A DESCRIPTIVE SURVEY TO ASCERTAIN THE ATTITUDES AND KNOWLEDGE OF STAFF NURSES TOWARD HUMAN SEXUALITY

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JANET BARBARA MOUCHÉ, B.S.

DENTON, TEXAS

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CHAPTER 1

INTRODUCTION

Sexuality is a universal human dimension regardless of one's physical or psychological health. "Sexuality can be defined as a basic human characteristic" and "it refers to all those perceptions related to feeling like, acting like, or being recognized as a man or woman" (Dulcey, 1980, p. 61). It is a composite of past and present life experiences and is affected by changes in one's biological, psychological, sociocultural, or spiritual development (Krizinofski, 1973).

Sexual health is recognized today as being an essential component of total health care (Bahr, 1978; Krizinofski, 1973; Mims, 1975; Payne, 1976). Healthy sexuality develops from the integration of "somatic, emotional, intellectual, social and ethical aspects of sexual being and behavior" (Payne, 1976, p. 286). How one behaves sexually may alter his/her life and conversely how one behaves in life may affect his/her sexuality. Interruption or disruption of an individual's sexual health continuum produces psychological and physical ramifications (Whipple & Gick, 1980).

Although nursing supports the "holistic" approach to comprehensive care of clients, sexual health care seldom seems incorporated into this approach (Fontaine, 1976; Mandetta & Woods, 1974; Mims, 1978). The issue of sexuality is either alluded to only when absolutely necessary, ignored, or dismissed entirely.

Research concerned with assessing the attitudes and knowledge of nurses in regards to sexuality is in its infancy. Lief and Payne (1975), deLemos (1977), Mims (1978), and Mandetta and Woods (1974) have described studies specific to this topic but research concerned with staff nurses in secondary and tertiary care settings and their knowledge and attitudes toward sexuality was not elicited.

Problem of Study

Staff nurses care for a variety of clients whose sexual health might be affected by temporary or permanent disorder. Additionally, these same clients require education and/or counseling to insure comprehensive care. Therefore, this study was conducted to address the question:

> What are the existing attitudes and knowledge of staff nurses regarding human sexuality?

Justification of the Problem

Sexuality is acknowledged as a vital part of an individual's total health. It has been well documented that physical and/or psychiatric dysfunction affect a person's sexual wellness. Specific illnesses such as spinal cord injuries, which are usually irreversible, affect body image, self-concept and sexuality (MacRae & Henderson, 1975). Sadoughi, Leshner and Fine (1971) surveyed 34 men and 21 women who had chronic physical disabilities including emphysema, arthritis, stroke and amputation, about their sexual adjustment to their illnesses. Of the subjects, 78% reported a decline in sexual activity and almost half indicated they would have appreciated discussing sexual problems with a member of the hospital staff prior to discharge. Other authors described the sexual difficulties and adjustments patients on dialysis and post coronary must face (Hickman, 1977; Puksta, 1977; Watts, 1976). Additionally, the elderly client and the grieving, depressed client experience alterations in sexuality that require assistance of professionals (Carey, 1975; Yeaworth & Friedeman, 1975).

Although the literature described the effects of illness on a person's sexuality, there was no documented research concerned with whether sexuality was an important part of nursing care. Krozy (1978) stated that nurses

assess problems of breathing, sleeping, and finances but often omit assessing sexuality. Nurses as health care givers are in key positions to provide education and counseling about sexual functioning, but evidence indicates that most nurses have insufficient knowledge of the physiology of sex to equip them for counseling. Many have not identified their own attitudes or values and are not comfortable with their own sexuality (Mandetta & Woods, 1974). Krizinofski (1973) believed that assessment of the nurses' personal attitudes toward sexuality is the most important step in assisting patients with their sexuality in comprehensive nursing care. Hogan (1980), in agreement with Krizinofski, maintained that nurses need knowledge of their subject matter in addition to awareness of beliefs, attitudes and values surrounding sexuality if they are to educate and promote sexual health.

Although sexuality is a topic which is now included in most nursing school curriculums, Fontaine (1976) found that out of 124 faculty instructors surveyed concerning sexuality, 42% believed their own curricula were "fairly inadequate or worse" (p. 176). The education of nurses concerning knowledge and attitudes toward sexuality may be insufficient to provide them with the ability to assist their clients toward wellness.

Conceptual Framework

The conceptual framework of this study was built on the premise that one's knowledge and attitudes influence one's subsequent teaching. Green (1979) stated that attitudes and knowledge have reciprocal relationships. Attitudes can interfere with acquisition of sufficient knowledge, and misinformation may lead to detrimental attitudes related to the subject matter. Fontaine (1976) also described the relationship between attitudes and knowledge as extremely important for the educator. She stated that teachers must have full awareness of their own feelings and attitudes as well as accurate and thorough knowledge before teaching students.

Redman (1980) described a study done in a large metropolitan area to identify reasons why nurses did not teach. Lack of knowledge about content material was identified as one of the major reasons. As Clark (1979) related, educators must have direct knowledge of practice issues and problems associated with subject matter if they are to relay appropriate examples with which the learner should identify. Limited knowledge regarding a subject such as sexuality may cause discomfort to the educator and influence his/her attitudes about actual teaching. Additionally, the quality and validity of knowledge an individual possesses may affect his/her attitude toward the given

topic. Redman (1980) stated that the relationship between knowledge and attitudes is not always predictable as a positive or negative influence.

In contrast to Redman's view, Clark (1979) believed that a predisposed attitude toward a given subject will influence the quantity of knowledge one seeks out about the subject. A positive outlook on an issue will lead one to find as many learning experiences as possible to increase his/her knowledge base whereas a negative attitude will hinder assimilation of new knowledge. Knowles (1978) supported this view and added that past learning and experience build a base to which new learning can be related. Derogatis (1976) said that prevailing attitudes tend to govern the individual's accessibility to new knowledge.

Effective teaching requires a broad knowledge base concerning a topic in order that correct, complete information is imparted. Similarly, an objective, nonjudgmental attitude toward a topic will help prevent biased or prejudiced presentation of the topic. This two-fold task becomes difficult when it concerns a highly controversial topic such as human sexuality which deals with concrete facts as well as feelings and attitudes.

Sexuality is a vast, sensitive and complex subject because of the intertwining of moral, aesthetic and

religious views of individuals (Hogan, 1980). Discomfort with the topic because of unresolved personal feelings threatens the nurse who is called upon to teach about human sexuality. Value judgments may be made unknowingly thus imposing biased attitudes on others (Whipple & Gick, 1980). Therefore, dispensing of comprehensive sexual information may be jeopardized by the educator's own knowledge and attitudes.

Assumptions

The following assumptions were applicable to this survey:

1. Staff nurses had attitudes and knowledge of human sexuality.
2. The respondents answered all sexual knowledge content questions to the best of their ability.
3. The respondents answered attitudinal questions accurately and independent of other respondents.

Research Questions

The following questions were researched in the study:

1. What are the attitudes of staff nurses toward human sexuality?
2. What is the knowledge level of nurses toward human sexuality?

3. What is the relationship between knowledge and attitudes of staff nurses toward human sexuality?

Definition of Terms

The following terms were defined for purposes of this study:

1. Attitudes: A learned, emotional predisposition to react to a concept, object or situation in a characteristic way. In this study the subject's attitude was measured by responses on the Sex Knowledge and Attitude Test (SKAT) (Preliminary, 1972).
2. Human sexuality: That dimension of a human individual which involves the ability to express one's self physically and psychologically to other individuals through the use of one's maleness or femaleness. This includes the developmental, interpersonal and reproductive aspects of one's being.
3. Knowledge: The condition of understanding concepts, information and principles concerning a specified topic. In this study the subject's knowledge was measured by correct answers on the SKAT.
4. Staff nurses: Registered nurses who are employed full time and work with patients in any area of the hospital, with the exception of outpatient clinic nurses and the director of nursing administration.

Limitation

The following limitation was recognized as possibly affecting study results:

A convenience sample of nurses from one private general hospital was included in the study; therefore, results of the survey can only be generalized to the participants of the study.

Summary

Staff nurses in any hospital setting possess individual attitudes and a knowledge level toward human sexuality. These attitudes and knowledge affect the quality and quantity of education and counseling given while caring for patients. This study sought to determine the knowledge level and attitudes of nurses towards human sexuality as well as the relationship between their knowledge and attitudes.

Chapter 2 contains a review of the literature concerning the history of human sexuality, general sexual attitudes and knowledge in the United States and prevailing attitudes and knowledge of nurses toward human sexuality. Chapter 3 presents the procedure for the collection of data. The analysis of data is discussed in Chapter 4, and Chapter 5 concludes the paper with a summary, conclusions, implications and recommendations for further research.

CHAPTER 2

REVIEW OF LITERATURE

The knowledge and attitudes of nurses toward human sexuality may affect the quality of care given to the health seeking client. Both knowledge and attitudes concerning sexuality are influenced by education, social norms and personal experiences. A review of the literature demonstrates varying attitudes and knowledge of sexuality throughout history. The following chapter addresses the historic perspective of human sexuality to the present day, what the prevailing American sexual knowledge and attitudes encompass, what studies reveal about the present knowledge and attitudes of nurses and how the nurses' role regarding sexuality relates to the health seeking client.

Historical Perspective

During the prehistoric times, Stone Age paintings depicted male and female sexual poses apparently symbolizing magical qualities attributed to sex (Hogan, 1980). The Sumerians, earliest builders of the Mesopotamian culture (around 3000-2000 B.C.), recorded their attitudes toward sexuality in their legal codes. Women were considered the

property of men so that many of their laws related to this assumption. For example, the husband had freedom to fornicate outside of marriage but his wife could be put to death for the same action. Marriage was considered to be for procreation, not companionship, and the wife's first duty was to raise children. A sterile marriage was grounds for divorce. Sex was equated with fertility of nature and so was accepted as a fact of life. Homosexuality was clearly practiced and accepted as shown by drawings found related to the times (Bullough, 1976b).

