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

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We hereby recommend that the thesis prepared under our supervision by Carol Burrage entitled A Descriptive Survey to Ascertain the Attitudes and Knowledge of Staff Nurses Toward Human Sexuality

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TABLE OF CONTENTS

Chapter

LIST OF TABLES

Table

CHAPTER 1

INTRODUCTION

Sexuality is an integral component of an individual's personality. It is "the sum total of our sexual identity, an essential part of what makes each person distinctly male or female" (Moran, 1979, p. 14). With the current relaxation of social restrictions regarding human sexuality, clients are verbalizing to nurses concerns about sexual issues that relate to their illness or injury (Whipple & Gick, 1980).

Traditionally nurses have adopted a holistic approach to health care, but historically the sexuality needs of clients have been excluded (deLemos, 1977; Kolodny, Masters, Johnson, & Biggs, 1979; Mims, 1978). There have been few formal courses in human sexuality offered in schools of nursing, and course work in human sexuality through continuing education programs has been minimal (Kolodny et al., 1979; Mims, 1978; Solomon, 1980).

Obstetrical or gynecological (OB/GYN) nursing of women focuses directly on the functioning of the reproductive system. Nurses caring for OB/GYN clients encounter situations daily in which concerns about sexuality issues are expressed. To provide effective nursing care, the OB/GYN nurse must

have a knowledge base of the human reproductive system and must feel comfortable with her own attitudes about sexuality to discuss specific issues with clients.

Problem of the Study

The problem statement for this study was: Is there a difference in the attitudes and knowledge of human sexuality between OB/GYN nurses and medical-surgical nurses?

Justification of Problem

Every human being is a sexual person whose sexuality is expressed in various ways (Anderson, 1980; Moran, 1979). Sexuality "may or may not relate to sex per se, but it does definitely relate to a person's conception of himself, his masculinity or femininity, his 'place' in the universe" (Moran, 1979, p. 14).

Historically, when a person entered the health care system, the societal norms related to sexuality under which that person functioned no longer existed. That person became an asexual client in the eyes of the health care providers; for example, some clients experienced multiple examinations without proper draping, were required to wear gowns that were sacklike and opened completely in the back, and encountered avoidance by nurses and other health care providers in answering sex-related questions (Anderson,

1980). Consequently, a situation has existed which fostered anxiety in clients when discussing any sexual concerns with nurses; similarly, nurses have experienced anxiety related to the possibility that clients would ask sexuality questions about which the nurses were embarrassed and/or ignorant. This dual anxiety often resulted in frustrating, nontherapeutic interactions for both clients and nurses (Anderson, 1980).

Today clients verbalize their rights as health care consumers much more frequently than in the past (Kuczynski, 1980). With contemporary societal norms reflecting an openness towards sexuality, the public's interest has been capitalized on by both written and visual media with numerous magazine articles, books, and movies on sex (Kolodny et al., 1979).

This public interest in sexuality has led to consumer demand for health care workers to provide sex education and sexual health care (Kuczynski, 1980). Unfortunately, the interest in the development of sexuality as a science has been slow and nurses as primary health care providers do not have the knowledge or skills necessary for providing clients with sexual health care (Kolodny et al., 1979; Kuczynski, 1980; Lief & Payne, 1975; Solomon, 1980).

Nurses' ignorance of human sexuality has been well documented in the literature (Kuczynski, 1980; Lief & Payne, 1975; Mims, 1976, 1979). This ignorance is related primarily to nursing school curricula deficits. Nursing education curricula have included the study of reproductive biology but few have provided any specific or integrated courses on sexuality (Fontaine, 1976; Lief & Payne, 1975). Nursing educators have verbally supported the inclusion of sexuality as a necessary component of holistic health care, but have lacked the knowledge and skills needed to teach students about sexuality (Fontaine, 1976).

A recent survey (Solomon, 1980) of 34 nursing programs in 11 western states, Alaska, and Hawaii revealed that slightly over half (56%) of the programs included content in sexuality integrated throughout the curricula. There was no determination in this survey of the specific information about sexuality that was integrated, only whether or not the subject was included in the curricula. The results of this survey were more positive than data reported on surveys of nursing programs conducted in the mid-1970s (Lief & Payne, 1975).

Even if nurses obtained a knowledge base about sexuality in their educational programs, role models to demonstrate application of that knowledge have not existed

(Mims & Swenson, 1978). Fontaine (1976) observed that nursing school faculty who verbalized the importance of recognizing clients' sexual concerns did not include sexual aspects in their nursing histories. In addition to imparting knowledge, faculty must include opportunities for discussions of cultural attitudes and values related to sexuality. Cultural taboos of faculty and students in discussing sexuality publicly must be addressed before nurses can be expected to discuss sexual issues with clients (Fontaine, 1976).

According to White (1977),

> attitudes can be defined as the affective and cognitive responses which we have for an object or stimulus. They can be described as responses which reflect attraction or repulsion. (p. 16)

Attitudes are learned but are not permanent; they may change because of personal experience and/or new knowledge (White, 1977).

Nurses bring with them to the health care delivery environment, cultural and societal attitudes about many concepts, including sexuality (Payne, 1976; White, 1977). Those attitudes may reflect attraction or repulsion towards sexuality. Strong prejudicial attitudes can affect the delivery of quality client health care by interfering with the objectivity necessary for a nonjudgmental approach to

client care and the acquisition of knowledge or development of skills (Lief & Payne, 1975).

Understanding and acknowledging attitudes towards sexuality are necessary before nurses can adequately deal with clients' sexual concerns (Lief & Payne, 1975; Payne, 1976). Nurses do not need to change their own moral standards (Payne, 1976), but must be aware of their own personal biases related to sexuality and "make certain that these do not interfere with what is best for the patient" (Lief & Payne, 1975, p. 2026).

When personal attitudes towards sexuality are understood, biases are reduced and communication enhanced (Payne, 1975). Then knowledge and skills deficits can be adequately assessed and addressed. Attitude, knowledge, and skills form an interlocking feedback system so that a weakness of one component affects the whole system (Lief & Payne, 1975).

"Sexual feelings, sexual functioning, and sexual behavior are inextricably interwoven into the entire fabric of human life" (Kolodny et al., 1979, p. 4). Therefore, when people become consumers of health care, their sexuality is influenced. Clients now are asking for answers to their sex-related problems. Obtaining that knowledge is so important to clients that they will seek information from whatever sources are available (Kuczynski, 1980).

Nurses as primary health care providers must meet client demand for sexual health care and sexual education. In order to accomplish this goal, they must first assess their own attitudes towards sexuality as well as their knowledge base. Necessary education must then be provided to correct knowledge and skill deficits so that clients can receive accurate information about their sex-related problems in a nonjudgemental atmosphere.

Theoretical Framework

An attitude as defined by Rokeach (1972) "is a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner" (p. 112). Attitudes are learned through the developmental process and are comprised of three components: cognitive, affective, and behavioral (Rokeach, 1972).

The cognitive component consists of what a person's knowledge is "about what is true or false, good or bad, desirable or undesirable" (Rokeach, 1972, p. 112) about an attitude. The affective component involves the negative or positive emotions that can be aroused under suitable conditions which are centered around the attitude. The behavioral component is concerned with what a person does related to the knowledge and feelings of an attitude (Rokeach, 1972).

