the barriers that are preventing assessment from occurring, very few studies have been completed that aim to address and eliminate these barriers through educational programs, sexual assessment tools or models, or other methods. The purpose of this thesis is to provide an updated understanding of the comfort of nurses and frequency of assessment, as well as what barriers exist today. With the knowledge gained through this study, future research should focus on overcoming the barriers to provide truly holistic care that is comfortable for both the nurse and the patient.

Methodology

Materials

We constructed a survey using questions both from the existing Sexuality Attitudes and Beliefs Survey (SABS) and questions developed by the PI. Permission from the original author of the SABS, Dr. Morris Magnan, was obtained on March 26th, 2019. We chose this particular sexual health questionnaire due to its psychometric properties and utility in measuring attitudes toward sexual health. The SABS’ overall Cronbach’s alpha is 0.75 to 0.82 indicating strong internal consistency and reliability (Reynolds & Morris, 2005). The SABS is also gender neutral,

whereas other instruments, including the Clarke Sexual History Questionnaire for Males [SHQ] and the McCoy Female Sexuality Questionnaire, are gender-specific (Arrington, Cofrancesco, & Wu, 2004). Other instruments measuring sexual health focus exclusively on sexual function, arousal, satisfaction, or HIV prevention. The survey is comprised of 33 questions in total, including the Informed Consent Letter preceding the survey, which is composed of three sections: one section about the nurses' attitudes and beliefs toward sexual health assessment, one section to indicate the frequencies by which nurses perform tasks related to sexual health assessment, and one section for demographic information. Each registered nurse participant was asked to select "strongly disagree," "disagree," "agree," or "strongly agree" in the first section, and "never," "sometimes," "often," or "always" for each item in the second section: answers were coded 1-4, with lower numbers indicating lowest agreement with questions. Demographic information included participants' age, nursing specialty, level of education, and gender and sexual identity. The complete survey form and permission to use questions from the SABS is found in Appendices A and B, as well as in Table 1. Institutional Review Board approval was received on June 14th, 2019.

Please indicate the level at which you agree with the following statements: Strongly Disagree, Disagree, Agree, or Strongly Agree
1. Patients expect nurses to ask about their sexual health
2. I make time to discuss sexual concerns with my patients
3. I am more comfortable than most nurses I work with in talking about sexual issues with my patients
4. I am uncomfortable talking about sexual issues
5. I feel confident in my ability to address patients' sexual concerns
6. Hospitalized patients are too sick to be interested in sexuality
7. Sexuality should be discussed only if initiated by the patient
8. Discussing sexuality is essential to patients' health outcomes
9. When patients ask me a sexually related question, I advise them to discuss the matter with their physician
10. Giving a patient permission to talk about sexual concerns is a nursing responsibility
11. Sexuality is too private an issue to discuss with patients
12. *I feel that nursing school adequately prepared me to assess my patients' sexual health

13. *I avoid assessing patients' sexual health to prevent embarrassment on their part
14. *I feel embarrassed to ask my patients about their sexual health
15. *My culture influences my attitude toward assessing sexual health
16. *I incorporate sexual health assessments into every patient's plan of care
17. *Sexual health is not a concern for nurses to consider
18. *I feel uncomfortable if my patient does not identify as their biological gender
19. *I feel that including a sexual health assessment is not important to my specialty
20. *I feel that I need more training on how to perform a sexual health assessment/take a sexual health history
Please indicate how often each of the following is true for you: Never, Sometimes, Often, or Always
21. *I ask my patients about contraceptive use
22. *I ask my patients about the number of sexual partners they have/have had
23. *I ask my patients if they have had an STI screening
24. *I educate my patients on the asymptomatic nature of many STIs
25. *I provide informational resources to my patients regardless if they have concerns
26. *When/if my patients appear uncomfortable during assessment, I discontinue it
Please complete the following criteria for demographic information:
27. *In what decade were you born?
1950s, 1960s, 1970s, 1980s, 1990s
27. *Please choose the clinical specialty with which you most closely identify:
Critical care/intensivist, Med-Surg/internal medicine, Emergency/urgent care, Family practice/primary care, Obstetrics/gynecology, Pediatrics, Surgical/Perioperative
28. *Please choose your primary professional role:
Registered nurse
Advanced-practice registered nurse with prescriptive authority
29. *Please indicate your highest level of education:
Diploma/Associate Degree in Nursing, Bachelor of Science in Nursing, Master of Science in Nursing, Doctorate in Nursing (DNP or PhD)
28. *How do you identify your gender?
Female, Male, Transgender Male (FTM), Transgender Female (MTF), Non-binary, Prefer not to say, Other
30. *How do you identify your sexuality?
Strictly Heterosexual (attracted to the opposite sex), Not heterosexual (homosexual, bisexual, pansexual, asexual).
* - Question created by primary investigator.

Table 1 Modified Sexuality Attitudes and Beliefs Survey

Participants

Participation was voluntary and anonymous with no more than minimal risks or benefits of partaking in the survey for the subjects. The participants are registered nurses in the United States with all levels of education and any specialty. The survey was sent out through social

media, including Facebook, Twitter, Instagram, and email, to obtain a wide range of replies across the United States. Out of the 140 total participants, 67% were born in the 1980s-1990s, 29% were critical care nurses, 82% were registered nurses, and 74% either had their ADN or BSN. Additionally, 94% of participants identified their gender as female and 92% identified their sexuality as strictly heterosexual. The majority of participants were from the Southeast region of the United States with 47% (n=66) being from Tennessee alone. Further statistical analysis of the participant demographics are found in the Results and Discussion sections of this thesis.

Procedure

Electronic links to the survey were posted on various social media platforms such as Facebook, Twitter, Instagram, allnurses.com, and nursescafe.com. It was also distributed through email to faculty at the University of Tennessee at Chattanooga's School of Nursing. Before participants could begin answering survey questions, the participant was required to read the informed consent form and choose whether or not to continue to the survey (see the attached informed consent form and survey located in Appendix A). If participants chose that they were under the age of 18 or did not consent, the survey closed. The participants were also informed that the survey was to take less than 10 minutes to complete and were notified that they may decline to participate or withdraw at any time. The survey was available from 09/04/2019 to 10/11/2019.