Egyptians considered nudity, youth and sex beautiful especially among men. The penis was greatly admired by ancient Egyptians and was seen characterized in pictures of the god Min. Temple reliefs often portrayed gods with large erect sex organs and the crux ansata, the cross with a handle which was a symbol of sexual union and virility (Cole, 1959). Egypt was essentially a man-centered culture so that most information about sexual practices is from the male point of view. Little information exists about the female sex life. Generally, Egyptians were monogamous, although the law provided for concubines. Adultery by the female was enough reason for divorce and burning at the stake. The Egyptian male was often circumcised for reasons of hygiene and Egyptian girls were also

"circumcised" but for different reasons. This circumcision consisted of resection of the clitoris and labia minora to make orgasm nearly impossible and to deny erotic stimulation (Bullough, 1976b). Overall, the Egyptians were a fairly permissive society with tomb pictures showing heterosexual and homosexual prostitution, oral-genital, anal and bestial sex (Bullough, 1976b; Hogan, 1980).

The ancient Hebrews, founders of Judiasm, were more directly influential in forming western sexual attitudes (Bullough, 1976a). They generally stressed social control of sexual activity, placing a negative value on sex outside of marriage. Adultery was punishable by death. The primary purpose of sex was for procreation and nonprocreative activities such as homosexuality were forbidden. Loss of semen was feared. But the Jews always recognized that sex was more than duty and could coexist with pleasure (Bullough, 1976a; Hogan, 1980; Schulz, 1979). Performance of the "marital act" on Friday night was religious duty according to the Talmud. The Talmud also said that the best way a woman could be certain of having a son was to bring the woman to orgasm before the male achieved it. Jewish law never prohibited pre-marital relations but a virgin bride was prized (Bullough, 1976b).

The Greeks, also forerunners of Western morality, considered sex and beauty as values. Licht (1953) stated

that the whole life of the Greeks was an exultant creed of naked sensuality. It was depicted throughout their art and music. Gods were portrayed as seductive and flirtatious, and myths, such as the story of Oedipus, described fears connected with sexual activity. Masturbation was totally acceptable as a substitute or safety valve created by nature to prevent sexual ailments, suicide, imprisonment and illegitimate motherhood. Homosexuality and bisexuality among the Greeks was common because young men were equated with religion and physical beauty (Lewinsohn, 1958; Licht, 1953). Lesbianism was not characteristic of Greeks but both male and female prostitution was extensively practiced. It is from the Greek female poet Sappho who lived with other women on the island of Lesbos that the term Lesbianism is derived (Hogan, 1980). Women were seen as primarily for procreation and keeping the house and finances. The Greek, Aristotle, regarded woman as different from man in the degree of energy and heat possessed. Since man possessed more heat, he was stronger, therefore superior (Bullough, 1976b; Lewisohn, 1958).

The sexual practices of the Romans differed from the Greeks in that they were more pragmatic than idealistic about sex. Greeks glorified homosexuality while Romans thought of it as commonplace along with pederasty, oral

intercourse and transvestism (Cole, 1959; Hogan, 1980). Prostitution was an old and generally recognized custom in Rome. Romans almost always viewed nakedness as indecent and improper but at the same time they were enthusiastic collectors of naked sculpture (Kiefer, 1953).

Early Christianity was considered a sex negative religion. It sought to attain perfection through renunciation of the world and advocacy of asceticism. Jesus said very little in the Bible about sex except as it dealt with divorce and remarriage, so that Christians focused on celibacy and downgraded sex of any kind. Intercourse was considered evil except in marriage and solely as a means of procreation (Bullough, 1976b; Cole, 1959; Schulz, 1979).

The Middle Ages upheld the ideals of chastity and asceticism but were more concerned with modifying ways and forms of sexual behavior. Marriage, procreation and children were encouraged but all other sex was a sin against nature. Contraception and abortion were forbidden (Hogan, 1980). The body was seen as shameful and was often distorted or caricatured in art to prevent lust of the beholder (Lewinsohn, 1958; Sorokin, 1956). Women were both praised and condemned but misogyny was the prevalent attitude. Not only the clergy but also the medieval medical and scientific writers were prejudiced against women. Galen,

a noted physician, dominated medieval thought with his view that the female was less perfect than the male because she was colder and therefore as a fetus could not project her (sexual) body parts to the outside. His idea that women were men turned inside out was commonly accepted. Menstruation was seen as a cleansing process for the additional digestive by-products women accumulated because of their sedentary lifestyle. Medicine emphasized keeping women under control because of the possibility of somatic changes of sex. If a man allowed a woman any greater degree of equality she might change somatic sex and challenge him for control. In the late Middle Ages, attitudes toward sex were contradictory. Although sexual deviation was associated with heresy and feared and punished, it was encouraged by many institutions in society (Bullough, 1976b).

The Renaissance brought about a period of sexual change with artists portraying the human body in erotic activities (Lewinsohn, 1958) and literature becoming more secular and less religious in orientation. Erotic love making was accepted by the Ranters, an English religious sect, as a form of worship (Schulz, 1979). Sex was openly enjoyed, illegitimacy was accepted, prostitutes and homosexuals were recognized and modesty of dress vanished (Hogan, 1980).

During the 17th and 18th centuries, the Bible began to lose importance as the answer to all questions. With the scientific discoveries of Newton, Descartes and others, the Age of Reason came about and the mystery of sex decreased. Rational sexuality kept emotions and feelings repressed. Passion was not to be openly expressed. In England, John Wesley, leader of the Methodist movement, helped bring about sexual inhibition with his denouncements of the excesses of society. Intercourse was looked down on and homosexuality was punishable by death. Reformation leaders Martin Luther and John Calvin expressed more positive views regarding sex and marriage. Luther saw sex as a fact of life and taught that God ordained that men should marry. Calvin's theology also affirmed sex and marriage as facts of creation. He believed that families were the foundation of a religious community (Cole, 1955; Schulz, 1979).

Sexual restraint had evolved by the early 1800s. Tissot, a Swiss physician of the time, taught that all sexual activity was dangerous because it caused blood to rush to the brain which starved the nerves, making them more likely to be damaged and thus increasing the chances of insanity. Masturbation was also seen as an inciting cause of mental illness. Physicians of the time offered

observations that large numbers of patients in mental institutions masturbated and concluded that this practice was the original cause of their illness (Bullough, 1976a).

The Romantic Era followed with emphasis on emotion and instinct as characterized by music and art. Women were no longer seen as possessions and marriage was seen as a relationship for sex and emotional satisfaction. Thomas Malthus proposed the theory about population growth which influenced the distribution of birth control information. Strong reactions arose from society including the fear that female virtue would disappear (Hogan, 1980). The Victorians, on the other hand, established sexual restraint by denial and suppression of sex drives. Masturbation and frequent coitus were considered lack of self-control. Publicly there was extreme reticence on all matters related to sex but the general picture of Victorian sexuality is that of a highly developed sexual underworld of pornography and prostitution (Mims & Swenson, 1980; Schulz, 1979; Smith, 1975).

In Colonial America sexuality was viewed with less inhibition than in England during the same period. Premarital sex was widespread, but discretion was practiced. Homosexuality was not prevalent despite the increased number of males. Adultery by either partner was considered punishable (Bullough, 1976b).

By the 20th century, sex and sexuality began to emerge from secrecy. This was the result of Sigmund Freud's psychoanalytic theory emphasizing sex as an important factor in human development, as well as the political changes taking place. Women were given the right to vote in 1920 thus ending the sheltered social position they previously occupied. Mass communication and transportation also contributed to changes in sexual mores and attitudes (Hogan, 1980; Mims & Swenson, 1980; Schulz, 1976). Sexual research began escalating with the work of Alfred Kinsey in the early 1940s which dealt primarily with social-psychological sex behavior. Masters and Johnson began systematic study of human sexual responses of the male and female in the early 1950s. Although other sexologists before them made important research contributions, they were the first to elicit facts about the physiology of the human sexual response (Hogan, 1980). Sexuality is viewed more liberally in the 20th century because of the advent of sex therapy, oral contraceptives and intrauterine devices as means of effective birth control. Sex is not seen as merely procreational but viewed as recreational also. The male-female relationship that characterized most of history has altered so that women are more comfortable in demanding a satisfying sex life. Mass communication has brought updated

information on such sex related issues as venereal disease control and provided answers to before unasked questions.

Knowledge and Attitudes in the United States Today

According to the literature, attitudes of Americans toward human sexuality have changed significantly in the past 50 years with greater recognition and acceptance of an individual's choice of his/her own sexual standards. This may be due in part to the widespread media coverage of health care including magazines, books, movies and television shows regarding sexuality. Additionally, matters of social policy such as abortion and contraception relate to sexual behavior. The public has also been made aware of the availability of sex therapy and counseling for sexual problems (Kolodny, Masters, Johnson, & Biggs, 1979).

Woods and Mandetta (1975b) cited a study done by Hunt in 1974 regarding sexual attitudes and behavior of 2,026 persons in 24 cities across the United States. He found that Americans were engaging in a wider variety of sexual activities than they did when studied by Kinsey in the 1940s. The study also showed that an increased number of young persons were more accepting and tolerant of many forms of sexual behavior such as oral sex and heterosexual anal intercourse. Specifically, 84% of the male respondents

thought premarital coitus was acceptable for men and 81% thought it was acceptable for women. Four times as many women and twice as many men today as in the Kinsey era admitted to sexual arousal by erotic material. And almost one-third of the men and a fifth of the women condone mate-swapping. Nearly 90% of men and women under age 35 do not think cunnilingus is wrong (McCary, 1978). Reiss (cited by Green, 1979) asserted that dramatic changes in our sexual lives have occurred in two periods of time in the past century, 1915-1925 and 1965-1975. He related this to the civil rights legislation changes, the women's rights movement and other minority group movements. In a 1963 national study in which he sampled 1,500 adults who were 21 years of age or older he found young people (25 years old) more accepting of premarital sexual permissiveness than the 50 year old persons also studied.

