Impact of a Comprehensive Sexual Health History Taking Tool

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Abstract

Obtaining a comprehensive sexual health history is an important part of the patient history taking process and is essential to providing high-quality, patient-centered, and accessible healthcare. Information gathered from the sexual health history guides delivery of appropriate education about prevention, counseling, treatment, and care. A federally qualified health center (FQHC) reported that they did not have a standardized comprehensive sexual health history taking process. To address this concern, a literature review was conducted to survey current evidence regarding both patient and healthcare provider perspective on sexual health history taking. While it is recommended for a sexual health history to be performed routinely, both healthcare providers and patients have reported sexual health is not discussed at most visits. The findings led to the initiation of an evidence-based project implementing a comprehensive sexual health history taking tool at the FQHC. The tool assists in obtaining a comprehensive sexual history and provides an understanding of the sexual practices of the patients. If healthcare providers become aware of the sexual practices of their patients, they are better able to provide evidence-based education that could lead to better health outcomes. The participants reported they liked being asked about their sexual health, did not find the questions too personal, and reported the questionnaire addressed their sexual health concerns, and was worth their time. Taking a comprehensive sexual health history is a fundamental skill that all healthcare providers must strive to improve for the general health of their patients and the community.

Keywords: sexual history, sexual practices, sexual health communication, patient questionnaire

Impact of a Comprehensive Sexual Health History Taking Tool

While obtaining a comprehensive sexual health history is recommended, healthcare providers and their patients frequently report that this is not being done. Open conversations between healthcare providers and patients have the potential to modify sexual practices and prevent adverse sexual health outcomes. Patients are comfortable talking about sexual health but are dependent on the healthcare provider to initiate these discussions. Therefore, interventions must be made to improve the sexual health history taking process.

Problem Statement

Healthcare providers typically address sexual health only regarding reproduction or when the presence of a sexually transmitted infection (STI) is suspected (World Health Organization [WHO], 2010). However, conversations regarding sexual health should be a part of routine care. It is recommended to discuss sexual health at a patient's initial visit, annually, and as needed dependent on symptoms that could be associated with STIs (Centers for Disease Control and Prevention [CDC], n.d.; WHO, 2010, the American College of Obstetricians and Gynecologists [ACOG], 2017; and the National Coalition of Sexual Health, 2016).

Background and Significance

The WHO (2010) recognizes the physical and emotional health, and well-being of individuals, partners, families, and communities are greatly impacted by sexual health. All people have the right to the knowledge and opportunity of pursuing a safe and pleasurable sexual life if they desire. However, achieving this is contingent upon having access to comprehensive information about sexuality, risky behaviors, and what adverse consequences could result from sexual activity. Individuals of any age should be able to access affordable, high quality health care in a supportive environment that is non-discriminating, confidential, and promotes sexual

health (WHO, 2010). Assumptions and judgments should never be made by healthcare providers about sexual behavior. Instead they should be aware of the personal and cultural differences among sexual practices (ACOG, 2017).

Comprehensive Sexual Health History

The ACOG (2017), CDC (n.d.), National Coalition of Sexual Health (2016), and WHO (2010) all recognize that incorporating comprehensive sexual health into practice involves first taking a comprehensive sexual history. It is important to review and discuss sexual health to identify associations with current health complaints, guide risk reduction, and provide adequate education and counseling (ACOG, 2017; Pessagno, 2013). Conversations between healthcare providers and their patients are highly successful at helping patients modify their sexual behaviors (CDC, n.d.). Including sexual health in routine care removes the stigma that often surrounds it; these discussions should take place throughout the lifespan, regardless of marital status (ACOG, 2017; WHO, 2010). If healthcare providers fail to complete a comprehensive sexual history, they could miss information that is crucial to explaining current health problems. The information gathered from the patient can then guide appropriate education and health counseling.

Healthcare providers should assess their personal comfort discussing sexual practices with various patient groups and identify any biases they may have. If healthcare providers are uncomfortable talking about sex and sexuality, the patients will be too (National Coalition of Sexual Health, 2016). Rapport should be established with the patient prior to asking sensitive questions (National Coalition of Sexual Health, 2016). The healthcare provider should always assure the patient's confidentiality (Singh, 2018). When completing a sexual health history, neutral and inclusive terms should be used, and questions should be raised in a non-judgmental

manner. Utilizing ubiquitous statements helps to normalize the topics (National Coalition of Sexual Health, 2016).

The Five P's

In order for healthcare providers to deliver care that leads to sexual health and well-being, a comprehensive sexual history must be obtained. A detailed guide was created by the CDC (n.d.) to lead healthcare providers through the sexual history taking process. Guidelines provided by the CDC (n.d.) address the five "P's": partners, practices, protection from STI's, past history of STIs, and prevention of pregnancy. These are the five categories that healthcare providers should openly discuss with their patients. The dialogue can begin with inquiring of whether the person is sexually active. If not, it should be asked if they have ever been sexually active. Without making assumptions of the patient's sexual orientation, the gender and number of partners should be assessed. Asking about a patient's sexual practices in terms of what type of sex they have, including vaginal, anal, and oral, helps the healthcare provider become aware of what potential health problems the patient could be at risk for. This then leads into the next question of whether the patient uses protection from STIs with their partner(s). Open-ended questions can help guide the dialogue. For example, if the patient has been in a monogamous relationship for over a year, risk-reduction counseling may not be needed. However, in other situations, there may need to be further explanation regarding condom use, monogamy, the patient's perception of their risk, and the subject of testing for STIs. A past history of STIs places the patient at higher risk for currently having one, therefore inquiring into past diagnosis and treatment of both the patient and their partner(s) is needed (CDC, n.d.). Lastly, pregnancy intention should be discussed. Utilizing the "One Key Question" Initiative can guide the conversation (ACOG, 2017). This involves asking the patient would you like to become pregnant

in the next year (ACOG, 2017). If a patient does not want to become pregnant it moves the dialogue into the conversation of birth control and partner support of contraception. By the end of the interview, the patient may have additional information they were not ready to discuss earlier on, so the healthcare provider should ask if there are other things the patient would like to discuss regarding sexual health and sexuality (CDC, n.d.).

