Sexual attitudes of occupational therapists regarding persons with physical disabilities: a follow-up study

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For the Degree of Occupational Therapy Doctorate

Student Name:  Nicole L. Stanger

Title of Scholarly Project:  Sexual Attitudes of Occupational Therapists Regarding Persons with Physical Disabilities: A Follow-up Study

The major advisor approves that this Scholarly Project is acceptable for presentation.

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Sexual Attitudes of Occupational Therapists
Regarding Persons with Physical Disabilities:
A Follow-up Study

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Abstract

The purpose of this study was to explore the relationship between sexual attitudes towards individuals with disabilities, sexual attitudes in general and the level of sexual knowledge of occupational therapists. This study investigated whether sexual knowledge, attitudes, and the involvement of sexuality in occupational therapy practice has changed over the last decade by comparing it to a similar study conducted ten years prior (Guest & Kopp Miller, 1997).

One thousand surveys were sent containing the Survey of Attitudes towards the Sexuality of Adults with Disabilities (SASAD) (Guest & Kopp Miller, 1997), the Sexuality Attitudes and Beliefs Survey (SABS) (Reynolds & Magnan, 2005) and a sexual knowledge assessment. There were 251 surveys returned providing a response rate of 26%. Due to inadequate completion 14 surveys were excluded, therefore, data analysis was conducted on a total of 237 surveys.

Slightly positive attitudes regarding the sexual rehabilitation of adults with disabilities and of addressing sexuality in rehabilitation were found. A significant correlation between the SASAD and the SABS was found, indicating that participants with more positive attitudes towards the sexuality of individuals with disabilities also had more positive attitudes towards sexuality in general. No significant correlation was found between the sexual knowledge assessment and either of the previously mentioned scales. This study found that participants with more positive attitudes on the SASAD and SABS were more likely to believe that addressing sexuality is a role for occupational therapy and were more likely to address it with their patients. The majority of participants believed that addressing sexuality is a role for occupational therapy but most did not address it with their patients. These findings are consistent with the findings of Guest and Kopp Miller in 1997.

The outcomes of this study suggest that occupational therapy as a profession needs to advocate for the inclusion of sexuality in practice in order for our patients to receive the holistic care they desire and deserve. Additionally, more training and education needs to be provided to occupational therapy practitioners regarding addressing sexuality issues and concerns with patients.
Sexual Attitudes of Occupational Therapists Regarding Persons with Physical Disabilities: A Follow-up Study

Sexuality is an important feature in the lives of individuals, including those with disabilities. Many disabilities can greatly affect a person’s sexuality. Although it is often overlooked during therapy, sexuality should be an area of focus for occupational therapists. The attitudes and knowledge of occupational therapists toward the sexuality of persons with disabilities may impact treatment or add to the reason sexual issues are rarely addressed. Using the Survey of Attitudes toward the Sexuality of Adults with Disabilities (SASAD) (Guest & Kopp Miller, 1997), this study addressed possible reasons for sexuality not being included in occupational therapy practice. The purpose of this study was to explore the relationship between sexual attitudes toward individuals with disabilities, sexual attitudes in general and the level of sexual knowledge of occupational therapists. This study was a follow up to one conducted ten years ago by Guest and Kopp Miller (1997). This study also investigated whether sexual knowledge, attitudes, and the involvement of sexuality in occupational therapy has changed over the past decade. Before the current study is introduced, sexuality and its involvement in occupational therapy will be discussed. The attitudes and knowledge of occupational therapists towards sexuality will also be reviewed.

Sexuality: Fundamental Aspect of Life

Sexuality is a crucial aspect of human development. From children differentiating gender, through puberty, to adult sexual expression, sexuality plays a role throughout a person’s life. Sexuality encompasses more than just sexual organs and characteristics. Sexuality can contribute to body image, self-esteem and identity. Sexuality also involves capacity for love and the ability to establish and maintain relationships. Sexuality is a major component of who we are as individuals and not simply what we do sexually. According to the World Health Organization (WHO, 2000), sexuality is a result of the interplay of biological, psychological, and cultural factors. It includes many aspects of the person including gender, identity, sexual orientation, and emotions. People can experience sexuality in different
ways and in different forms. The experience will depend on the factors and aspects that make up a person’s own unique sexuality. It can be experienced in thoughts, beliefs, attitudes, values, relationships, roles, and occupations (WHO, 2000). Sexual health is part of a person’s overall health. Sexual health is the relationship between sexuality and the ongoing process of physical, psychological and socio-cultural well being. For sexual health to be achieved and maintained it is necessary that the sexual rights of all people be recognized and upheld (WHO, 2000).

Sexual activity is a complex set of behaviors that involves the mind, emotions and many different body systems. Therefore, a disability that interferes with motor skills, cognition, coordination, or sensory skills could greatly affect one’s sexuality and sexual activity. Physical impairments such as spinal cord injury, multiple sclerosis and arthritis produce muscle weakness and decreased range of motion. Cognitive disabilities, such as dementia and depression, can affect a person’s ability to form healthy relationships. Damaged self-image can result from such surgical procedures such as a mastectomy or amputation. This can affect a person’s desire to resume or maintain sexual activity (Krapp & Gales, 2002).

Along with these interferences a person’s sexual esteem and satisfaction can also be affected. This was demonstrated in a study conducted by McCabe, Taleporos, and Dip (2003). This study consisted of 1,196 participants in which 748 had physical disabilities and 448 were able-bodied. It was predicted that people with physical disabilities would demonstrate lower levels of sexual esteem, sexual satisfaction, and sexual activity, as well as higher levels of sexual depression compared to people who were able-bodied. This hypothesis was supported by the results. Significant differences were found using univariate tests on the effects of a disability with sexual esteem, satisfaction, activity, and depression. This illustrates the negative affect of a disability on the sexuality of a person.

Sexuality is a topic of great importance to many patients, yet it is often overlooked by medical personnel. People with disabilities are sexual individuals with sexual desires and concerns that require the attention of health care professionals. The Sexuality Information and Education Council of the
United States (SIECUS) supports this idea fully. SIECUS believes that persons with disabilities, whether physical, cognitive, or emotional, have the right to receive sexual health care, sexual education and the opportunities for sexual expression (SIECUS, 2001).

McAlonan (1995) conducted a study on improving sexual rehabilitation services from the perspectives of patients with disabilities. She gathered data from 12 persons with spinal cord injury through interviews. Many participants reported dissatisfaction with the quality and quantity of sexuality-related services. Participants were given the opportunity to suggest how health care professionals could improve sexual rehabilitation services. Participants stressed the need to know what their options were regarding sexual rehabilitation so that they could make timely and intelligent choices that best fit their needs. Providing information on fertility, assistive technology, and parenthood was also requested. This study provided information on how future services can be improved.

People with disabilities are often viewed by our society as nonsexual individuals, but that is not the case. There is also a gap in the medical profession when dealing with sexuality in people with disabilities. This is a topic that can no longer be overlooked by medical personnel, although the profession best suited to fill this gap is often not clearly defined.