Premarital sexual attitudes and behavior among college students have been studied widely in the past 10-15 years. A 1970 Gallup pole conducted on 55 college campuses demonstrated that 75% of the students (males and females) felt that virginity at the time of marriage is unimportant (McCary, 1978). However, Christensen and Gregg (1970) studied the responses of 360 male and 343 female students to a sex attitude questionnaire and found that 55% of the

males sampled approved of premarital intercourse but 75% of them preferred to marry a virgin. Sorensen, Drusin, Magayna, Yano, and Ley (1976) reported a study of 6,103 unmarried students under 26 years of age regarding premarital sexual behavior. They found a positive relationship between higher socioeconomic class and permissive premarital behavior. They also found a positive relationship between increased age and the proportion of highly active persons. There were no significant differences in male and female responses. Likewise, Bauman and Wilson (1976) studied the premarital sexual attitudes of unmarried undergraduates at a southeastern university from random samples of questionnaires given in 1968 and 1972 during psychology and sociology classes. They found more permissive attitudes toward premarital sexual behavior, fewer differences between men and women and less adherence to the double standard in 1972 as compared to 1968. Snyder and Spreitzer (1976) studied the influence of age on sexual attitudes. The sample was a national probability sample of the United States and included 1,020 respondents under 65 years of age and 235 respondents older than 64 years of age. Attitudes were measured toward premarital sex relations, extramarital relations and homosexuality. Older respondents had the most conservative sexual attitudes with 93% of the females

and 86% of the males over age 64 strongly disapproving of extramarital sex. Homosexuality was strongly disapproved of by both males and females over 65 (92% and 85%, respectively) and by 70% of both males and females under 64.

In 1970 a descriptive survey was conducted by Wilson (1975) concerning selected sexual attitudes and behaviors in the United States. Based on the responses of a self-administered questionnaire of 2,281 persons, approximately 40% rated their own sexual attitudes as liberal while a slight majority rated themselves conservative. Two-thirds of the adults in the sample rejected the statement "First of all, sex is for fun", yet two-thirds agreed that there is a difference between what people would like to do sexually and what they actually do. Regarding masturbation, nearly one in five adults did not express an opinion on the topic, but among those who responded, the responses were evenly divided between acceptance (43%) and non-acceptance (40%). Young and better educated respondents were found to be more accepting. Story (1979) studied the effects of a university human sexuality course on sexual attitudes over a two year period in the mid-1970s. Out of 127 human sexuality class students and 114 control class students who were measured at the beginning of the course, the end of the course and two years later, she found that students

taking the course developed more accepting attitudes than the control group. There were no pretest differences in terms of demographic data or sexual attitudes.

Although sexual attitudes are often measured throughout history by the religious and political dictates of the time, no studies were elicited in the review of literature correlating religion or present day laws with personal attitudes.

The knowledge of Americans regarding sexuality has had little study except for special groups such as health care personnel and students taking specific college courses related to human sexuality. McCreary-Juhasz (1967a) studied 893 entering university students to determine the accuracy and adequacy of their sexual knowledge. A two-part questionnaire concerning sex organ structure and function, physiology and such topics as masturbation, menopause and venereal disease was administered. Results showed that a large majority of students had great gaps in their basic sexual knowledge; 60% of the females and 50% of the males were well informed about menstruation. However, more than two-thirds of the females and one-third of the males had very little information about masturbation. Over 80% of both males and females had inadequate information regarding

venereal disease. Over 80% of all students were well informed concerning contraception and menopause.

Lief and Payne (1975) studied nursing students, graduate nurses, medical students and non-nursing college graduates by means of the Sex Knowledge and Attitudes Test (SKAT) and found the college graduate to be more knowledgeable than any of the other groups. No other studies specific to measurement of knowledge in the general population were found.

Nurses' Knowledge and Attitudes

Only three descriptive research studies were elicited specific to the knowledge and attitudes of nurses toward human sexuality. Payne (1976) studied the knowledge, attitudes and behavior of 107 professional family planning nurses and 64 senior nursing students using the Professional Sexual Role Inventory (PSRI) and the Sex Knowledge and Attitude Test (SKAT). Results indicated a significant positive association by means of correlation coefficient between each of the sex scores for the family planning nurses but correlations for the senior students were not as strong. The masturbation score was the only one that showed a significant positive correlation to all other scores ($p<.01$) suggesting that students who had a more positive attitude toward masturbation were probably more comfortable

with other sexual aspects. A comparison of sexual knowledge and attitudes of 1,774 nursing students and 828 registered nurses by Lief and Payne (1975) indicated that nursing students were more knowledgeable and more liberal on all four attitude scales of SKAT. But both nursing groups scored significantly lower on the knowledge section and were more conservative on the attitude scales than the 1,104 female medical students, 569 female graduate students and 1,243 female college students. McCreary-Juhasz (1967b) also studied the sex knowledge of prospective teachers and graduate nurses using a 30-item multiple choice questionnaire covering such topics as venereal disease, structure and function of the sexual organs, contraception and masturbation. It was administered to 75 graduate nurses, both male and female. Results disclosed that on the average, nurses missed one item in six with two-thirds missing one item in ten. The highest percentage of incorrect responses (31%) concerned questions on homosexuality and masturbation. McCreary-Juhasz (1967b) concluded from her study that nurses do not appear to have complete enough knowledge concerning essential physiological sex information to instruct others.

Others have reported research regarding knowledge and attitudes before and after administration of a human sexuality course. Most studies hypothesized that attitudes

toward sexuality would become more positive while knowledge would increase. This suggests that sexual attitudes of nurses are thought to be conservative and knowledge insufficient. Mims, Yeaworth, and Hornstein (1975) described a five-day human sexuality program offered to health professionals, including 37 nursing students, which was designed to increase sexual knowledge and understanding. Pre and posttesting utilized the Sex Knowledge and Attitude Test (SKAT). All 143 subjects studied showed a significant difference in their pre and posttest scores. The sexual myths, heterosexual and autoeroticism scales were significant ($p=.001$) and the knowledge scores increased significantly for the nursing students.

Mims, Brown, and Lubow (1976) reported on 186 students, 86 of whom were nursing students, who participated in a three-day human sex course. Pre and posttesting was again measured by SKAT. Results indicated no significant change in knowledge scores but there were significant statistical differences on all attitudinal items except the abortion scale. The lack of significant change (increased liberalism) regarding abortion attitudes was felt to be due to the exclusion of the topic during the three day program. In another study of knowledge and attitudes following a human sexuality workshop, Mims (1978) studied 132 subjects of

which 67 (51%) were nurses. The nurse group consisted of practical, diploma, baccalaureate and master's degree nurses. Again the SKAT was the instrument used to measure knowledge and attitudes pre and post workshop. Of the 67 nurses, only 52 (78%) took the pre and posttest. Results showed significant changes ($p<.001$) on the autoeroticism attitudinal scale and knowledge score. This seems to concur with the two previous studies in which significant changes occurred in attitudes, possibly indicating conservative attitudes on the whole prior to exposure of a human sexuality course.

Mandetta and Woods (1974) pilot tested a one semester human sexuality course concerned with knowledge and attitudes and offered to all undergraduate nursing students at Duke University. Using a measurement tool of their own, the Human Sexuality Knowledge and Attitude Inventory (HSKAI) students were pre and posttested. Total knowledge was shown to increase significantly but contrary to other studies, attitudes did not alter significantly. Again, Woods and Mandetta (1975a) repeated their study using 12 female undergraduate nursing students and 11 male undergraduate students. They found that the students demonstrated significant gains in their knowledge regarding human sexual response and contraception. Raw data showed the students'

attitudes fell within a range of two to three on a liberalism scale of one to five, with one being the most liberal and five most conservative. DeLemos (1977) also evaluated sexual knowledge and attitudes of interdisciplinary professionals by means of the SKAT pre and post human sexuality workshop. Four groups were studied, two of these including 41 public health nurses. Both the groups demonstrated borderline conservative attitudes on both the pre and posttest scores. Their knowledge scores increased in the posttest results but still did not attain the mean score for graduate nurses. In a subjective report by Withersty (1976) staff nurses at a large university hospital reported that lack of factual knowledge pertaining to sexuality was not an issue for them but rather the discomfort of discussing sexual problems with patients. Although no data is available to verify this report, it suggests that perhaps attitudes regarding sexuality are more conservative while degree of knowledge is adequate.

Nurses' Role Regarding Human Sexuality

Nurses in their daily dealings with health seeking clients, whether in the acute, chronic or rehabilitative setting, are in the best position to provide sexual health care (Krizinofski, 1973; Whipple & Gick, 1980). Woods (1979) viewed several roles that nurses enact in delivering

sexual health services to clients. These roles include: providing anticipatory guidance, facilitating a milieu conducive to sexual health, validating normalcy, educating in all areas of sexuality, counseling of clients (short term and intensive) and consulting to other health professionals. Mims (1975) and Hogan (1980) described assessing, interviewing, teaching and counseling of individuals as nursing roles pertaining to sexuality. Mims and Swenson (1978) described the nurses' roles regarding sexuality in the health care setting as relating to the P-LI-SS-IT (Permission, Limited Information, Specific Suggestions, Intensive Therapy) Model developed by Annon for behavioral treatment of sexual problems. This model employs four ascending levels of health care focusing on behaviors or activities and building on the preceding level. Each level requires more advanced communication skills regarding sexual health so that the primary level consists of no necessary nursing interaction while the advanced or fourth level requires a nurse who would do counseling, therapy and research. Hogan (1980) maintained that the nurse requires four areas of expertise to promote sexual health: knowledge of the subject matter, skill in assessing and intervening, awareness of beliefs, attitudes and values and an awareness of the effect these beliefs, attitudes and values have on delivery

of health care. Familiarity with the basic principles of sexual function and dysfunction may serve many clinical nurses who deal with sexuality in a general sense. More in-depth sexual knowledge and counseling skills as they relate to various illnesses such as diabetes and alcoholism may be requested by other nurses who feel their role demands closer interaction. There is also a need for nurses who will assume the primary role of maintaining healthy human sexuality through more intensive counseling, therapy and education for patients, families, other health care personnel and communities. Kolodny et al. (1979) wrote that the role most overlooked for a nurse in regards to sexuality is that of a researcher, although Mims and Swenson (1978) addressed this role area when describing the advanced nurse practitioner involved in sexual health maintenance.