Potential Impact on Health

Data on sexual and reproductive health morbidity demonstrates the importance sexual health has on health care. The rates of STIs are continuing to rise every year in the United States (U.S.), with the combined rates of chlamydia, gonorrhea, and syphilis reaching an all-time high at over 2.4 million cases reported in 2018 (CDC, 2019). Additionally, each year there is an estimated 45,000 new cases of human immunodeficiency virus (HIV) in the U.S. (CDC, 2019). Nearly half of pregnancies are unintended, totaling just under three million a year (ACOG, 2017). If healthcare providers complete comprehensive sexual histories and openly discuss sexual health with their patients, there is a potential to address these preventable outcomes (ACOG, 2017).

While urinary tract infections (UTIs) and bacterial vaginosis (BV) have been attributed to a variety of factors, both have been associated with sexual activity (Lema, 2015; Bilardi, 2013; Bradshaw et al., 2013). UTIs are defined as symptomatic infections of the urethra, bladder, ureters, or kidneys (Quinlan & Jorgensen, 2017). Women are more prone to UTIs than men due to anatomical differences, specifically the close proximity of the vaginal introitus and urethral meatus to the anal opening and the shorter length of the female urethra. The anatomical relationship of the female urethral meatus to the vagina tends to lead to an increase of bacterial exposure during sexual intercourse. The incidence of UTIs peaks between 15 to 39 years old.

This is also the period of maximum sexual and reproductive activity in many women's lives (Lema, 2015). Almost half of all women will have at least one episode of a UTI in their lifetime (Lema, 2015; Quinlan & Jorgensen, 2017). The pathogenesis of UTIs in young healthy women is complex and is influenced by many host biological and behavioral factors. The relationship between UTIs and vaginal intercourse has been strongly linked in that every time a woman has sexual intercourse, she is exposed to bacteria, putting herself at risk for development of a UTI (Lema, 2015). One study found that women who experienced recurrent UTIs were ten times more likely to have had sexual intercourse more than nine times a month in the last year (Gupta & Trautner, 2013). The elevated risk can be attributed to trauma and introduction of bacteria into the urethra through mechanical factors (Quinlan & Jorgensen, 2017).

Although the etiology of BV has not been clearly identified, it is known to be a polymicrobial condition that involves a loss of the normal vaginal flora with an overgrowth of anaerobic bacteria (Bilardi et al., 2013; Paavonen & Brunham, 2018; Verstraelen, Verhelst, Vaneechoutte, & Temmerman, 2010). Symptoms generally include a thin, milky white or gray homogenous vaginal discharge with a foul smelling, fishy odor that causes vulvovaginal discomfort and vulvar irritation (Bilardi et al., 2013; Muzny, 2018; Paavonen & Brunham, 2018). The prevalence of BV is highest among African American women at 51.6%, compared to Hispanics at 32.1% and Caucasians at 23.2% respectively (Bradshaw et al., 2013). Additionally, two-thirds of women will experience a recurrent infection within twelve months of the recommended treatment regimen (Bradshaw et al., 2013; Muzny, 2018). While BV has not been named a STI, it has been strongly linked to sexual activity and is most common among women who report new or multiple male partners, frequent vaginal intercourse, condom-less intercourse

with a male partner, or intercourse with another women (Bilardi et al., 2013; Muzny, 2018; Wessels et al., 2017).

Sexual dysfunction has become a more common complaint associated with chronic diseases and certain medications. Sexual problems often arise as a consequence of health conditions, such as diabetes, cardiovascular disease, and depression (Singh, 2018). Further, medications, including diuretics, antihypertensives, oral contraceptives, corticosteroids, antidepressants, and antipsychotics, have been known to lead to sexual issues (ACOG, 2017; Singh, 2018). As women age, it is important to address the evolution of sexual health issues that may arise, including menopause and hypoactive sexual desire disorder (ACOG, 2017). Patients are often reluctant to self-report sexual dysfunction. Careful history taking is required to alert healthcare providers of sexual side effects that could be impeding sexual health, negatively impacting satisfaction, self-confidence, and intimate relationships (Singh, 2018).

With obtaining a comprehensive sexual health history, healthcare providers should be prepared to discuss subjects such as intimate partner violence, sexual assault, sexual abuse, and reproductive coercion (ACOG, 2017). There is a high association between females reporting their abusive male partners with trying to get them pregnant or interfering with their planned contraceptive measures. Therefore, these topics should be a part of differential diagnosis' when patients are seen for pregnancy or STI testing, emergency contraception, or with unplanned pregnancies. Because of this known link between reproductive health and violence, screening should occur at initial visits, annually, during each trimester of pregnancy, and postpartum (ACOG, 2013). Addressing these topics with patients is needed because intervention is critical. Reproductive health issues that may occur with women who have experienced some form of intimate partner violence, include earlier initiation of sexual intercourse, alcohol or drug abuse, a

STI/HIV diagnosis, miscarriage, and risky sexual behavior, such as unprotected sexual intercourse and having multiple sexual partners. Education given by healthcare providers can have a positive effect on patients' health and choices. Interventions should also include counseling on harm-reduction strategies and prevention of unintended pregnancies by proposing long-acting reversible methods of contraception that are less detectable to partners (ACOG, 2013).