*Sexuality in Occupational Therapy*

Occupational therapy is a holistic profession that works with patients to regain maximal performance in all functional areas and occupations of life. Occupation is a central concept in occupational therapy and, according to Nelson and Thomas (2003), an occupation is anything a person does that he/she applies meaning and purpose. Sexuality and sexual behavior are clearly an occupation, making these legitimate areas for occupational therapists to consider. Many occupational therapy settings allow the therapist to have one-on-one contact with the patient, providing privacy to allow discussion of intimate topics. Occupational therapy addresses personal and intimate occupations such as dressing and toileting. Occupational therapists build rapport with patients due to the amount of personal time spent together. Having privacy and building rapport with patients are both critical to addressing
Sexuality. Since sexuality is an intimate topic, this could help the patient feel more comfortable in speaking about sexuality. Addressing other intimate topics that are typical to occupational therapy allows a smooth transition into addressing sexuality.

There has been a recent increase in the interest of occupational therapy’s involvement in addressing sexuality with patients. This is evidence by OT Practice offering continuing education credits on the topic in June of 2008 (Hattjar, Parker, & Lappa, 2008). Hattjar, Parker, and Lappa (2008) supported the idea that much like any other occupation of daily living, sexuality should be addressed by the occupational therapist during the normal course of treatment. The same problems that affect patients other occupations, like functional mobility and socialization, may also affect their ability to express themselves sexually (Freidman, 1997). Burton (1996) supported the idea of the occupational therapist addressing issues of sexuality. He stated that despite any disability a patient should know how to communicate and perform sexually. He has found that individuals with disabilities have had their sexual concerns ignored by medical personnel. This led the patients to feel as if they were not being treated and cared for as a complete person (Burton, 1996). Occupational therapists spend a large amount of time working with a patient on his or her physical, emotional and cognitive status. They also set aside time for dealing with occupations of daily living such as leisure activities and self-care, but the areas of sex, love, and intimacy are often ignored.

Penna and Kieron (2000) conducted a survey of occupational therapists regarding whether occupational therapists should offer sex education to people with disabilities, specifically schizophrenia. Forty-nine questionnaires were returned and the following results were revealed. Participants reported the need for special training and further clinical experience in order to provide this service. Still, the majority of respondents believed that sex education is an appropriate domain for occupational therapy. The occupational therapists in this study had positive attitudes towards sexuality but felt that they had a lack of experience and knowledge in this area. This led to many of the therapists not addressing the issue of sexuality in practice.
Attitudes and Knowledge of Occupational Therapist Towards Sexuality

The attitude of the health care professional towards sexuality will affect whether and how the therapist deals with issues of sexuality during therapy. Sexual behaviors vary on an individual basis. Attitudes surrounding these matters of sexual behavior are influenced by personal experience, personal values, cultural issues, education, religion, family, education, laws and peer groups (Rathus, Navid & Fichner-Rathus, 1997).

Conine, Christie, Hammond and Smith (1979) conducted a study on occupational therapists’ roles and attitudes toward sexual rehabilitation of people with disabilities. They surveyed 26 occupational therapists that were employed in large metropolitan hospitals. They found that occupational therapists had positive attitudes toward the sexuality of clients and saw sexual expression as fundamental to the quality of life. Sixty-two percent of the participants believed that providing sexuality counseling for their clients was important. However, half of the participants did not address sexuality in their work as an occupational therapist.

Jones, Weerakoon, and Pynor (2005) conducted a study involving occupational therapy students and sexual issues in clinical practice. The purpose of this study was to examine the level of comfort that occupational therapy students had regarding sexual issues. The participants included 340 occupational therapy students. It was found that the students did not feel that they had adequate information regarding numerous sexuality issues; therefore, they were not knowledgeable or comfortable enough to deal with them if they were to arise in a therapy session. Seventy-eight percent of the students were not prepared to ask a patient about sexual experience, seventy-four percent were not prepared to ask about sexual practice and sixty percent could not answer patients’ questions on matters relating to sexuality. This lack of comfort may be detrimental for both the therapist and patient. There may be a time in an occupational therapist’s career when these issues will arise and current students do not feel that they will be prepared to handle it appropriately.
Current Study

Disabilities can negatively affect the sexuality of a person, ranging from an increase in sexual depression, to physical limitations, to a decrease in sexual satisfaction. Patients have come forward and stated the need for this issue to be addressed, yet it is still too often ignored. Occupational therapists know that sexuality is a legitimate and important topic to their patients, but still seldom address the issue. This is unacceptable. Patients deserve to be treated in a holistic manner which incorporates all aspects of the human, including sexuality. The patients have stated the need. The occupational therapists have stated the legitimacy. So what is preventing the inclusion of sexuality in therapy? Could it be a lack of sexual knowledge or negative sexual attitude of the occupational therapist? This study attempted to bring light to these issues. In doing so, this study assisted occupational therapists in providing the holistic care their patients deserve.

There has been little research done on the involvement of sexuality in occupational therapy treatment, including the knowledge and attitudes of the occupational therapists surrounding this issue. The current study was a follow up to a study conducted by Guest and Kopp Miller in 1997 on the development of the Survey of Attitudes toward the Sexuality of Adults with Disabilities (SASAD). The purpose of that study was to assess the reliability of the SASAD and to explore the relationship between sexual knowledge and attitudes and the SASAD. The authors hypothesized that occupational therapists with negative sexual attitudes toward individuals with disabilities, as measured by the SASAD would also have negative sexual attitudes in general, as well as low levels of sexual knowledge. Seventy-two surveys from randomly selected occupational therapists were returned. The occupational therapists were drawn from the American Occupational Therapy Association member list. The survey included a cover letter and a three part questionnaire. Part one elicited demographics information, part two consisted of the fourteen-question SASAD and the third part consisted of the Sex Knowledge and Attitude Test (SKAT)-Form 2 (Part I and II)(Leif & Reid, 1972). Part I of the SKAT consisted of 35 attitude items and Part II consisted of 71 true-false items regarding sexual knowledge. The results supported the
authors’ hypothesis of this study. The mean score of the SASAD was 54, on a scale of 14 to 70. This indicated a positive attitude regarding the sexuality of persons with physical disabilities. The mean score for the SKAT-Part I was 91 indicating the participants were slightly more positive with regard to attitudes about sex in general. The mean score for the SKAT-Part II was 48 indicating that participants scored low in terms of general knowledge of sexual issues. The results of this study indicated that occupational therapists with greater sexual knowledge held more positive attitudes toward sexuality in general and toward sexuality of individuals with physical disabilities.

The Guest and Kopp Miller (1997) study was replicated to evaluate the correlation between sexual attitudes toward individuals with disabilities, as measured by the SASAD, sexual attitudes in general and levels of sexual knowledge. This study also investigated whether there has been a change in attitudes and knowledge surrounding sexuality in the field of occupational therapy over the last ten years. Using questions from the demographic portion of the questionnaire, the correlation between addressing sexuality in practice and sexual attitudes and knowledge was also explored. It was predicted that occupational therapists that have negative attitudes towards sexuality in individuals with disabilities, will also have negative sexual attitudes in general, along with low levels of sexual knowledge.