A consistency or a balance of these three components is what an individual strives to maintain (Festinger, 1957). Maintaining such a balance is not always possible so that sometimes inconsistency occurs between the cognitive, affective, and behavioral elements. Festinger (1957) referred to inconsistency as dissonance and consistency as consonance. He hypothesized that:

> (1) The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance.
> (2) When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which would likely increase the dissonance. (p. 3)

In addition, Festinger (1957) proposed "that dissonance, that is the existence of non-fitting relations among cognitions, is a motivating factor in its own right" (p. 3). He defined cognition and cognitive dissonance as:

> any knowledge, opinion, or belief about the environment, about oneself, or about one's behavior . . . and so cognitive dissonance can be seen as an antecedent condition which leads to activity oriented toward dissonance reduction. (p. 3)

Dissonance reduction is familiar to nurses whose assignments have required caring for clients with attitudes and beliefs at variance with their own (White, 1977). "Attitudes have been shown to influence significantly our response to ideas, situations, and other people" (Berger, 1979, p. 231). Nurses who have negative ideas towards

abortion will experience dissonance when assigned to care for an abortion client. That dissonance will be communicated behaviorally to the clients, and may result in a barrier to effective care (Berger, 1979; Festinger, 1957; Rokeach, 1972).

With the current openness and frankness about human sexuality, nurses are confronted with caring for clients who candidly acknowledge positive attitudes towards such previously taboo subjects as homosexuality, extramarital sexual relations, the right to choose abortion on demand, and casual sex for women. If nurses' attitudes towards human sexuality issues are dissonant with the clients' attitudes, that dissonance will be expressed, consciously or unconsciously, in behavior related to the cognitive and affective components of the attitudes (Rokeach, 1972). That behavior could be helpful or detrimental to the client's prognosis.

Festinger (1957) stated that acceptance of dissonance is rare, and that rationalization is frequently used to attempt dissonance reduction. Rationalization is not always successful. For this reason, it is important that nurses become aware of their attitudes related to human sexuality so that when dissonance occurs, they can acknowledge it and

utilize conscious, rational thinking and problem solving to reduce it.

Obtaining knowledge of a subject is an important element in the process of dissonance reduction. Having accurate information about a subject can influence a person's perception of a dissonant situation so that logical problem solving can be used to reduce the dissonance (Festinger, 1957).

Nurses' lack of knowledge of human sexuality has been well documented in the literature (Kuczynski, 1980; Lief & Payne, 1975; Mims, 1976, 1979). This ignorance of information about a subject that is necessary for holistic health care has resulted in a state of cognitive dissonance. Nurses experience anxiety related to the imbalance between expected and actual behavior, the dissonant state that Festinger (1957) explained as "the existence of non-fitting relations among cognitions" (p. 3). In this study a survey in the two specialty areas of nurses' knowledge and attitudes of human sexuality was conducted.

Assumptions

The following assumptions were applicable to this study:

1. Staff nurses have varying attitudes and levels of knowledge of human sexuality.

2. Cognitive dissonance occurs when two or more cognitive elements are incongruous with each other (Festinger, 1957).
3. Dissonance reduction is achieved by changing one or more of the cognitive elements (Festinger, 1957).

Research Question

The research question in this study was: Is there a difference in the attitudes and knowledge of human sexuality between OB/GYN nurses and medical-surgical nurses?

Definition of Terms

The following terms are defined for the purpose of this study:

1. Attitude: a learned group of beliefs comprising knowledge, emotion, and behavior about a situation or object (Rokeach, 1972). In this study attitudes of human sexuality were determined by the score on the Sex Knowledge and Attitude Test (SKAT)(Lief & Reed, 1967).
2. Human sexuality: that dimension of a human being that relates to a person's conception of self, maleness or femaleness, including sexual feelings, sexual functioning, and sexual behavior (Moran, 1979; Kolodny et al., 1979).

3. Knowledge: the condition of understanding information and principles about a certain topic (Webster's, 1981). In this study knowledge of human sexuality was determined by the score on the Sex Knowledge and Attitude Test (SKAT)(Lief & Reed, 1967).
4. Medical-surgical nurse: a registered nurse, licensed by the State of Texas, who was assigned to general medicine or general surgery units (excludes hospital subspecialties such as oncology, orthopedics, and urology.
5. OB/GYN nurse: a registered nurse, licensed by the State of Texas, who was assigned to obstetric or gynecology units.

Limitation

A convenience sampling method was used in this study; therefore, the limitation of this study was that the results can be generalized only to the participants of the study.

Summary

Individuals as consumers of health care now are verbalizing their concerns about sexuality issues and are seeking sex counseling and sex education from nurses. Nurses have varying attitudes and levels of knowledge of human sexuality. Historically they have lacked the necessary knowledge base required to meet clients' educational

needs. Additionally, nurses experience dissonance (Festinger, 1957) when they are required to care for clients whose attitudes and values are at variance with their own. Nurses who work in obstetrics or gynecology (OB/GYN) daily encounter situations with clients related to reproduction and sexuality. This study was conducted to determine if there was a difference in the attitudes and knowledge of human sexuality between medical-surgical and OB/GYN nurses.

Chapter 2 contains a review of the literature including contemporary attitudes and knowledge of human sexuality, nurses' attitudes and knowledge of human sexuality, and nurses' role regarding sexuality. Chapter 3 describes the procedure for the collection and treatment of data including a description of the research tool. Chapter 4 contains the analysis of data and Chapter 5 summarizes the study including conclusions, implications, and recommendations for further nursing study.

CHAPTER 2

REVIEW OF THE LITERATURE

Nurses' knowledge and attitudes of human sexuality may affect the quality of care given to clients. Both knowledge and attitudes are affected by educational and cultural factors and by personal experiences (Rokeach, 1972). A review of the literature revealed consistent findings regarding nurses' knowledge of and attitudes toward human sexuality. The following chapter addresses contemporary attitudes and knowledge of human sexuality, nurses' attitudes and knowledge of human sexuality, and nurses' role regarding human sexuality.

Contemporary Attitudes and Knowledge of Human Sexuality

Contemporary attitudes and knowledge of human sexuality are related to several historical factors which have occurred in this century. The first was Freud's psychoanalytic theory (Hogan, 1980) which emphasized that sex was a major factor in personality development. The topic of sexuality was condoned for intellectual discussion. The second factor was World War I which was followed by a rejection of Puritan beliefs and more relaxed attitudes towards sexuality. According to Hogan (1980),

> The third and fourth factors leading to a change in sexual mores were the advent of mass communications and the advent of rapid transportation. Ideas, information, and changes in attitudes were quickly transmitted from area to area. (p. 12)

Kinsey and his colleagues at the University of Indiana conducted the first and most extensive study of human sexuality. The results of this research were published in Sexual Behavior of the Human Male (1948) and Sexual Behavior of the Human Female (1953). The public's positive response to Kinsey's reports indicated a need for more information about sex (Hogan, 1980; Montague, 1969). "Kinsey's work paved the way for scientific study of sexuality and greater comfort with discussion of sexuality as a bio-psycho-social phenomenon" (Hogan, 1980, p. 12). More recently, Masters and Johnson studied human sexual response in males and in females. Hogan pointed out that their books, Human Sexual Response (1966) and Human Sexual Inadequacy (1970), which written as reports of scientific research, received much attention from the general public.

Sexuality has become a far more open and acceptable topic for conversation, and therapy for sexuality related problems has become an integral component of health care. Masters and Johnson have developed treatment techniques for sexual dysfunctions, and problems such as gender identity disturbance are being treated w-th new methods such as sexual reassignment (Hogan, 1980).

