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A descriptive survey of registered nurses' attitudes, knowledge and skills related to sexual health care of older clients

Author
Parsons, Virgil

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A DESCRIPTIVE SURVEY OF REGISTERED NURSES' ATTITUDES, KNOWLEDGE AND SKILLS RELATED TO SEXUAL HEALTH CARE OF OLDER CLIENTS

by

Virgil Parsons

B.S., University of Kansas, 1966

M.S., University of California, San Francisco, 1971

DISSERTATION

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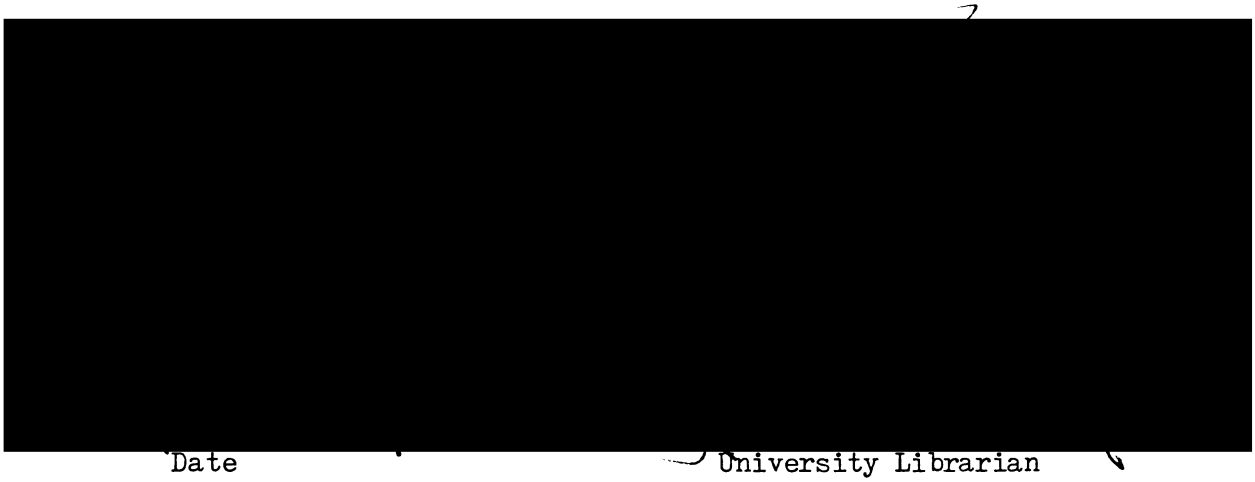

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ABSTRACT

A descriptive survey approach was used to obtain information about registered nurses' attitudes, knowledge and skills related to sexual health care of older clients. A convenience sample population of 52 registered nurses, at least 50% of whose clients were 50 years old or older, provided the data, which were collected using parts of a standardized test, the Sex Knowledge and Attitude Test (SKAT), and a questionnaire developed by the investigator. The data collection instrument was self-administered and returned by mail, with a return rate of 71.2% (N = 52).

The sample population was representative of nurses who work with older clients, with the exception that nonwhite nurses, with only four (8%) respondents, were very underrepresented. The model respondent was a 30-39-year old, white/Caucasian female, who was married, with 1-3 children, and with 10-19 years as a practicing nurse. Seventy-five percent or more of her clients were 50 years of age and older, and she worked in an actue or long-term, medical-surgical or gerontological, clinical setting. She had an undergraduate level of education, may have had a course in human sexuality, but probably had not taken a sexuality and aging course.

The three research questions and major findings were:

1. What are registered nurses' attitudes toward, and level of knowledge about, sexual behavior? Registered nurses who work with older clients have an average level of knowledge about sexual behavior. They are also about average in

their: (a) acceptance of premarital and extramarital heterosexual relations, (b) rejection of sexual myths and misconceptions, (c) acceptance of abortion, and (d) acceptance of masturbation. These "averages" are based on standardization with medical and nursing personnel, not the general population.

2. Is there any correlation between selected demographic characteristics of registered nurses and their knowledge and attitudes about sexual behavior? Little relationship was found between the nurses' knowledge of and attitudes toward sexual behavior and the characteristics explored in the data collection instrument. A significant correlation was found between increased age and lower acceptance of premarital and extramarital sexual behavior and less acceptance of masturbation. Nurses with graduate education were found to have significantly greater knowledge about sexual behavior than those with undergraduate preparation. Also, nurses who had taken a human sexuality course were significantly less accepting of premarital and extramarital heterosexual relations than those who had not taken such a course.

3. How, and to what extent, is sexual health care integrated into the nursing care of older clients? Nursing personnel rarely use the nursing process to provide sexual health care. Also, nurses are often uncomfortable with their own attitudes and feelings regarding sexuality and sexual behavior, and nurses are generally viewed as having inadequate knowledge and skills for giving sexual health care.

External factors are generally hindrances to sexual health care, most notably lack of support from administrative personnel, physicians and clients' families.

The findings strongly suggest that, in spite of nurses' knowledge and attitudes, effective sexual health care is not being provided to older clients. Not only must effort be directed toward increasing knowledge, awareness and acceptance of attitudes, but also the external factors and problems need attention. These external influences appear to be serious barriers to positive sexual health care for older clients.

More research is needed in the area of sexuality, aging and nursing. This study could be repeated for more specific and detailed information from registered nurses and other subgroups of nursing personnel. Also, action research should be carried out to explore methods for providing education and other preparation of nursing personnel who work with older clients to provide effective sexual health care.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1

INTRODUCTION

This chapter describes the research questions, background, purpose and need for a descriptive survey of registered nurses' attitudes, knowledge and skills related to the sexual health care of older clients. The conceptual framework, scope and delimitation are also presented. The chapter concludes with an overview of the research design for the survey.

Research Questions

This study gathers information from registered nurses who work with clients 50 years of age and older about three questions.

1. What are registered nurses' attitudes toward, and level of knowledge about, sexual behavior?

2. Is there any correlation between selected demographic characteristics, such as age, level of preparation and area of clinical practice, and registered nurses' knowledge and attitudes about sexual behavior?

3. How, and to what extent, is sexual health care integrated into total nursing care?

Background

Sexual health care has become an accepted part of total health care and nursing personnel have a responsibility to promote sexual health when providing care and services (Mace, Bannerman & Burton, 1974). Unfortunately, most

nurses have not had the educational experiences needed to acquire the knowledge and skills to provide care for clients with sexual concerns (Mims & Swenson, 1978). This is particularly true in the nursing care of older people in which many nurses and other health care givers seem to ascribe to the prevalent assumptions that:

> (1) old people do not have sexual desire; (2) they could not make love even if they did want to; (3) they are too fragile physically and it might hurt them; (4) they are physically unattractive and therefore sexually undesirable; (5) anyway, the whole notion is shameful and decidedly perverse. (Butler & Lewis, 1977, p. 112)

Recent evidence indicates disagreement with the above assumptions. A 65-year-old man wrote to Ann Landers expressing concern and stating, "I don't feel like an old fool. Although I'm not the man I was 35 years ago, I still have a lot of pep and am far from dead sexually" (Landers, 1977, p. 21). Another item reports that a 64-year-old man was found guilty of attempted rape ("Nine-Year Term," 1977). This information and more that has been written suggests that older people's awareness of their sexuality is increasing and that they will expect and demand appropriate sexual health care from health care professionals.

To provide effective sexual health care, nurses must have accurate information regarding human sexuality, be accepting of their own sexual values and practices as well

as those of others, and develop skills in sexuality education and counseling (Mims & Swenson, 1978, p. 121). In order for nurses who work with clients to achieve these aims, more information is needed about the current status of the three dimensions of sexual health care--knowledge, attitudes and skills--and about how sexual health care is carried out in the nursing care of older clients.

Purpose and Need

The purpose of this study is to identify and describe registered nurses' attitudes toward and knowledge of sexual behavior, and to assess how, and to what extent, skills are used to provide sexual health care to older clients. Several writers (Burnside, 1975; Costello, 1975; Gress, 1978; Stanford, 1977; Yeaworth & Friedeman, 1975) have indicated that nurses' attitudes are too conservative, knowledge is lacking, and skills are deficient for giving adequate sexual health care to older persons. However, none of these opinions has been explored or documented through research, and more accurate and systematic information is needed for determining the current status of sexual health care in the nursing care of older clients (Gunter & Miller, 1977).