Methods

Participants

One thousand participants were solicited from the state of Ohio. Participants had to be practicing licensed occupational therapists. A list of all registered occupational therapists within Ohio was obtained from the Ohio Occupational Therapy Board Licensure. Participants were randomly selected from this list.

Study Design

A survey research design was the research design used for this study. The survey included a four part questionnaire.
Instrument

The instrument was a questionnaire consisting of three parts (see Appendix A). The first part consisted of ten questions eliciting demographic information such as age, gender, marital status, and years of experience.

The second part of the questionnaire was the Survey of Attitudes towards the Sexuality of Adults with Disabilities (SASAD) (Guest & Kopp Miller, 1997). This consisted of 14 statements involving attitudes toward sexuality and disability rehabilitation. The participants were asked to respond to these statements using a 5-point Likert-scale, with one meaning strongly disagree and five meaning strongly agree. Statements 5, 7, 12, and 13 were reversed scored. Participants received a total score (range = 14-70), with a higher score indicating a more positive attitude towards the sexual rehabilitation of persons with physical disabilities. Statements 4, 5, 11 and 12 of the SASAD were adjusted into person first language. The study done by Guest and Kopp Miller (1997) demonstrated that the SASAD has satisfactory reliability and validity. The reliability was proven by the alpha coefficients of .85 and the validity was demonstrated by comparing the relationship between the SASAD and Part I of the SKAT. Part I of the SKAT consisted of 35 sexual attitude statements to which the participant responded using the same 5-point Likert-scale as the SASAD, with one meaning strongly disagree and 5 meaning strongly agree.

The third part of the questionnaire consisted of the Sexuality Attitudes and Beliefs Survey (SABS) developed by Reynolds and Magnan (2005) (see Appendix A), and permission was given for its use. The Sexuality Attitudes and Beliefs Survey consisted of 12 statements and utilized a 6-point Likert-scale with six meaning strongly agree and one meaning strongly disagree. Statements 3, 5, 7, 9 and 11 are reversed scored. Statements 4, 10 and 12 were adjusted to recognize occupational therapists instead of nurses. To demonstrate construct validity the SABS scores were compared to another valid and reliable measure of sexual attitudes. The construct validity of the SABS was demonstrated by its
significant correlation \( r = -.37; p< .05 \) with the attitudes scale of the SKAT. The internal consistency was demonstrated with alpha coefficients of .75 and .82.

In the previous study by Guest and Kopp Miller (1997) Part II of the SKAT was used to assess sexual knowledge. Part II of the SKAT was not suitable for this study due to the age of the assessment. Therefore, the fourth part of the questionnaire consisted of a new sexual knowledge assessment developed by the researchers (see Appendix A). This assessment consists of 50 true/false statements pertaining to knowledge of sexuality. These statements were derived from the book *Understanding Human Sexuality* by Shibley Hyde and DeLamater (2000). To create an assessment that encompassed a variety of sexuality topics, statements were derived from numerous chapters throughout the text. The statements in this survey were reviewed by health care professionals and their recommendations for alterations were considered. The fifty statements were then randomly ordered to finalize the survey. This assessment was scored by the number of correct responses the participant provides. A high score therefore correlated with a higher level of knowledge of sexuality. The validity and reliability of this sexuality knowledge assessment will be explored in this study. Internal reliability will be assessed and validity will be explored by determining the relationship between this assessment and the other tools used in this study.

**Procedure**

One thousand registered occupational therapists were mailed the four parts of the survey: a demographic questionnaire, the 14 statements that compromise the Survey of Attitudes towards the Sexuality of Adults with Disabilities (Guest & Kopp Miller, 1997), the SABS (Reynolds & Magnan, 2005) and a sexual knowledge assessment. Included in the survey was a letter of cover letter and a self-addressed stamped envelope. A reminder postcard was mailed after three weeks to all of the occupational therapists.
Results

Demographic Information

One thousand surveys were mailed to occupational therapists in Ohio and, of these, 971 surveys reached the participants. There were 251 surveys returned providing a response rate of 26%. Fourteen surveys were excluded due to the surveys being returned blank or with little information. Therefore, data analysis was conducted on a total of 237 surveys. Of these 237 surveys any incomplete data were entered as missing data. The data gathered were analyzed using SPSS for Windows Statistical Software. An alpha level of .05 was used.

The following information was gathered from the demographic questionnaire portion of the survey. The ages of the participants ranged from 24 to 70 ($M = 41.46; SD = 10.10$). Ninety-three percent of the participants were female, 74% of the participants were married, 17% were single, and 8% were divorced. Sixty-four percent of the participants had received a bachelor’s degree in occupational therapy and 35% reported having a master’s degree in occupational therapy. Sixty-five percent of the participants reported discussing the topic of sexuality in their occupational therapy curriculum. The mean amount of time that was spent on sexuality in the participants’ curriculum was 4.51 hours ($SD = 4.97$). The total length of time that the participants reported having practiced as an occupational therapists ranged from 12 to 576 months ($M = 182.58; SD = 117.10$). The mean length of time that the participants had been working with individuals with physical disabilities was 161.56 months ($SD = 112.75$). The percentage of the day that participants reported working with clients with physical disabilities was a mean of 63.

Only 31% of participants reported actually addressing sexuality with patients but a total of 89% reported that they believed that addressing sexuality was a role for occupational therapy. Participants were asked to explain their answer to whether or not they believed that addressing sexuality was a role for occupational therapy. Eight-nine percent ($n = 211$) provided a comment with numerous participants provided more than one comment. There were a wide range of explanations provided. A common
reoccurring theme among 43% (n = 90) of participants who provided a comment was that sexuality was an important component of life, an occupation, a life role, and simply that it is an activity of daily living and therefore it is within our scope of practice.

Thirteen percent (n = 28) of therapists felt that the appropriateness for discussing sexuality issues depended on the setting, the diagnosis and the patient. There were mixed opinions when it came to the appropriateness of the setting. Some participants felt that sexuality is not appropriate for the school settings, where others felt that aspects such as physical boundaries, feelings, behaviors, and possibly personal exploration could be addressed. In acute care settings some participants felt that their patients were more worried about basic activities of daily living than sexuality and time constraints did not allow for enough rapport to be built in order to address this issue. Others felt that this is an important setting, especially when the patient has a new diagnosis. Some participants felt that this is not appropriate with the geriatric population in long term care settings because the participants felt this was not a priority for this population. A total of twelve participants (1%) felt that sexuality was not a priority for their patients and other basic activities of daily living should be the focus of occupational therapy intervention.

Twenty-one percent (n = 45) of participants provided specific diagnoses in which sexuality issues should be addressed with. These included orthopedic conditions, spinal cord injury, cerebral vascular accidents, Parkinson’s disease, coronary artery bypass grafts, back conditions, multiple sclerosis, Guillain Barre, chronic pain, traumatic brain injuries, and chronic obstructive pulmonary disorder. There were numerous ways reported that occupational therapists could address sexuality with these patients, such as maintaining precautions, restrictions, donning contraceptives, positioning, energy conservation, physical conditioning, strength, range of motion, safety, compensatory techniques and providing additional or community resources.