Sexual Practices

With the known link of vaginal intercourse and increased risk of infections, studies are now exploring the association of other sexual practices, such as oral sex, anal intercourse, or the use of sex toys, with UTIs and other vulvovaginal infections. It is generally accepted that the bacteria responsible for the majority of UTIs originates from the rectum, most commonly *Escherichia coli* (*E. coli*) (Lema, 2015). *E. coli* has also been shown to change the normal vaginal flora increasing the risk of development of BV (Verstraelen st al., 2010). Participation in either oral or anal sex can assist in the transfer of bacteria from the rectal and perineal regions to the vulvar region and vagina increasing the risk of UTIs and BV (Verstraelen et al., 2010).

In nationally represented surveys in the U.S., over half of women reported having used a vibrator (Wood, Crann, Cunningham, Money, & O'Doherty, 2017). Using sex toys has been correlated with several sexual behaviors, including vaginal, oral, and anal intercourse and women reported their use for solo masturbation, intercourse, and sexual foreplay with a partner (Wood, et al., 2017). A cross-sectional survey of sex toy use and self-reported vulvovaginal infections was conducted in Canada focusing on information that has been lacking in other studies. The authors found an association between individuals who did not perform adequate sex toy hygiene and vulvovaginal infections, but there was no reported increase in UTIs (Wood et

al., 2017). Although limitations exist within this study, especially lack of report of when sex toys had been used and when infections occurred, it is useful to help guide future surveys of this nature which could demonstrate a stronger correlation between genital health outcomes and certain sexual behaviors.

Internal Evidence

Within a federally qualified community health center (FQHC) with multiple locations in the southwestern U.S., women's healthcare providers recognize two issues within their organization. Firstly, they believe there is a rise in urinary and vulvovaginal infections among the female patients. Secondly, there is a gap in obtaining a thorough sexual health history. Obtaining the sexual history is not standardized and is clinician based which can lead to inconsistencies. Variability has also been observed between the different locations. Without a comprehensive sexual history template in the electronic health record (EHR) there is no tracking of what is currently asked of the patients. By failing to obtain a comprehensive sexual health history from the women, they are missing key components that could potentially be correlated with a rise in urinary and vulvovaginal infections. The goal is with a thorough sexual health history, education can specifically address the sexual practices patients are participating in, thus reducing the risk for adverse health outcomes.

This inquiry has led to the clinically relevant PICO question, among women (P), how does safe sexual practices (I) compared to risky sexual practices (C) affect vulvovaginal health outcomes (O)?

Evidence Synthesis

Search Strategy

A search was conducted between February and March 2019 in PubMed, CINAHL, Cochrane Library, and Academic Search Premier. Search terms included “women,” “sexual history,” “sexual history taking,” “health history,” “sex,” “prevention,” “urinary tract infection,” and “bacterial vaginosis.” Groupings of terms yielded from 302-6491 articles in PubMed and 60-12,703 in Academic Search Premier. The articles that were able to be saved for review resulted from the combination of “women” and “sexual history taking” which yielded a total of 833 articles in PubMed and 60 articles in Academic Search Premier. While this combination did not result in any relevant articles in CINAHL that were written within the last ten years, and the Cochrane Library did not have any relevant articles pertaining to this search, it became the most successful grouping of terms. A search was conducted in Grey Literature, however no relevant studies resulted.

Exclusion criteria included works published prior to 2010 to incorporate a greater amount of relevant information since research on this particular topic is limited. Studies that evaluated patients under the age of 14 were excluded. Studies that used a non-English language or were conducted in a country that evaluated a specific ethnicity were excluded in this literature review. A total of 14 studies were critically appraised and narrowed down to ten chosen studies. Due to the lack of studies available on this topic, relevance was of the highest priority. Qualitative, quantitative, and mixed method studies were all included. The level of evidence was not an exclusion criterion because of the nature of this review.

Critical Appraisal

Ten studies were retained for this review. Half of the retained studies were cross-sectional surveys. The remaining studies included quasi-experimental, quality improvement, mixed methods, and grounded theory. Multiple studies presented selection bias; however, this is

appropriate given the voluntary nature of surveys. The study samples were relatively small, ranging between 21 to 1147 (Appendix A). The complete study sample of Van der Kwaak et al. (2010) was unable to be determined due the mixed methods used in the five studies that were reviewed.

The studies demonstrate a moderate degree of demographic information. The studies which evaluated patient responses had an age range between 14 to 81 years old. Patients were predominantly female gender and Caucasian, with the exception of the Fisher et al. (2014) study, in which 56% of participants were African American. In the studies that evaluated healthcare providers, the ages ranged between twenties to sixties and included both males and females. Female healthcare providers reported being more comfortable with discussing sexual health as opposed to their male counterparts. A majority of the studies took place in clinics, multiple being urban based (Appendix A).

Whether the study concentrated on the patient or healthcare provider perspective determined the focus. The two main primary outcomes of focus were increased reporting of sexual behavior and documentation of sexual history. There were various factors studied to determine the effect of the reporting of sexual behavior, including age, relationship status, sexual history taking format, and environment. The documentation of sexual history increased in relation to healthcare provider education, knowledge, comfort, and female gendered healthcare provider. In contrast, documentation decreased due to lack of time, interruptions, decreased communication skills, if patients were married, or over 45 years old (Appendix A).

Significant homogeneity existed in the measurement tools utilized. A majority of the studies used questionnaires, surveys, or interviews to collect data. While the measurement tools were relatively similar, the questions asked in each of the studies provided diverse data and

evaluated both the perspective of the healthcare provider and the patient. Most studies reported level of significance (*p*). Few studies reported confidence interval (CI), but the CI's were narrow with statistically significant *p* values indicating positive effects.

Discussion

Nearly all studies evaluated either the perspective of the patients or the healthcare provider regarding sexual health history taking. The overwhelming majority of patients are generally not embarrassed to discuss sexual health. Significant percentages of patients perceive that they are not frequently asked about sexual health history. This aligns with the studies of healthcare provider practices that discovered healthcare providers either self-report or the EHR reports that patients are not being asked their sexual history as often as recommended. While there are various approaches to perform a sexual health history, a majority of patients prefer to have conversations in person. Multiple studies have found that patients believe it is the responsibility of the healthcare provider to initiate the discussion of sexual health. Both physicians and nurse practitioners reported they are not routinely addressing sexual health with patients. Analyzing data from both perspectives highlights the need for improvement in the discussion of sexual health.