Information gained from this study provides a basis for planning and implementing educational experiences regarding sexual health care of older clients. The investigation furnishes valuable information about the sexual health care component of total nursing and health care. Also, the

findings could reveal unshared or uncommunicated information and strategies for providing sexual health care. In writing about sexuality, aging and nursing, Steffl (1978) states:

> No doubt personnel in institutions, especially those giving direct care to patients, could tell us much more about coping strategies and innovations, but our taboos have made it too dangerous for them to do so. (p. 152)

Most importantly, this study is needed as a beginning point to deal with older clients' suffering resulting from their sexuality being ignored, negated or suppressed.

Krizinofski (1973) points out a need for an "exploration of the role of the nurse in intervention in the sexual concerns of clients" (p. 676). This study addresses this need by exploring registered nurses' attitudes, knowledge and skills related to the sexual health care of older clients.

Conceptual Framework

The conceptual guide for this study is based on a framework of the major concepts of sexual health care and on the proposition of Lief and Payne (1975) that sexual health care is a function of the interaction of "attitudes, skills, and knowledge (the ASK formula) as an interlocking feedback system" (p. 2026). This formula can be represented by the equation:

$$\text{Sexual Health Care} = f \begin{matrix} & \text{Attitudes} & \\ \swarrow & & \searrow \\ \text{Knowledge} & \leftrightarrow & \text{Skills} \end{matrix} \quad \text{which can}$$

be stated: Sexual health care is a function of the interaction of skills, attitudes and knowledge. Thus, the major concepts of the framework are: (a) sexual health care, (b) knowledge, (c) attitudes, and (d) skills.

Sexual Health Care

According to Mace et al (1974), sexual health care refers to those interventions which are aimed at assisting people to conduct their sexual lives successfully, that is, to achieve positive sexual health. The concept of sexual health includes three basic elements:

> (1) a capacity to enjoy and control sexual and reproductive behavior in accordance with a social and personal ethic,
>
> (2) freedom from fear, shame, guilt, false beliefs, and other psychological factors inhibiting sexual responses and impairing sexual relationships, and
>
> (3) freedom from organic disorders, diseases, and deficiencies that interfere with sexual and reproductive functions. (p. 10)

Mace et al also describe three major categories of roles for health care givers in providing sexual health care: (a) educational roles, (b) therapeutic roles, and (c) community roles (p. 12-13). Educational roles center around sexuality education as preventive medicine and for marriage preparation; therapeutic roles are enacted when health practitioners intervene in problems related to

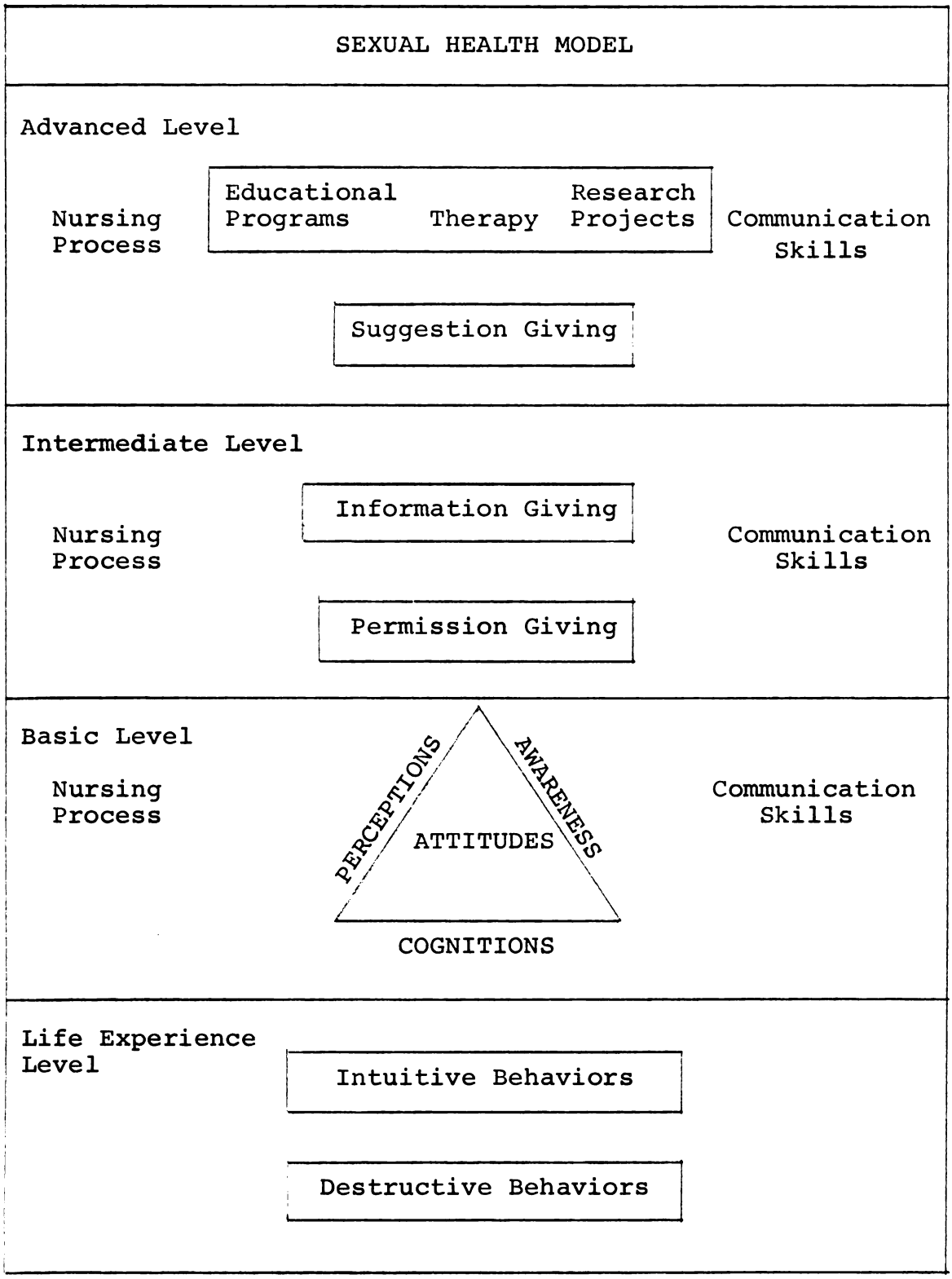
sexuality and sexual functioning. Community roles provide services to people with sex-related problems and should be an integral part of a total program of community health care and services. An example of these last roles is a health care provider giving advice and consultation to legal authorities concerning incest or exhibitionism.

Mims and Swenson (1978) have developed a four-step conceptual model for use in defining the various knowledge, attitudes and skills needed by nurses when providing sexual health nursing care. This model appears on the following page.

The first level, the life experience level, includes both destructive and intuitively helpful behaviors that a person develops as a result of living in society. Operating exclusively from life experiences is a haphazard way of delivering sexual health care; however, many nurses do this because of lack of education and preparation for dealing with clients' sexual concerns.

The second, or basic level of behaviors, begins to use the nursing process and is based on awareness of cognitions, attitudes and perceptions of sexual health care. The cognitions include knowledge of sexual development and functioning; attitudes include feelings, values and beliefs concerning sexuality. Perceptions are dependent on observation and assessment skills. All nurses should be at least at this level of working with clients.

The intermediate level includes communication skills



(Mims & Swenson, 1978, p. 123)

that facilitate "permission giving," providing information and teaching. Permission giving means that nurses, by attitude or word, let clients know that they positively sanction sexuality and sexual behavior. Many sexual concerns are alleviated when a nurse gives clients permission to be sexual or to engage or not engage in sexual activities. Providing information is important for giving accurate and basic knowledge to clients; teaching can serve to assist with sexuality problems and enhance clients' sexual health status. To perform at this level, the nurse needs an introductory course in human sexuality and supervised clinical practice.