Three participants stated that the topic of sexuality has never been brought up throughout their careers. Ten participants reported that they were not comfortable discussing sexuality or needed more education and training. Others (n = 13) reported feeling that the patients should discuss these issues with
the medical doctor, psychologist, social worker, or other medical professionals. One participant felt that physicians should handle the medical aspect, psychologists should handle the psychosocial aspect and occupational therapists should handle the functional aspect of sexuality. Another participant stated that if occupational therapists do not address this issue, he/she was not sure who else would and another felt that we may be the only professionals to address this issue despite its importance.

Assessment Scales

The reliability of the Survey of Attitudes toward the Sexuality of Adults with Disabilities (SASAD) (Guest & Kopp Miller, 1997) was measured using a Cronbach’s coefficient alpha statistic. With all 14 items included the coefficient alpha was .83. The highest possible score on the SASAD was a 70. The mean score was 49.29 (SD = 6.96). This indicated a slightly positive attitude regarding the sexual rehabilitation of adults with disabilities. The mean scores and standard deviations for each item of the SASAD (Guest & Kopp Miller, 1997) are located in Table 1.

The reliability of the Sexuality Attitudes and Beliefs Survey (SABS) (Reynolds & Magnan, 2005) was also measured using a Cronbach’s coefficient alpha statistic, with the coefficient alpha of .79. For the SABS (Reynolds & Magnan, 2005), the highest possible score was a 72. The mean score was 41.70 (SD = 8.58) indicating slightly positive attitudes and beliefs of addressing sexuality in rehabilitation. The mean scores and standard deviations for each of the 12 items of the SABS (Reynolds & Magnan, 2005) are located in Table 2.

For the sexual knowledge assessment the highest possible score was a 50. The mean score was a 38.15 (SD = 2.99) indicating a moderately high level of sexual knowledge of the participants. The three items of the sexual knowledge assessment that received the highest number of correct responses were “Only men are capable of having multiple orgasms,” “Swinging refers to married couples exchanging sexual partners with other married couples with the knowledge and consent of all involved,” and “Untreated gonorrhea can lead to sterility in women.” The three items that received the lowest number of correct responses were “More than 10% of women over age 65 report having sex at least once a
week,” “There are over 3 million abortions performed annually in the United States,” and “About 50% of all arrests for sexual offenses are for exhibitionism.” The mean scores of total percentages of correct and the standard deviations for each of the 50 items of the sexual knowledge assessment are located in Table 3.

It was hypothesized that there would be a relationship between sexual attitudes towards individuals with disabilities, sexual attitudes in general and the level of sexual knowledge of occupational therapists. Correlations between the scales were assessed by using a two-tailed Pearson correlation. This was done to determine the relationship between the SASAD (Guest & Kopp Miller, 1997) and the SABS (Reynolds & Magnan, 2005), the SASAD (Guest & Kopp Miller, 1997) and the sexual knowledge assessment, as well as the SABS (Reynolds & Magnan, 2005) and the sexual knowledge assessment. A significant correlation of .63 (p < .05) was found between the SASAD (Guest & Kopp Miller, 1997) and the SABS (Reynolds & Magnan, 2005). This correlation indicates that participants with a more positive attitude regarding the sexuality of adults with disabilities also have more positive attitudes and beliefs regarding sexuality in general. No other significant correlations were found between the SASAD (Guest & Kopp Miller, 1997) and the sexual knowledge assessment or the SABS (Reynolds & Magnan, 2005) and the sexual knowledge assessment. This lack of significant correlations indicate that the sexual knowledge of the participants in this study did not influence the attitudes regarding the sexuality of adults with disabilities or the attitudes and beliefs of sexuality in general.

Additional Comparisons

Using questions from the demographic portion of the questionnaire, a comparison between addressing sexuality in practice and sexual attitudes and knowledge was also explored. A significant difference with t = 5.55 (p > 0.05) was found between scores on the SASAD (Guest & Kopp Miller, 1997) and whether the participants believed that sexuality should be addressed in occupational therapy practice. This finding indicates that occupational therapists with a more positive attitude towards the
sexuality of adults with disabilities are more likely to believe that this is a role for occupational therapists. There was also a significant difference between scores on the SASAD (Guest & Kopp Miller, 1997) and whether the participant addressed sexuality with his/her patients with t = 4.54 (p > 0.05). This finding indicates that occupational therapists with a more positive attitude towards the sexuality of adults with disabilities are more likely to address sexuality issues in practice. A significant difference with t = 5.24 (p > 0.05) was also found between scores on the SABS (Reynolds & Magnan, 2005) and whether the participant believed that sexuality is a role for occupational therapy. This indicates that participants with more positive attitudes toward sexuality in general are more likely to believe that sexuality is an area that should be addressed by occupational therapists. A significant difference on scores of the SABS (Reynolds & Magnan, 2005) and whether the participant addressed sexuality with his/her patients with t = 9.63 (p > 0.05) was also found. This finding indicates that participants with more positive attitudes toward sexuality in general are more likely to address sexuality with their patients.

Additional group comparisons were conducted although no significant findings were found. There was no correlation between the sexual knowledge of the participants and whether they believe that sexuality is an area that should be addressed by occupational therapists (t = 0.34, p > 0.05). There was also no correlation between the knowledge surrounding sexuality of the participants, as measured by the sexual knowledge assessment and their attitudes regarding the sexuality of adults with disabilities (t = 0.92, p > 0.05) or sexuality in general (t = 0.85, p > 0.05). There was no correlation between the sexual knowledge of the participants and whether they address sexuality with their patients (t = 0.27, p > 0.05). Additionally, there was no correlation between whether sexuality was addressed in the participants’ occupational therapy curriculum and the sexual knowledge of the participant (t = 0.71, p > 0.05).

Discussion

The purpose of this study was to investigate the relationship between sexual attitudes towards individuals with disabilities, sexual attitudes in general and the level of knowledge of occupational
Sexual Attitudes

therapists. Being that this study was a follow-up study to one conducted ten years ago, it also investigated whether there were changes in attitudes, sexual knowledge, and involvement of sexuality issues in occupational therapy has changed over the past decade.

This study found that the attitudes of the participants regarding sexuality in general were slightly higher than neutral. It was also found that the attitudes of participants regarding the sexuality of adults with disabilities were slightly higher than neutral. This is consistent with the findings of Guest and Kopp Miller (1997) a decade ago. These findings suggest that the attitudes of occupational therapists towards the sexuality of adults with disabilities have remained consistent over the last ten years. These findings were also consistent with the findings of Conine, Christie, Hammond, and Smith (1979) where they also found that occupational therapists had positive attitudes towards the sexuality of patients.