The survey created for this research project was first distributed on 09/04/2019 and was kept open until 10/11/2019. Throughout this time it was redistributed multiple times via social media. A total of 188 participants started the survey, and 140 participants completed it, with a completion rate of 74.47%. 48 participants dropped out of the survey. Out of the 140 participants, 137 surveys were completed in the United States, one was completed in Canada,

one in Kenya, and one in the United Kingdom. Many significant findings resulted from this survey and the analysis of these results are organized by category.

Results

Generational Differences

A Kruskal-Wallis test was conducted to determine if there were differences in scores (e.g. ratings) between groups that differed in age. Distributions of ratings were similar for all groups, as assessed by visual inspection of a boxplot. Median scores were statistically significantly different between the ratings of the need for training to comfortably and effectively assess sexual health, $\chi^2(4) = 19.527, p = .001$. Subsequently, pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons. Adjusted p-values are presented. Analyses revealed statistically significant differences in ratings between participants born in the 1950s (Mdn = 48.88) and 1990s (Mdn = 87.3).

Participants born in 1950s-1960s reported the highest levels of comfort in performing a sexual assessment (Mdn = 96.12) versus those born in 1990s, (Mdn = 58.05), $p = .042$. Regarding the survey item that stated, "I am uncomfortable talking about sexual issues," participants born in 1950s-1960s disagreed most with this statement (Mdn = 50.88 and 58.86, respectively) versus those born in 1990s, (Mdn = 81.56), $p = .026$. Confidence in ability to address patients' sexual concerns was highest in participants born in 1950s (Mdn = 96.56) versus participants born in 1990s (Mdn = 53.77), $p = .002$. Personal embarrassment in assessing patients' sexual health was lowest in participants born in 1950s (Mdn = 44.25) versus participants born in 1990s (Mdn = 84.82), $p = .004$. No participant groups agreed strongly that they incorporated sexual health into their nursing plans of care, however, participants born in

1950s reported higher incidence in doing so (Mdn = 92.38) versus participants born in 1990s (Mdn = 58.16), $p = .003$.

Clinical Specialty

Between clinical specialties, Emergency Department (ED), Family Practice/Primary Care (FP), and Obstetrics/Gynecology (OBGYN) nurses reported making the most time for addressing patients' sexual health (Mdn = 106.67, 101.14, and 70.22, respectively; [$\chi^2(7) = 30.714, p < .0005$],) whereas critical care, medical-surgical, pediatrics, and surgical/perioperative nurses reported making the least amount of time (Mdn = 60.9, 48, 58.67, and 46.67, respectively). In regard to the survey item about feeling more comfortable in performing sexual assessments, Emergency Department, family practice/primary care, and obstetrics/gynecology nurses reported the highest level of comfort (Mdn = 84.81, 97.97, and 84.36, respectively) with critical care, medical-surgical, and surgical services nurses reporting the lowest level of comfort (Mdn = 60.58, 53.12, and 50.50, respectively). Of all clinical specialties, pediatric nurses reported significantly lowest levels of comfort (Mdn = 14.67; $\chi^2(7) = 26.821, p < .0005$). In terms of confidence in their abilities, Emergency Department, family practice/primary care, and obstetrics/gynecology nurses reported the highest levels of confidence (Mdn = 84.5, 90.83, and 85.07, respectively) with critical care, medical-surgical, pediatrics, and surgical/perioperative nurses reporting the lowest (Mdn = 59.8, 59.56, 41.33, and 42.93, respectively; [$\chi^2(7) = 20.183, p < .0005$]).

Of all specialties, only pediatric and surgical service nurses disagreed that sexual health was a nursing responsibility (Mdn = 49.17 and 35.71, respectively; [$\chi^2(7) = 16.384, p = .022$]). Emergency nursing reported the lowest personal embarrassment in addressing sexual health (Mdn = 53.04) which was significantly different ([$\chi^2(7) = 18.09, p = .012$]) than pediatric and

surgical service nurses, who reported the highest embarrassment with addressing sexual health (Mdn = 88.33 and 93.29, respectively). Only family practice/primary care and obstetrics/gynecology nurses agreed that they incorporate sexual health into plans of care (Mdn = 103.5 and 100.36, respectively) which was significantly different [$\chi^2(7) = 30.492, p < .0005$] from surgical service nurses, who reported incorporating sexual health least of all specialties (Mdn = 43.93).

Regarding the survey item “I feel that including a sexual health assessment is not important to my specialty,” family practice nurses were lowest in agreement (Mdn = 30.10) whereas pediatric nurses were highest (Mdn = 104; [$\chi^2(7) = 30.039, p < .0005$]). Similarly, when asked to indicate how often the participant asked his or her patients about contraceptive use, family practice/primary care nurses performed this task more often than any other specialty (Mdn = 113.93) and more than double as often than pediatric nurses (Mdn = 45.17; [$\chi^2(7) = 40.262, p < .0005$]). When asked to indicate how often participants asked their patients about the number of sexual partners they’ve had and how often participants educate their patients on the asymptomatic nature of many STIs, medical-surgical nurses reported performing these tasks the least (Mdn = 48.25) and family practice/primary care nurses were again double in the frequency (Mdn = 115.27; [$\chi^2(7) = 39.614, p < .0005$]).

In asking patients about having STI screenings, medical-surgical nurses performed this task the least (Mdn = 40.62) whereas family practice/primary care and obstetrics/gynecology performed it the most (Mdn = 112.30 and 105.79, respectively; [$\chi^2(7) = 43.732, p < .0005$]). When asked about the frequency in providing education on the asymptomatic nature of many STIs, responses were similar with medical-surgical nurses performing this task the least (Mdn = 49.59) and family practice nurses performing it the most (Mdn = 105.23; [$\chi^2(7) = 27.227, p <$

.0005]). When asked about providing information regardless if the patient had concerns, surgical service nurses reported provided this service the least (Mdn = 49.93) whereas obstetrics/gynecology nurses provided it the most (Mdn = 105.21; [$\chi^2(7) = 32.854, p < .0005$]).