The advanced level of functioning includes giving specific suggestions in response to sexual problems, doing sexual therapy, carrying out educational programs, and participating in or conducting research. High level proficiency in these areas would require advanced, probably graduate level, preparation. Only a few nurses have acquired the expertise needed for these activities.

These definitions and discussion illustrate the interaction of attitudes, knowledge and skills in carrying out sexual health care. Each of these dimensions or components of sexual health care will be described separately and more explicitly in the following sections.

Attitudes

An attitude toward any given object, idea or person is

an enduring value system with a cognitive component, an affective component and an action tendency (Freedman, Carlsmith & Sears, 1974, p. 245). The cognitive component consists of beliefs about the attitude object; the affective component includes feelings or emotions connected with the beliefs. The action tendency is a readiness to respond in a certain way toward the object of the attitude. For example, a nurse's attitude toward masturbation might include a belief that it is commonly practiced, feelings of disgust or repulsion when observing autoerotic behavior, and a tendency to discourage clients from or admonish them about masturbatory activity.

It is important to distinguish between attitudes and factual knowledge. The main distinguishing characteristic of attitudes is that they involve an evaluative or emotional component (Freedman et al, 1974, p. 245). The nurse may have factual knowledge that mastrubation is common, but a concomitant belief may be that it should not be done. This judgment or emotional bent results in the feeling of disgust and the tendency to discourage, or even punish, a client who masturbates.

Negative attitudes have been identified as a major obstacle in learning about and providing sexual health care (Krizinofski, 1973; Lief & Payne, 1975; Mace et al, 1974; Mims & Swenson, 1978; Woods & Mandetta, 1975). These attitudes include nurses' embarrassment or discomfort with their own sexuality which hinders them being able to discuss

sexual behavior with clients and to assist clients to achieve optimal sexual functioning. Nurses and other health care givers need help in becoming aware of, and coming to terms with, their own sexuality and sexual behavior. This awareness enables them to develop a greater understanding and tolerance of sexuality in self as well as in others.

Along with personal comfort, nonjudgmental attitudes are essential for giving effective sexual health care. The intention of preparation and training for sexual health care is not necessarily to change the provider's values, biases or prejudices, but simply to increase awareness of these attitudes. It is assumed that nurses and other health care givers cannot be neutral, but by being aware, they can work toward not permitting their personal attitudes to interfere with what is acceptable, right or best for clients.

This discussion has illustrated how nurses' attitudes toward sexuality and sexual behavior influence their providing sexual health care to clients. Thus, it is important that the nature of these attitudes be explored in order to assess the status of sexual health care of nurses' older clients.

Knowledge

Factual knowledge about human sexuality is perhaps easier to acquire than are positive attitudes, but is no less important as a dimension of giving effective sexual health care. The areas of knowledge considered necessary

for a basic understanding of sexuality, sexual behavior and sexual functioning include:

1. Anatomy and physiology of the sexual organs,
2. Psychosexual development,
3. Psychosexual behaviors, and
4. Sexual variations among people. (Mims & Swenson, 1978, p. 122)

In addition, health care givers must learn the interrelations between illness and sexual function and dysfunction, and have a basic understanding of the types of sexual therapy (Mace et al, 1974, p. 21). Nurses should understand reasonably well how fear, anger and guilt can interfere with sexual functioning, and conversely, how pride, hope and joy can augment sexual pleasure (Lief & Payne, 1975, p. 2026). Finally, nurses should have a comprehensive knowledge of the relation of sexuality to the family, reproduction and parental roles and responsibilities.

The subject of human sexuality is vast, sensitive and complex, especially for learners whose goal is not only to learn, but also to prepare themselves to assist and teach others. Exploring this knowledge component of sexual health care is essential for appraising how, and to what extent, sexual health care is included in comprehensive health and nursing care.

Skills

A skill is the ability to perform behaviors in order to

accomplish a specific, identified task or goal. Skills have three components: (a) cognitive, (b) affective, and (c) psychomotor (Hilgard & Bower, 1966, p. 545). The cognitive aspect provides the understanding of the principles and theory underlying the skill; the affective refers to the use of appropriate feelings and emotions when carrying out the skill. The psychomotor component is the observable performance of the behaviors integrating the cognitive and affective components.

An example illustrates these three components. A nurse giving an injection needs to have cognitions or knowledge of the substance being injected and the principles of safe and proper injection technique. The affective component comes into play by the nurse being sensitive and supportive with the client to minimize the pain and discomfort from receiving the injection. The act is culminated by manually carrying out the behaviors of injection giving while integrating the cognitive and affective components.

Sexual health care activity requires this same integration of the three components of skills. For example, assessment of a client's sexual functioning requires the knowledge of which questions to ask, feelings of acceptance, warmth and openness, and ability to interview and communicate in order to get the desired information. Based on this basic outline of skills, specific skills have been described as essential for providing sexual health care.

Krizinofski (1973) describes basic interviewing skills

for accomplishing sexual health care. Nurses should develop interpersonal skills necessary to:

1. Create an atmosphere conducive to discussion of sexual concerns,
2. Listen for nonverbal cues of sexual concerns,
3. Elicit verbalization of underlying concerns, and
4. Assess the client's perception of his sexual concerns. (pp. 675-676)

Mace et al (1974) also describe needed skills. These include:

1. How to recognize a possible sexual difficulty in a client who has not reported such a problem in specific terms.

2. How to ask appropriate questions in order to explore the sexual life of the client.

3. How to accept the client as a person, and to be objective about his/her sexual behavior.

4. How to diagnose a sexual problem with reasonable accuracy.

5. How to offer concrete help to the client, even if the problem is a very complex one that has to be referred.

6. How to make an effective referral, when necessary, to a reliable source of help. (p.20)

In actuality, the skills required for sexual health care are not so different from the skills needed for any other aspect of comprehensive nursing care. Nurses generally should be able to:

1. Use the nursing process of assessment, planning, implementation, and evaluation to promote positive sexual health.

2. Provide sexuality education and counseling.

3. Make referrals to appropriate sources for sexual problems needing intervention beyond their ability.

Skills, the third dimension, completes the triad of the "ASK formula" for sexual health care. Gaining information about skills completes an exploration of sexual health care in the nursing care of older clients.

Summary of Conceptual Framework

Providing sexual health care in nursing practice is influenced by nurses' attitudes toward sexuality and sexual behavior, knowledge of sexual development and functioning, and skills which enhance the sexual health of clients through assessment, planning, implementation and evaluation. To investigate sexual health care in the nursing care of older clients, all three of these dimensions of the "ASK formula" have been explored.

Scope and Delimitation

The conceptual framework helps to focus this study of sexual health care in the nursing care of older persons by delimiting the variables to be explored. The variables identified are attitudes, knowledge and skills which influence the effectiveness of providing sexual health care. Specifically, attitudes toward and knowledge of sexual

behavior are determined to be major factors in sexual health care. The skills variable is less well delineated, and these skills are explored via behaviors which represent their enactment. The behaviors are organized and formulated in relation to the nursing process and sexual health care in nursing practice. Nurses' perceptions of their knowledge, comfort with feelings, and proficiency in skills of sexual health care are also explored.

Research Design

This research is a base-line, descriptive survey, using parts of a standardized test and an investigator-developed questionnaire for data collection. The subjects are a cross-sectional, convenience sample of registered nurses who work with clients 50 years of age and older. These nurses were selected from volunteers who work in a variety of clinical settings. A criterion for an individual to participate was that 50% or more of nurse's clients were 50 years old or older. Descriptive statistics and correlational procedures are the major means for treatment of data. The design and methodology will be described in more detail in Chapter 3.

Summary

This chapter identified the research questions, described the background, purpose and need for the study, presented the conceptual framework and scope, and introduced the design of the investigation. Chapter 2 is a review of relevant literature; Chapter 3 describes the methodology for

the study. Chapters 4 and 5 are a presentation of the data analysis, findings, conclusions and recommendations based on the study results.

Chapter 2

REVIEW OF LITERATURE

This chapter describes a review of research and writings relevant to this investigation of the sexual health care of older clients in nursing. Discussion is presented in three major categories or areas: (a) sexuality and aging, including psychosexual development, (b) sexuality and nursing practice, and (c) sexuality, aging and nursing care.