Potential Interventions

Healthcare providers should be trained to adequately screen and detect sexual health problems and be equipped to provide sufficient education about prevention, counseling, treatment, and care (WHO, 2010). Knowledge and comfort levels have been positively correlated with an increase in sexual health history taking of patients (Maes & Louis, 2011). One article revolved around improving the education of residents. First year residents participated in a curriculum that involved didactic and interactive components with the goal of improving sexual

health history taking and STI counseling. The curriculum was effective at improving knowledge, comfort, and frequency in obtaining appropriate sexual histories, and comfort in providing STI counseling (Shroff et al., 2018). This program shows promise. If healthcare providers are properly educated early in their practice, their comfortability with the subject will develop and produce improved history taking ability.

Implementing a sexual health history template or prompts to complete a sexual history in an EHR may improve the completion of a sexual history (Loeb et al., 2011). One study examined implementing a communication aid with the goal of increasing the frequency of how often sexual health issues are raised with young people in primary care. The tool helped identify health complaints that allow for an easy segue into discussing sexual health. The tool not only increased the incidence of sexual health discussions, but it also increased the rate that healthcare providers initiated sexual health conversations (MacDowall et al., 2010).

Theoretical Framework

The Health Belief Model (Appendix B) is a health behavior change model developed to explain and predict individual changes in health behaviors. This model is useful in separating individuals who use preventive measures from those who do not. The key elements of the Health Belief Model focus on individual beliefs about health conditions, which predict individual health-related behaviors. The key elements include an individual's perceived susceptibility to an illness or disease, perceived severity, perceived benefits, perceived benefits to action, factors that serve as a cue to action, and self-efficacy or the confidence in the ability to succeed (Rosenstock, 1960).

The Health Belief Model considers the benefits and barriers for given behaviors or actions are evaluated. Benefits of discussing sexual health could be early diagnosis and

intervention, reduction in STIs or vulvovaginal infections, and improved health outcomes. Possible barriers for healthcare providers include embarrassment in discussing sexual health, not feeling prepared to discuss the topic with patients, the belief that the sexual history is not relevant to the presenting chief complaint, attitudes related to sexual activity, and time constraints. Potential barriers of patients could include embarrassment, not feeling comfortable discussing sexual health, and not believing their healthcare provider needs to know this information. Improved sexual health history taking occurs when the healthcare provider recognizes that the benefits of a comprehensive history outweigh the potential barriers.

EBP Model

The ACE Star Model of Knowledge Transformation (Appendix C) was chosen as the conceptual framework for its systematic way of putting evidence-based practice into operation. This model consists of five stages of knowledge transformation that is represented by a simple five-point star. The cyclic nature of the model allows for an easy step-by-step process through the stages of knowledge discovery, evidence synthesis, translation into practice recommendations, implementation into practice, and evaluation (Stevens, 2008).

The ACE Star Model provided a process that allowed knowledge to be transformed into an implemented project. Stage one involved gathering the internal evidence from healthcare providers at the project site. The second stage involved the literature review and evidence synthesis, which led to development of a comprehensive sexual health history based on recommendations. The fourth and fifth stages will be discussed below. The fourth stage involved the implementation of a sexual health history tool. In the fifth stage the satisfaction and efficiency of the tool was evaluated.

Methods

Based upon the evidence in the literature review, both patients and healthcare providers recognize a lack of discussion regarding sexual health. This aligns with the internal evidence at the FQHC. Therefore, a standardized comprehensive sexual history survey should be implemented.

Setting

This project was executed in the women's health specialty department of a FQHC with five locations, which are located within multiple cities inside a large metropolitan area in the southwestern U.S. The comprehensive, FQHC delivers care to patients regardless of insurance status and serves a large population of individuals of lower socioeconomic status.

Project Description

The project involved the implementation of a one-time, confidential questionnaire with English-speaking females over the age of 18, including pregnant women. Participants already had a scheduled appointment with their healthcare provider. Women who met the inclusion criteria were given the consent letter by the staff member who roomed the patient or by the healthcare provider. This occurred at the project site as part of the usual intake procedure in the exam room. If the patient confirmed that she wanted to participate, the participant completed a demographic form (Appendix D). Participants were then verbally asked the questions on the sexual health history taking tool (Appendix E) and the responses were recorded by the project investigator. Completion of the interview was considered participant consent.

The sexual health history taking tool was developed based on the CDC (n.d.) and the ACOG (2017) recommendations for sexual health history taking and face validity was obtained through healthcare provider review. The sexual health history taking tool has a SMOG index score of 5.6, corresponding to a fifth to sixth grade reading level (McLaughlin, 1969). The

questions were estimated to take ten minutes or less to complete. No forms contained personal identifiable information. Following this, the participant was asked to complete a satisfaction survey (Appendix F). These questions were rated on a 5-point Likert scale. The satisfaction survey questions were developed from "Controlled Trial of a Patient-Completed History Questionnaire: Effects on Quality of Documentation and Patient and Physician Satisfaction," and from questions that addressed patients' feelings on discussion of sexual health in "Talking of Sex: Developing and Piloting a Sexual Health Communication Tool for Use in Primary Care (Hershey & Grant, 2002; Macdowall et al., 2010)." Content validity of these surveys was achieved by utilizing the questions proposed within scientific literature. Face validity was obtained through healthcare provider review. It was estimated that the entire intervention would take approximately fifteen minutes to complete. Participants were made aware from the consent form that information provided to any member of the project team will not be released to their healthcare provider and it was the responsibility of the participant to address any concerns with their healthcare provider. Healthcare providers did not provide any information about the patient.