Role

A Mann-Whitney U test was run to determine if there were differences in levels of agreement between participants' reported professional role. Distributions were similar, as assessed by visual inspection. Advanced-practice registered nurses (APRNs; e.g. nurse practitioners [NP] and clinical nurse specialists [CNS]) agreed significantly more that they made time to discuss sexual concerns with their patients than Registered Nurses (RNs) reported making time. Median scores for making time for sexual assessment were statistically significantly higher in APRNs (93.56) than in RNs (64.18), $U = 2,014, z = 3.578, p < .0005$, using an exact sampling distribution for U (Dineen & Blakesley, 1973).

The median score in feeling comfortable performing a sexual health assessment and discussing sexual issues with patients was statistically significantly higher in APRNs (95.96) than in RNs (64.31), $U = 2,074, z = 3.778, p < .0005$. Median scores in feeling confident in his or her ability in address the patient's sexual concerns were statistically significantly higher in APRNs (89.44) than in RNs (65.74), $U = 1,911, z = 2.940, p = .003$. Median scores in discussing sexuality and sexual concerns only if initiated by the patient were statistically significantly higher in RNs (72.81) than in APRNs (57.20), $U = 1,105, z = -2.092, p = .036$.

Advanced-practice registered nurses were far less likely (Mdn = 43.34) than RNs (75.85; $U = 758.5, z = -4.112, p < .0005$) to defer the patient to the physician if sexual concerns were present, and APRNs reported far less personal embarrassment (55.96) than RNs in performing sexual assessment and discussing sexual matters with patients (73.08; $U = 1,074, z = -2.114, p =$

.035). Nurse practitioners were also far more likely to incorporate sexual health into plans of care (83.82) compared to RNs (66.97; $U = 1,770$, $z = 2.194$, $p = .028$).

Advanced-practice registered nurses disagreed significantly more (45.24) than RNs (75.43) in regard to the survey item “I feel that including a sexual health assessment is not important to my specialty,” ($U = 806$, $z = -3.785$, $p < .0005$); APRNs were far more likely (95.96) to ask their patients about contraceptive use than RNs (64.31; $U = 2,074$, $z = 3.748$, $p < .0005$), agreed more (92.38) than RNs (65.09) about asking patients about the number of sexual partners they’ve had ($U = 1,984$, $z = 3.397$, $p = .001$), were more likely to ask about STI screening (96.06) than RNs (64.29; $U = 2,076$, $z = 3.756$, $p < .0005$), and agreed more about including education on the asymptomatic nature of many STIs (91.18) than RNs (64.70; $U = 1,954$, $z = 3.151$, $p = .002$).

Gender

Participants identifying as male (i.e., men) reported being significantly less comfortable (101.0) than those identifying as female (i.e., women) in performing a sexual health assessment (67.15; $\chi^2(2) = 6.536$, $p = .038$). Men were significantly higher in agreement with the statement, “My culture influences my attitude toward assessing sexual health,” (105.21) than women (67.73; (59.57; $\chi^2(2) = 6.989$, $p = .03$) and men also agreed about needing more training on how to perform a sexual health assessment (105.07) significantly more than women (67.46; $\chi^2(2) = 7.298$, $p = .026$).

Education

Independent Kruskal-Wallis tests were conducted to determine if there were differences in scores (e.g. ratings) between participants’ reported levels of education (Diploma/Associate [ADN], Bachelor of Science in Nursing [BSN], Master of Science in Nursing [MSN], and

Doctorate in Nursing [DNP or PhD]). Distributions of ratings were similar for all groups, as assessed by visual inspection of a boxplot. Subsequently, pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons. Adjusted p-values are presented.

Median (Mdn) scores were significantly different between education in making time for discussing patients' sexual concerns ($\chi^2(3) = 12.838, p = .005$) with BSN-prepared nurses reporting lowest time made (58.5) and doctorate-prepared nurses reporting the most time made (103.86). Most participants agreed they were comfortable; however doctorate-prepared nurses again reported the highest levels of comfort (94.29) and BSN-prepared nurses reported the lowest (62.79; $\chi^2(3) = 9.047, p = .029$). Similarly, nurses with doctorates reported highest confidence in their abilities (91.36) whereas nurses with BSNs reported the lowest levels of confidence (60.24; $\chi^2(3) = 9.044, p = .029$). Doctorates were lowest in agreement with the statement that sexuality should only be discussed if the patient initiates the conversation (40.14) whereas ADN's agreed the most (75.59; $\chi^2(3) = 8.560, p = .036$). BSNs reported they would refer patients to a physician rather than discuss the matter with their patient the most (80.03) whereas doctorates would refer patients the least (42.21; $\chi^2(3) = 15.044, p = .002$).

Participants with a master's degree disagreed most that school prepared them (60.38) compared to doctorates who agreed the most that school prepared them (86.21; $\chi^2(3) = 9.455, p = .024$). Nurses with doctorates also planned care to incorporate sexual health the most (91.64) with BSNs reporting the least incorporation (61.61; $\chi^2(3) = 8.567, p = .036$). For the survey item that states, "I feel that including a sexual health assessment is not important to my specialty," AND-prepared nurses agreed the most (80.03) in contrast to doctorate-prepared nurses who disagreed the most (39.57; $\chi^2(3) = 12.493, p = .006$). Participants with BSNs agreed the most

that they needed more training (82.11) while doctorates felt they needed the least additional training (54.21; $\chi^2(3) = 11.450, p = .01$). Doctorates were also highest in agreement that they ask patients about use of contraceptives (108.57) whereas BSNs reported doing this the least (59.57; $\chi^2(3) = 15.588, p = .001$). Nurses with ADNs (64.44) and BSNs (64.57) reported that they ask about the number of sexual partners and educated patients on the asymptomatic nature of many STIs the least versus doctorates (110.71; $\chi^2(3) = 13.158, p = .004$), who reported they performed these tasks the most (64.24 and 61.77, respectively).

The Cronbach's alpha for this study decreased to 0.35 in this sample. This is likely due to the heterogeneity of the sample (i.e. many demographic differences) and PI-added questions. This value also indicates that there is a need for this survey to be tested in more populations with different characteristics.