Perhaps the single most influential event related to contemporary human sexuality was the development of oral contraceptives--"The Pill" (Montague, 1969). The availability of a convenient, inexpensive, and reliable method of birth control allowed for more realistic family planning and greater freedom of sexual expression (Boston Women's Collective, 1976).

Concomitant with the advent of oral contraceptives was the Woman's Liberation Movement. Women began demanding a greater role in all sectors of business and society. Women's attitudes towards sexuality were changing as, for the first time, women of all socioeconomic levels could enjoy sexual relationships without the fear of pregnancy (Montague, 1969).

Societal attitudes in general toward sexuality changed. Homosexuals publicly acknowledged their sexual preference, married couples exchanged sex partners, and young people were living in communes engaging in sex with various partners. It was a Sexual Revolution in which the motto was "enjoy sex for its own sake" (Montague, 1969, p. 15).

The public's interest in obtaining knowledge about sexuality was capitalized on by the media (Kolodny, Masters, Johnson, & Biggs, 1979). Movies began displaying more explicit sex, and eventually, because of consumer demand, a

rating system for movies was developed to indicate the degree of sex and/or violence in a particular movie. How-to books became popular as evidenced by the success of Comfort's book, The Joy of Sex (Hogan, 1980).

Nurses' Attitudes and Knowledge of Human Sexuality

The public began seeking answers for their sexuality related questions from various sources, one being health care providers (Kuczynski, 1980). The literature revealed that nurses who are a part of the health care provider group lacked the knowledge and experience to adequately meet consumer demands for sexual health education (Mims, 1978; Wood & Mandetta, 1975). The basis for this deficit can be found in nursing school curricula and in agency continuing educational departments (Lief & Payne, 1975; Mims, 1978).

A study of 115 students conducted in 1971 at the University of Cincinnati revealed that nursing students and medical students had lower knowledge scores and more conservative attitudes on the Sex Knowledge and Attitude Test (SKAT), a standardized questionnaire, than other students (Mims, Yeaworth, & Hornstein, 1974). That same study revealed that nursing students had higher knowledge scores (normed score 53.63) than medical students (normed score

50.86) on the SKAT. A study (Kuczynski, 1980) reported six years later revealed that graduate nursing students continued to score near the mean of 50 on the SKAT knowledge section. That group of 55 graduate nursing students scored 51.96; a group of 55 sophomore medical students scored 51.15, and a group of 358 nonmedical graduate students scored 53.91 on the SKAT knowledge section.

The SKAT knowledge scores of practicing registered nurses were even lower. Payne (1976) tested 108 family planning nurses and 64 senior nursing students. Her data revealed that both groups scored well below the SKAT mean of 50. The family planning nurses had a mean score of 37.37, and the student nurses had a mean score of 43.27. deLemos (1977) surveyed 41 public health nurses who had a normed SKAT knowledge score of 45.76.

Nurses' attitudes towards sexuality were generally conservative (Kuczynski, 1980; Mims, Brown, & Lubow, 1976). The SKAT contains four attitude scales which include questions related to pre- and extramarital heterosexual relations, sexual myths, abortion, and autoerotocism (masturbation). A study conducted in 1974 (Mims et al.) which included nursing students, medical students, and other students revealed that the nursing students' attitudes were more conservative than either of the other two groups. Mean

scores for the nursing students were 47.59 on the heterosexual relations (HR) scale, 54.10 on the sexual myths (SM) scale, 44.93 on the abortion (A) scale, and 49.29 on the autoerotocism (M) scale. On all the SKAT attitude scales, scores above 60 indicate liberal or more accepting attitudes, and scores below 40 indicate conservative or strongly negative feelings (Lief & Payne, 1975). Other studies conducted in the mid- to late 1970s revealed similar conservative attitudes (Mims et al., 1976; Payne, 1976).

Kuczynski's study (1980) revealed similar mean attitude scores for a group of 55 graduate nursing students: HR scale 45.04, SM scale 53.31, A scale 42.08, and M scale 47.69. All of these scores except sexual myths were lower than the mean scores of the sophomore medical students and the graduate nonmedical students also included in the study.

Studies of practicing nurses revealed even more conservative attitudes than those found with the nursing students. deLemos (1977) in testing 41 public health nurses reported median scores of 42 on the heterosexual relations scale, 45.76 on the sexual myths scale, and 45.00 on the autoeroticism scale. She excluded the abortion scale in her study. The most conservative scores reported in nursing literature in the 1970s were those of Payne (1976). Her study which included 108 family planning nurses revealed the

following mean SKAT attitude scores: HR scale 33.07, SM scale 42.72, A scale 37.00, and M scale 36.27.

In these reported studies, the sexual myths scores were higher than any of the other scores. Kuczynski (1980) postulated that the reason for nurses scoring higher on the sexual myths scale may be related to their education which focuses on the biological sciences including reproductive biology. She further postulated that the conservative attitudes may be related to the long-standing medical model approach to nursing education with more emphasis on disease and illness than on learning about and meeting the needs of the whole person.

Nurses' Role Regarding Human Sexuality

Human sexuality is a complicated characteristic of every person. In addition to physiologic responses and biological gender, sexuality involves a person's self-concept and self-esteem.

According to Kuczynski (1980),

> Sexuality includes masculine or feminine self-image, expression of emotional states of being, and communication of feelings for others and encompasses everything that the individual is, thinks, feels, or does during the entire life span. (p. 339)

It reflects a person's sexual experiences and the way a person interprets those experiences. Throughout a person's life sexuality changes as a result of sexual experiences

and social learnings. "Sexual behavior, more than any other behavior, is intimately related to emotional and social well-being yet is misunderstood, feared, and misused" (Kuczynski, 1980, p. 339).

Nurses, as people who are part of society, have beliefs and related attitudes and values towards human sexuality that are a product of culture and experiences. In addition, nurses are a product of the subculture that has been designated by society and the culture to perform certain functions. Part of those functions include a sanction to touch the human body and in general to be concerned about intimate or bodily care activities (Krizinofski, 1973).

Nursing has long been concerned with hygiene and with teaching good hygienic care, but "dichotomous cultural norms are attached to this function: aspects of cleanliness are confused with sex as a somehow unclean practice" (Krizinoski, 1973, p. 674). Nursing supports the view of holistic client care (Solomon, 1980; Kuczynski, 1980), but nursing care has reflected an emphasis on cleanliness and neatness over concern for the interpersonal, cultural, and social needs of clients (Krizinoski, 1973).

Clients today are more vocal in asserting their rights as health care consumers, and they also are more verbal regarding sexuality issues. Clients are asking nurses

specific questions about sexuality related to certain diseases, illnesses, and injuries (Kuczynski, 1980; Payne, 1976). The literature has revealed that nurses are inadequately prepared to meet the clients' needs for sexual health care and sex education (Kuczynski, 1980). This lack of preparation was related primarily to nursing school curricula and secondly to agency continuing education departments (Mims, 1978; Solomon, 1980).

Nursing curricula stress a holistic approach to client care as a method of teaching nursing students to care for the "whole person" of the client. The nursing role in holistic care includes assessment and intervention of psychosocial and spiritual needs as well as physical needs of the client (Solomon, 1980).

Human sexuality involves physical and psychosocial aspects of health care. Nurses must have knowledge of the cultural mores and norms as well as of the physiology of sex. Nurses also must be aware of their own sexual attributes, feelings, and values and be comfortable with their own sexuality before they can effectively counsel clients about sexuality issues (Mandetta & Woods, 1974).