This was a one-time participation and participants were not contacted for a follow up. Data collection occurred over an eight-week period with a total of 100 participants. All data was entered into a statistical analysis software. The number of cover letters and tools given out were compared to the number of interviews conducted to determine participation rate. The satisfaction survey data determines participant satisfaction and comfortability with discussing their sexual health, whether the tool addressed their concerns, and the efficiency of the sexual health history tool. This information determines whether the sexual health history tool is appropriate to be implemented electronically and in other department specialties at the project site. The responses

on the sexual health history tool will be used to provide insight into the sexual practices of the individuals at the health center.

Budget

The project is a low-cost investment. Participants presented for their already scheduled visit with their healthcare provider. Direct costs are related to the supplies needed for interviewing participants, these include paper and a writing utensil. Indirect costs are absorbed by the project site related to the project being completed during regular office hours.

Participant Protection

All data was collected without participant identifiers and medical records were not accessed. Verbal consent to participate was obtained outside of the participants' healthcare provider visit at the project site. While the content of the sexual health history tool could be an uncomfortable topic for some individuals, participants had the option to not answer a question or stop any time. All data was entered into a password protected laptop into a password protected statistical analysis software. The forms were shredded at the end of data analysis and will not be banked for future use.

Results

Descriptive statistics were used to analyze the participants' responses on the sexual health history taking tool and the satisfaction survey.

Demographics

The majority of participants were between the age ranges of 18-24 and 25-30, with 38 (38%) participants in these two categories. The youngest participant was 18 years old and the oldest was 80 years old. The ethnicities of the participants were white non-Hispanic (n = 15, 15%), black non-Hispanic (n = 23, 23%), and Hispanic (n = 62, 62%). The relationship statuses

of the participants were single (*n* = 9, 9%), in a relationship (*n* = 66, 66%), and married (*n* = 25, 25%). The majority of patients identified as heterosexual (*n* = 93, 93%) with the remainder identifying as bisexual (*n* = 7, 7%). The educational background of participants included less than high school diploma (*n* = 3, 3%), high school diploma (*n* = 35, 35%), some college (*n* = 33, 33%), and college degree (*n* = 29, 29%). Forty-three percent (*n* = 43) of participants were pregnant. Demographic frequencies and percentages are presented in Table 1 (Appendix G).

Frequencies and Percentages

Frequencies and percentages were calculated for the types of sex, sex toy use, cleaning of sex toys, lubrication use, and protection use. All participants responded yes to vaginal sex (*n* = 100, 100%). The majority responded no to anal sex (*n* = 64, 64%). Of the respondents who answered yes to anal sex (*n* = 36, 36%), 14 reported they have vaginal sex following anal sex. The majority responded yes to oral sex (*n* = 85, 85%). Of the respondents who answered yes to oral sex, 23 reported they have vaginal oral sex following anal oral sex. The majority responded no to using sex toys alone or with a partner (*n* = 66, 66%). Of the respondents who answered yes to use of sex toys (*n* = 34, 34%), all reported cleaning of the sex toys after use. The majority responded no to using lubrication (*n* = 60, 60%). The majority responded no to protection use (*n* = 64, 64%). Of the respondents who answered yes to use of protection (*n* = 36, 36%), 11 reported always using protection and 25 reported sometimes using protection. Frequencies and percentages are presented in Table 2 (Appendix H).

Frequencies and percentages were calculated for the responses of the satisfaction survey. Seventy-five percent of respondents agreed with the statement “I liked being asked about my sexual health” (strongly agree, *n* = 38, 38%; agree, *n* = 37, 37%). Fifty-four percent of respondents agreed with the statement “my provider has addressed these questions with me

before" (strongly agree, *n* = 23, 23%; agree, *n* = 31, 31%). A majority of respondents neither agreed nor disagreed with the statement "I'd been wanting to talk about my sexual health but did not know how" (*n* = 33, 33%). Sixty percent of respondents agreed with the statement "it's my providers' job to bring up sexual health" (strongly agree, *n* = 18, 18%; agree, *n* = 42, 42%). Fifty-eight percent of respondents agreed with the statement "the questionnaire helped address any sexual health concerns I had" (strongly agree *n* = 26, 26%; agree, *n* = 32, 32%). Seventy-four percent of respondents disagreed with the statement "I thought the questions were too personal" (strongly disagree, *n* = 32, 32%; disagree, *n* = 42, 42%). Eighty percent of respondents agreed with the statement "my appointment took longer, but it was worth my time" (strongly agree, *n* = 42, 42%; agree, *n* = 38, 38%). Frequencies and percentages are presented in Table 3 (Appendix I).

Discussion

Overall, the sexual history taking tool assists in obtaining a comprehensive sexual history and provides knowledge of the sexual practices of the participants at the FQHC. Participants reported having vaginal, anal, and oral sex and using sex toys and lubrication. It is essential for healthcare providers to be aware of these sexual behaviors, as each of these practices can potentially put a patient at risk for infections. It is important to note that multiple participants reported vaginal intercourse following anal intercourse or oral sex vaginally following oral sex anally putting them at risk of transferring bacteria from the rectal and perineal regions to the vulva and vagina, which has been linked to an increase in vulvovaginal infections (Verstraelen et al., 2010). The tool creates the opportunity for healthcare providers to deliver evidence-based education based on the responses to help patients modify their behaviors as needed.

A majority of the women do not believe the questions were too personal and report the questionnaire addressed any sexual concerns they had and was worth their time. The results of the satisfaction survey are similar to the findings in related literature with 75% of participants reporting they liked being asked about their sexual health. These survey results suggest the tool is appropriate for implementation at this FQHC. While just over half of participants reported their healthcare provider had addressed the sexual health questions with them before, it is concerning that a third of participants report their healthcare provider has not. This tool has the potential to assist healthcare providers in addressing sexual health at the recommended intervals, especially because a majority of patients report it is their healthcare providers' job to bring up the topic. Although these survey results are not statistically significant, they are clinically significant and support a change in practice.