Discussion

Nursing focuses extensively on providing holistic care for each patient; however, sexual health is often neglected in nursing plans of care (Minoia, 2017). Omitting sexual health assessment is significant because without proper assessment, an increased number of patients may go undiagnosed, untreated, and experience a lower quality of life or death due to illness or complications resulting from poor or absent sexual health assessment. Complications of undiagnosed and untreated STIs include infertility, ectopic pregnancy, stillbirth in infants, and increased risk for HIV infection (CDC, 2017b). Untreated individuals who have STIs may continue their transmission as a result of their asymptomatic nature, worsening the current STI epidemic; in 2017, the CDC reported that the STI epidemic was "accelerating in multiple populations" including women, infants, and gay and bisexual men (CDC, 2017c). The steady

increase in the STI epidemic necessitates that nurses and other healthcare personnel take patients' sexual health into serious consideration whenever possible.

In terms of generational differences, we found that nurses born in the 1950s reported being far more comfortable and confident in performing sexual health assessments and addressing patients' sexual health concerns than nurses born in the 1990s. Nurses born in the 1950s were also the least embarrassed in performing sexual health assessments while nurses in the 1990s were the most embarrassed. This high level of comfort, confidence, and frequency in nurses who were born in the 1950s may be attributed to more years of experience and potentially higher levels of education (Bdair & Constantino, 2017). While no generational group strongly agreed in including sexual health assessment in every patient's plan of care, those born in the 1950s reported a higher incidence in doing so than those born in the 1990s.

When analyzing the differences between clinical specialties, Emergency Department, family practice/primary care, and obstetrics/gynecology nurses reported significantly higher frequency and comfort in performing sexual health assessments and addressing sexual health concerns of their patients. They also reported allotting the most amount of time to this component of care than any other specialty. In contrast, three other specialties were the least comfortable and confident and reported performing sexual health assessments on their patients the least. Medical-surgical, critical care, and surgical/perioperative nurses fall into this category. They were also the specialties with the highest frequency of embarrassment when discussing sexual health.

Potential causes for the lack of comfort and low frequency may be feelings that sexual health matters were not of high enough priority for the patient population in these specialties (medical-surgical and critical care) or that there was not enough time to incorporate this

component of care (surgical/perioperative). Another cause of the low frequency is likely due to surgical/perioperative nurses reporting that they strongly agree that sexual health is not a nursing responsibility. If one does not feel that a component of care is a priority, they are likely to dismiss or ignore any need to include assessments or interventions to address it.

Pediatric nurses also reported that sexual health of their patients was not a nursing responsibility and strongly agreed with the statement “I feel sexual health assessment is not important to my specialty.” This is a cause for concern given the high incidence of STIs in the pediatric population: the CDC reports that individuals ages 15-24 years-old “make up just over a quarter of the sexually active population, but account for half of the 20 million new sexually transmitted infections that occur in the United States each year,” (CDC, 2017b, para. 1). The CDC also reports that one in four sexually-active adolescent females has contracted an STI (CDC, 2018). Incidence and prevalence reports that “adolescents aged 15-24 years are at higher risk of acquiring STIs for a combination of behavioral, biological, and cultural reasons,” when compared to the older adult population (CDC, 2018, para. 1).

Omitting pediatric sexual health assessments due to the belief that it is not important to the patient’s care or to the pediatric specialty as indicated by participants in this study (Mdn = 104) eliminates the ability to provide education to reduce this statistic or provide care to those who have already contracted STIs. Pediatric nurses also reported the lowest frequency in asking their patients about contraceptive use. This is a missed educational opportunity to decrease the teen pregnancy rate. Though teen pregnancy rates have steadily declined, the birth rate in women aged 15-19 years-old was 18.8 per 1,000 women in 2017 (CDC, 2019). Providing education about sexual health and contraceptive use opens up the conversation about sexuality and prepares individuals in the pediatric population to be safe and aware about this aspect of their health.

Family practice/primary care and obstetrics/gynecology nurses reported incorporating sexual health into each patient's plan of care the most, which is very beneficial to the adult population. While conversations about sexual health may be uncomfortable and difficult with patients (particularly with young patients), opening up this conversation, becoming familiar with the topic, and beginning education early has significant positive impacts for patients. Providing education to patients of all ages regardless if the patient reports any sexual health concerns is beneficial in the case that the patient is too embarrassed to disclose those concerns.

When comparing the differences that roles have on comfort toward and frequency of sexual health assessment (i.e. registered nurses versus advanced-practice registered nurses) significant disparities presented. Overall, advanced-practice nurses were more comfortable, more confident, allotted more time to sexual health assessment, were less embarrassed, and were much more likely to include this component of care into the patient's overall plan of care. They also provided more education about the asymptomatic nature of STIs and completed a more in-depth sexual health assessment overall (asked about number of sexual partners, use of contraceptives, previous STI screening, etc.) Registered nurses were significantly less comfortable, confident, and frequent in performing sexual health assessments with their patients. This may be due to the higher level of education and possibly the greater amount of experience and training that advanced-practice nurses have compared to registered nurses (Simmonds, Hewitt, Aztlan, & Skinner, 2017).

In terms of gender differences, male participants reported feeling the most uncomfortable and least prepared to perform a sexual health assessment. There is a lack of literature regarding the impact of gender differences in the United States, presenting a need for additional research. However, a study completed in Jordan provides an example of how gender differences affect the

ability to comfortably and effectively complete a sexual health assessment. It was identified that two large barriers to this assessment are gender differences between the nurse and patient (i.e. male nurse and female patient) and culture that does not openly discuss these matters or consider them as essential to care (Akhu-Zaheya & Masadeh, 2015). An integrative literature review also found that one of the primary barriers to sexual health assessment was gender differences between the patient and nurse (Bdair & Constantino, 2017).

Differences in education primarily showed that participants with levels of education above a BSN (masters and doctorates) were more comfortable, confident, and incorporated this aspect in the plan of care more often. Advanced degrees provide more training and education on sexual health and its implications on patient health and well-being (Simmonds, Hewitt, Aztlan, & Skinner, 2017). The World Health Organization created competencies to be implemented into advanced-practice nursing programs specifically related to sexual and reproductive health to ensure this component of care is addressed with patients (Simmonds, Hewitt, Aztlan & Skinner, 2017). This finding may also suggest that more years of experience leads to greater comfort with initiating this conversation. Nurses with BSNs reported the least confidence and devoted the least amount of time to this aspect of care while doctorate-prepared nurses reported the most confidence and greatest amount of time. Overall, doctorate-prepared nurses reported greater confidence and incorporation of sexual health into the plan of care. BSNs and ADNs reported needing the most additional training to perform this assessment while doctorates reported needing the least amount of training.