Nursing schools have included reproductive biology in their curricula, but courses specifically about human sexuality have been either absent or elective if offered (Fontaine, 1976; Solomon, 1980). The need for inclusion of

information about sexuality has been stated as being important by nursing educators, but the availability of qualified faculty to teach sexuality courses has been limited (Fontaine, 1976).

Education of nursing school faculty about human sexuality is a necessary first step if nurses are even going to have the needed information to meet clients' sexual health care needs. One method for meeting this educational goal of faculty can be planned seminars and workshops that would include opportunities for gaining insight and awareness of personal attitudes and beliefs as well as learning the biological and sociological aspects of sexuality. Positive changes in SKAT attitude and knowledge scores following concentrated educational programs have been reported in the literature (deLemos, 1977; Mims et al., 1976; Mims et al., 1974). Once faculty have achieved the basic knowledge base and feel comfortable about discussing human sexuality behavior and issues, development and implementation of meaningful courses could occur.

In addition to deficient nursing school curricula, agency continuing education departments have also neglected to offer many programs regarding human sexuality. As a result, even if a nurse had a course in nursing school regarding human sexuality, once she started functioning as

a practitioner, there were few continuing educational programs available to maintain and increase knowledge and counseling skills (Mims, 1978). Time has been a significant variable when considering educational programs for nurses, especially those working in hospitals. Mims (1978) conducted a concentrated program in two days for various professionals including physicians, nurses, and clergy. She used SKAT scores as a measure of the effectiveness of the program. The posttest knowledge, sexual myths, and autoerotocism scores were significantly higher for the nurses. There was little change in the scores of the heterosexual relations and abortion scales (Mims, 1978).

If nursing schools offered comprehensive courses in human sexuality and if agencies followed up with meaningful continuing educational programs on human sexuality and emphasized the significance of sexuality as part of nursing care, the general nursing practitioner would have the needed knowledge and skills to meet clients' human sexuality needs. Additionally, if there were increased emphasis on sexual health care, nurses might begin to feel more comfortable with discussing human sexuality issues and begin to include a sexual history as part of their client assessments.

If holistic client care is considered the norm, the nurses' role regarding human sexuality should include

assessment, planning, intervention, and evaluation of clients' sexual health. At present schools of nursing and agency continuing education departments are not stressing sexuality issues as a part of client care (Lief & Payne, 1975; Mims, 1978; Kuczynski, 1980).

Summary

Clients now are more knowledgeable about sexuality in general and are aware of their rights as consumers. Despite nurses' lack of knowledge and comfort in discussing sexuality issues, clients are asking sexuality-related questions and are expecting answers to their questions (Payne, 1976; Whipple & Gick, 1980). In order to effectively meet clients' needs, nurses must first assess their own attitudes and values regarding sexuality and toward discussing sexual concerns with clients. In addition an adequate knowledge base must be provided for nurses to obtain the necessary information with which to meet clients' needs (Whipple & Gick, 1980).

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The research methodology for this study was a descriptive survey (Polit & Hungler, 1978). The purpose of the survey was to determine if a difference in attitudes and knowledge of human sexuality existed between obstetrical or gynecological (OB/GYN) and medical-surgical nurses.

Setting

The setting for this study was an 800-bed teaching hospital in a metropolitan area in southeastern Texas. There were three medicine and two surgery units with a total of 126 medical-surgical beds and four OB/GYN units with a total of 90 OB/GYN beds including a labor and delivery unit.

Population and Sample

The total licensed registered nursing staff of a large metropolitan teaching hospital in southeastern Texas is approximately 800. The population for this study was all 54 licensed registered OB/GYN nurses and all 62 licensed registered medical-surgical nurses, on all shifts, including head nurses and assistant head nurses, on the nine

nursing units. The convenience sample for this study was those 44 registered nurses who agreed to participate in the study.

Protection of Human Subjects

Protection of human subjects was assured by compliance with the regulations of Texas Woman's University Human Subjects Review Committee and the study agency's Committee for the Protection of Human Subjects (Appendix A). All questionnaires were treated confidentially, and individual responses remained anonymous.

Instrument

The instrument for this study is the Sex Knowledge and Attitude Test (SKAT)(Appendix B). The SKAT was originally designed in 1967 by Harold Lief, M.D., and David Reed, Ph.D., "as a means of gathering information about sexual attitudes, knowledge, degree of experience in a variety of sexual behaviors, as well as a means of obtaining a diversity of biographical information" (Miller & Lief, 1979, p. 282). The test was developed as a tool to aid in teaching courses on human sexuality, as a social sciences research instrument, and as a self-study aid (Miller & Lief, 1979).

The SKAT contains four parts. Part I contains 35 Likert-type items related to attitudes about sexuality. Part II is the Knowledge Scale which contains 71 true/false questions. Part III is the demographic section which was revised to suit the needs of this study by yielding additional data such as nurses' level of education, years of experience in nursing, type of licensure held, assigned work area, and religious preference. Part IV includes questions about personal sexual experience (Miller & Lief, 1979). Part IV was not used in this study because the data about personal sexual experience was not utilized in describing nurses' attitudes and knowledge of human sexuality.

Scores for attitude and knowledge scales can be obtained as either raw scores or standardized scores. Standardized scores, used in this study, are T-scores with a mean of 50 and a standard deviation of 10. These scores were obtained in 1969 and 1970 after analyzing SKAT data from over 2,000 American medical students at 43 institutions (Miller & Lief, 1979; Preliminary Technical Manual, 1972).

There are four attitudinal scales containing seven to nine items each in Part I. These four are: (1) Heterosexual Relations (HR), (2) Sexual Myths (SM), (3) Abortion (A), and (4) Autoeroticism (M).

The Heterosexual Relations Scale (HR) deals with a person's general attitude toward pre- and extramarital relations. A score of 60 or higher indicates that a person accepts, and may even find desirable, premarital heterosexual relations. The same score also indicates that a person views extramarital relations as not harmful and possibly even beneficial in some circumstances. A score of 40 or less on the HR scale indicates a conservative attitude and nonacceptance of either pre- or extramarital relations (Miller & Lief, 1979).

The Sexual Myths Scale (SM) is concerned with a person's acceptance (SM score 40 or less) or rejection (SM score 60 or more) of commonly held sexual misconceptions.

The Abortion Scale (A) deals with a person's general social, medical, and legal feelings towards abortion. Scores of 60 or greater indicate an attitude of acceptance towards abortion, and scores of 40 or less indicate a less favorable attitude toward abortion.

The Autoerotocism Scale (M) deals with a person's general attitudes toward the permissibility of masturbation. Scores of 60 or higher indicate a view that autoerotic stimulation is healthy or acceptable, and scores of 40 or less indicate a view that masturbation is an unhealthy practice (Miller & Lief, 1979).

The Knowledge Scale, Part II, contains 50 questions which are designated test items, and 21 which are lecture items for inclusion when the SKAT is utilized as a tool for classroom instruction. This section yields a single raw score from the 50 test items which reflects a person's knowledge of "biological, psychobiological, psychological, and social aspects of human sexuality" (Miller & Lief, 1979, p. 284). The 21 lecture items are not included in the total knowledge score. A total raw score of less than 50 indicates a lesser degree of knowledge than the average medical student, and a score of 50 or more indicates a performance equal or superior to the average medical student (Preliminary Technical Manual, 1972).