Summary

The role of the nurse in terms of sexual health is dependent upon many variables, among them personal attitudes and degree of knowledge, cultural factors and previous experience within the health care setting. With these factors in mind the role of the nurse will vary from mere information-giving to counseling and research depending on the area of nursing being practiced.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A descriptive survey was the research design selected for this study. Abdellah and Levine (1979) stated that selection of the research design is a fundamental, important step in research because it affects all other steps in the research process. They defined descriptive research as primarily being concerned with obtaining accurate and meaningful descriptions of the phenomena being studied.

Setting

The setting for this study was a 720 bed private general hospital located in a large metropolitan area of 2.9 million inhabitants in southeast Texas. The research was conducted on the nursing units of the selected hospital.

Population and Sample

The target population used for this research study included all full time registered staff nurses (approximately 850 registered nurses) at a large metropolitan private general hospital in southeast Texas. Registered nurses in the outpatient clinic (eight nurses) and the Director of Nursing Administration were excluded.

The sample included 310 of the 850 staff nurses at the hospital and was obtained by convenience sampling. Of the 310 nurses who were given the opportunity to participate in the study, a total of 204 (66%) nurses responded to the questionnaires.

Protection of Human Subjects

The survey questionnaire was administered after approval of the Human Research Review Committee of Texas Woman's University and the Committee for the Protection of Human Subjects at the study agency (Appendix A). To assure protection of all research participants the following steps were taken:

1. A cover letter was attached to each questionnaire explaining the purpose of the study and stating that answering the questionnaire and returning it to a designated area assumed the nurse's willingness and consent to participate in the study (Appendix B).
2. No names or numbers were used to code questionnaires or envelopes in order to insure anonymity and confidentiality of individual respondents.
3. Written assurance, included in the cover letter, was given to the subject that the outcome of the study would in no way prejudice or jeopardize his/her employment status at the hospital.

4. There was no expense to the subjects other than the time needed to complete the questionnaire.

The Instrument

The instrument used in the study was the Sex Knowledge and Attitude Test (SKAT), originally designed in 1967 by Lief and Reed. It was developed to gather information regarding sexual attitudes, knowledge, degree of experience concerning various sexual behaviors and to obtain biographic data about American post-high school educated subjects. It was primarily used as a teaching aid in courses dealing with human sexuality. Since 1972, when it was first published, it has been refined and administered to more than 35,000 undergraduate, graduate, and medical students. It has been translated into several languages and used in many other countries (Miller & Lief, 1979). Written permission was obtained for use in this study (Appendix C).

The SKAT was developed from a pool of questions drawn from a survey of relevant literature, clinical experience and sex-related, socially controversial topic areas. The SKAT is divided into three areas: (1) attitudes, (2) knowledge, and (3) biographical data. Only the first two areas are scored.

The attitudes section consists of 35 Likert-type items. The respondents can answer one of five ways: Strongly Agree,

Agree, Uncertain, Disagree, or Strongly Disagree. Responses to these items yields four scores based on four attitude scales. These four scales are Heterosexual Relations (HR), Sexual Myths (SM), Abortion (A), and Autoeroticism or Masturbation (M). The HR Scale demonstrates that respondents with scores over 60 (high scores) regard premarital and extramarital heterosexual relations as acceptable, desirable and/or benefitting marital relationships while scores below 40 demonstrate a conservative attitude. The range of scores for the HR Scale is 14.17 to 69.83. The SM Scale measures rejection or acceptance of sexual myths and a score above 60 indicates rejection of these misconceptions. The range for SM scores is -6.16 to 72.84. The A Scale measures views on the social, medical, and legal aspects of abortion. Scoring above 60 indicates the respondent feels abortion is acceptable in an unwanted pregnancy while a score below 40 indicates negative response to the issue. The abortion score range is from 13.33 to 67.11. The M Scale shows that persons with scores of 60 or over view masturbation as acceptable while scores below 40 imply nonacceptance. It is assumed that a score of 40 or below connotes a more conservative view. The M Scale range of scores is 3.75 to 71.55. No overall attitude scores were calculated in the SKAT.

The knowledge section consists of 71 true-false items covering the biological, sociological and psychological aspects of human sexuality. Only 50 of the questions are scored to give the general knowledge score while 21 of the items are for discussion value only. One score is obtained and the score indicates the amount of knowledge the respondent possesses (Lief & Payne, 1975; Miller & Lief, 1979). The range of scores for the knowledge section is -9.57 to 72.18. For purposes of this study the 21 items for discussion only were omitted.

Validity

According to Miller and Lief (1979), all of the items in the SKAT are considered straight forward and undisguised and are considered to have face validity by a variety of sources. Construct validity was established by means of internal analysis of the interrelationship of the items based on a test sample of 850 medical students. Pearson Product-Moment and point biserial correlations of 0.10 were significantly different from zero at the .01 probability level. Construct validity was also obtained when SKAT was used before and after human sexuality courses designed to change attitudes and/or knowledge. Miller and Lief (1979) further stated that Marcotte and Kilpatrick (1974) and Mims, Brown and Lubow (1976) reported significant change in

attitudes and knowledge after designed courses to produce these desired changes. Marcotte and Kilpatrick tested 15 medical students before and after a formally structured 22-hour human sexuality course and measured positive changes in all 15 students. Mims et al. (1976) studied 186 medical, nursing and graduate psychology students pre and post a three-day human sexuality course. The total group registered a significant statistical difference on all SKAT items ($p \leq .001$) except the abortion attitudinal score. One study conducted by Golden and Liston (1972) of 127 students after 20 hours of instruction found negligible change in SKAT scores.

Reliability

Using coefficient alpha the internal consistency reliability estimate of the attitude section of SKAT was computed at the Center for Study of Sex Education Medicine in 1971-1972. Eight hundred fifty freshmen through senior medical students from 16 medical schools throughout the United States were randomly assigned to either the experimental or the cross-validation samples. There was clear evidence of internal consistency of the SKAT Attitudinal Scale scores. The alpha coefficients for the experimental sample were .86 for HR, .71 for SM, .80 for A, and .81 for M. The alpha coefficients for the cross-validation sample

were .86 for HR, .68 for SM, .77 for A, and .84 for M. Negligible or nonexistent shrinkage in reliability upon cross-validation was found (Preliminary Technical Manual, SKAT, 1972). The reliability of the knowledge section of SKAT was tested on the same sample of 850 medical students by means of the KR-21 and estimated to be .87 for the 50 test items.

Data Collection

Upon approval of the Human Research Review Committee of Texas Woman's University and the Protection of Human Subjects Committee of the study agency, nursing directors for the medical, surgical, critical care, obstetrics-gynecology, pediatric, psychiatric and emergency care areas of the hospital were contacted regarding the research project. They were asked to volunteer nursing units/floors under their auspices for the study. After agreement to participate, they were given the choice of personally orienting the head nurses of those selected units to the study or having the investigator orient the head nurses. All directors requested that the investigator personally orient the 20 participating units/floors.

The investigator contacted all head nurses, explained the study and left enough questionnaires for all registered nurses on the staff. Included in the explanation was the

fact that no names were to be used by the head nurse on the questionnaires and that all questionnaires were to be filled out at the hospital if possible to prevent loss. Further, all questionnaires, both completed and non-completed, were to be returned to the head nurse within one week of administration. Phone numbers where the investigator could be reached at all times were left with each head nurse. The investigator personally distributed the questionnaires over an eight-day period (February 19-27, 1981) and picked all questionnaires up from the head nurses within one week (February 27-March 6, 1981). All questionnaires were returned with a total of 204 completed questionnaires.

Treatment of Data

Descriptive statistics including mean, median, and standard deviation were used to evaluate biographical data and attitude and knowledge scores. Parametric tests including Pearson's Product-Moment Correlation were used to assess the relationship between the knowledge score and each attitude scale score. A one-way analysis of variance (ANOVA) was used to determine if there was any difference in mean scores of respondents and selected demographic variables. A multiple regression/correlation technique was used to assess the relationship between the knowledge score and the four attitude scores.

Summary

This study surveyed the existing knowledge and attitudes of staff nurses caring for a variety of patients at a large private metropolitan general hospital. The Sex Knowledge and Attitudes Test (SKAT) was used because of its already established validity and reliability. It was distributed to 20 various nursing care units with a total of 204 respondents. The data were analyzed using descriptive and parametric statistics. Chapter 4 discusses the results of the study.

CHAPTER 4

ANALYSIS OF DATA

This descriptive survey was conducted to determine the existing knowledge and attitudes of staff nurses toward human sexuality and the relationship between their knowledge and attitudes. The following chapter contains the analysis and interpretation of the data obtained from 195 of the 204 returned questionnaires pertaining to sexuality.

Description of Sample

The sample for this study consisted of 204 registered staff nurses who answered the questionnaire, representing 66% of the total number of questionnaires made available to the nurses for completion. Because they were not totally completed, 9 of the 204 questionnaires were not used for data analysis. Therefore, only 195 or 63% of the total number of questionnaires were analyzed. Of the 195 respondents, 184 (94.4%) were female and 11 (5.6%) were male.