Sexuality and Aging

The sexuality of older people can best be understood when placed in the context of psychosexual development and human sexual response. Woods (1979) provides an excellent overview of human sexuality; her writing is a major reference for the following summaries.

Human Sexuality

Each individual is a sexual being from the moment of conception until death, and psychosexual development is a complex process resulting from the interaction of physiological, psychological and sociocultural influences. Generally speaking, a core gender identity becomes solidified during early childhood, but sexual maturation does not occur until adolescence when anatomical and physiological changes establish biologic sexuality. Along with physical sexuality, individuals need to define their sex-role behaviors and sexual object choice during the early years of life. Adult

sexuality is largely based on the result of this growth and development, but it still undergoes change and modification during the later years of life.

Masters and Johnson (1966) made a major contribution to the understanding of sexuality by describing a human sexual activity response cycle with four phases: (a) excitement, (b) plateau, (c) orgasm, and (d) resolution. The excitement phase originates with physical or psychological stimuli, and the intensity of arousal increases rapidly. The plateau phase is a stabilizing period that follows excitement if adequate stimulation is maintained. Orgasm, an involuntary climax of sexual tension, involves only a few seconds, and although the total body is involved, the sensory focus is usually in the pelvic area. During the resolution phase, the individual experiences involutional changes which restore the preexcitement state of being.

An important concomitant finding of Masters and Johnson is that human sexual response is a total bodily response rather than merely a genital or pelvic phenomenon. Changes in the cardiovascular and respiratory systems as well as reactions involving skin, muscles, breasts and the rectal sphincter can be observed during the sexual response cycle (Woods, 1979, p. 4).

In addition to the four-stage sexual response cycle, Kaplan (1974) describes the nature of sexual response and activity as being biphasic: (a) vasocongestion, and (b) myotonia. The first is the vasocongestive reaction

resulting in penile erection and vaginal lubrication and swelling. The second is reflex, clonic muscle contractions constituting orgasm. Since these two components involve different structures innervated by different parts of the nervous system, the biphasic formulation increases understanding of the differential effects of disease, trauma, medications and age on sexual functioning and behavior (Woods, 1979, p. 11).

In summary, Woods (1979) lists key constructs regarding the physical, psychological and sociocultural variables influencing sexual activity and behavior.

1. Physiologic aspects of the human sexual response cycle are similar for males and females and are dependent on vasocongestion and myotonia.
2. Biologic aspects of human sexual response may be influenced by psychologic and sociologic variables.
3. Some components of human sexual response may be learned or conditioned.
4. Aspects of sexual behavior other than orgasm may be pleasurable.
5. A number of alternative sexual response patterns exist.
6. Patterns of sexual behavior differ among and between cultural groups.
7. Sexual customs in the United States are changing. There is an increasing concern for the quality of human relationships. The double standard is

> disappearing, perhaps as a result of the technologic control of conception. Sexual behavior has become a matter of individual choice. This change is especially apparent for women, who are now subject to fewer social sanctions for their sexual activity than in the past. (p. 29)

Middle Age: Ages 50-65

Several psychological changes influencing sexuality occur during the middle years, from approximately 50 years of age to the age of retirement. These events include children leaving home, attaining career peak, settling relationships with aging parents and learning ways to use leisure time (Woods, 1979, p. 59). Difficulty with one or more of these can result in decreased self-esteem, disappointment or depression, all of which can affect sexual behavior and sexual functioning.

Physiological concomitants of the aging process can also affect sexuality and include menopause, hormonal changes, decrease in cardiac power and thinning skin. Women may become more interested in sexual activity after menopause, due to absence of the risk of pregnancy. It is speculated that males also go through a "climacteric" period, though the changes are not as pronounced as they are in females (Rubin, 1970, p. 14). Although a gradual decline in overall sexual interest and activity occur as age increases, strong evidence indicates that sex continues to

be an important aspect of middle life (Pfeiffer, Verwoerdt & Davis, 1972).

Old Age: Ages 65 and Over

Several changes confront aging persons during the latter years of their lives, including adjusting to retirement, reestablishing living routines, coping with physical decline and loss, and the grief associated with the death of friends or spouses. The physiological changes that began in middle age continue through the later years. These changes include wrinkling of the skin, diminished visual acuity and hearing, and dimunition of muscle strength and muscle mass. Hormonal changes are responsible for atrophy of breasts and genitalia; the course of atrophy is more gradual in the male than in the female (Woods, 1979, p. 68).

There is evidence that sexual interest and activity continue into the last decades of life. However, the frequency of sexual intercourse and masturbation tends to decrease with age (Gadpaille, 1975; Kinsey, Pomeroy & Martin, 1948; Kinsey, Pomeroy, Martin & Gebhard, 1953; Pfeiffer, Verwoerdt & Wang, 1968). The reasons for cessation of intercourse are most often ill health or sexual dysfunction of the male. Sexual activity and interest persist provided the person is in relatively good health and has an interested and interesting partner (Pfeiffer et al, 1972, Rubin, 1970).

Factors Influencing Sexual Expression in Aging

Friedeman (1978) has presented an excellent review of

the literature pertaining to factors influencing sexual expression in aging persons. She describes a system of variables which influence present sexual interest and activity in older persons. These variables include: (a) demographic factors, (b) value systems, (c) knowledge of sexuality, (d) prior patterns of sexual expression, (e) social and economic resources, (f) physical health, and (g) emotional health. "Present sexual expression" is delineated as all forms of sexual activity, with or without a partner (p. 34).

Demographic factors. Studies have reported on the demographic variables of age, gender, marital status, church attendance, education and race, the last being limited to Negro and Caucasian (Pfeiffer et al, 1968; Verwoerdt, Pfeiffer & Wang, 1969; Busse, 1973). Other demographic variables not specifically studied are religious affiliation, occupation or previous occupation if retired, income, life style, rural or urban living and ethnic background. In general, age is accompanied by a reduction in sexual interest and heterosexual relations of married persons, and decreased masturbation in men, but the effects of age on other forms of sexual expression, such as homosexual behavior and extramarital relations, are not known. Regarding gender and marital status, in men, marital status apparently has little effect on sexual activity and interest. In women, marital status has an effect on heterosexual activity, but little effect on sexual interest. Generally,

the sexual activity and interest of men is greater than that of women regardless of marital status. Findings regarding other demographic factors are equivocal and contradictory (Friedeman, 1978, p. 37).

Value systems and knowledge of sexuality. A second factor which might influence aging persons' sexual expression is the individual's belief or value system. This variable includes people's desire to conform to a particular system, its values, norms and degree of religiosity. Value systems may depend upon the era in which an individual was reared and a variation with age cohorts might be expected. These facets of an aging person's belief system seem relevant in influencing present sexual expression. However, these issues have not been studied in any systematic way. Another factor, people's knowledge about their changing sexual function and behavior, may also have a bearing on older persons' sexual expression, but this phenomenon has not been studied (Friedeman, 1978, p. 36).

Prior patterns of sexual expression. One of the most significant research findings is that older persons' present sexual expression, primarily heterosexual intercourse, is similar to their prior patterns of sexual behavior and activity. Kaplan (1974) contends that sexual experience and activity over the life cycle are important determinants of sexual expression in later life. That is, good sexual experiences in youth lead to successful sexual experience in old age. Other experts agree that prior patterns of sexual

experience and expression definitely influence an older person's present sexual expression, but the specifics of the impact of these patterns have not been identified except in terms of sexual interest (Friedeman, 1978, p. 40). In view of this finding, it is no surprise that a recent book regarding sexuality and aging written for older people entitled, Use It or You'll Lose It (Poticha, 1979), encourages them to increase their sexual activity.

Social and economic resources. Social and economic resources determine to some extent older people's present sexual expression. For example, the opportunity for meeting others is important to single older people, not only for finding a sexual partner, but also for joining groups in which they can express their sexuality in a more global sense such as companionship. Adequate economic resources to pay the cost are a precursor for attaining any degree of social mobility. However, there are no research reports linking social and economic resources of aging people to their sexual expression. Several experts have expressed concern about limitations to privacy and urge that the elderly need the resources which would allow options for many varieties of social participation (Friedeman, 1978, p. 40).