Validity

According to Miller and Lief (1979), all of the items in the SKAT are considered straightforward and undisguised:

> Each question is intended to obtain no more or less information than what is implicit in its meaning. Thus, the items in SKAT are regarded as having face validity. (p. 285)

Construct validity was established based on an internal analysis of the interrelationship among SKAT items. The correlational data were based on a sample of 850 medical students. Pearson product-moment correlation and point biserial correlation of .10 were significantly different

from zero at the .01 level of probability. Construct validity was also obtained from SKAT testing before and after an educational class or program designed to change attitudes and/or knowledge (Miller & Lief, 1979). Mims (1978), Mims, Yeaworth, and Hornstein (1974), and Mims, Brown, and Lubow (1976) all showed increases in knowledge scores and liberalization of at least two attitudinal scales following a workshop on human sexuality.

Reliability

The reliability of the four SKAT attitudinal scales was computed from two separate samples of 425 medical students in the United States. The SKAT was administered in the fall of 1971 to the experimental group and in the spring of 1972 to the cross-validation group. Using coefficient alpha for computation, internal consistency of the attitudinal scales was evidenced. The alpha coefficients for the experimental group were .86 for HR, .71 for SM, .80 for A, and .81 for M. The alpha coefficients for the cross-validation group were .86 for HR, .68 for SM, .77 for A, and .84 for M. The stability of the attitudinal scales was attested to by the negligible or nonexistent shrinkage in reliability upon cross validation. Utilizing the same two samples of medical students, the reliability of the knowledge

test was computed by means of KR-21 and was estimated to be r = .87 (Preliminary Technical Manual, 1972).

Data Collection

Upon approval of the Human Subjects Review Committee of Texas Woman's University and the study agency's Protection of Human Subjects Committee, meetings were held with the nursing directors of medical, surgical, and OB/GYN nursing units to explain the study. Permission was sought from the nursing directors to meet with head nurses of the OB/GYN and general medical-surgical units.

Each head nurse was given the specific number of questionnaire packets equal to the number of licensed nurses on the staff. The packets contained the SKAT and a cover letter. The cover letter explained the purpose and procedure of the study, the protection of anonymity, that participation was voluntary and that there was no coding of questionnaires. Also enclosed in the packet was a consent form for participation in the study as required by the agency's Committee for the Protection of Human Subjects. This form contained a brief statement about the purpose and procedure of the study, the potential benefits and risks of participation in the study and that the return of a questionnaire constituted consent to participate in the study.

The head nurses were asked to distribute the questionnaires to the staff nurses. A box was provided for completed questionnaires. At the end of one week all questionnaires were picked up by the investigator.

Treatment of Data

Demographic data were analyzed using the descriptive statistical technique of frequency distribution for each variable. Other descriptive statistics which included the mean and standard deviation were used to describe attitude and knowledge scores. Knowledge scores were correlated with each of the four attitude scores using the Pearson product-moment correlation coefficient. Knowledge and attitude scores of OB/GYN nurses were compared with knowledge and attitude scores of medical-surgical nurses using the inferential statistical test of Mann-Whitney U.

Summary

This study surveyed the human sexuality attitudes and knowledge of medical-surgical and OB/GYN registered nurses in a teaching hospital in a large metropolitan area. The Sex Knowledge and Attitude Test (SKAT), a standardized test, was the research instrument used. The SKAT was completed by 44 respondents on nine nursing units. Data were analyzed using descriptive and inferential statistics.

CHAPTER 4

ANALYSIS OF DATA

This descriptive study was conducted to determine if there were differences in the attitudes and knowledge of medical-surgical nurses and OB/GYN nurses towards human sexuality. This chapter contains the analysis and interpretation of data obtained from 44 returned questionnaires of the 116 that were distributed.

Description of the Sample

The sample for this study consisted of 44 registered nurses, representing 38% of the total number of questionnaires made available to the nurses for completion. Twenty-three (52.3%) were medical-surgical nurses and 21 (47.7%) were OB/GYN nurses. All but one (2.3%) respondent were females. Ages varied from 25-59 years. The mean age was 32.5 years, and nearly half (45.5%) of the subjects were in the 30-39 years age range (Table 1).

Twenty-five (56.8%) of the subjects were married, 13 (29.5%) were single, and 6 (13.6%) were either separated, divorced or widowed. Almost half (47.7%) of the respondents were Protestant, 14 (31.8%) were Catholic, 1 (2.3%)

Table 1

Frequency and Percentage of Demographic Characteristics of 44 Registered Nurses Responding to the Sex Knowledge and Attitude Test

Variables	Number	Percent
Age Ranges (Years)		
25-29	17	38.6
30-39	20	45.5
40-49	6	13.7
50-59	1	2.3
Total	44	100.0
Marital Status		
Single	13	29.5
Married	25	56.8
Postmarried[a]	6	13.6
Total	44	100.0
Nursing Education		
Diploma	10	22.7
Associate Degree	8	18.2
B.A. or B.S.	26	59.1
Total	44	100.0
Years Nursing Experience		
Less than 1 year	1	2.3
1-5 years	16	36.4
6-10 years	14	31.8
11-15 years	8	18.2
Over 15 years	5	11.4
Total	44	100.0
Area of Practice		
Medical-surgical	23	52.3
OB/GYN	31	47.7
Total	44	100.0

[a]Postmarried includes separated, divorced and widowed.

was Jewish, and 8 (18.2%) did not state a religious preference.

In the questionnaire, the subjects were asked to indicate their highest level of education. Ten (22.7%) responded that they had a diploma in nursing, and eight (18.2%) had an associate degree in nursing. The majority, 26 (59.1%), reported that a baccalaureate degree in nursing was their highest level of education. None of the subjects indicated that they held a degree higher than baccalaureate.

The nurses were asked to indicate their years of nursing experience. Of the subjects, only one (2.3%) had less than one year's experience. Sixteen (36.4%) had 1-5 years' experience, 14 (31.8%) had 6-10 years' experience, and 5 (11.4%) indicated that they had been in nursing over 15 years (Table 1).

The questionnaire asked about the type of human sexuality education the nurses had had. Over half, 25 (56.8%) indicated that information about sexuality had been integrated in their nursing school curricula. Six (13.6%) reported that they had a formal college course dealing with human sexuality. Six respondents (13.6%) indicated that they had attended seminars and/or workshops about sexuality. Seven nurses (15.9%) responded that they had no education regarding human sexuality (Table 2).

Table 2

Frequency and Percentage of Human Sexuality Education and Counseling of 44 Registered Nurses Responding to the Sex Knowledge and Attitude Test

Variable	Number	Percent
Sex Education		
Formal college course	6	13.6
Integrated curriculum	25	56.8
Seminars/workshops	6	13.6
None	7	15.9
Total	44	100.0
Sex Counseling		
Regularly counsel	2	4.5
Intermittently counsel	24	54.5
No counseling	18	40.9
Total	44	100.0

The nurses were also asked to indicate the amount or experience they had counseling or teaching about human sexuality in their nursing practice. Over half, 24 (54.5%), reported that they conducted sex education and/or counseling intermittently while involved in client care. Eighteen subjects (40.9%) indicated that they did no sex counseling. Only two subjects (4.5%) reported that they regularly counseled clients regarding human sexuality.

Findings

To determine the degree of knowledge about human sexuality possessed by the 44 respondents, the 50-item

knowledge protion of each questionnaire was hand scored for the raw score. Raw knowledge scores in this study ranged from 21 to 44. A normed score was then computed using the Sex Knowledge and Attitude Test (SKAT) key. The normed scores for the knowledge section of SKAT vary from -9.57 to 72.18. The mean normed score for graduate nurses as determined by SKAT was 50.50. This is compared to the average score of 50.00 obtained by medical students taking SKAT. The nurses in this study were somewhat below the mean with a normed score of 43.66.