The age ranges of the respondents are shown in Table 1. Mean age of the group was 30.1 years, mode was 24 years and age range was 22-59 years. Five persons did not give age on

Table 1

Frequency and Percentage of Demographic Characteristics of the Registered Nurses Responding to the Sex Knowledge Attitude Test

Variables	Number	Percent
Age Range (Years)		
22-30	122	64.2
31-40	54	28.4
41-50	11	5.8
51-59	3	1.6
Total	190	100.0
Nursing Education		
Associate Degree	34	17.4
Diploma	54	27.7
B.A. or B.S.	95	48.8
Master's	11	5.6
Unknown	1	0.5
Total	195	100.0
Years Nursing Experience		
Less than 1 year	12	6.2
1-5 years	86	44.1
6-10 years	47	24.1
11-15 years	31	15.9
Over 15 years	19	9.7
Total	195	100.0
Years in Practice Area		
Less than 1 year	28	14.4
1-5 years	114	58.5
6-10 years	35	17.9
11-15 years	12	6.1
Over 15 years	6	3.1
Total	195	100.0

Table 1 (Continued)

Variables	Number	Percent
Experience Counseling/ Teaching Human Sexuality		
None	86	44.1
Intermittent, when caring for patients	102	52.3
Regularly counsel	7	3.6
Total	195	100.0

the questionnaire. The majority of nurses were between the ages of 22-30 years.

The majority of the respondents, 82 (42.1%), reported their marital status as married, closely followed by 80 (41%) nurses who were single. Four of the respondents (2.1%) were separated, 28 (14.4%) were divorced and 1 (0.5%) was widowed. The religious preference of the respondents was divided into four categories. The majority, 121 (62.1%), were Protestants, 53 (27.2%) were Catholics, 4 (2.1%) were Jewish, and 17 (8.7%) did not state a preference.

Nursing education as reported by the respondents indicated the greatest number of nurses, 95 (48.7%), held a B.A. or B.S. in Nursing. One (0.5%) respondent failed to answer the question. In response to the question about total years of nursing experience possessed by the

respondents, those who have practiced one to five years, 86 (44.1%) nurses, comprised the largest group. In reporting years of practice in their present area of nursing, over half, 114 (58.5%), of the nurses had had 1-5 years experience (Table 1).

The respondents were queried as to the area of nursing in which they were presently working. The majority of nurses, 46 (23.6%), answered medical-surgical, with 30 (15.4%) choosing orthopedics and 22 (11.3%) answering psychiatry. The critical care areas comprised 33 (16.9%) of the work sites of the respondents. Pediatric, obstetrics-gynecology, and neonatal areas were reported by 44 (22.5%) of the nurses.

The question was raised concerning the amount of human sexuality education the nurses had had. Over half of the respondents, 106 (54.4%), stated they had information integrated into their nursing courses, while 32 (16.4%) answered they had had formal college courses. These two groups represent 70.8% of the total number of respondents. Nineteen (9.7%) nurses answered they had obtained education through seminars or workshops, and 31 (15.9%) indicated they had never received any formal human sexuality education. Only seven (3.6%) nurses answered that they received both information integrated into their nursing courses as well as seminar or workshop education.

Additionally, the respondents were asked to indicate the amount of experience they had had counseling or teaching about human sexuality in their nursing practice. Only seven (3.6%) nurses answered that they regularly counsel or teach patients (Table 1).

Findings

To determine the degree of human sexuality knowledge possessed by the 195 respondents, the 50-item knowledge portion of each questionnaire was hand scored for a raw score. A normed score was then computed using the Sex Knowledge Attitude Test (SKAT) scoring key. The SKAT scoring range for the knowledge section is from -9.57 to 72.18. The mean score for graduate nurses as computed by SKAT for the knowledge section was 50.50. This compares to the average performance of 50.00 obtained by medical students taking SKAT. The group of nurses under study were slightly below the mean with a score of 47.61 (see Table 2).

Each of the 35 Likert-type questions of the respondents were hand scored to produce four raw attitude scores. These included the heterosexual relations score, sexual myths score, abortion score, and autoeroticism score. The raw scores were then normed and compared to the scores of graduate nurses computed by SKAT. Table 3 presents the scores of the respondents to each of the attitude sections.

Table 2

Knowledge Scores of 195 Registered Nurses Responding to the Sex Knowledge Attitude Test as Compared to Graduate Nurse Scores of SKAT

	RNs Under Study	SKAT Graduate RNs[a]
Number	195	178
Mean Score	47.61	50.50
Standard Deviation	11.63	12.30
Range	9.44-68.38	11.34-70.28

[a]See Preliminary Technical Manual, 1972.

Table 3

Attitude Scores of 192 Registered Nurses Responding to the Sex Knowledge Attitude Test as Compared to Graduate Nurse Scores of SKAT

Attitude	RNs Under Study	SKAT Graduate RNs[a]
Heterosexual Relations		
Number	192	180
Mean Score	45.12	46.27
Standard Deviation	13.16	9.90
Range	14.17-66.35	26.35-68.09
Sexual Myths		
Number	192	180
Mean Score	48.47	53.05
Standard Deviation	13.35	9.50
Range	14.15-70.59	25.44-72.84
Abortion		
Number	192	180
Mean Score	42.11	46.16
Standard Deviation	11.75	11.40
Range	16.69-63.75	13.33-67.11
Autoeroticism		
Number	192	180
Mean Score	47.87	49.19
Standard Deviation	12.21	8.70
Range	11.02-69.13	20.70-66.71

[a]See Preliminary Technical Manual, 1972.

The group of nurses under study had a slightly lower mean score than the SKAT graduate nurses on the Heterosexual Relations Section. The SKAT range for possible Heterosexual Relations scores is 14.17 to 69.83. A total of 123 (64%) of the respondents scored between 40 and 60, 57 (29.7%) scored under 40, and 12 (6.3%) scored over 60. There were distinctly more conservative than liberal attitudes toward heterosexual relations.

The results of the Sexual Myths scores of the study nurses again indicated a slightly lower mean as a group than the SKAT Graduate Nurses. The SKAT range for Sexual Myths scores is -6.16 to 72.84. Of the 192 nurse respondents, 129 (66.2%) scored between 40 and 60, indicating neither rejection nor acceptance of popular misconceptions regarding sexuality. However, 41 (20.9%) scored under 40, indicating acceptance of sexual myths and 22 (12.8%) scored over 60, indicating strong rejection of myths concerned with human sexuality.

The mean score results of the nurses under study as compared to the SKAT Graduate Nurses on the Abortion attitude section again indicate a slightly lower mean than the SKAT nurses. The SKAT range of possible Abortion scores is 13.33 to 67.11. The majority, 106 (55.2%), of the nurses scored between 40 and 60, demonstrating neither

strong acceptance nor strong rejection of abortion related issues. More nurses, 79 (41.15%), scored below 40, indicating nonacceptance of abortion, than those scoring above 60, 7 (3.65%), who held more favorable views than the average respondent.

Results of the Autoeroticism attitude section show that the majority of nurses under study, 149 (77.6%), scored between 40 and 60, demonstrating neither extreme liberalism nor conservatism towards masturbating activities. However, 30 (15.6%) nurses scored above 60, indicating that they view autoerotic stimulation as healthy or acceptable, while 13 (6.8%) scored below 40, indicating that they feel masturbation is an unhealthy practice. The SKAT range of possible scores for this section is 3.75 to 71.55.

Relationship Between Knowledge and Attitude Scores

In order to determine the relationship between knowledge and attitude scores, Pearson's *r* was preliminarily calculated to determine if any correlations existed between the variables. Table 4 indicates that there was a significant relationship between all attitude variables and knowledge with the exception of abortion.

Stepwise multiple regression analysis was then performed to determine the best coefficient weights of the attitude variables to linearly predict the human sexuality

Table 4

Pearson's r for Knowledge and Attitude Variables of 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

	Knowledge	Heterosexual Relations	Sexual Myths	Abortion	Autoeroticism
Knowledge	1.00	.31*	.63**	.18	.35**
Heterosexual Relations		1.00	.57**	.64**	.73**
Sexual Myths			1.00	.52**	.64**
Abortion				1.00	.60**
Autoeroticism					1.00

*$p \leq .01$

**$p \leq .001$

knowledge score. The multiple r was found to be 0.64773 ($F = 34.4$, $p \leq .001$) which means that 41.8% of the variance in the knowledge scores can be explained by the attitude scores. Entering all variables into regression analysis, it was found that Sexual Myths scores and Abortion scores were the best predictors of knowledge. Heterosexuality and Autoeroticism scores did not significantly contribute

to prediction of knowledge scores using the constant of .248 and the Beta weights of Sexual Myth and Abortion scores. The following formula may be used to predict knowledge scores within a plus or minus 8.9 standard error:

$$\text{Knowledge} = .63(\text{SM}) + -.184(\text{ABOR}) + .248.$$

Relationship of Selected Demographic Variables to Knowledge and Attitude Scores

Based on personal interest of the investigator, several demographic variables were investigated in relation to knowledge and attitude scores. These demographic variables included religion and Abortion scores, nursing experience and Sexual Myths scores, nursing education and Sexual Myths scores, and nursing experience and knowledge scores.

To determine if there were significant differences between religious classification and abortion scores, a one-way ANOVA was performed. Table 5 indicates that the groups were significantly different.

A post hoc test, the Newman-Keuls procedure, was done to determine where the differences were between groups. Table 6 indicates that all non-Catholic groups scored significantly higher on the Abortion scale than the Catholics. This indicates all groups held more liberal attitudes toward abortion than the Catholics. Additionally, the no preference religious group scored higher than the Protestants.