Overall, it appears that nurses are comfortable in performing sexual health assessment as 74% of participants reported that they either disagreed or strongly disagreed with the statement, "I am uncomfortable talking about sexual issues," and 84% agreed that including sexual health

concerns/assessment is a nursing responsibility. However, when looking at implementation and frequency of assessment, some concerns are still present: 86% of participants reported that they did not include sexual health assessments into their patients' plan of care. The primary barrier to assessing this component of health and incorporating it into nursing plans of care is a lack of training or education. Out of 140 participants, 117 reported that they did not feel nursing school adequately prepared them to assess their patient's sexual health. The majority of participants (82%) were RNs and 74% of participants' highest level of education was either an associate degree or a bachelor's degree in nursing, suggesting a need to incorporate more education on this component of care into prelicensure nursing programs. Overall, 64% of participants reported that they feel they need more training on how to perform a sexual health assessment and history. This suggests the need for more sexual health-specific training and curriculum overall.

While 72% of participants agreed that they felt comfortable and confident in discussing sexual health and performing this assessment, 86% reported that they did not include sexual health assessments into their patients' plan of care; 95% of participants reported that sexual health was a nursing concern to be considered, yet the majority did not regularly incorporate this aspect of care into the patient's plan. The majority of participants were born in the 1990s (35%) and, as previously noted, were the least comfortable and performed sexual health assessments the least. In contrast, the smallest generational demographic were those born in the 1950s (6%) and were the most comfortable and incorporated this component of health into the plan of care most often when compared to all generations. Many "baby-boomer" nurses (those born between 1944-1964) are now retiring while millennials (born in 1981-1996) are "twice as likely (186%) to become an RN," showing that this population comprises the majority of nursing today (Auerbach, Buerhaus, & Staiger, 2017, p. 1805). Because millennials make up a large portion of

the nursing population and reported little comfort, confidence, and frequency in performing sexual health assessment in this study, greater education is needed to ensure that patients are receiving holistic care.

Our results indicate that the level of comfort in discussing sexual health and performing sexual health assessments has increased when compared to previous studies. The frequency of assessment appears to have stayed the same as previous studies indicate, though the barriers are fewer. Sexual health assessment is still not included in many patient plans of care despite being seen as a nursing priority. The barriers that have been indicated from this updated study are not a matter of importance to patient health or discomfort in discussing/assessing sexual health, but more a matter of lack of education and training.

Implications for Nursing & Recommendations

One of the primary recommendations to increase the comfort and frequency of sexual health assessment by nurses is providing education, training, and easily accessible and useable tools. This recommendation is not new as the majority of research has found a lack of knowledge to be one of the most significant barriers to including this component of health in regular plans of care. Education includes information both on common sexual health/sexuality concerns (STIs, dysfunction, etc.) and communication skills to begin the conversation in the first place. Learning to approach the conversation in a way that is comfortable for the nurse and patient is imperative, as are developing skills to provide easily-understood education to the patient. The Altarum Institute has published a “A Provider’s Guide” to facilitate the sexual health assessment process in both pediatric and adult populations (Altarum Institute, 2016). It provides recommended questions, preventative services and education for various populations, and a guide on how to best answer the patient’s questions. This guide emphasizes the benefits of addressing sexual

health and providing education in all patients. Facilitating the difficult and sensitive conversation about sexual health with patients will eliminate fear or anxiety in doing so, improving both comfort and frequency.

Beginning the education process in nursing schools will streamline the process as the practice of completing a sexual assessment will become normalized before a nurse's career even begins. The results showing that BSN- and ADN-prepared nurses are the most ill-equipped and least comfortable in discussing sexual health matters emphasizes the need to build a stronger foundation in undergraduate programs. However, it is also important to implement training sessions and workshops in the clinical setting to address the barriers that already exist among professional nurses. Programs may need to be molded to specific units to address the differences in beliefs depending on specialty that has been identified in this study (pediatrics, critical care, and surgical specialties specifically). It will also improve the comfort and attitudes toward sexual health assessment and its place in nursing practice. Researchers suggest simulating "role-play case scenarios by a nurse specialist in sexuality manners," so that nurses are able to practice new communication skills and begin to normalize the topic (Bdair & Constantino, 2017, p. 484).

Fostering an appropriate, confidential, and quiet space for this conversation and assessment to occur is essential. For some patients, including their significant other may be beneficial as it has been found to increase their comfort and address their concerns more effectively (Bdair & Constantino, 2017). This also allows the nurse to understand more about the patient's concerns and provide education to the patient and his or her partner. However, it is also important to recognize that the patient may desire having this conversation alone and the nurse should therefore plan a time to accommodate this request. Providing patients and their partners,

if present, with written materials based on the concerns and education needed is also beneficial as a resource that can be used beyond the hospital.

Finally, measures should be taken to “create, adopt, and implement sexual health policies and procedures for sexual health assessment in clinical settings to facilitate nurses’ roles in conducting this important nursing task,” (Bdair & Constantino, 2017, p. 484). This may include implementing the PLISSIT model, as previously described, into every patient’s plan of care. It may also include integrating this component of care into the admission assessment for every hospitalized patient, perhaps through the electronic health record. Additional models or tools outside of the PLISSIT model may need to be created to further facilitate this assessment process and provide nurses with resources to improve their comfort and confidence in their abilities. Further studies will need to be conducted to investigate the use of these models and the impact of education on the attitudes and practice of nurses toward sexual health assessment. By implementing these recommendations, the frequency of sexual health assessment and its incorporation into patients’ plan of care will increase.

Limitations

Potential limitations of this study include the limited population size of 140 total completed surveys across the United States, with 3 responses outside of the United States. Another limitation may be the concentration of nurses who took the survey in the Southeast region of the United States, thus not providing a generalized perspective of the United States. Of the total number of responses, 47% were from Tennessee alone (n=66). Other limitations that may have impacted the number of survey responses include the length of the survey (33 questions), time commitment (10 minutes or less with an average of three minutes to complete), and the sensitivity of the topic. A total of 188 participants began the survey and 140 completed

it, resulting in a 74.47% completion rate; with a larger pool of responses and a more diverse distribution across the country, results may provide a more generalized perspective of nurses in the United States.