Each of the 35 Likert-type questions were hand scored to produce raw scores for the four attitude scales. These scales included items regarding heterosexual relations, sexual myths, abortion, and autoerotocism. Raw scores were converted to normed scores using the SKAT key. For all four attitude scales, normed scores below 40 indicate conservative attitudes and scores greater than 60 indicate liberal attitudes.

Raw scores for the heterosexual relations scale varied from 8 to 40 (normed 17.05 to 69.83). The respondents in this study had raw scores varying from 8 to 34 (normed 14.17 to 59.39) with a mean score of 23.97 (normed 42.00). When converted to normed scores, scores of over one third (38.6%) of the 44 respondents were below 40 which indicated

unfavorable attitudes towards premarital and extramarital sexual relations. The majority (61.4%) scored between 40 and 60 which indicated neither extreme position.

Scores for the sexual myths scale varied from 10 to 45 (normed -6.16 to 72.84). The respondents in this study had raw scores varying from 21 to 42 (normed 18.67 to 66.07) with a mean score of 33.53 (normed 48.01). Eight respondents (18.2%) had scores below 40 and five (11.4%) had scores over 60. In this scale, scores under 40 represent acceptance of commonly held sexual myths, and scores over 60 represent rejection of sexual myths. The majority (72.4%) scored between 40 and 60.

The abortion scale scores varied from 8 to 40 (normed 13.33 to 67.11). In this study, raw scores varied from 12 to 43 (normed 20.05 to 57.03) with a mean score of 25.21 (normed 41.90). Slightly over a third (34.2%) of the respondents scores under 40 which indicated unfavorable attitudes towards abortion. The majority (65.8%) scored between 40 and 60 which indicated neither conservatism nor liberalism.

The autoerotocism scale raw scores varied from 7 to 35 (normed 3.75 to 71.55). Raw scores of the respondents varied from 14 to 32 with a mean score of 24.21. In this study 11 (24.9%) scored over 60 indicating positive attitudes towards masturbation. A fifth (20.3%) scored under

40 indicating unfavorable attitudes towards mastubatory activities. Slightly over half (54.8%) scored between 40 and 60 indicating attitudes of neither conservative nor liberal extreme.

The data analysis of the respondents revealed normed mean attitude scores between 41.90 and 48.01. SKAT attitude scores between 40 and 60 indicate neither conservative nor liberal attitudes. The respondents also revealed a knowledge score below the SKAT mean of 50 (Table 3).

Table 3

Knowledge and Attitude Scores of 44 Registered Nurses Responding to the Sex Knowledge and Attitude Test

Scale	Raw Score Range	Mean Score	SD	Normed Score Range	Normed Mean Score
Knowledge	21-44	34.477	6.245	17.05-60.77	43.66
Heterosexual Relations	8-34	23.977	6.083	14.17-59.39	42.00
Sexual Myths	21-42	33.529	5.085	18.67-66.07	48.01
Abortion	12-34	25.205	5.188	20.05-57.03	41.90
Autoerotocism	14-32	24.205	4.202	20.70-64.29	44.92

Relationship of Knowledge and Attitude Scores Between Medical-Surgical and OB/GYN Nurses

Using the Mann-Whitney U test, knowledge and attitude scores were compared between nurses in the two practice areas. In all sections the medical-surgical nurses' mean ranks were higher than the OB/GYN nurses (see Table 4).

Table 4

Mann-Whitney U Comparison of Sex Attitude and Knowledge Scores Between 23 Medical-Surgical and 21 OB/GYN Nurses

Scale	Mean Rank		U Value	p
	Medical-Surgical	OB/GYN		
Knowledge	26.67	17.93	145.5	.02*
Heterosexual Relations	24.54	20.26	194.5	.27
Sexual Myths	26.11	18.55	158.5	.05*
Abortion	24.63	20.17	192.5	.25
Autoerotocism	27.50	17.02	126.5	.01*

*$p \leq .05$

In the heterosexual relations scale, the mean rank for the medical-surgical nurses was 24.54; the mean rank for the OB/GYN nurses was 20.26. Mean ranks for the sexual myths scale varied significantly with the medical-surgical nurses having a mean rank of 26.11, and the OB/GYN nurses having a mean rank of 18.55. Mean ranks for the abortion scale were similar with the medical-surgical nurses having a

mean rank of 24.63, and the OB/GYN nurses having a mean rank of 20.17. Mean ranks for the autoerotocism scale varied significantly with the medical-surgical nurses having a mean rank of 27.50 and the OB/GYN nurses having a mean rank of 17.02. A significant difference also occurred in the knowledge section with the medical-surgical nurses having a mean rank of 26.67 and the OB/GYN nurses having a mean rank of 17.93.

Relationship Between Knowledge and Attitude Scores

To determine the relationship between attitude and knowledge scores, a Pearson product-moment correlation coefficient was calculated. There was a significant relationship between knowledge and all attitude scores except abortion (Table 5). The highest positive direct correlation of knowledge and attitude scores was between knowledge and sexual myths (r = .68).

Relationship of Selected Variables to Knowledge and Attitude Scores

Certain demographic variables were analyzed in relation to knowledge and attitude scores. These demographic variables were marital status, religion, and years of nursing experience. A one-way nonparametric ANOVA was used with each variable to determine if there was any significance between the variables and the scores.

Table 5

Pearson's r for Knowledge and Attitude Variables of 44 Registered Nurses Responding to the Sex Knowledge and Attitude Test

	Knowledge	Hetero-sexual Rela-tions	Sexual Myths	Abortion	Auto-erotocism
Knowledge	1.00	.46*	.68*	.23	.54*
Heterosexual Relations		1.00	.50*	.64*	.58*
Sexual Myths			1.00	.37*	.69*
Abortion				1.00	.54
Autoerotocism					1.00

*$p \leq .05$

In investigating marital status, a significant difference ($\chi^2 = 7.37$, $p = .03$) was found between marital status and heterosexual relations scores. Married nurses had the lowest mean rank (18.08), and postmarried (separated, divorced, and widowed) nurses had the highest mean rank (34.42). Single nurses were in between with a mean rank of 26.88.

Analysis of the relationship between marital status and knowledge and scores on the other three attitude scales revealed no significant difference (Table 6). Knowledge scores by marital status varied only slightly between the

Table 6

Kruskal-Wallis Tests of Marital Status and Knowledge and Attitude Scores of 44 Registered Nurses Responding to the Sex Knowledge and Attitude Test

	Mean Rank				
	Knowledge	Hetero-sexual Rela-tions	Sexual Myths	Abortion	Auto-erotocism
Single (N=13)	22.85	26.88*	21.54	23.15	23.46
Married (N=25)	22.42	18.08*	21.86	19.78	21.24
Postmarried[a] (N=6)	22.08	31.42*	27.25	32.42	25.67

[a]Separated, divorced, or widowed.

*$p \leq .05$

three groups with single nurses having a mean rank of 22.85, married nurses having a mean rank of 22.42, and postmarried nurses having a mean rank of 22.08. Mean ranks for sexual myths varied somewhat with postmarried nurses having a mean rank of 27.25, married nurses having a mean rank of 21.86, and single nurses having a mean rank of 21.54. Mean ranks for autoerotocism scale varied only slightly. The mean rank for married nurses was 21.24, for single nurses 23.46, and for postmarried nurses it was 25.67. There was a greater diversity of mean ranks in the abortion scale. Married nurses revealed a low mean rank of 19.78, and postmarried

nurses varied greatly with a mean rank of 32.42. Single nurses were in between the two extremes with a mean rank of 23.15.