Physical health. Physical changes in aging persons affect their sexual functioning and expression. Illness may intervene to complicate already-altered sexual functioning. Friedeman (1978) summarizes the "normal" involutionary

changes in men which influence sexual activity, particularly the human sexual response cycle.

1. The size and firmness of the testicles diminish and they do not elevate to the same degree.

2. The seminiferous tubules thicken, and to an ever increasing degree, a degenerative process inhibits sperm production.

3. Normal spermatozoa can persist even after potency is lost.

4. The seminal fluid is thinner and more scant; ejaculatory pressure is less.

5. The prostate gland often enlarges and its contractions during orgasm are weaker.

6. Older men are slower to achieve an erection and do not ejaculate as quickly as younger men.

7. The resolution phase lengthens for the man over 50 to about 12 to 24 hours after ejaculation.

8. Penile erection may be maintained for extended periods of time. (pp. 40-41)

The aging woman also experiences changes which accompany aging that influence sexual activity and expression.

1. The lining of the vagina in postmenopausal years becomes atrophic.

2. Vaginal width, length and expansive ability decrease.

3. A reduction in vaginal lubrication may result in irritation of the urethra after intercourse.

4. Menopausal glandular imbalance is the source of an instability in the vasomotor system which causes more blood flow at one time inducing "hot flashes."

5. Other symptoms during menopause are fatigue, dizziness, migraine headaches, chest and neck pains, insomnia, excess sleepiness and depression.

6. The median age for the onset of menopause is 50.1 years.

7. Orgasm in older women is similar to younger women except that the orgasmic phase is reduced in duration and the resolution phase occurs more quickly.

8. Estrogen diminishes with the cessation of menses, followed by atrophy of the uterus and ovaries and the involutional changes in the vagina, labia and clitoris. (p. 41)

To summarize, physiological changes in sexual functioning accompany the aging process. These changes are gradual for both sexes, usually do not impede sexual expression or activity, and occur at different rates for different people. Research to date indicates that women virtually never lose capacity for orgasm, but men often become impotent with advanced age if they abstain from sexual activity and orgasm for periods of time (Friedeman, 1978, p. 41).

Some physical illnesses and surgical procedures can also affect sexual activity and expression. Illnesses which may have a detrimental effect on sexual response include diseases of the cardiovascular and respiratory systems, hormonal impairment and neurological and hematological

disorders. Diabetes mellitus is a common example of a chronic illness which may affect sexual responsiveness and interest. Surgery which can affect sexual activity and behavior includes prostatic surgery, hysterectomy and mastectomy. Other physical conditions that may affect sexual drive and function in both men and women are illnesses which limit physical mobility, such as paralysis or arthritis, and disorders of the pituitary gland. Research on the influence of specific illnesses and surgical procedures on sexual activity and behavior has been limited, and more investigation in this area is needed (Friedeman, 1978, p. 41-42).

Emotional health. Regarding the emotional health factor, there have been few studies relating the effect of specific emotional disorders on sexual expression, but experts have noted that depression, alcoholism, obesity and some drugs affect sexual response. The drugs include medications given for physical illness as well as those for emotional illnesses. Other research has established that an appropriate emotional and psychological climate is necessary for enjoyment of sexual expression. Therefore, the relationship between emotional health and present sexual expression is an important one (Friedeman, 1978, p. 43).

Summary. Studies on sexuality and the aging process are sparse and the data are inconclusive, but they illuminate factors which may influence sexual expression in older persons. These factors include demographic variables, value

systems, sexuality knowledge, social and economic resources, physical and emotional health and prior patterns of sexual expression. Present sexual expression may be heterosexual, homosexual, bisexual, self-stimulatory or other forms of sexual activity. However, most research has dealt with heterosexual intercourse between married persons. A need exists for further research that would explore or examine the effects of specific variables on all forms of sexuality and sexual activity of older persons.

Sexuality and Nursing

Human sexuality has only recently been accorded appropriate status in holistic nursing care and practice. Several recent publications have given attention to sexuality, if only by including chapters or sections on human sexuality and sexual health care in nursing (Bana-Constantino, 1979; Barnard, Clancy & Krantz; 1978; Brown, 1978; Kolodny, Masters, Johnson & Biggs, 1979; Watson, 1979; Wilson & Kneisl, 1979; Woods, 1979). However, it is worthwhile to review the past status of human sexuality from a nursing perspective, including: (a) sexuality and the nursing profession, (b) research regarding sexuality and nurses, and (c) sexual health nursing care.

Sexuality and the Nursing Profession

The first nurses were monks; other early nurses were orders of nuns and prostitutes who cared for the ill to augment their usual income. Thus, early nursing was

characterized by male and female and by the sexually ascetic and sexually active delivering care to the sick. After Florence Nightingale began modern nursing, nursing education and training required students to suppress and repress their sexuality. The connotation of nurses as pure and asexual as well as the prevailing cultural mores served to prohibit the subject of sexuality in nursing education, a system which was rigid, hierarchical in control and strictly disciplined (Griffin & Griffin, 1969).

This avoidance of sexuality in nursing has contributed to several problems. Sexism and sexual stereotyping have been evident in a profession largely made up of women. Only in recent years, has it been acceptable for a man to seek a nursing career. Patient care has suffered because sex segregation has created communication barriers. These barriers have partly resulted from what has been called the "doctor-nurse game," which at least in part, is a "male versus female" conflict (Elder, 1978).

Fortunately, sexual roles and relationships are changing (Minnigerode, Kayser-Jones & Garcia, 1978). Some nurses prefer to stay with the culturally defined male-female roles, but many no longer accept these roles and are asserting their right to provide <u>total</u> health care with autonomy and independence. Nurses in the future can be a pivotal profession in promoting and maintaining the sexual health of individuals, families and communities (Hogan, 1979; Krizinofski, 1973).

Research: Sexuality and Nurses

Nurses' attitudes and knowledge regarding sexuality have been a subject for research. One study involving family planning nurses and senior nursing students found that the more knowledge the nurses had of sexuality, the more favorable were their attitudes and the more comfortable they were in health care situations with sexual overtones (Fontaine, 1976). A pilot study with female nursing students and male undergraduate students indicated that a human sexuality course was effective in helping students gain knowledge, although attitudinal change was not a result, at least as an immediate course outcome (Woods & Mandetta, 1975).

Mims, Yeaworth and Hornstein (1974) documented that an interdisciplinary human sexuality program was effective in increasing knowledge of the learners. Also, on attitudinal scales, the learners moved from a lower, more conservative viewpoint to a more liberal understanding in all areas except abortion. Following the program, students seemed more willing and able to view sexuality as a legitimate concern of clients; some even requested additional preparation and training.

Payne (1976) conducted a study which surveyed instructors in schools of nursing regarding their perceptions of:

1. The number of clients who had sexual concerns or problems.

2. The frequency of sexuality questions asked in

nursing histories.

3. The adequacy of their basic education in human sexuality.

4. Their level of understanding of sexuality, compared to that of most nurses.

5. Their ability to discuss sexual problems with clients.

6. The adequacy of integration of sexuality in their and other curricula.

The instructors' self-ratings in these areas indicated that the ability to discuss sexual concerns with clients fell behind their perceived knowledge. Many stated they did not include sexuality needs in taking a nursing history. Also, there was a lack of courses or indication that sexuality was integrated into their nursing courses.

The Payne survey supports the view that nursing education does not prepare health care givers to deal with a range of sexual behavior or with many types of sexual problems. This negative view is offset by increasing evidence that nurses are expanding their sexuality knowledge and that human sexuality is being included in nursing curricula, beyond simply content regarding reproduction (Kolodny et al, 1979; Mims, 1975; Woods, 1979).