Other statistical limitations include the range of demographic variables, including age, specialty, role, gender, and education level: 67% of participants were born in the 1980s-1990s, 82% were registered nurses, 94% were female, and 29% were specialized in critical care. These statistics may have impacted the results, thus more focused studies on specific areas of nursing or demographic groups may provide a more detailed understanding of the attitudes toward sexual health assessment.

Conclusion

Overall, the findings of this study show that nurses report feeling comfortable and confident in completing sexual health assessments. However, the frequency in which this assessment occurs and the implementation of this component of health in plans of care is still lacking as 86% of participants reported omitting sexual health assessment into their nursing plans of care. These results prove the original hypothesis of this study. Differences in comfort, confidence, and frequency of sexual health assessment exist depending on age, specialty, role, gender, and education. The lack of time devoted to sexual health and the belief that it is not important to the pediatric specialty are some of the most alarming results given the current STI epidemic. Additionally, while the majority of participants agreed that sexual health was a nursing responsibility, the majority also indicated that they did not regularly include this component into their patients' plan of care. There is a relationship between level of education and incorporation of sexual health assessment: lower education corresponded to lower frequency of SHA, indicating a need for more intensive education about sexual health in BSN and ADN programs.

Male nurses may also require more education and assistance in implementing this assessment comfortably with patients. The primary barrier to sexual health assessment indicated from the results are a lack of education or training in assessing this aspect of health and implementing strategies or interventions to address the concerns. Further studies on the implementation of educational programs and tools to facilitate sexual health assessment will provide insight as to what will increase the frequency of it so that patients are cared for holistically.

Further Studies

Much of the existing research on this topic provides information on the barriers to sexual health assessment and shows continuity in the fact that nurses are uncomfortable and/or ill-prepared to complete this component of care. The present study found that a lack of education or training is still a primary barrier to sexual health assessment. While comfort has increased and embarrassment has decreased, this barrier has still not progressed or been resolved. This thesis also identifies barriers that have not previously been as prevalent in older studies, including the feeling that sexual health is not a nursing priority or that it is not essential to patient care in specific specialties. Barriers disrupt the ability to fully assess the patient for health or educational deficits. These are the issues that must be addressed with nurses and other healthcare professionals to adequately fill the gap in assessment and provide holistic care.

Future studies should focus on the effects of implementing of educational courses, models to assist nurses in opening up this conversation, and reassessing how sexual health is incorporated into nursing school curriculum. There are a few existing studies that have created educational programs within the hospital that have shown positive impacts in knowledge, but not in implementation after completion of the course. Therefore, incorporating sexual health questions into admission assessments or including a sexual health assessment component to the Electronic

Health Record (EHR) could be very beneficial to healthcare professionals and patients. While patients may defer this assessment, the opportunity to address any concerns is still presented instead of neglected. It is important that educational programs include information not only on the anatomy and physiology components of sexual health, but also on how to begin these delicate and sometimes difficult conversations, as discussed previously. A study on the implementation of a model or tool to facilitate sexual health assessment, such as the PLISSIT model, would also provide valuable results.

Future studies should also include a broader population in both number of participants and geographical location. Though this survey was available throughout the United States, the majority of participants were from Tennessee and the general Southeast region of the United States. A study with a wider scope and larger population would provide more information and the ability to generalize the findings. Additionally, there is a gap in the literature regarding the abilities and confidence of male nurses in performing this assessment in the United States, as well as how individual and societal culture influences it. Future studies could also investigate the frequency of sexual health assessment in specific populations, particularly the pediatric and geriatric populations as they seem to be neglected when it comes to sexual health. Researchers may consider a qualitative study on specific units to gain more knowledge on the barriers that are preventing this assessment from occurring. Another qualitative study may involve hospital leaders and unit leaders to indicate what models or tools are used for assessing this aspect of patient care, if any are used at all.

There is still much to be learned and researched in terms of assessing and addressing sexual health concerns of patients. More research is needed to fully optimize nurses' and other healthcare professionals' ability to address this aspect of care. This thesis has provided an

updated view of nurses' attitudes and beliefs toward sexual health assessment, as well as information on how this assessment is perceived depending on generation, role, specialty, gender, and education. The focus of this research should now turn to overcoming the barriers to assessment by providing additional training and education and facilitating the process of approaching this sensitive, yet critical component of care.

References

- Akhu-Zaheya, L.M. & Masadeh, A.B. (2015). Sexual information needs of Arab-Muslim patients with cardiac problems. *European Journal of Cardiovascular Nursing*, 14(6), 478-485. doi: 10.1177/1474515115597353
- Altarum Institute. (2016). *Sexual Health and Your Patients: A Provider's Guide*. Retrieved from <https://nationalcoalitionforsexualhealth.org/tools/for-healthcare-providers/document/ProviderGuide.pdf>
- Annon, J.S. (1976). The PLISSIT Model: A proposed conceptual scheme for the behavioral treatment of sexual problems. *Journal of Sex Education and Therapy*, 2(1), 1-15. doi: 10.1080/01614576.1976.11074483
- Arrington, R., Cofrancesco, J., & Wu, A.W. (2004). Questionnaires to measure sexual quality of life. *Quality of Life Research*, 12(10), 1643-1658.
- Auerbach, D.I., Buerhaus, P.I., & Staiger, D.O. (2017). Millennials almost twice as likely to be registered nurses as baby boomers were. *Health Affairs*, 36(10), 1804-1807. doi: 10.1377/hlthaff.2017.0386
- Bailey, B. (1997). Prescribing the pill: Politics, culture, and the sexual revolution in America's heartland. *Journal of Social History*, 30(4), 827-856
- Bdair, I.A.A. & Constantino, R.E. (2017). Barriers and promoting strategies to sexual health assessment for patients with coronary artery disease in nursing practice: A literature review. *Health*, 9, 473-492. doi: 10.4236/health.2017.93034
- Bell, A. & Bray, L. (2014). The knowledge and attitudes of student nurses towards patients with sexually transmitted infections: Exploring changes to the curriculum. *Nurse Education in Practice*, 14(5), 512-517. doi: 10.1016/j.nepr.2014.05.002