The confidentiality of the study is a strength, likely improving the accuracy of the responses. Every participant who agreed to have the investigator speak with them about the project, consented to participate, therefore there was a 100% participation rate. Through interviewing the participants, the investigator observed the participants being open, interactive, and not hesitating when answering questions. All participants answered every question they were eligible to complete. It took less time to deliver the tool than estimated. Completing the sexual health history taking tool took between one to three minutes. The entire process of completing the demographic form, sexual health history taking tool, and the satisfaction survey took between three to five minutes. Therefore, it can be anticipated that implementing the tool will not disrupt typical healthcare provider workflow.

The demographics of the participants is the main limitation of this study. It only included English speaking female patients. Over 90% of participants were under 40 years old. Further,

only non-Hispanic whites, non-Hispanic blacks, and Hispanics happened to be interviewed. The FQHC serves a diverse population with patients from multiple ethnic backgrounds, many of which do not speak English. Responses could potentially be different for males or individuals who are older or from other cultural backgrounds.

This sexual health history taking tool is appropriate to be implemented into the EHR and could be utilized by other department specialties at the project site. The literature review that was performed revealed that there is currently a lack of scientific literature that addresses sexual health history taking. This project has the potential to add to the current body of knowledge.

Implications for Healthcare Providers

Women's healthcare providers are in the unique position to have an open dialogue about sexual health with their patients. Acquiring information about sexual health practices may lead to early detection of related problems, effective interventions, and appropriate patient education. If healthcare providers become aware of the sexual behaviors of their patients, they can provide applicable evidence-based education that could lead to improved health outcomes. Individuals have the right to balanced and comprehensive information about their health, body, and options, allowing them to participate in shared decision making. This requires that they receive high quality counseling in which healthcare providers are giving age and sex appropriate information in a non-judgmental, non-stigmatizing manner (WHO, 2010).

Conclusions

Sexual health is an important aspect of overall health that not only affects sexual function, but also relationships and the well-being of individuals. Discussion of sexual health throughout the lifespan will assist healthcare providers in identifying specific issues from adolescence to menopause and beyond, leading to evidence-based treatment and education.

Healthcare providers should recognize the barriers that impede them from performing a sexual health history and implement appropriate interventions, such as a comprehensive sexual health history taking tool, to ensure the sexual health of patients, partners, and the community.

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Appendix A

Table 1

Synthesis Table

Studies	Fairchild	Fisher	Loeb	Macdowall	Maes	Shroff	Sobecki	Van der Kwaak	Wood	Gesink
Year	2016	2014	2011	2010	2011	2018	2012	2010	2017	2012
LOE	III	III	III	III	III	V	III	IV	III	VI
Sample Size	383	206	360	92	100	21	1147	5 studies	1408	146
Demographics										
Patients	X	X		X						
Providers			X		X	X	X	X		
White	80.50%	22%		98.90%	87%				86.50%	0%
Female	100%	77%	39%	87%	92%	38%	47%		98.60%	55%
Mean Age/Age Range	42.8	14-21	20's	22.4/16-29	Mean 50-59		48		18-81	16-45
Setting										
US	X	X	X		X	X	X			
International				X				X	X	X
Hospital						X				
Clinic	X	X	X	X	X		X	X		
Community									X	X
Urban	X	X	X							X
Rural								X		
Interventions										
SHHC		X								
In Person Conversation	X									

Hx- history, **LOE-** level of evidence, **SB-** sexual behavior, **SHHC-** sexual health history calendar, **STI-** sexually transmitted infection, **STU-** sex toy use

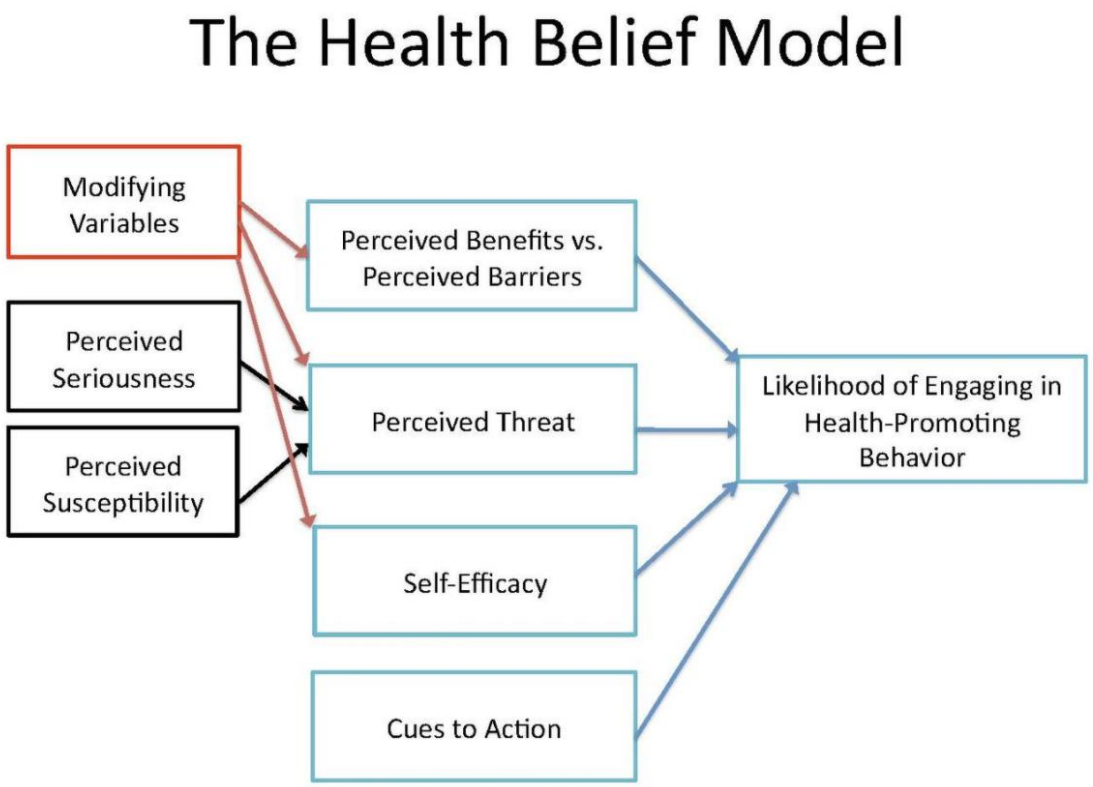
Bridging Condition				X						
Privacy & Confidentiality								X		
Provider/Patient Congruency								X		
STU									X	
Independent Variables										
Married			X							
Age > 45			X							
Provider Knowledge & Comfort					X					
Provider Lack of Time					X					
Provider Interruptions					X					
Provider ↓ Communication					X					
Sexual Hx Curriculum						X				
Female Provider							X			
Social Norms										X
Attitudes/Behavior										X
Outcomes										
Reporting of SB	↑	↑		↑				↑	↑	
Documented Sexual Hx			↓		↑K&C ↓ Others	↑	↑			
Themes										
SB										X
Number of Partners										X
STI Risk										X