Table 5

ANOVA Summary Table of Abortion Scores by Religion of 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

Source of Variance	SS	df	MS	F	p
Between Groups	1,505.69	3	501.90	3.79	.01*
Within Groups	25,292.91	191	132.42		
Total	26,798.60	194			

*p=.01

Table 6

Newman-Keuls Post Hoc Procedure of Abortion by Religion of 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

	Catholic	Protes-tant	Jewish	No Pref-erence	Eq	Eqs
	37.91	43.17	45.68	46.84		
Catholic 37.91		5.26*	7.77*	8.93*	3.633	3.015
Protestant 43.17			2.51	3.67*	3.314	2.750
Jewish 45.68				1.16	2.772	2.300

*p≤.05

Sexual Myth scores were found to be significantly different as determined by the years of nursing experience the respondents held. As seen in Table 7, the ANOVA showed a significant difference between groups. Therefore, Newman-Keuls Procedure was performed to find out where the groups differed. Table 8 indicates that the nurses with 1-5 years of nursing experience scored significantly higher means than all groups, and nurses with 5-10 years experience scored significantly higher than nurses with 10 or more years nursing experience.

Table 7

ANOVA Summary Table of Nursing Experience by Sexual Myth Scores of 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

Source of Variance	SS	df	MS	F	p
Between Groups	1,710.66	4	427.67	2.47	.05*
Within Groups	32,870.88	190	173.005		
Total	34,581.54	194			

*$p = .05$

Table 8

Newman-Keuls Post Hoc Procedure of Sexual Myths by Nursing Experience for 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

	>15 Years 43.86	10-15 Years 44.16	<1 Year 47.45	5-10 Years 48.16	1-5 Years 51.35	Eq	Eq_S
>15 Years 43.86		.30	3.59	4.30*	7.49*	3.858	3.627
10-15 Years 44.16			3.29	4.00*	7.19*	3.633	3.415
<1 Year 47.45				.71	3.90*	3.314	3.115
5-10 Years 48.16					3.19*	2.772	2.606

*$p \leq .05$

Using a one-way ANOVA, a significant difference was also found between the mean Sexual Myths scores as determined by the type of nursing education possessed by the respondents. Table 9 summarizes the analysis of variance. After performing the Newman-Keuls Procedure, it was determined that master's prepared nurses scored significantly higher than all other groups. Those nurses holding a B.A. or B.S. in nursing scored higher than A.D. graduates, and A.D. nurses scored higher than diploma nurses (see Table 10).

Table 9

ANOVA Summary Table of Nursing Education and Sexual Myths Scores of 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

Source of Variance	SS	df	MS	F	p
Between Groups	2,939.93	4	734.98	4.41	.002*
Within Groups	31,641.61	190	166.54		
Total	34,581.54	194			

*$p = .002$

Table 10

Newman-Keuls Post Hoc Procedure of Sexual Myths by Nursing Education for 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

	Diploma 42.54	AD 49.41	BA/BS 50.65	MS 54.79	Eq	Eq_S
Diploma 42.54		6.87*	8.11*	12.25*	3.633	3.415
AD 49.41			1.24	5.38*	3.314	3.115
BA/BS 50.65				4.14*	2.772	2.606

*$p \leq .05$

No significant difference was found between Autoeroticism scores as determined by types of nursing education. Additionally, there were no significant differences found between Heterosexual, Abortion, or Autoeroticism scores as determined by total years of nursing experience. Lastly, there was no significant difference in the means of the four attitude scores and the various sex education groups.

To determine if there was any correlation between age of respondents and attitude scores, Pearson's r was calculated. Results indicated that the younger the respondent, the higher the Sexual Myth score: $r = -.16$ ($p \leq .02$). This indicates that the younger the respondent, the greater the rejection of sexual myths.

To determine if knowledge scores were related to years of nursing experience, a one-way ANOVA was performed. Table 11 summarizes the analysis of variance and indicates that the groups were significantly different. Therefore, the Newman-Keuls Procedure was performed to determine where the differences were between the groups. Table 12 indicates that all groups scored significantly higher than those with 11-15 years experiences. Nurses with less than one year of experience also scored higher than all other groups.

Table 11

ANOVA Summary Table of Nursing Experience and Knowledge Score of 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

Source of Variance	SS	df	MS	F	p
Between Groups	1,283.85	4	320.96	2.45	.05*
Within Groups	24,945.49	190	131.29		
Total	26,229.34	194			

*$p=.05$

Table 12

Newman-Keuls Post Hoc Procedure of Knowledge by Nursing Experience for 192 Registered Nurses Responding to the Sex Knowledge Attitude Test

	11-15 Years 42.38	15 Years 46.67	6-10 Years 47.47	1-5 Years 49.23	<1 Year 51.59	Eq	Eq_s
11-15 Years 42.38		4.31*	5.11*	6.87*	9.23*	3.858	3.164
>15 Years 46.67			.44	2.56	4.92*	3.633	2.979
6-10 Years 47.47				1.76	4.12*	3.314	2.717
1-5 Years 49.23					2.36*	2.772	2.273

*$p \leq .05$

A Pearson's r was also calculated to determine if there was any correlation between age of respondents and knowledge scores. Results indicated that the younger the respondents, the greater the knowledge score: $r = -.13$ ($p \leq .04$). There was no significant difference found in the mean knowledge score of the respondents in terms of the amount of sex education they held.

Summary of Findings

Chapter 4 has presented an analysis and interpretation of the findings of this study. The analysis of data showed that the group of nurses under study had lower mean knowledge scores than the SKAT graduate nurses. The nurses under study also had lower mean scores in each of the four attitude sections than the SKAT graduate nurses, indicating they held slightly more conservative attitudes than the SKAT nurses. However the mean attitude scores of the nurses under study were considered neither conservative nor liberal by the established SKAT score ranges.

Further analysis was performed on selected demographic variables and knowledge and attitude scores. Results indicated that the younger the respondent was, the higher his knowledge score. Also, the younger the respondent, the higher his Sexual Myth score, indicating greater rejection of sexual myths. There was a significant difference

between the religious groups and their Abortion scores. All groups held more liberal views on abortion than the Catholics. It was also found that nurses with 1-5 years of nursing experience scored significantly higher on the Sexual Myths section than the other groups. Additionally, those nurses holding master's degrees scored higher on the Sexual Myths attitude section than all other nursing education groups. It was of interest that nurses with ADs scored higher on the Sexual Myths attitude section than diploma nurses. As far as knowledge scores and demographic variables, a significant difference was found between knowledge and nursing experience. Nurses with less than one year of experience scored higher than all other groups, while those with 11-15 years experience scored lower than all groups.

In analyzing the relationship between knowledge and attitude scores, it was elicited that there was a significant relationship between knowledge and Sexual Myth and Abortion scores. Heterosexual and Autoeroticism scores only added .1% explained variance.

CHAPTER 5

SUMMARY OF THE STUDY

The purpose of this study was to determine the existing knowledge and attitudes of 195 staff nurses toward human sexuality using a survey approach. The study further sought to determine if there was any relationship between the attitudes and knowledge possessed by the nurses. The following chapter presents a summary of the study as well as a discussion of the findings. Conclusion, implications and recommendations for further study conclude the chapter.

Summary

Because sexuality is considered an important part of one's total health care, this study was carried out to determine whether staff nurses caring for a variety of patients possess adequate knowledge about human sexuality to provide comprehensive health care. It further attempted to elicit the prevailing attitudes of staff nurses toward human sexuality and whether there was any relationship between their attitudes and knowledge base.

A review of the literature revealed that attitudes and knowledge concerning a subject will affect the manner in which the subject is taught, or not taught. Human sexuality,

although a very important part of health care, is a sensitive, complex subject and often an uncomfortable part of health care to be dealt with by the nurse providing comprehensive patient care. Studies done in the past have shown that nurses possess insufficient knowledge of human sexuality to adequately teach others. Their attitudes were found to be more conservative than non-nursing participants in the studies.

To determine the knowledge and attitudes towards human sexuality of registered staff nurses, a descriptive survey was conducted. The setting was a large private general hospital located in a metropolitan area of southeast Texas. The study was conducted on selected nursing units of the particular hospital. The data were collected using the Sex Knowledge and Attitude Test (SKAT). The questionnaire consisted of a knowledge section with 50 true-false items covering biological, sociological and psychological aspects of human sexuality. Additionally, the questionnaire contained an attitudes section consisting of 35 Likert-type items. This section dealt with four attitudes, heterosexual relations, sexual myths, abortion, and masturbation. The author also included a revised demographic section of the original questionnaire applicable to the group under study. Using convenience sampling 310 questionnaires were

administered and 204 questionnaires were returned. The data were then analyzed using descriptive and parametric statistics.

From the analysis of data it was found that as a group, the nurses under study possessed less than average knowledge concerning human sexuality as compared to SKAT graduate nurses already studied. It was also found that the nurses had lower mean scores than the SKAT nurses in each of the four attitudes sections, signifying more conservative views toward sexuality. However, their overall mean attitude score was not considered extremely liberal or conservative. Further analysis of the data revealed that overall knowledge was predictable by Sexual Myth and Abortion scores.

Discussion of Findings

The major finding in this survey was that as a group the nurses under study did not possess average knowledge of human sexuality. These results support the findings of Lief and Payne (1975), McCreary-Juhasz (1967), Mims (1975), and deLemos (1977) who also found that graduate nurses possessed less than average knowledge of human sexuality. It was of interest however that nurses in this study with less than one year's experience of nursing scored significantly higher than all other groups on the knowledge section. This possibly suggests that new graduates of today are receiving

better education concerning human sexuality than the older nurses received. It was also found that those nurses who were master's prepared scored significantly better than other educationally prepared nurses. Perhaps these nurses have received additional education regarding human sexuality in their programs.