Sexual Health Nursing Care

The roles of nurses in promoting and maintaining the sexual health of clients have been well described in recent

writings (Bana-Constantino, 1979; Brown, 1978; Hogan, 1979; Mims & Swenson, 1978). Woods (1979) provides an excellent summary of these roles, including:

1. Facilitator of a milieu conducive to sexual health.
2. Provider of anticipatory guidance.
3. Validation of normalcy.
4. Educator (including the cognitive, attitudinal, and communication components of sexuality).
5. Counselor of clients who must adapt to changes in their usual forms of sexual expression.
6. Provider of intensive therapy for clients with complex problems.
7. Consultant to other helpers. (p. 98)

In order to enact these roles, nurses need a broad knowledge base in the biopsychosocial aspects of sexuality and objective, accepting attitudes. A variety of skills are needed, including basic therapeutic communication and interviewing, teaching and counseling skill. Depending on the setting, nurses engaged in practitioner roles and primary nursing may need to become adept and comfortable in doing perineal, pelvic and genital examinations as part of physical assessment. Nurses need to be able to provide sexual health care to a variety of clients, including individuals, families, groups, organizations and communities. Cooperation and collaboration with other health care providers can prevent fragmentation of sexual health care.

Summary

In the near future, nurses will be knowledgeable about sexuality throughout the life cycle and about the effects of illness and health problems on sexual functioning and behavior. Not all nurses will be sex therapists in the narrow sense of the term, but all nurses will be able to assess clients' needs in relation to sexuality, accurately identify problems and plan appropriately, and intervene to relieve the ignorance, misinformation, guilt, shame and embarrassment manifested by clients. Nurses will be able to utilize many therapeutic models to assist their clients to maintain or restore sexual health, and people will increasingly turn to nurses as health care givers who can effectively assist them in achieving positive sexual health (Hogan, 1979).

Sexuality, Aging and Nursing

The interrelationship of sexuality, aging and nursing has been the focus of several articles, but very few research studies. Only one study has been reported in the nursing literature; another was conducted by social workers. A third report, although not the result of an organized investigation, offers important insights in the area of sexuality, aging and nursing. These three will be discussed as research, and the remaining discussion will describe pertinent writings concerned with sexuality and identity, sexual health care needs and barriers to sexual health care of older clients.

Research

The one study reported in the nursing literature (Brower & Tanner, 1979) was disappointing as a true experiment, although it did result in noteworthy conclusions and recommendations. Working with volunteer subjects who attended a neighborhood center, the investigators attempted to ascertain whether significant changes took place in older adults' knowledge and attitudes about sexuality following a two-session course on the subject. The results were inconclusive, mainly because many subjects were threatened by, or resented, being tested. Several who sat in on the sessions refused to take the tests or identify themselves on the tests, so the test results could not be used in the analysis of data. However, this study did indicate a need for sexual information in the older adult group as demonstrated by the number attending and the active discussion occurring in the small group sessions. A recommendation was made to repeat the study using personal interviews or anonymous instruments to gather data, which would possibly be less threatening than formalized group testing.

A second study explored sexuality in nursing homes (Wasow & Loeb, 1975). Using interviews to gather information, it was concluded that, in general, residents of nursing homes believe that sexual activity is appropriate for other people. However, most of the subjects were not currently involved themselves because of lack of opportunity. Most of the residents were spouseless. The nursing

home staff were generally quite permissive in their attitudes about sexuality of older people, but little information was obtained about what they actually do in specific situations. An important finding was that, when given the opportunity, residents asked many questions and seemed to want information about sexuality. This finding is supported by other writers (Burnside, 1975, 1979; Runciman, 1975, 1978; Steffl, 1978) as well as being in agreement with Brower and Tanner's (1979) conclusion.

Roehm (1973) presents information related to older clients' sexuality needs. While working with aged clients' dependency, she recalled the two types of dependency described by Kagan and Moss (1962, pp. 50-51). They distinguished two categories of dependent behaviors, instrumental and affectional. Instrumental refers to attempts to obtain physical aid in accomplishing task-oriented goals. Affectional dependency refers to attempts to obtain nurturing aid from others, in the form of interest and approval, in order to achieve a sense of being a valued worthwhile person. Based on her observations of aged clients' dependency, Roehm formulated the following principle: "Manifestation of extreme instrumental dependency may indicate that affectional dependency needs are not being met" (p. 127). Since sexuality needs include the need for affection, this principle has implications for nursing care. A valuable research study would be to explore whether clients' instrumental dependency decreases as

sexuality and affection needs are better met.

Sexuality and Identity

Most of the research in the area of sexuality and aging has focused on sexual intercourse and performance, or on related genital activity such as masturbation (Foster, 1979). However, many writers (Burnside, 1975, 1979; Eliopoulos, 1979; Fox, Garland, Hanss & Pettid, 1978; Haneburth, Ehrhart & Peltzer, 1977; Steffl, 1978) encourage nursing personnel to think of sexuality in a broader context, one that encompasses the total identity of the individual. Fox et al (1978) state:

> "Sex" is just one of the parts that make up the meaning of sexuality. True sexuality means more than just the love act between two people; it comprises the sharing part of humanness, the humanness which belongs to each one of us, whether we are young or old. It has to do with our feelings about ourselves as total persons, with feelings about our masculinity or our femininity. Sexuality includes those intangible ties that bind--love, trust, empathy, companionship, touch, tenderness and affection. And, ultimately, sexuality deals with who we are, how we see ourselves, and how others see us. (p. 16)

Considering sexuality in this framework has several implications for nursing care, particularly institutional care of older clients. Nursing personnel should, at all

times, validate the sexuality of each individual. Methods for doing this include:

1. Supporting aging women's interest in clothing, cosmetics and hairstyles.

2. Respecting a man's desire to be cleaned and shaved before his wife or female friends visit.

3. Encouraging aged persons' attempts to look attractive and to dress in attractive clothing of their choice.

4. Maintaining privacy and modesty during examination, care activity and dressing.

5. Granting the person's request for a care giver of the same sex to bathe him/her.

6. Avoiding discussion of incontinent episodes in the presence of clients' peers.

7. Facilitating older clients' interest in, and flirtation and interaction with, each other (Eliopoulos, 1979, p. 319).

Fortunately, recent guidelines and regulations (Health Facilities, 1975; Title Twenty-two, 1976) for the care of older clients include statements regarding patients' rights and standards which encourage appropriate intervention related to sexuality and positive sexual health care. This health care approach can do much to enhance older persons' "quality of life" and help to maintain a positive identity and hopeful view of living (Miller, 1978).

Sexual Health Care Needs

Specific aspects of the sexual health care of older clients have been described by nurse writers and others with expertise in sexuality, aging and nursing. These aspects include: (a) common health problems related to sexual health, (b) drugs and medications that affect sexual function, (c) education and counseling in sexual health care, and (d) use of the nursing process in sexual health care.

Common health problems. Many older clients receiving medical and nursing care are "at risk" of experiencing sexuality problems (Woods, 1979, p. 90). Health problems that are specific threats to sexual health include medical illnesses, conditions requiring surgery and behavioral disorders. Examples of medical illnesses are arthritis, diabetes and cardiovascular conditions, and older persons are particularly susceptible to vaginitis, uterine prolapse and cystocle and rectocele. Hysterectomy and prostatectomy are surgical procedures common to older clients. Behavioral disorders include organic brain syndrome, depression and impotence of psychogenic origin.

In the event of the above health problems and others, some clients will be able to identify their sexual concerns. However, in some instances, clients will not be aware of, or will be hesitant to express concerns about, the effect of their illness on their sexual functioning and behavior. Nursing personnel and other health care givers need to assume the responsibility for assessing and intervening in

each situation so that clients fully understand the interrelationship of their health problems and their sexuality (Kolodny et al, 1979; Steffl, 1978; Woods, 1979).

Medications and drugs. Any medication taken for prolonged periods will have some influence on sexual functioning and activity (Woods, 1979, p. 364). However, specific drugs and medications have a negative effect on sexuality, even if taken for short periods of time. Some alter the libido or intensity of sexual interest and pleasure, while others affect the physiological response of the genital and reproductive organs, erection, orgasm and ejaculation (Steffl, 1978, p. 144). Drugs or medication that are commonly inhibitory include tranquilizers, antihypertensive medications and alcohol.

Assessment of medication effects is complicated because drug action is complex and depends on many variables. Nurses need to be aware that there is no drug without some effect on sexuality, and they should ask questions and provide information about sexuality and medications when assessing and evaluating the effects of specific medications (Lesh, 1975). Also, clients should be encouraged to report the effects of their medications on their sexual behavior and functioning (Kolodny et al, 1979, p. 239).