As in past studies, in the current study the participants were questioned on whether they felt that addressing sexuality was a role of occupational therapy and if they address it with their patients. In the study conducted by Penna and Kieron (2000) the majority of respondents believed that sexuality was an appropriate domain for occupational therapy. Guest and Kopp Miller (1997) also reported that the participants felt that the inclusion of sexuality into practice was important, yet participants were reluctant to address it. Similar findings were indicated in this study with a total of 89% of participants reported that they believed that addressing sexuality is a role for occupational therapy but only 31% reported actually addressing this issue.

It was found that participants with more positive attitudes on the SASAD (Guest & Kopp Miller, 1997) and SABS (Reynolds & Magnan, 2005) were more likely to believe that addressing sexuality was a role for occupational therapy and were also more likely to address it with their patients. The current study also found that there was a positive correlation between the attitudes regarding the sexuality of individuals with disabilities and the attitudes regarding sexuality in general, according to the results from the SASAD (Guest & Kopp Miller, 1997) and the SABS (Reynolds & Magnan, 2005). According to the current study occupational therapists have positive attitudes towards addressing sexuality issues
with patients and believe that this is a role for occupational therapy, but many are still not addressing it. This is consistent with the findings of the study conducted by Penna and Kieron (2000) discussed previously. The current study found that occupational therapists had positive attitudes towards sexuality but were not addressing it with their patients. Participants in the current study reported a lack of knowledge on the topic of sexuality was a contributing factor for not addressing sexuality during practice.

The results from the sexual knowledge assessment in the current study indicated a moderately high level of sexual knowledge of the participants. Participants answered, on average, 76% of the items correctly. This is an increase in score when compared to Guest and Kopp Miller (1997), although both studies utilized different sexual knowledge assessments. These findings do not support the findings of the studies by Jones, Weerakoon, and Pynor (2005) and Penna and Kiron (2000) where participants reported a lack of knowledge in the area of sexuality. No correlation was found between the level of sexual knowledge and the attitudes regarding the sexuality of individuals with disabilities or attitudes regarding sexuality in general. This is a contradictory finding to Guest and Kopp Miller (1997) where they found that participants with higher scores on the sexual knowledge assessment were more likely to have more positive attitudes regarding the sexuality of individuals with disabilities. The contradiction could have also occurred due to the two studies using different scales to measure sexual knowledge.

Implications for Occupational Therapy

Previous research has shown that patients feel there is a need for sexuality to be addressed after a disability (McAlonan, 1995). Our research has shown that occupational therapists have positive attitudes regarding sexuality and believe that it is in our scope of practice. The outcomes of the current study have implications for occupational therapy as a profession and occupational therapy practitioners. One implication of this study on the field of occupational therapy is that as a profession we need to advocate for the involvement of sexuality within our practice. Advocating can be done through additional articles in *OT Practice* on the inclusion of sexuality into occupational therapy practice. The knowledge, attitudes
Sexual Attitudes

and beliefs all support this role for occupational therapist but still it is not being addressed. By advocating for more inclusion of sexuality into treatment will ensure our patients are receiving the holistic care they deserve.

Some occupational therapy practitioners reported that there was not enough training and education in the areas of sexuality for them to effectively address this topic with their patients. Specialized continuing education classes, personal research, or facility in-services needs to be provided to educate, train, and encourage the inclusion of sexuality into occupational therapy practice. Topic areas that should be addressed include techniques to begin a discussion about sexuality, common diagnoses that will affect sexuality, intervention techniques, and information to provide to patients regarding sexuality. Another way to increase the knowledge of occupational therapists on the topic of sexuality is to increase the amount that this topic is addressed in occupational therapy curriculums. The same topic areas stated above should be included into the curriculums.

Limitations

The first limitation of this study was the use a survey to collect data. Survey research has many advantages such as the ability to reach a large number of respondents with a relatively minimal expenditure, to collect data on numerous variables, and the opportunity for participants to remain anonymous. Even with these advantages, survey research can be limited by participant response bias. Bias may result from participants being unable to recall information accurately, participants interpreting the meaning of a question differently than intended, or response choices that do not accurately express participants’ experiences or opinions.

This study was limited by the scale that was used to measure the sexual knowledge of the participants. This assessment was created due to the lack of up-to-date sexual knowledge assessments available. There are currently no reliability or validity data on this sexual knowledge assessment. There have been no other studies conducted using the same sexual knowledge assessment, therefore comparing results of sexual knowledge to those of other studies may pose challenges.
Addition limitations could include the population the survey was distributed to and length of the survey. Participants for this survey were only solicited from the state of Ohio. Also, this survey included four portions: demographic questionnaire, SASAD (Guest & Kopp Miller, 1997), SABS (Reynolds & Magnan, 2005), and the sexual knowledge assessment. In seeing the length of this survey, participants might have rushed through it or may have not completed it due to feeling that it was too time consuming.

Lastly, the subject matter of this survey may have posed a limitation. Sexuality is a sensitive subject and may have made certain participants uncomfortable. Being that sexuality is a sensitive topic, this study was only able to assess the attitudes and knowledge of those individuals who were willing to discuss this subject.

*Future Research*

Positive attitudes regarding sexuality of individuals with disabilities, positive sexual attitudes in general and a moderately high level of sexual knowledge were reported. Still only 31% of participants were addressing the topic of sexuality with their patients. Research needs to be conducted to determine the reason why participants are not addressing this topic with their patients.

This research study was only conducted in the Midwest region of the United States, specifically the state of Ohio. Additional research should be conducted on a national level to ensure adequate representation of different regions and different cultures throughout the United States.

Another possible area for future research would be to investigate what specific knowledge occupational therapists feel is required in order for them to address sexuality with their patients. This study found that occupational therapists have a good level of knowledge regarding sexuality in general. Still many participants stated not have enough training and knowledge in the area to address sexuality with their patients. It would be beneficial to investigate what knowledge is required for the inclusion of sexuality into occupational therapy practice in order to better provide this training and education to practitioners.
This study found that there was a positive correlation between the attitudes regarding the sexuality of individuals with disabilities and the attitudes regarding sexuality in general, according to the SASAD (Guest & Kopp Miller, 1997) and the SABS (Reynolds & Magnan, 2005). This study also found that participants with a more positive attitude on both of these scales were more likely to believe that addressing sexuality is a role for occupational therapy and were more likely to address it with their patients. In this study there was no correlation found between the level of sexual knowledge of the participants and their attitudes surrounding sexuality or whether they addressed this topic with their patients or not. This study found that the majority of participants did believe that addressing sexuality is a role for occupational therapy but most did not address it with their patients. These results suggest that occupational therapy as a profession needs to advocate for the inclusion of sexuality in practice in order for our patients to receive the holistic care they desire and deserve. Additionally, more training and education needs to be provided to occupational therapy practitioners regarding addressing sexuality issues and concerns with patients.
References


Friedman, J. D. (1997). Sexual expression, the forgotten component of ADL. *OT Practice, 2*(1), 20-25.


Lief, H. I., & Reed, D. M. (1972). *Sex knowledge and attitude test*. Philadelphia: Center for the Study of Sex Education in Medicine, University of Pennsylvania, School of Medicine.