Regarding the attitudes of the nurses under study it was found that they held neither conservative nor liberal views. This is in agreement with the study of registered and student nurses done by Lief and Payne (1975) and the study by Woods and Mandetta (1975). Several demographic variables were of interest in regards to attitudes scores. Catholic nurses in this study held significantly more conservative views on abortion than other religious groups as did the nurses in the study by Lief and Payne (1975). Nurses with 1-5 years of nursing experience were found to be more rejecting of sexual myths than the other nurses possibly suggesting that these nurses have been more recently exposed to human sexuality issues. Of this group of nurses it was also found that those with master's degrees were found to be the most rejecting of sexual myths. This suggests that the more educational preparation received, the more likely one is to reject myths or unfounded facts. However, master's prepared nurses were not found to be more

liberal in their views toward abortion, autoeroticism or heterosexuality, indicating that attitudes are not necessarily a function of educational preparation, as knowledge is. This supports Redman's (1980) research and views that the relationship between knowledge and attitudes is not always predictable as a positive or negative influence.

The findings in this study regarding the relationship between attitudes and knowledge indicate that Sexual Myths scores and Abortion scores or attitudes are the best predictors of knowledge. However, there was found to be a significant relationship between all attitudes and degree of knowledge with the exception of abortion. This indicates that except for the issue of abortion, those nurses with more liberal attitudes had better knowledge than the other nurses.

Conclusions and Implications

The following conclusions seem justified based on the results of this study:

1. Nurses have less than average knowledge of human sexuality.
2. Master's prepared nurses possess more knowledge of human sexuality than associate degree, diploma or baccalaureate nurses.

3. Nurses have neither conservative nor liberal attitudes about human sexuality.
4. With the exception of abortion, the more liberal the nurses' attitudes are, the greater their knowledge concerning human sexuality.
5. Sexual myths and abortion attitudes are predictors of knowledge.

The following implications for nursing practice seem justified based on the results of this study:

1. Inservice programs, orientation and continuing education programs need to be designed to meet the needs of staff nurses dealing with sexual issues.
2. More emphasis needs to be put on human sexuality in the nurse's basic preparation for professional nursing.
3. A professional with training and practice in the area of human sexuality issues should be made available for consultation to all practicing staff nurses.

Recommendations

Based upon the findings of this study, the following recommendations for research are presented:

1. A study should be conducted to determine what areas of human sexuality nurses feel they need assistance with in terms of caring for patients.

2. A similar study should be conducted in other institutions and other geographic areas to determine if lack of knowledge of human sexuality among staff nurses is common.
3. A study should be conducted with a variety of patients to determine if they need assistance with human sexuality issues.
4. A study should be conducted in which a group of nurses is given a course on human sexuality to determine if it assists them in providing comprehensive health care to patients.

APPENDIX A

APPROVALS

TEXAS WOMAN'S UNIVERSITY
Box 23717 TWU Station
Denton, Texas 76204

HUMAN SUBJECTS REVIEW COMMITTEE

Name of Investigator: Jan Mouché Center: Houston

Address: 11529 Chimney Rock Date: 12/17/80

Houston, TX 77035

Dear Ms. Mouché:

Your study entitled A Descriptive Survey to Acertain the Attitudes and Knowledge of Staff Nurses Toward Human Sexuality

has been reviewed by a committee of the Human Subjects Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education, and Welfare regulations typically require that signatures indicating informed consent be obtained from all human subjects in your studies. These are to be filed with the Human Subjects Review Committee. Any exception to this requirement is noted below. Furthermore, according to DHEW regulations, another review by the Committee is required if your project changes.

Any special provisions pertaining to your study are noted below:

_____ Add to informed consent form: No medical service or compensation is provided to subjects by the University as a result of injury from participation in research.

_____ Add to informed consent form: I UNDERSTAND THAT THE RETURN OF MY QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH.

_X_ The filing of signatures of subjects with the Human Subjects Review Committee is not required.

_____ Other:

_____ No special provisions apply.

Sincerely,

Irene S. Roberson

Chairman, Human Subjects Review Committee at Houston

HERMANN HOSPITAL

DIVISION OF NURSING RESEARCH

AGENCY PERMISSION FOR CONDUCTING RESEARCH

Researcher Jan Mouché, R. N.

Status in institution Nurse Clinician, Hemophilia Center

Address 11529 Chimney Rock, Houston, Texas 77035 Phone 728-4090

Title of Study A Descriptive Survey to Ascertain the Attitudes and Knowledge of Staff Nurses Toward Human Sexuality

Requested date to begin data collection 2-2-81

Estimated duration of data collection 3 weeks

Specific characteristics of population sample desired All registered staff nurses excluding the out-patient clinic nurses and Director of Nursing.

Hermann Hospital (grants) (does not grant) permission to use our facilities for this study for the following reasons:

The conditions mutually agreed upon are as follows:

1) The purpose of the study will be fully explained to all participants by means of detailed cover letter/consent form (to be approved by the Division of Nursing Research). The cover letter/consent form and all data collection instruments in final form must be submitted to the Chairman, Division of Nursing Research, no later than the final week of any calendar month.

2) The researcher will communicate directly with appropriate management personnel prior to data collection. Some communication about the study and/or responsibility for data collection may be delegated to the Directors and Head Nurses of this institution.

3) The selection of participating units within the specified sample and design will be the decision of the Nursing Directors and/or the Chairman, Division of Nursing Research.

4) The Council of Nursing Directors reserves the right to negotiate adjustment of any of the data collection tools prior to approval.

5) The method of coding or identifying data other than by (hospital) (~~clinical service~~), not to include individual identification, may be determined by the Division of Nursing Research.

6) Results, including all raw data without identification of individuals, will be shared with the Division of Nursing Research. The method of dissemination of aggregate data to all participants will be determined by the Council of Nursing Directors. Researchers' participation in this communication of results may be requested.

7) ~~Any publication regarding this data will credit the researcher for involvement and/or development of any tool. A written communication stating the researcher's understanding and agreement of our intent to further utilize data is requested.~~

8) The agency (may) (~~may not~~) be identified in the final report.

9) The names of consultative or administrative personnel in the agency (may) (~~may not~~) be identified in the final report.

10) We retain the right to review and agree upon institutional identification in any published material.

11) The agency (wants) (~~does not want~~) a conference with the researcher when the report is compiled. (Schedule with the Chairman, Division of Nursing Research).

12) The agency (wants) (~~does not want~~) a copy of the results.

13) The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.

OTHER_____

_____

_____

Date: 1/7/81 / Marilyn L. Andrews
Signature, Chairman, Division of Nursing Research

Date: 1-7-81 / J B Mouchet
Signature of Researcher

Date: Jan 7 1981 / Vera M Harmon, R.N. Ph.D
Signature of Faculty Advisor (if researcher is a student)

Date: 1/26/81 / William F. [illegible]
Signature, Executive Director, Hermann Hospital

(Researcher and Faculty Advisor must sign prior to agency approval)

White - Committee for the Protection of Human Subjects
Copy 1 - Division of Nursing Research
Copy 2 - Student's Institution (If applicable)

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS 76204

DALLAS CENTER
1810 INWOOD ROAD
DALLAS, TEXAS 75235

HOUSTON CENTER
1130 M. D. ANDERSON BLVD.
HOUSTON, TEXAS 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Hermann Hospital

GRANTS TO Jan Mouché
a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

A Descriptive Survey to Ascertain the Attitudes and Knowledge of Staff Nurses Toward Human Sexuality

The conditions mutually agreed upon are as follows:

1. The agency (may) (~~may not~~) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (~~may not~~) be identified in the final report.
3. The agency (wants) (~~does not want~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other Want a copy of results

Date: 1-8-81

Marilyn L. Anders 1/8/81
Signature of Agency Personnel

Jan Mouché
Signature of Student

Signature of Faculty Advisor

* Fill out and sign three copies to be distributed as follows: Original-Student; First copy - agency; Second copy - TWU College of Nursing.

GP:GEN 13
07026074 cd

APPENDIX B

QUESTIONNAIRE PACKET

CONSENT FORM FOR PARTICIPATION IN
STUDY OF NURSES KNOWLEDGE AND ATTITUDES
REGARDING HUMAN SEXUALITY

Dear Professional Nurse:

I am a candidate for the Masters of Science Degree in Nursing at Texas Woman's University. My Master's thesis is an attempt to determine the attitudes and knowledge of staff nurses in various settings of the hospital toward human sexuality. Sexuality is an important human dimension regardless of one's physical or psychological health. Alterations in a person's sexuality are known to result when illness or interruption of health occurs. Nurses are in constant contact with individuals whose sexual health may be disrupted because of physical or psychological disturbances. Quite often they are called upon to educate or counsel the ill individual back towards wellness. And quite often this includes sexual health counseling or teaching. Because of these special demands I am interested in exploring the current sexual attitudes and knowledge of staff nurses. Results of the survey may assist in improving total health care presently being given to ill individuals.

The questionnaire is structured to make it as easy as possible for you to answer quickly. It should take approximately 15 minutes of your time to answer the questions, place the results in the provided return envelope and drop it in the interoffice mail. There is no financial cost whatsoever to you. Your job will not be jeopardized in any way by answering the questionnaire. The questionnaire has been approved by the University of Texas Health Science Center Committee for the Protection of Human Subjects and the Hermann Hospital Administration as well as the Texas Woman's University Human Research Review Committee. The questionnaires are not coded in any way. Because of the sensitive nature of the questions, I want to assure you that I am being cautious about confidentiality and that individual respondents will remain anonymous. YOU UNDERSTAND THAT YOUR RETURN OF THE QUESTIONNAIRE CONSTITUTES YOUR INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH SURVEY.

The findings of this study will be made available to you upon request. If you have any questions or requests please feel free to contact me at the phone number or address below. As you know, the results of the study are dependent on the number of respondents. I would really appreciate you returning the questionnaire within one week of the time you receive it.