Education and counseling. The need for education and counseling as interventions in sexual health care of older clients is well described by many writers. Specific examples of this activity have been reported, four of which

will be discussed here.

Odegard and Deskin (1977) developed a program titled, "Facilitating Sexual Growth in Aging and Illness." This program was designed for Veterans Administration hospitals to be presented periodically to a variety of health care givers. The study guide for the program lists objectives related to knowledge gain, attitude change and behavior change (pp. 1-2). Very commendably, the developers formulated "patient care outcomes" as follows:

1. Patients learn that their sexual concerns are an appropriate subject for discussion with health professionals.

2. Patients understand how their illness can affect their sexual life.

3. Rehabilitated patients will make a quicker and more complete adjustment to their disability. (p. 2)

The program presents information about aging, sexuality and the sexual response cycle, a model for intervention and guidelines for sexuality counseling and therapy for selected illnesses and health problems.

Another example of education and counseling activity is a program conducted by two nurse practitioners in Santa Clara County, California (Watson, 1977). This program is aimed at assisting "middle years women" to understand and positively cope with menopause. Organized as a "clinic," the program offers education sessions, medical examination and counseling. Menopause is viewed as a time of loss of

status, functions and roles, as well as a time of change, and "the whole point of the Sunnyvale clinic is to give women the confidence to face up to that change without resorting to alcohol or valium--the secret vices of many depressed middle-aged women" (p. 4). This program uses a holistic approach, and the response and results have been very positive.

Vernon (1973) describes an education and counseling approach to assisting women undergoing hysterectomy. This nurse recognized that many women view hysterectomy as a threat to their feminine self-concept. With this in mind, she interviewed posthysterectomy patients and compiled a list of their questions dealing with fears and misconceptions they had before surgery. Examples of the resulting questions are:

1. Does a hysterectomy mean the removal of the ovaries, tubes, and uterus?
2. Are most hysterectomies performed because of cancer?
3. Will I lose sexual desire or the ability to have a climax?
4. What are the positive aspects of hysterectomy? (pp. 69-71)

These questions offer insight into the presurgical preparation of women needing hysterectomy. "The nurse must play a key role in identifying and dealing with fears and misconceptions about hysterectomy before it is performed" (p. 71).

The need and importance of education and counseling is illustrated by the inclusion of an entire chapter on "Sexuality Needs" in a textbook for nursing assistants (Haneburth et al, 1977, pp. 202-215). Preparing nursing assistants to work with clients in this area is evidence of a truly holistic approach to nursing care by all levels of practitioners. The chapter discusses the concept of sexuality, anatomy and physiology of the reproductive system, the aging process and conditions that threaten sexuality. Also included are "therapeutic tasks," such as teaching breast examination, assisting patients to maintain sexual identity and providing emotional support. Registered nurses directing the care given by nursing assistants would benefit from reading this material.

Sexual health care and the nursing process. Several writers have emphasized the integration of sexual health care into the nursing process--assessment, planning, intervention and evaluation (Hogan, 1979; Krizinofski, 1973; Steffl, 1978; Woods, 1979). Nursing assessment should include questions about clients' sexuality to determine the status of current sexual functioning and to distinguish causes of sexual dysfunction. Effort should be made to assess the quality of clients' interpersonal relationships, as well as situations with sexual partners which have bearing on clients' health status. Effective, cooperative planning by all members of the health care team relies on adequate nursing assessments (Hogan, 1979).

Intervention should be aimed at any health problem which may interfere with sexuality and sexual functioning. Also, as described previously, teaching and counseling are interventions which are in the specific realm of nursing care and practice (Krizinofski, 1973). Nurses can be instrumental in decreasing the isolation of long-term care settings by increasing interaction with persons of the opposite sex, encouraging interest in clients' personal appearance and providing activities which may give clients the impetus to seek interpersonal interaction.

Evaluation should be planned around goals that are mutually chosen by clients and nurses (Woods, 1979). Clients are the best judge of whether interventions have been appropriate, adequate and realistic to meet their goals. Nurses will need to seek verbal expression of satisfaction by clients to evaluate if nursing intervention has been helpful (Steffl, 1978, p. 150).

Barriers to Sexual Health Care

Barriers to the sexual health care of older clients have been identified and described (Burnside, 1975, 1979; Hogan, 1979; Steffl, 1978). One of the problems is the ignorance and/or discomfort of nursing personnel in dealing with clients' sexuality needs. Registered nurses must take responsibility for teaching their colleagues and subordinates and for assisting these people to deal with their feelings that influence sexual health care.

Another barrier is the criticism or ridicule by peers. Many older people themselves ascribe to the sociocultural myths regarding sexual activity and behavior of aging persons. Nurses should provide accurate information, while giving support to clients experiencing negative peer influence. Some clients will maintain their suppressive stance and attitudes toward sexuality, but they should be prevented from causing shame or embarrassment in clients with healthy and positive sexuality attitudes and needs.

For a variety of reasons, families or children react negatively to sexual behavior of their older relative. These persons often cannot accept sexual drives and needs in their aged relatives, especially their own parents. Nurses can serve as liaisons and mediators between clients and families by translating the sexual needs of older clients as healthy and acceptable. Physicians and administrators of care settings are others who often resist and fail to cooperate in providing sexual health care to older clients.

Summary

The integration of sexual health care in the nursing care of older clients has been written about and described extensively. At the same time, little research or investigation has been carried out in this area. The literature consistently reinforces the idea that sexual health care should be a part of comprehensive, holistic nursing care, and efforts should be made to meet this goal. In view of

the need, it is noteworthy that a booklet providing guidelines for care of the institutionalized elderly person developed by the National League for Nursing (Understanding the Aging Process, 1976) makes no mention of clients' sexuality needs, while a textbook for nursing assistants (Haneburth et al, 1977) provides thorough coverage of the subject. As leaders in the health care of older clients, registered nurses need to correct this omission or oversight.

Summary of the Review of Literature

This chapter has presented a review of research and writings in the areas of: (a) sexuality and aging, (b) sexuality and nursing, and (c) sexuality, aging and nursing. Research investigation has been minimal, but important conclusions can be derived from this review.

1. Sexuality and sexual activity are present and important for older persons.

2. Sexual health care is a responsibility of nurses in providing total, holistic care and services.

3. The integration of sexual health care in the nursing care of older clients has been described as lacking, but no systematic assessment of this activity has been carried out or reported.

In addition to these conclusions, the review of literature supported the conceptual framework of this study by reinforcing the interaction of knowledge, attitudes and

skills in providing sexual health care to clients. The review also indicated that external factors influencing sexual health care should be explored in this study. The literature review provided a basis for developing the methodology for the study, which is presented in the next chapter, Chapter 3.

Chapter 3

METHODOLOGY

This chapter describes the methodology for this investigation of nurses' knowledge, attitudes and skills related to sexual health care of older clients. The methodology includes the: (a) overall research design, (b) sample population and setting, (c) data collection instrument, and (d) procedures for gathering information. After a description of each of these components, the methodological limitations are presented and discussed.

Research Design

A descriptive survey approach is the basis for the overall design of this study. According to Isaac and Michael (1971), the purpose of descriptive research is "to describe systematically the facts and characteristics of a given population or area of interest, factually and accurately" (p. 18). Polit and Hungler (1978) define survey research as "that branch of research activity that focusses [sic] on the status quo of some situation and which normally collects this information directly from the group (or members of the group) that is the object of investigation" (p. 195). Also, as Babbie (1973) states:

> Surveys are frequently conducted for the purpose of making descriptive assertions about some population; discovering the distribution of certain traits or

> attributes. In this regard, the research is not concerned with why the observed distribution exists, but merely what the distribution is. (pp. 57-58)

Further, based on the research questions, conceptual framework and literature review, a cross-sectional survey design is determined to be appropriate for this study.

> In a cross-sectional survey, data are collected at one point in time from a sample selected to describe some larger population at that time. Such a survey can be used not only for purposes of description but also for the determination of relationships between variables at the time of study. (Babbie, 1973, p. 62)

This design allows for gathering information about attitudes toward, and knowledge about, sexual behavior, as well as exploring relationships or correlations between these factors and registered nurses' characteristics such as age and level of education.