In analyzing religion and knowledge and attitude scores, no significant relationship was determined. For the most part mean ranks between Protestant, Catholic, and "no religious preference stated" nurses varied only slightly. For the heterosexual relations scale, mean rank values of Protestant (20.88) and Catholic (20.93) nurses were essentially the same. Nurses who had no stated religious preference had a mean rank of 26.88. The Jewish nurse's mean rank was 43.50. Mean rank values for the sexual myths scale ranged from 18.57 for Catholic nurses to 43.00 for the Jewish nurse. Protestant and no stated religious preference nurses were in between with mean ranks of 22.64 and 26.44, respectively. On the abortion scale, Catholic nurses' mean rank was the lowest (18.00). Mean rank values of Protestant (23.00) and no stated religious preference (26.81) groups varied slightly. The Jewish nurse's mean rank was 40.50 (see Table 7).

Except for the Jewish nurse's mean rank of 43.50, mean rank values for the autoerotocism scale varied only slightly. Catholic nurses had a mean rank of 18.82; Protestant nurses had a mean rank of 23.98, and nurses who had no stated

Table 7

Kruskal-Wallis Tests of Religion and Knowledge and Attitude Scores of 44 Registered Nurses Responding to the Sex Knowledge and Attitude Test

	Mean Rank				
	Knowledge	Hetero-sexual Rela-tions	Sexual Myths	Abortion	Auto-erotocism
Protestant (N=21)	22.05	20.08	23.64	23.00	23.98
Catholic (N=14)	21.96	20.93	18.57	18.00	18.82
Jewish (N=1)	28.50	43.50	43.00	40.50	43.50
No Preference (N=8)	23.88	26.88	26.44	26.81	22.44

religious preference had a mean rank of 22.44. Knowledge mean ranks varied only 7 points between the four groups. Catholic nurses had the lowest mean rank (21.96). The Jewish nurse had the highest mean rank (28.50). Protestant nurses had a mean rank of 22.05, and nurses with no stated religious preference had a mean rank of 23.88.

As with the religion variable, there was no significant difference determined between years of nursing experience and knowledge and attitude scores. However, except for the abortion scale, nurses with over 15 years experience scored higher than any other nurses. There was one respondent with

less than one year's experience. That person's mean rank was lower than the other nurses on all areas (Table 8).

Table 8

Kruskal-Wallis Tests of Years of Nursing Experience and Knowledge and Attitude Scores of 44 Registered Nurses Responding to the Sex Knowledge and Attitude Test

	Mean Rank				
	Knowledge	Hetero-sexual Rela-tions	Sexual Myths	Abortion	Auto-erotocism
<1 year (N=1)	1.00	11.50	2.40	10.00	1.50
1-7 years (N=16)	22.69	18.19	20.03	19.13	21.06
6-10 years (N=14)	22.93	25.86	24.18	26.54	24.11
11-15 years (N=8)	16.94	22.06	17.88	21.88	22.69
>15 years (N=5)	33.90	29.80	27.50	25.50	26.50

Knowledge mean ranks for nurses with 1-5 years (22.69) and 6-10 years (22.93) experience essentially did not vary. Nurses with 11-15 years experience had a mean rank of 16.94, and nurses with over 15 years experience had a mean rank of 33.90. The nurse with less than one year's experience had a mean rank of 1.00. Mean ranks for heterosexual relations

scale varied minimally for nurses with 6 or more years experience. Nurses with 6-10 years experience had a mean rank of 25.86; nurses with 11-15 years experience had a mean rank of 22.06, and nurses with more than 15 years experience had a mean rank of 29.80. Lower mean ranks were seen by the nurse with less than one year's experience (11.50) and nurses with 1-5 years experience (18.19).

In the sexual myths scale the low mean rank, excluding the nurse with less than one year's experience (2.50), was seen in the group with 11-15 years experience (17.88). Mean ranks for the remaining three groups varied only slightly. Nurses with 1-5 years experience had a mean rank of 23.03; nurses with 6-10 years experience had a mean rank of 27.50. Lower mean ranks for the abortion scale appeared in the group with 1-5 years experience (19.13) and the nurse with less than 1 year's experience (10.00). Mean ranks for the other groups varied minimally. Nurses with 6-10 years experience had a mean rank of 26.54; nurses with 11-15 years experience had a mean rank of 21.88, and nurses with over 15 years experience had a mean rank of 25.50. Except for the nurse with less than one year's experience whose mean rank was 1.50, mean ranks for the remaining four groups on the autoeroticism scale varied only slightly. Nurses with 1-5 year's experience had a mean rank of 21.06; nurses with 6-10 years experience had a mean rank of 24.11; nurses with

11-15 years experience had a mean rank of 22.67, and nurses with over 15 years experience had a mean rank of 26.50.

Summary of Findings

Chapter 4 has presented an analysis and interpretation of the findings of this study. Data analysis revealed that the normed mean knowledge score of subjects was below that previously reported for SKAT graduate nurses, and the normed mean attitude scores of subjects were between 40.00 and 60.00 which indicated they were neither conservative nor liberal.

Analysis of the relationship of knowledge and attitude scores between the two practice areas revealed that medical-surgical nurses had a higher mean rank than OB/GYN nurses on the knowledge section ($p = .02$) and on the sexual myths ($p = .05$) and autoerotocism ($p = .01$) attitude scales. A study of knowledge and the four attitude scores revealed a significant relationship between knowledge and all attitude scores except abortion. The greatest positive direct correlation ($r = .68$) was between knowledge and the sexual myths scale. Demographic data analysis revealed a significant relationship between marital status and heterosexual relations scores.

CHAPTER 5

SUMMARY OF THE STUDY

The purpose of this study was to determine if there was a difference in knowledge and attitudes of 23 medical-surgical nurses and 21 OB/GYN nurses toward human sexuality. The study further sought to determine if there was any significance between Sex Knowledge and Attitude Test (SKAT) scores and selected demographic variables. This chapter presents a summary of the study and a discussion of the findings. The conclusion, implications, and recommendations for further study conclude the chapter.

Summary

Human sexuality is considered an integral component of holistic health care. Because nurses who work in OB/GYN are constantly dealing with health care problems related primarily to reproductive function and secondarily to sexual behavior and concerns, this study was conducted to determine if there was a difference in knowledge and attitudes of medical-surgical and OB/GYN nurses towards human sexuality. This study also attempted to determine if selected demographic variables affected knowledge and/or attitudes towards human sexuality.

A review of the literature revealed that nursing educators and nurse practitioners consider meeting human sexuality needs to be an important aspect of total health care. The literature also revealed, though, that nurses are inadequately prepared in educational programs to meet clients' sexual health care needs. Few schools of nursing offer comprehensive courses in human sexuality, and, in general, the courses that are offered are elective. Furthermore, once functioning as a practitioner, the nurse has few clinical role models related to sexual health care counseling. The literature revealed that not only do nurses have insufficient knowledge of human sexuality, they also have more conservative attitudes than non-nurses towards sexuality.