Thank you so much for your interest.

Sincerely,

Jan Mouché

Jan Mouché
11529 Chimney Rock
Houston, Texas 77035
Phone 792-5450 (work) 728-4090 (home)

APPROVED BY: Marilyn Anderson
Chairman, Division Nursing Research

PART I: DEMOGRAPHIC IDENTIFICATION INFORMATION

Please complete the following questions:

1. Sex (circle one)

   a. Male
   b. Female

2. Age: _____

3. Marital Status (circle one)

   a. Single
   b. Married
   c. Separated
   d. Divorced
   e. Widowed

4. Religious preference: _____

5. Formal nursing education (circle highest level)

   a. Associate Degree
   b. Diploma
   c. B.A. or B.S. in Nursing
   d. Master's Degree in Nursing
   e. Doctoral Degree

6. How many years of nursing experience have you had? (circle one)

   a. Less than 1 year
   b. 1-5 years
   c. 6-10 years
   d. 11-15 years
   e. Over 15 years

7. In what area of nursing are you presently working? (circle one)

   a. Medical
   b. Surgical
   c. Medical-surgical
   d. Orthopedic
   e. Obstetric-gynecology
   f. Pediatric
   g. Psychiatric
   h. Emergency
   i. Operating room
   j. Other _____

8. How many years have you practiced in this area of nursing? (circle one)

   a. Less than 1 year
   b. 1-5 years
   c. 6-10 years
   d. 11-15 years
   e. Over 15 years

9. What type of human sexuality education have you had? (circle one)

   a. Formal college course
   b. Information integrated into nursing courses, but not formal course
   c. Seminars or workshops
   d. None

10. What experience have you ever had doing sexual health counseling or teaching in nursing? (circle one)

    a. None
    b. Intermittently, when caring for patients
    c. Regularly counsel/teach patients

PART II: KNOWLEDGE

Each of the following statements can be answered either true or false. Please indicate your position on each statement using the following alternatives:

T = True F = False

_____ 1. Pregnancy can occur during natural menopause (gradual cessation of menstruation).

_____ 2. Most religious and moral systems throughout the world condemn premarital intercourse.

_____ 3. A woman does not have the physiological capacity to have as intense an orgasm as a man.

_____ 4. There is no difference between men and women with regard to the age of maximal sex drive.

_____ 5. The use of the condom is the most reliable of the various contraceptive methods.

_____ 6. Impotence is almost always a psychogenic disorder.

_____ 7. Tranvestism (a form of cross-dressing) is usually linked to homosexual behavior.

_____ 8. Sexual attitudes of children are molded by erotic literature.

_____ 9. Homosexuals are more likely to be exceptionally creative than heterosexuals.

_____ 10. A woman who has had a hysterectomy (removal of the uterus) can experience orgasm during sexual intercourse.

_____ 11. Homosexuality comes from learning and conditioning experiences.

_____ 12. Those convicted of serious crimes ordinarily are those who began with minor sex offenses.

_____ 13. One of the immediate results of castration in the adult male is impotence.

_____ 14. The body build of most homosexuals lacks any distinguishing features.

_____ 15. Masturbation by a married person is a sign of poor marital sex adjustment.

_____ 16. Exhibitionists are latent homosexuals.

_____ 17. A woman's chances of conceiving are greatly enhanced if she has an orgasm.

_____ 18. Only a small minority of all married couples ever experience mouth-genital sex play.

_____ 19. Impotence is the most frequent cause of sterility.

_____ 20. Certain foods render the individual much more susceptible to sexual stimulation.

_____ 21. A high percentage of those who commit sexual offenses against children is made up of the children's friends and relatives.

_____ 22. In most instances, the biological sex will override the sex assigned by the child's parents.

_____ 23. The onset of secondary impotence (impotence preceded by a period of potency) is often associated with the influence of alcohol.

_____ 24. In our culture some homosexual behavior is a normal part of growing up.

_____ 25. Direct contact between penis and clitoris is needed to produce female orgasm during intercourse.

_____ 26. For a period of time following orgasm, women are not able to respond to further sexual stimulation.

_____ 27. In some legal jurisdictions artificial insemination by a donor may make a woman liable to suit for adultery.

_____ 28. Habitual sexual promiscuity is the consequence of an above-average sex drive.

_____ 29. Impotence in men over 70 is nearly universal.

_____ 30. Certain conditions of mental and emotional instability are demonstrably caused by masturbation.

_____ 31. The emotionally damaging consequences of a sexual offense against a child are more often attributable to the attitudes of the adults who deal with the child than to the experience itself.

_____ 32. Direct stimulation of the clitoris is essential to achieving orgasm in the woman.

_____ 33. Age affects the sexual behavior of men more than it does women.

_____ 34. More than a few people who are middle-aged or older practice masturbation.

_____ 35. Varied coital techniques are used most often by people in lower socio-economic classes.

_____ 36. Individuals who commit rape have an unusually strong sex drive.

_____ 37. The rhythm method, (refraining from intercourse during the six to eight days midway between menstrual periods), when used properly is just as effective as the pill in preventing conception.

_____ 38. Many women erroneously consider themselves to be frigid.

_____ 39. Menopause in a woman is accompanied by a sharp and lasting reduction in sexual drive and interest.

_____ 40. The two most widely used forms of contraception around the world are the condom and withdrawal by the male (coitus interruptus).

_____ 41. People in lower socioeconomic classes have sexual intercourse more frequently than those of higher classes.

_____ 42. Pornographic materials are responsible for much of today's aberrant sexual behavior.

_____ 43. For some women, the arrival of menopause signals the beginning of a more active and satisfying sex life.

_____ 44. Lower-class couples are generally not interested in limiting the number of children they have.

_____ 45. Excessive sex play in childhood and adolescence interferes with later marital adjustment.

_____ 46. There is a trend toward more aggressive behavior by women throughout the world in courtship, sexual relations, and coitus itself.

_____ 47. Sometimes a child may have cooperated in or even provoked sexual molestation by an adult.

_____ 48. For every female that masturbates four males do.

_____ 49. Douching is an effective form of contraception.

_____ 50. Freshman medical students know more about sex than other college graduates.

PART III: ATTITUDES

Please indicate your reaction to each of the following statements on sexual behavior in our culture, using the following alternatives:

SA = Strongly Agree
A = Agree
U = Uncertain
D = Disagree
SD = Strongly Disagree

_____ 1. The spread of sex education is causing a rise in premarital intercourse.

_____ 2. Mutual masturbation among boys is often a precursor of homosexual behavior.

_____ 3. Extramarital relations are almost always harmful to a marriage.

_____ 4. Abortion should be permitted whenever desired by the mother.

_____ 5. The possession of contraceptive information is often an incitement to promiscuity.

_____ 6. Relieving tension by masturbation is a healthy practice.

_____ 7. Premarital intercourse is morally undesirable.

_____ 8. Oral-genital sex play is indicative of an excessive desire for physical pleasure.

_____ 9. Parents should stop their children from masturbating.

_____ 10. Women should have coital experience prior to marriage.

_____ 11. Abortion is murder.

_____ 12. Girls should be prohibited from engaging in sexual self-stimulation.

_____ 13. All abortion laws should be repealed.

_____ 14. Strong legal measures should be taken against homosexuals.

_____ 15. Laws requiring a committee of physicians to approve an abortion should be abolished.

_____ 16. Sexual intercourse should occur only between married partners.

_____ 17. The lower-class male has a higher sex drive than others.

_____ 18. Society should offer abortion as an acceptable form of birth control.

_____ 19. Masturbation is generally unhealthy.

_____ 20. A physician has the responsibility to inform the husband or parents of any female he aborts.

_____ 21. Promiscuity is widespread on college campuses today.

_____ 22. Abortion should be disapproved of under all circumstances.

_____ 23. Men should have coital experience prior to marriage.

_____ 24. Boys should be encouraged to masturbate.

_____ 25. Abortions should not be permitted after the twentieth week of pregnancy.

_____ 26. Experiences of seeing family members in the nude arouse undue curiosity in children.

_____ 27. Premarital intercourse between consenting adults should be socially acceptable.

_____ 28. Legal abortions should be restricted to hospitals.

_____ 29. Masturbation among girls is a frequent cause of frigidity.

_____ 30. Lower-class women are typically quite sexually responsive.

_____ 31. Abortion is a greater evil than bringing an unwanted child into the world.

_____ 32. Mutual masturbation in childhood should be prohibited.

_____ 33. Virginity among unmarried girls should be encouraged in our society.

_____ 34. Extramarital sexual relations may result in a strengthening of the marriage relationship of the persons involved.

_____ 35. Masturbation is acceptable when the objective is simply the attainment of sensory enjoyment.

APPENDIX C

WRITTEN PERMISSION TO USE QUESTIONNAIRE

MARRIAGE COUNCIL of PHILADELPHIA, Inc.

affiliated with Division of Family Study, Department of Psychiatry
The University of Pennsylvania School of Medicine

4025 Chestnut Street
Philadelphia, Pa. 19104
(215) 382-6680

September 18, 1980

Jan Mouche, R.N.
Texas Woman's University
Health Science Center at Houston
Medical School
P.O. Box 20708
Houston, Texas 77025

Dear Ms. Mouche:

In response to your letter of September 16th, permission to use the Sex Knowledge and Attitude Test (SKAT) and to reproduce same in your study involving existing attitudes and knowledge of hospital staff nurses in regards to human sexuality has been granted. The only cost involved will be the purchase of a complete set of SKAT materials for your duplicating needs. I am enclosing two SKAT order forms for your convenience.

Good Luck with your research.

Sincerely,

Jean McLaughlin

Jean McLaughlin
Secretary to
William R. Miller, Ph.D.
Director of Clinical Services
& Research

jm
Encls.

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