Hx- history, **LOE-** level of evidence, **SB-** sexual behavior, **SHHC-** sexual health history calendar, **STI-** sexually transmitted infection, **STU-** sex toy use

Appendix B

Figure 1

The Health Belief Model

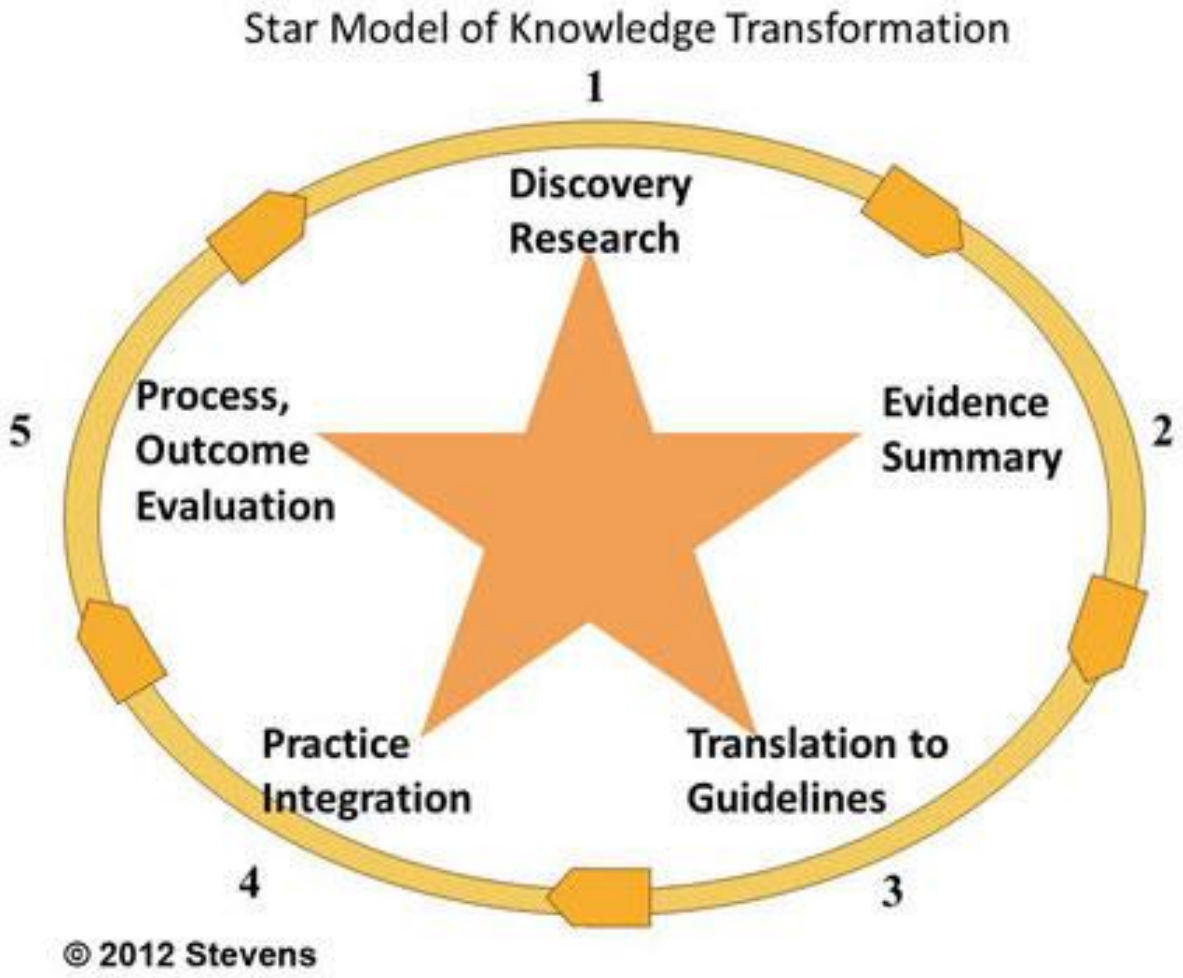


(Pennsylvania State University, n.d.)