- Berman, A., Snyder, S. J., Frandsen, G. (2016). *Kozier & Erb's Fundamentals of Nursing Concepts, Process, and Practice*. Hoboken, NJ: Pearson Education.
- Centers for Disease Control and Prevention. (2017a). *STDs at record high, indicating urgent need for prevention*. Retrieved from <https://www.cdc.gov/media/releases/2017/p0926-std-prevention.html>.
- Centers for Disease Control and Prevention (CDC). (2017b). *Sexually transmitted diseases: Adolescents and young adults*. Retrieved from <https://www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm>
- Centers for Disease Control and Prevention. (2017c). *STD & HIV screening recommendations*. Retrieved from <https://www.cdc.gov/std/prevention/screeningreccs.htm>.
- Centers for Disease Control and Prevention (CDC). (2018). *Sexually transmitted disease surveillance 2018: Adolescents and young adults*. Retrieved from <https://www.cdc.gov/std/stats18/adolescents.htm>
- Centers for Disease Control and Prevention (CDC). (2019). *Reproductive health: Teen pregnancy*. Retrieved from <https://www.cdc.gov/teenpregnancy/about/index.htm>
- Dattilo J. & Brewer MK. (2005). Assessing clients' sexual health as a component of holistic nursing practice: Senior nursing students share their experiences. *Journal of Holistic Nursing*, 23(2), 208–219. doi: 10.1177/0898010105275839
- Dixon, K. & Dixon, P. (2006). The PLISSIT model: Care and management of patients' psychosexual needs following radical surgery. *Lippincott's Case Management*, 11(2), 101-106.
- Faghani, S. & Ghaffari, F. (2016). Effects of sexual rehabilitation using the PLISSIT model on quality of sexual life and sexual functioning in post-mastectomy breast cancer survivors.

- Asian Pacific Journal of Cancer Prevention*, 17(11), 4845-4851. doi:
10.22034/APJCP.2016.17.11.4845
- Fisher, T. D., Davis, C. M., Yarber, W. L., Davis, S. L. (2013). *Handbook of Sexuality-Related Measures: Third Edition*. Hoboken, NJ: Taylor and Francis.
- Fontaine, K L. (1976). Human sexuality: Faculty knowledge and attitudes. *Nursing Education Today*, 24(3), 74-76. doi: 10.1016/0260-6917(87)90066-9.
- Jonsdottir, J.I., Zoega, S., Saevarsdottir, T., Sverrisdottir, A., Thorsdottir, T., Einarsson, G.V., Gunnarsdottir, S., & Fridriksdottir, N. (2016). Changes in attitudes, practices and barriers among oncology health care professionals regarding sexual health care: Outcomes from a 2-year educational intervention at a university hospital. *European Journal of Oncology Nursing*, 21, 24-30. doi: 10.1016/j.ejon.2015.12.004.
- Kotronoulas, G., Papadopoulou, C., & Patiraki, E. (2009). Nurses' knowledge, attitudes, and practices regarding provision of sexual health care in patients with cancer: Critical review of the evidence. *Supportive Care in Cancer*, 17(5), 479-501. doi: 10.1007/s00520-008-0563-5
- Laverse, E., Jaleel, H., Evans, D., & Sundaresan, M. (2009). Sexual history: its importance in averting detrimental misdiagnosis and delayed diagnosis. *BMJ Case Reports*, 1, 27-33. doi: 10.1136/bcr.04.2009.1773
- Minoia, J. I. (2017). *Sexual health knowledge, attitudes, and beliefs among nurse practitioners and certified nurse midwives who work with adolescents in non-acute care settings*. Retrieved from <https://idea.library.drexel.edu/islandora/object/idea%3A7561>.

- Moana, B., Crawford, R., & Isaac, D. (2017). Discussing sexual health with older clients: are primary health care nurses sufficiently prepared? *Whitireia Nursing and Health Journal*, *24*, 63–67.
- Nusbaum, M. R., & Hamilton, C. D. (2002). The proactive sexual health history. *American Family Physician*, *66*(9), 1705-1713.
- Reynolds, K., & Magnan, M. (2005). Nursing attitudes and beliefs toward human sexuality: Collaborative research promoting evidence-based practice. *Clinical Nurse Specialist*, *19*, 255-259.
- Simmonds, K., Hewitt, C.M., Aztlan, E.A., & Skinner, E. (2017). Pathways to competence in sexual and reproductive health care for advanced practice nurses. *Journal for Obstetric, Gynecologic, & Neonatal Nursing*, *46*(5), 168-179. doi: 10.1016/j.jogn.2017.02.007
- Stewart, K. & O'Reilly, P. (2017). Exploring the attitudes, knowledge and beliefs of nurses and midwives of the healthcare needs of the LGBTQ population: An integrative review. *Nurse Education Today*, *53*, 67-77. doi: 10.1016/j.nedt.2017.04.008.
- Waterhouse, J. (1996). Nursing practice related to sexuality: A review and recommendations. *Journal of Research in Nursing*, *1*(6).
- Wood, S. M. & Natterson, J. (1967). Sexual attitudes of medical students: some implications for medical education. *The American Journal of Psychiatry*, *124*(3), 323-332.
doi:10.1176/ajp.124.3.323.

Appendix A

Modified Sexuality Attitudes and Beliefs Survey

Informed Consent Letter: Frequency of Sexual Health Assessment and the Comfort of Nurses: A Survey Analysis

You are invited to participate in a web-based online survey. The purpose of this study is to determine the attitudes and beliefs of current practicing nurses toward sexual health assessment of patients and the frequency at which such assessment is completed based on responses to 32 survey questions. This research is being conducted by Allison Culp, a nursing student at the University of Tennessee at Chattanooga. It will take approximately 10 minutes to complete.

PARTICIPATION

Your participation in this survey is voluntary. You may refuse to take part in this research study or exit the survey at any time without penalty. You may refuse to answer any question you do not wish to answer for any reason. If you choose to discontinue the study, your responses will be discarded.

BENEFITS

There are no direct benefits from participating in this survey. However, your responses may contribute to a better understanding of current attitudes and beliefs about sexual health and how frequently it is assessed in patients.

RISKS

There are no foreseeable risks involved in participating in this study, however, you may find that some of the survey items are sensitive. Once again, all questions are optional if you wish to leave them unanswered for any reason.

CONFIDENTIALITY

Your survey answers will be recorded via QuestionPro. All responses will be kept strictly confidential and anonymous. No one will be able to identify you by your survey responses and no one will know if you have participated in this study.