To determine if there was a difference in medical-surgical and OB/GYN nurses' knowledge and attitudes towards human sexuality, a descriptive survey was conducted. The setting was a large teaching hospital in a metropolitan area in southeastern Texas. The study was conducted on five general medical-surgical and four OB/GYN units. The data were collected using the Sex Knowledge and Attitude Test (SKAT) which consists of a knowledge section with 50 true/false questions and an attitude section with 35 Likert-type items. The attitude section includes items related to

heterosexual relations, sexual myths, abortion, and masturbation. A demographic section was also included in the questionnaire packet. Using convenience sampling 116 questionnaires were distributed and 44 were returned. The data were then analyzed using descriptive and inferential statistics.

From the analysis of the data it was found that the nurses as a group had lower mean knowledge scores and lower mean attitudes scores than those previously reported for SKAT graduate nurses. Analysis of data between the two practice areas revealed that medical-surgical nurses had significantly higher mean ranks than OB/GYN nurses in the knowledge section and in the sexual myths and autoerotocism attitude scales. A comparison of knowledge and attitude scores revealed a significant relationship between knowledge and all attitudes except abortion. Demographic data analysis revealed a significant relationship between marital status and heterosexual relations mean ranks.

Discussion of Findings

A major finding of this study was that, while both groups had extremely low knowledge raw scores, there was a significant difference ($p = .02$) in SKAT knowledge mean ranks of medical-surgical and OB/GYN nurses. Studies revealing low SKAT knowledge mean scores for nurses have

previously been reported by Lief and Payne (1975) and Kuczynski (1980).

Studies in the literature using SKAT as the data collection tool have reported generalized groups of nurses, for example, graduate nurses and nursing students. A specific study with nurses counseling hysterectomy patients regarding postoperative sexual functioning was reported by Krueger, Hassell, Goggins, Ishimatau, Pablico, and Tuttle (1979). That study revealed that nurse counseling was not related to sexual readjustment and that patients did not feel that they received their most valuable counseling from nurses. Almost half of the patients responding suggested that nurses provide hysterectomy patients with more information about the effects of surgery on sexuality.

The data from this study revealed that medical-surgical and OB/GYN nurses have, as the literature has reported, insufficient knowledge to provide adequate sexual health counseling and/or education. It further revealed, for a reason the investigator was unable to determine, that nurses in the study who work every day with patients who are experiencing some sort of concern related to their reproductive system have a much lower SKAT knowledge mean rank than nurses who care for general medical-surgical patients.

The medical-surgical nurses also had significantly higher mean ranks than the OB/GYN nurses on the sexual myths

(p = .05) and autoerotocism (p = .01) attitude scales. From the data and the literature, the investigator has no supposition as to why those two attitude scales varied significantly.

The SKAT knowledge scores in this study were significantly related to all attitude scores, except abortion. The highest positive direct knowledge/attitude correlation in this study was between knowledge and sexual myths (r = .68). A possible explanation for a positive relationship between knowledge and sexual myths was reported by Kuczynski (1980). She postulated that nurses' education in the biological sciences might be related to an increased rejection of sexual myths.

In analyzing data for selected demographic data and SKAT knowledge and attitude scores, a significant relationship was revealed between marital status and heterosexual relations. A possible explanation might be that married nurses who had the lowest mean ranks reject the idea of extramarital heterosexual relations. Also, as they become parents, they might have more conservative views about premarital sexual relations for their children. Single nurses might have more liberal attitudes towards premarital sexual relations, as indicated by a higher heterosexual relations mean rank, than the married nurses. The highest mean ranks

were reported by nurses who were either separated, divorced, or widowed. A possible explanation might be that these nurses, who were once married, and supposedly shared a sexual relationship with their spouses, developed more liberal attitudes towards pre- and extramarital sexual relations as a result of their own sexual experiences and maturation.

Conclusions and Implications

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

1. Medical-surgical and OB/GYN nurses have less knowledge of human sexuality than SKAT graduate nurses.
2. Medical-surgical nurses have more knowledge of human sexuality than OB/GYN nurses.
3. OB/GYN nurses have more conservative attitudes toward autoerotocism and more acceptance of sexual myths than do medical-surgical nurses.
4. Nurses who are either separated, divorced, or widowed have more liberal attitudes toward pre- and extramarital heterosexual relations than married nurses.

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

1. Educational programs related to human sexuality need to be provided to meet staff nurses' needs

for knowledge that is related to sexuality issues.

2. Nursing educational curricula need to place more emphasis on human sexuality concerns of clients.
3. Nurse practitioners with expertise in sexual health counseling and education should be available for staff nurse consultation.

Recommendations

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

1. Conduct a survey with clients to ascertain their concerns related to sexuality.
2. Conduct a similar study with a larger population in a different geographical area of the country.

APPENDIX A

AGENCY PERMISSION

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 77030

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE_____

GRANTS TO Carol Burrage
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_____

Date: June 10, 1983

Signature of Agency Personnel

Carol Burrage
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.

/bc

APPENDIX B

QUESTIONNAIRE PACKET

CONSENT FORM FOR PARTICIPATION IN THE
STUDY OF MEDICAL-SURGICAL AND
OB/GYN NURSES ATTITUDES AND KNOWLEDGE
REGARDING HUMAN SEXUALITY

Dear Registered Nurse:

I am a candidate for the Masters of Science Degree in Nursing at Texas Woman's University. My Master's thesis involves studying the attitudes and knowledge of human sexuality of staff nurses in specific clinical areas of the hospital. Sexuality is an integral component of an individual's personality, and nurses in the hospital are continually in contact with people who experience alterations in their sexuality related to illness, injury, or disease. Because of these alterations in sexuality, nurses are frequently called upon to include sex education and/or sex counseling in patients' care. Providing sexual health care involves a certain understanding by nurses, and for that reason, I am interested in exploring the attitudes and knowledge towards human sexuality of nurses who work in medical, surgical, and OB/GYN units of the hospital. Results of this research study may assist nurses in improving the total care they provide for people who are ill.

The enclosed questionnaire is structured to make it as easy as possible for you to complete it quickly. It should take approximately 15 minutes of your time to answer the questions. Please place your completed questionnaire in the enclosed envelope and place the envelope in the box that is on your unit. I will collect the questionnaires one (1) week from the time you receive it. There is no financial cost whatsoever to you. Participation in the study is voluntary, and you may refuse to participate without jeopardizing your job in any way. The project has been approved by the

and

Texas Woman's University's Human Subjects Committee. The questionnaires are not coded in any way. All questionnaires will be treated confidentially, and individual responses will remain anonymous. PLEASE BE ADVISED THAT YOUR RETURN OF THE QUESTIONNAIRE CONSTITUTES YOUR INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH SURVEY.

You may retain this sheet as your copy of agreement to participate in this study. The results of this study will be made available to you upon request. Correct answers to the knowledge section of the questionnaire will be posted on your unit after completion of the survey. If you have any questions please feel free to contact me at the phone number or address below.

Thank you so much for your interest.

Sincerely,

Carol Hultburg

Carol Hultburg
8801 S. Braeswood, #1302
Houston, Texas 77031
Phone: 772-4978 (home)
797-4660 (work)

This research study, HSC-TWU-83-008, has been reviewed and approved by the Committee for the Protection of Human Subjects . For inquiry regarding subject's rights or to report a research related injury, the Committee may be contacted at (713) 792-5048.

PART I: 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 a female he aborts.

___21. Promiscuity is widespread on college compuses 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.

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. Transvestism (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.

____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 staisfying 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: 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. Obstetric-gynecology

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

Verbal permission to duplicate and use the Sex Attitude and Knowledge Test (SKAT) was granted by Jean McLaughlin, Secretary to William R. Miller, M.D., Director of Clinical Services and Research, Marriage Council of Philadelphia, Inc., Philadelphia, Pa.

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