Appendix A

Informed Consent Letter

Dear Colleague:

You were selected as part of a random sample of currently practicing occupational therapists to participate in a survey regarding your attitude toward sexuality in regards to persons with disabilities. I am conducting this study in fulfillment of the requirements for my Doctoral degree in Occupational Therapy at the University of Toledo Health Science Campus. The results from this study will be used for research purposes only.

The enclosed questionnaire will take approximately 15 minutes of your time. It is my intention to advance the knowledge of sexual attitudes and their effects on treatment. This is an area that I feel is important to our field and yet it is relatively unexplored.

Your participation in this study is voluntary and anonymous. Your reply will be held in the strictest confidence, so please do not place your name or any other identifying information on the questionnaire. By completing this survey you are implying your consent to participate in this study. Please return the completed questionnaire by ______________________ in the self-address stamped envelope provided.

If you have any questions or concerns regarding this survey or its contents, please call Nicole Stanger at (419) 215-8297 or Barbara Kopp Miller at (419) 383-4289.

Your time and assistance is greatly appreciated.

Sincerely,

Barbara Kopp Miller, Ph.D
Principal Investigator

Nicole Stanger, OTDS
Co-Investigator
Dear Colleague:

This letter is to remind you that you were selected as part of a random sample of currently practicing occupational therapists to participate in a survey regarding your attitude toward sexuality in regards to persons with disabilities. I am conducting this study in fulfillment of the requirements for my Doctoral degree in Occupational Therapy at the University of Toledo Health Science Campus. The results from this study will be used for research purposes only.

The questionnaire will take approximately 15 minutes of your time. It is my intention to advance the knowledge of sexual attitudes and their effects on treatment. This is an area that I feel is important to our field and yet it is relatively unexplored.

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Your time and assistance is greatly appreciated.

Sincerely,

Barbara Kopp Miller, Ph.D  
Principal Investigator

Nicole Stanger, OTDS  
Co-Investigator
Demographic Questionnaire

1. Age: _____
2. Gender: Male_____ Female_____
3. Marital Status: Single_____ Married_____ Divorced_____ Widowed_____ 
4. What type of occupational therapy degree do you hold?
   Bachelor_____ Masters_____ Doctorate_____ 
5. How long have you been an occupational therapist? (years & months) _____
6. What type of setting do you currently work in the majority of the time?
   __In-patient  __Out-patient  __Skilled-Nursing Facility  __Schools  __Other(please state)________ 
7. What percentage of your day do you work with patients with physical disabilities? ______
8. How long have you worked with clients with physical disabilities? (years & months) ______
9. Was sexuality covered in your occupational therapy education? __Yes  __No
   If yes, how many hours were dedicated to sexuality? ______
10. Do you address the issue of sexuality with your patients? __Yes  __No
11. Do you believe addressing sexuality is a role for occupational therapy? __Yes  __No
   Please explain your answer ______________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

Please circle the amount of agreement as appropriate to the following 14 statements. Please be sure to answer every question.

1. Sexuality is an important dimension of health care and rehabilitation process.
   Strongly Disagree 1 2 3 4 5 Strongly Agree
2. Sexuality and sex drive remain intact, although physical disability or chronic illness may impose alterations in sex acts.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

3. In assessing a patient for occupations of daily living, all aspects should be considered: physical, vocational, recreational, as well as sexual.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

4. In evaluating an adult who is chronically ill or disabled for occupations of daily living, therapists should ask routine questions concerning the patient’s sexual history.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

5. Probing into the sex lives of a person who is disabled would be a source of irritation or embarrassment.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

6. History taking and discussions of sexuality should be done within the context of the patient’s total problem.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

7. Sexual rehabilitation should not be encouraged in the hospital.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

8. Information on sexuality should be made available to patients.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

9. Patients in occupational therapy have questions related to sexuality and their disability or illness.

   Strongly Disagree  1  2  3  4  5  Strongly Agree

10. Medical aspects of sexuality should be integrated into the basic occupational therapy curricula of schools.

    Strongly Disagree  1  2  3  4  5  Strongly Agree

11. Rehabilitation team members should try discussing sexuality and sexual functioning with patients who have disabilities or a chronic illness and with colleagues.

    Strongly Disagree  1  2  3  4  5  Strongly Agree
12. Occupational therapists should not become involved in the sexual aspects of rehabilitation of patients with disabilities.

   Strongly Disagree 1 2 3 4 5 Strongly Agree

13. Occupational therapists should leave the discussion of sexuality to other rehabilitation team members.

   Strongly Disagree 1 2 3 4 5 Strongly Agree

14. Most occupational therapists do not know enough about the medical aspects of sexuality and sexual functioning.

   Strongly Disagree 1 2 3 4 5 Strongly Agree

Please circle the amount of agreement as appropriate to the following 12 statements. Please be sure to answer every question.

1. Discussing sexuality is essential to a patient’s health outcome.

   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

2. I understand how my patient’s disease and treatments might affect his/her sexuality.

   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

3. I am uncomfortable talking about sexual issues.

   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

4. I am more comfortable talking about sexual issues with my patients than are most of the occupational therapists I work with.

   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

5. Most hospitalized patients are too sick to be interested in sexuality.

   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

6. I make time to discuss sexual concerns with my patients.

   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

7. Whenever patients ask me a sexually related question, I advise them to discuss the matter with their physician.

   Strongly Disagree 1 2 3 4 5 6 Strongly Agree
8. I feel confident in my ability to address patients’ sexual concerns.

   Strongly Disagree  1  2  3  4  5  6  Strongly Agree

9. Sexuality is too private an issue to discuss with patients.

   Strongly Disagree  1  2  3  4  5  6  Strongly Agree

10. Giving a patient permission to talk about sexual concerns is an occupational therapist’s responsibility.

    Strongly Disagree  1  2  3  4  5  6  Strongly Agree

11. Sexuality should be discussed only if initiated by the patient.

    Strongly Disagree  1  2  3  4  5  6  Strongly Agree

12. Patients expect occupational therapists to ask about their sexual concerns.

    Strongly Disagree  1  2  3  4  5  6  Strongly Agree

Please circle True or False for the following 50 statements. Please be sure to answer every question.

   True / False  1. Autoeroticism is sexual self-stimulation, for example, masturbation.

   True / False  2. A violent home environment and a hostile masculine personality are two factors that predispose men to engage in sexual coercion of women.

   True / False  3. Herpes simplex virus 1 (responsible for cold sores) can not be transmitted to the genitals during oral genital sex.

   True / False  4. About 50% of women with spinal cord injuries are able to have orgasms from stimulation of genitals.

   True / False  5. Dysmenorrhea is defined as painful menstruation.

   True / False  6. Available data does not point to any single factor as a cause of homosexuality.

   True / False  7. Only men are capable of having multiple orgasms.

   True / False  8. Today the majority of Americans approve of extramarital sex.

   True / False  9. A transsexual is a person who believes he/she is trapped in the body of the other gender.
True / False 10. Hypothalamus, pituitary glands and gonads all influence sexual behavior.