WHOM TO CONTACT IF YOU HAVE QUESTIONS ABOUT THE STUDY

If you have any questions about this research study, you may contact Allison Culp at ksj825@mocs.utc.edu or Dr. Kate Kemplin at Kate-Kemplin@utc.edu. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you may contact Dr. Amy Doolittle, Chair of the UTC Institutional Review Board at (423) 425-5563. This research protocol has been approved by the UTC Institutional Review Board. Additional contact information is available at www.utc.edu/irb.

If you would like to accept the informed consent letter and proceed to the survey, please click “I agree.”

Thank you for your participation in this study.

Please indicate the level at which you agree with the following statements: **Strongly Disagree, Disagree, Agree, or Strongly Agree**

1. Patients expect nurses to ask about their sexual health
2. I make time to discuss sexual concerns with my patients
3. I am more comfortable than most nurses I work with in talking about sexual issues with my patients
4. I am uncomfortable talking about sexual issues
5. I feel confident in my ability to address patients' sexual concerns
6. Hospitalized patients are too sick to be interested in sexuality

7. Sexuality should be discussed only if initiated by the patient
8. Discussing sexuality is essential to patients' health outcomes
9. When patients ask me a sexually related question, I advise them to discuss the matter with their physician
10. Giving a patient permission to talk about sexual concerns is a nursing responsibility
11. Sexuality is too private an issue to discuss with patients
12. *I feel that nursing school adequately prepared me to assess my patients' sexual health
13. *I avoid assessing patients' sexual health to prevent embarrassment on their part
14. *I feel embarrassed to ask my patients about their sexual health
15. *My culture influences my attitude toward assessing sexual health
16. *I incorporate sexual health assessments into every patient's plan of care
17. *Sexual health is not a concern for nurses to consider
18. *I feel uncomfortable if my patient does not identify as their biological gender
19. *I feel that including a sexual health assessment is not important to my specialty
20. *I feel that I need more training on how to perform a sexual health assessment/take a sexual health history

Please indicate how often each of the following is true for you: Never, Sometimes, Often, or

Always

21. *I ask my patients about contraceptive use
22. *I ask my patients about the number of sexual partners they have/have had
23. *I ask my patients if they have had an STI screening
24. *I educate my patients on the asymptomatic nature of many STIs
25. *I provide informational resources to my patients regardless if they have concerns

26. *When/if my patients appear uncomfortable during assessment, I discontinue it

Please complete the following criteria for demographic information:

27. *In what decade were you born?

1950s, 1960s, 1970s, 1980s, 1990s

27. *Please choose the clinical specialty with which you most closely identify:

Critical care/intensivist, Med-Surg/internal medicine, Emergency/urgent care, Family practice/primary care, Obstetrics/gynecology, Pediatrics, Surgical/Perioperative

28. *Please choose your primary professional role:

Registered nurse

Advanced-practice registered nurse with prescriptive authority

29. *Please indicate your highest level of education:

Diploma/Associate Degree in Nursing, Bachelor of Science in Nursing, Master of Science in Nursing, Doctorate in Nursing (DNP or PhD)

28. *How do you identify your gender?

Female, Male, Transgender Male (FTM), Transgender Female (MTF), Non-binary, Prefer not to say, Other


30. *How do you identify your sexuality?

Strictly Heterosexual (attracted to the opposite sex), Not heterosexual (homosexual, bisexual, pansexual, asexual).

* - Question created by primary investigator.

Appendix B

03/17/2019 THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA MAIL - Undergraduate Researcher Seeking Permission

 Allison Culp <ksj825@mocs.utc.edu>

Undergraduate Researcher Seeking Permission
3 messages

Allison Culp <ksj825@mocs.utc.edu> Tue, Mar 26, 2019 at 2:06 PM
To: magnanm@karmanos.org


Hello,

My name is Allison Culp and I am a nursing student at the University of Tennessee at Chattanooga conducting undergraduate research to complete my senior thesis and graduate with honors.

The focus of my thesis is on nurses' current attitudes and comfort levels toward sexual health assessments and the frequency at which they perform them with their patients. During my preliminary research, I came across the Sexuality Attitudes and Beliefs Survey (SABS) that you created with Kathleen E. Reynolds. With your permission, I would greatly appreciate the ability to use some of the questions from the SABS in addition to questions that I have created to include in a survey. Of course, full credit will be listed both on the survey and in my final research paper.

I hope to hear from you soon and thank you so much for a moment of your time. Have a wonderful afternoon.

Sincerely,
Allison Culp

 Virus-free. www.avast.com

Magnan, Morris <magnanm@karmanos.org> Tue, Mar 26, 2019 at 4:00 PM
To: Allison Culp <ksj825@mocs.utc.edu>

Hello Allison,

I am pleased to hear that you are doing research for your undergraduate thesis. You have my permission to use the SABS in its entirety or in part for the project you described in your email. In the end, you may find it difficult to make comparisons between your results and the results reported in the literature. Using the SABS in its entirety will make it easier for you to compare results across studies and will likely put you in a better position to publish your findings. Ultimately, the decision to use the SABS, in whole or in part, rest with you and your advisor. Best of luck.

Kind Regards,
Dr. Morris Magnan

From: Allison Culp <ksj825@mocs.utc.edu>
Sent: Tuesday, March 26, 2019 2:07 PM
To: Magnan, Morris <magnanm@karmanos.org>
Subject: [EXTERNAL]Undergraduate Researcher Seeking Permission

WARNING: External email. Exercise caution when clicking on links.

Hello,

My name is Allison Culp and I am a nursing student at the University of Tennessee at Chattanooga conducting undergraduate research to complete my senior thesis and graduate with honors.

The focus of my thesis is on nurses' current attitudes and comfort levels toward sexual health assessments and the frequency at which they perform them with their patients. During my preliminary research, I came across the Sexuality Attitudes and Beliefs Survey (SABS) that you created with Kathleen E. Reynolds. With your permission, I would greatly appreciate the ability to use some of the questions from the SABS in addition to questions that I have created to include in a survey. Of course, full credit will be listed both on the survey and in my final research paper.

I hope to hear from you soon and thank you so much for a moment of your time. Have a wonderful afternoon.

Sincerely,
Allison Culp