Appendix C

Figure 2

ACE Star Model



Appendix D

Figure 3

Demographic Form

Demographic Data

Age: _____

Ethnicity: □ Caucasian □ African American/Black □ Hispanic □ Asian □ Pacific Islander □ Other _____

How you describe your emotional and sexual attraction to others: □ Heterosexual/Straight (attracted to opposite sex) □ Homosexual/Lesbian/Gay (attracted to same sex) □ Bisexual (attracted to men and women) □ Don't know □ Decline to answer □ Something else; please specify _____

Relationship Status: □ Single □ In a Relationship □ Married □ Separated □ Divorced

Education: □ Less than high school □ High school □Some college □ College degree □ Graduate degree

Are you currently pregnant? □ Yes □ No

Appendix E

Figure 4

Sexual Health History Taking Tool

Partners	Are you sexually active? □ Yes □ No - If no, have you ever been sexually active? □ Yes □ No Are you sexually active sex with □ men, □ women, or □ both? In the past 3 months, how many partners have you been sexually active with? _____ In the past 12 months, how many partners have you been sexually active with? _____
Practices	What kind of sexual contact do you have, or have you had? - Vaginal sex (penis in the vagina)? □ Yes □ No - Anal sex (penis in the anus)? □Yes □ No - If so, do you do ever have vaginal sex after anal sex? □ Yes □ No - Oral sex (mouth on penis, vagina, or anus)? □ Yes □ No - If so, do you receive oral sex vaginally after anally? □ Yes □ No Do you use sex toys alone or with you partner? □ Yes □ No - If so, what kinds of toys do you use? _____ - Do you clean your toys after use? □ Yes □ No Do you and your partner use any lubricants during sexual activity? □ Yes □ No
Protection from STIs	Do you and your partner(s) use any protection against STIs? □ Yes □ No - If so, what kind of protection do you use? _____ - How often do you use this protection? □ never □ sometimes □ always - If "sometimes," in what situations or with whom do you use protection? _____ - If not, can you tell me the reason? _____ - Are you comfortable asking your partner to use condoms? □ Yes □ No
Past History of STIs	Have you been tested for HIV or other STIs? □ Yes □ No Have you ever been diagnosed with an STI? □ Yes □ No - When? _____ - How were you treated? _____ - Have you had any recurring symptoms or diagnoses? □ Yes □ No Has your current partner or any former partners ever been diagnosed or treated for an STI? □ Yes □ No - Were you tested for the same STI(s)? □ Yes □ No - If yes, when were you tested? _____ - What was the diagnosis? _____ - How was it treated? _____
Prevention of Pregnancy	Are you currently trying to become pregnant? □ Yes □ No Are you concerned about getting pregnant? □ Yes □ No Are you using birth control? □ Yes □ No Is your partner supportive of your using birth control? □ Yes □ No

Appendix F

Figure 5

Satisfaction Survey

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I liked being asked about my sexual health	☐	☐	☐	☐	☐
My provider has addressed these questions with me before	☐	☐	☐	☐	☐
I'd been wanting to talk about my sexual health but did not know how	☐	☐	☐	☐	☐
It's my providers job to bring up sexual health	☐	☐	☐	☐	☐
The questionnaire helped address any sexual health concerns I had	☐	☐	☐	☐	☐
I thought the questions were too personal	☐	☐	☐	☐	☐
My appointment took longer, but it was worth my time	☐	☐	☐	☐	☐

Appendix G

Table 1

Participant Demographics

Variable	*n*	*%*
Age Range		
18-24	38	38
25-30	38	38
31-35	9	9
36-40	8	8
41+	7	7
Race/Ethnicity		
White, non-Hispanic	15	15
Black, non-Hispanic	23	23
Hispanic	62	62
Other	0	0
Relationship Status		
Single	9	9
In a relationship	66	66
Married	25	25
Sexual Orientation		
Heterosexual	93	93
Homosexual	0	0
Bisexual	7	7
Other	0	0
Education		
Less than high school	3	3
High school diploma	35	35
Some college	33	33
College degree	29	29
Pregnant		
No	57	57
Yes	43	43

Appendix H

Table 2

Frequency Table for Sexual Health History Taking Tool

Variable	*n*	*%*
Vaginal sex		
No	0	0
Yes	100	100
Anal sex		
No	64	64
Yes	36	36
Vaginal sex after anal sex		
No	22	22
Not applicable	64	64
Yes	14	14
Oral sex		
No	15	15
Yes	85	85
Vaginal oral sex after anal oral sex		
No	62	62
Not applicable	15	15
Yes	23	23
Use of sex toys		
No	66	66
Yes	34	34
Clean sex toys		
No	0	0
Not applicable	66	66
Yes	34	34
Use of lubrication		
No	60	60
Yes	40	40
Use of protection		
No	64	64
Yes	36	36

When protection is used		
Never	64	64
Sometimes	25	25
Always	11	11

Appendix I

Table 3

Frequency Table for Satisfaction Survey

Variable	*n*	*%*
“I liked being asked about my sexual health”		
Strongly agree	38	38
Agree	37	37
Neither agree nor disagree	24	24
Disagree	1	1
Strongly disagree	0	0
“My provider has addressed these questions with me before"		
Strongly agree	23	23
Agree	31	31
Neither agree nor disagree	13	13
Disagree	21	21
Strongly disagree	12	12
“I’d been wanting to talk about my sexual health but did not know how”		
Strongly agree	15	15
Agree	19	19
Neither agree nor disagree	33	33
Disagree	27	27
Strongly disagree	6	6
“It’s my providers’ job to bring up sexual health”		
Strongly agree	18	18
Agree	42	42
Neither agree nor disagree	26	26
Disagree	6	6
Strongly disagree	8	8
“The questionnaire helped address any sexual health concerns I had”		
Strongly agree	26	26
Agree	32	32
Neither agree nor disagree	31	31
Disagree	7	7
Strongly disagree	4	4

“I thought the questions were too personal”		
Strongly agree	4	4
Agree	6	6
Neither agree nor disagree	16	16
Disagree	42	42
Strongly disagree	32	32
“My appointment took longer, but it was worth my time”		
Strongly agree	42	42
Agree	38	38
Neither agree nor disagree	7	7
Disagree	11	11
Strongly disagree	2	2