True / False 11. About one out of five stranger rapes are reported to the police.

True / False 12. More than 10% of women over age 65 report having sex at least once a week.

True / False 13. Birth control pills work mainly by preventing ovulation.

True / False 14. Most divorced women, but fewer widowed women, return to having an active sex life.

True / False 15. Approximately 13% of women experience postpartum depression.

True / False 16. For most children, the major source of sex information is the mother.

True / False 17. Research shows that there is a difference in the adjustment and mental health of children raised in a homosexual family when compared to children raised in a heterosexual family.

True / False 18. Erection in a male is produced by a simple spinal reflex.

True / False 19. Female genital cutting (FGC) is no longer a worldwide sexual health controversy.

True / False 20. The majority of women do not continue to engage in sexual activity after menopause.

True / False 21. Approximately 80% of breast lumps are benign.

True / False 22. For severe cases of erectile disorder, surgery can be performed to implant a prosthesis into the penis.

True / False 23. Swinging refers to married couples exchanging sexual partners with other married couples, with the knowledge and consent of all involved.

True / False 24. At least 2/3 of parents and high school students support programs which make condoms available in schools.

True / False 25. Masturbation is rare among married adults

True / False 26. Primetime television programs in the U.S. feature an average of 10 instances of sexual behavior an hour.

True / False 27. Many people in the United States feel that a lesbian family or a gay family is a damaging setting for children to grow up in.

True / False 28. At least ¾ of Americans engage in pre-marital sex.
29. About one in nine American women will have breast cancer at some time in their lives.

30. Sex hormones are manufactured by endocrine glands.

31. Pheromones are biochemicals secreted outside the body that may serve a role as sex attractants.

32. There are two strains of the HIV virus, although one of them is found almost exclusively in Africa.

33. In general, the frequency of marital intercourse declines with age.

34. It is rare to find a transvestite who is heterosexually married.

35. Vaginal deliveries are not possible for pregnant women with spinal cord injuries.

36. By age seven, 30% of American children understand genital differences between male and female.

37. The majority of men with spinal cord injury are unable to have an erection.

38. Many African Americans see AIDS as a planned strategy to kill African Americans.

39. More than half of all cases of Chlamydia infection are asymptomatic.

40. There are over 3 million abortions performed annually in the United States.

41. Many medications used to treat erectile dysfunction (e.g., Viagra) are not recommended for men who take medication for a heart condition.

42. During menopause women are no more vulnerable to infection than women who are not experiencing menopause.

43. Condoms and vasectomy are two highly effective methods of birth control that can be used by men.

44. About 50% of all arrests for sexual offenses are for exhibitionism.

45. Hepatitis B is more common than most people think because it receives relatively little publicity compared with AIDS and herpes.

46. Untreated gonorrhea can lead to sterility in women.
True / False 47. More than 60% of men between ages 27-38 report having sex at least once a week.

True / False 48. There are significant health benefits to circumcision.

True / False 49. Male to female ratio of arrests for voyeurism or “peeping” is around 9:1.

True / False 50. Testicular cancer is rare in men between the ages of 29-35.

Thank you for taking the time to fill out this survey.
Table 1

Mean Scores of Individual Items on the Survey of Attitudes toward the Sexuality of Adults with Disabilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean Score</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sexuality is an important dimension of health care and rehabilitation process.</td>
<td>3.92</td>
<td>0.95</td>
</tr>
<tr>
<td>2. Sexuality and sex drive remain intact, although physical disability or chronics illness may impose alterations in sex acts.</td>
<td>4.12</td>
<td>0.97</td>
</tr>
<tr>
<td>3. In assessing a patient for occupations of daily living, all aspects should be considered: physical, vocational, recreational, as well as sexual.</td>
<td>3.81</td>
<td>1.07</td>
</tr>
<tr>
<td>4. In evaluation an adult who is chronically ill or disabled for occupations of daily living, therapist should as routine questions concerning the patient’s sexual history.</td>
<td>3.03</td>
<td>1.11</td>
</tr>
<tr>
<td>5. Probing into the sex lives of a person who is disabled would be a source of irritation of embarrassment.</td>
<td>2.87*</td>
<td>1.02</td>
</tr>
<tr>
<td>6. History taking and discussion of sexuality should be done within the context of the patient’s total problem.</td>
<td>4.08</td>
<td>0.89</td>
</tr>
<tr>
<td>7. Sexual rehabilitation should no be encouraged in the hospital.</td>
<td>3.55*</td>
<td>1.04</td>
</tr>
<tr>
<td>8. Information on sexuality should be made available to patients.</td>
<td>4.64</td>
<td>0.64</td>
</tr>
<tr>
<td>9. Patients in occupational therapy have questions related to sexuality and their disability or illness.</td>
<td>3.68</td>
<td>1.05</td>
</tr>
<tr>
<td>10. Medical aspects of sexuality should be integrated into the basic occupational therapy curricula of schools.</td>
<td>4.19</td>
<td>0.88</td>
</tr>
<tr>
<td>11. Rehabilitation team members should try discussing sexuality and sexual functioning with patients who have disabilities or chronic illness and with colleagues.</td>
<td>3.57</td>
<td>1.02</td>
</tr>
<tr>
<td>12. Occupational therapists should not become involved in the sexual aspects of rehabilitation of patients with disabilities.</td>
<td>3.94*</td>
<td>0.95</td>
</tr>
<tr>
<td>13. Occupational therapists should leave the discussion of sexuality to other rehabilitation team members.</td>
<td>3.95*</td>
<td>0.94</td>
</tr>
<tr>
<td>14. Most occupational therapists do not know enough about the medical aspects of sexuality and sexual functioning.</td>
<td>3.89</td>
<td>0.98</td>
</tr>
</tbody>
</table>

Scale: 1=Strongly Disagree to 5=Strongly Agree
* Notes items that were reverse scored.
Table 2

Mean Scores of Individual Items on the Sexuality Attitudes and Beliefs Survey

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean Score</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discussing sexuality is essential to a patient’s health outcome.</td>
<td>3.68</td>
<td>1.30</td>
</tr>
<tr>
<td>2. I understand how my patient’s disease and treatments might affect his/her sexuality.</td>
<td>3.71</td>
<td>1.26</td>
</tr>
<tr>
<td>3. I am uncomfortable talking about sexual issues.</td>
<td>3.49*</td>
<td>1.46</td>
</tr>
<tr>
<td>4. I am more comfortable talking about sexual issues with my patients than are most of the occupational therapists I work with.</td>
<td>3.41</td>
<td>1.39</td>
</tr>
<tr>
<td>5. Most hospitalized patients are too sick to be interested in sexuality.</td>
<td>3.80*</td>
<td>1.36</td>
</tr>
<tr>
<td>6. I make time to discuss sexual concerns with my patients.</td>
<td>2.39</td>
<td>1.36</td>
</tr>
<tr>
<td>7. Whenever patients ask me a sexually related question, I advise them to discuss the matter with their physician.</td>
<td>4.03*</td>
<td>1.41</td>
</tr>
<tr>
<td>8. I feel confident in my ability to address patients’ sexual concerns.</td>
<td>2.90</td>
<td>1.37</td>
</tr>
<tr>
<td>9. Sexuality is too private an issue to discuss with patients.</td>
<td>4.68*</td>
<td>1.20</td>
</tr>
<tr>
<td>10. Giving a patient permission to talk about sexual concerns is an occupational therapist’s responsibility.</td>
<td>4.29</td>
<td>1.27</td>
</tr>
<tr>
<td>11. Sexuality should be discussed only if initiated by the patient.</td>
<td>3.50*</td>
<td>1.36</td>
</tr>
<tr>
<td>12. Patients expect occupational therapists to ask about their sexual concerns.</td>
<td>1.82</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Scale: 1=Strongly Disagree to 6=Strongly Agree
*Notes items that were reversed scored.
Table 3

**Mean Scores of Individual Items on the sexual knowledge assessment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Autoeroticism is sexual self-stimulation, for example, masturbation.</td>
<td>80</td>
</tr>
<tr>
<td>2. A violent home environment and hostile masculine personality are two factors that predispose men to engage in sexual coercion of women.</td>
<td>86</td>
</tr>
<tr>
<td>3. Herpes simplex virus 1 (responsible for cold sores) can not be transmitted to the genitals during oral genital sex.</td>
<td>81</td>
</tr>
<tr>
<td>4. About 50% of women with spinal cord injuries are able to have orgasms from stimulation of genitals.</td>
<td>84</td>
</tr>
<tr>
<td>5. Dysmenorrhea is defined as painful menstruation.</td>
<td>73</td>
</tr>
<tr>
<td>6. Available data does not point to any single factor as a cause of homosexuality.</td>
<td>95</td>
</tr>
<tr>
<td>7. Only men are capable of having multiple orgasms.</td>
<td>100*</td>
</tr>
<tr>
<td>8. Today the majority of Americans approve of extramarital sex.</td>
<td>83</td>
</tr>
<tr>
<td>9. A transsexual is a person who believes he/she is trapped in the body of the other gender.</td>
<td>77</td>
</tr>
<tr>
<td>10. Hypothalamus, pituitary glands and gonads all influence sexual behavior.</td>
<td>92</td>
</tr>
<tr>
<td>11. About one out of five stranger rapes are reported to the police.</td>
<td>79</td>
</tr>
<tr>
<td>12. More than 10% of women over age 65 report having sex at least once a week.</td>
<td>11**</td>
</tr>
<tr>
<td>13. Birth control pills work mainly by preventing ovulation.</td>
<td>79</td>
</tr>
<tr>
<td>14. Most divorced women, but fewer widowed women, return to having an active sex life.</td>
<td>79</td>
</tr>
<tr>
<td>15. Approximately 13% of women experience postpartum depression.</td>
<td>87</td>
</tr>
<tr>
<td>16. For most children, the major source of sex information is the mother.</td>
<td>58</td>
</tr>
<tr>
<td>17. Research shows that there is a difference in the adjustment and mental health of children raised in a homosexual family when compared to children raised in a heterosexual family.</td>
<td>76</td>
</tr>
<tr>
<td>18. Erection in a male is produced by a simple spinal reflex.</td>
<td>41</td>
</tr>
<tr>
<td>19. Female genital cutting (FGC) is no longer a worldwide sexual health controversy.</td>
<td>92</td>
</tr>
<tr>
<td>20. The majority of women do not continue to engage in sexual activity after menopause.</td>
<td>97</td>
</tr>
<tr>
<td>21. Approximately 80% of breast lumps are benign.</td>
<td>78</td>
</tr>
<tr>
<td>22. For severe cases of erectile disorder, surgery can be performed to implant prosthesis into the penis.</td>
<td>93</td>
</tr>
<tr>
<td>23. Swinging refers to married couples exchanging sexual partners with other married couples, with the knowledge and consent of all involved.</td>
<td>99*</td>
</tr>
<tr>
<td>24. At least 2/3 of parents and high school students support programs which make condoms available in schools.</td>
<td>52</td>
</tr>
<tr>
<td>25. Masturbation is rare among married adults.</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>26.</td>
<td>Primetime television programs in the U.S. feature an average of 10 instances of sexual behavior an hour.</td>
</tr>
<tr>
<td>27.</td>
<td>Many people in the United States feel that a lesbian family or a gay family is a damaging setting for children to grow up in.</td>
</tr>
<tr>
<td>28.</td>
<td>At least ¾ of Americans engage in pre-marital sex.</td>
</tr>
<tr>
<td>29.</td>
<td>About one in nine American women will have breast cancer at some time in their lives.</td>
</tr>
<tr>
<td>30.</td>
<td>Sex hormones are manufactured by endocrine glands.</td>
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<td>31.</td>
<td>Pheromones are biochemicals secreted outside the body that may serve a role as sex attractants.</td>
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<td>There are two strains of the HIV virus, although one of them is found almost exclusively in Africa.</td>
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<td>33.</td>
<td>In general, the frequency of marital intercourse declines with age.</td>
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<td>34.</td>
<td>It is rare to find a transvestite who is heterosexually married.</td>
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<td>37.</td>
<td>The majority of men with spinal cord injury are unable to have an erection.</td>
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<tr>
<td>38.</td>
<td>Many African Americans see AIDS as a planned strategy to kill African Americans.</td>
</tr>
<tr>
<td>39.</td>
<td>More than half of all cases of Chlamydia infection are asymptomatic.</td>
</tr>
<tr>
<td>40.</td>
<td>There are over 3 million abortions performed annually in the United States.</td>
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<td>41.</td>
<td>Many medications used to treat erectile dysfunction (e.g., Viagra) are not recommended for men who take medication for a heart condition.</td>
</tr>
<tr>
<td>42.</td>
<td>During menopause women are no more vulnerable to infection than women who are not experiencing menopause.</td>
</tr>
<tr>
<td>43.</td>
<td>Condoms and vasectomy are two highly effective methods of birth control that can be used by men.</td>
</tr>
<tr>
<td>44.</td>
<td>About 50% of all arrests for sexual offenses are for exhibitionism.</td>
</tr>
<tr>
<td>45.</td>
<td>Hepatitis B is more common than most people think because it receives relatively little publicity compared with AIDS and herpes.</td>
</tr>
<tr>
<td>46.</td>
<td>Untreated gonorrhea can lead to sterility in women.</td>
</tr>
<tr>
<td>47.</td>
<td>More than 60% of men between ages 27-38 report have sex at least once a week.</td>
</tr>
<tr>
<td>48.</td>
<td>There are significant health benefits to circumcision.</td>
</tr>
<tr>
<td>49.</td>
<td>Male to female ratio for arrest for voyeurism or “peeping” is around 9:1.</td>
</tr>
<tr>
<td>50.</td>
<td>Testicular cancer is rare in men between the ages of 29-35.</td>
</tr>
</tbody>
</table>

*Notes three statements with the highest percentage correct.
**Notes three statements with the lowest percentage correct.