The final aspect of the overall design is the plan for data analysis. Univariate descriptive statistics and correlational procedures are the major methods for organization and analysis of data. This plan for data analysis is congruent with the descriptive survey approach, because the goal is to describe attitudes, knowledge and skills, not to infer any cause-effect relationship between the variables being explored.

Sample Population and Setting

The subjects for this study are a cross-sectional, convenience sample population of registered nurses who work with clients 50 years of age and older. These nurses are from a variety of clinical settings, including acute inpatient psychiatry. The main criterion for an individual to serve as a respondent was that 50% or more of the nurses' clients were 50 years old or older.

The sample population was recruited using three methods. First, the investigator attended a meeting of a gerontological nursing interest group and requested volunteers to serve as subjects. Twenty-four data collection instruments were distributed to these nurses. Secondly, baccalaureate and graduate nursing students who are practicing registered nurses working with clients 50 years of age and older were invited to participate. An instrument was given to eighteen nurses from this group who volunteered to participate.

In addition to these two methods, nursing colleagues and acquaintances of the investigator agreed to complete a data collection instrument, and several nurses who heard of the study by word of mouth contacted the investigator and agreed to participate. Thirty-one instruments were given out to these people, bringing the total number of nurses in the sample to 73. Subjects were asked to return the completed instrument to the investigator by mail.

As mentioned previously, the subjects represent a variety of clinical settings. The geographic setting for the study is the San Francisco Bay Area of Northern California. Most of the data collection instruments were distributed in Santa Clara County, an urban area at the south end of the San Francisco Bay.

Data Collection Instrument

The data collection instrument combines sections of a standardized test and an investigator-designed questionnaire (Appendix A). The instrument is self-administered and composed of four parts, and respondents are kept anonymous.

Parts I and II include the first two sections of the Sex Knowledge and Attitude Test (SKAT), a test developed and standardized as a teaching and research tool (Preliminary Technical Manual, 1973). This test has been useful in gathering information about sexual attitudes and knowledge. "Over 25,000 college, graduate and professional students have taken the test" (Lief and Payne, 1975, p. 2027).

Part I of the instrument, which is also Part I of the SKAT, explores attitudes and is composed of 35 statements to which the subject responds with level of agreement, ranging from Strongly Agree to Strongly Disagree. The responses in this section are grouped into four attitudinal scales: (a) heterosexual relations (HR), (b) sexual myths (SM), (c) abortion (A), and (d) masturbatory (M). Each of these scales will be described as it is in the manual which

accompanies the SKAT materials (Preliminary Technical Manual, 1973, pp. 9-10).

The Heterosexual Relations (HR) Scale deals with an individual's general attitudes toward premarital and extramarital heterosexual activity. Individuals with high HR scores regard premarital intercourse as acceptable, or even desirable, for both men and women, and view extramarital relations as potentially benefiting, rather than harming, the marital relationships of the persons involved. Low scores imply a conservative or disapproving attitude toward premarital and extramarital relations.

The Sexual Myths (SM) Scale relates to an individual's acceptance or rejection of commonly held misconceptions about sexuality. High SM scores indicate a rejection of these misconceptions. Examples are: (a) Lower class people have stronger sex drives than other people, and (b) The possession of contraceptive information is often an incitement to promiscuity. Low SM scores indicate acceptance of these myths and misconceptions.

The Abortion (A) Scale deals with an individual's general feelings about the social, medical and legal aspects of abortion. High A scores imply an orientation which considers abortion an acceptable form of birth control which should be permitted whenever wanted by women. Low scores suggest an orientation that views abortion as an immoral act which should be strictly controlled, medically and legally.

The Masturbatory (M) Scale relates to general attitudes

toward the acceptability and permissibility of autoerotic activity. Individuals with high scores consider masturbation a healthy means of relieving tension and attaining sensory pleasure. Also, high scores imply an attitude that neither boys or girls should be prohibited from autoerotic stimulation. Low scores suggest an orientation which views masturbation as an unhealthy practice which should be discouraged or prohibited by parents and other adults.

According to the manual, the attitude section of the SKAT is considered to have adequate face and construct validity (pp. 23-26). Also, the stability of the four SKAT attitudinal scales is attested to by the negligible or non-existent shrinkage in reliability upon cross validation (p. 20).

Part II of the data collection instrument, Part II of the SKAT, contains 71 true-false questions for exploring factual knowledge. Fifty of these questions are psychometric items; the remaining 21 are included for their "heuristic" and "teaching" value (p. 15). Subjects respond to all 71 items, but only the 50 psychometric items are considered in determing the knowledge score.

Items included in the 50 psychometric items of the knowledge test were selected by the developers from a large item pool. Criteria used for selecting these items were purely psychometric in nature, within the topic areas of physiological, psychological and social aspects of sexuality and sexual behavior. These criteria include:

1. Item difficulty ranged from .25 to .75.
2. Point biserial correlations were .30 or greater.
3. Item added a positive increment to the external consistency of the overall test. (Preliminary Technical Manual, 1973, pp. 15-16)

Regarding reliability and validity of this section, the manual states that the reliability (KR-21) of the knowledge test is estimated to be .87 (p. 16). Also:

> Since all items in the fifty item sex knowledge test are considered to have not only face and content validity, but correct psychometric properties as well, the sex knowledge test is considered to be valid. Attempts to estimate concurrent and/or predictive validity have not yet been undertaken. (p. 16)

The reliability and validity are considered adequate for using this test as a tool for exploring the knowledge levels of the sample population.

Parts III and IV of the data collection instrument (Appendix A) were developed by the investigator based on the conceptual framework and review of literature. These parts were pretested with a group of 10 registered nurses who would not be part of the study sample, and based on their feedback, changes and revision were made in the instructions and in certain items. This feedback process served to increase the format and content validity of these parts of the instrument. Because of the limited use and pretesting of these parts, limited information is available concerning

their reliability.

Part III asks for information about how, and to what extent, sexual health care is carried out and/or integrated in the total nursing care of older clients. On this questionnaire, subjects are instructed to indicate one response for themselves and one about their opinion of the actions of other nursing personnel according to level of frequency, ranging from Always to Never. Six areas are covered in the questionnaire: (a) assessment of client, (b) planning for nursing care, (c) implementation of nursing interventions, (d) evaluation of nursing action, (e) characteristics of nursing personnel, and (f) external factors influencing sexual health care.

Part IV requests demographic information about the subjects. This information includes age, sex, race/ethnicity, marital status, setting of clinical practice and highest level of education. The subjects are also asked whether they had taken a course in human sexuality and a course in sexuality and aging. Since the subject is to remain anonymous, no identifying information, such as name, address or specific place of employment is requested.

Each data collection instrument includes a sheet of instructions (Appendix A) which gives the subject general directions for completing and returning the instrument. The name, address and phone number of the investigator are included on this sheet so that subjects could contact him if they had questions or concerns. The time for completion of

all four parts of the instrument is estimated to be 45-60 minutes. No further time or effort is required of subjects after they return the completed data collection instrument.

This concludes discussion of the data collection instrument. The instrument follows a questionnaire format. This method of data collection is appropriate for a cross-sectional survey which seeks to gather descriptive information about a certain population or situation (Babbie, 1973, p. 131; Isaac & Michael, 1971, p. 18; Polit & Hungler, 1978, pp. 325-326).

Procedures

There are three main procedures for the implementation of this study. The first procedure is the preparation and submission of a Research Protocol (Appendix B) to the Committee on Human Research at the University of California, San Francisco. The protocol was submitted on April 5, 1979, and approval to begin the study was given on April 12, 1979.

The second procedure involves ordering test materials and obtaining permission from the SKAT copyright holder, the Marriage Council of Philadelphia, Inc., Phildelphia, Pennsylvania. Letters (Appendix C) were exchanged, and permission was granted to use Parts I and II of the Sex Knowledge and Attitude Test. Permission was also granted not to use Parts III and IV of the SKAT. Part III of the SKAT asks for basic information, such as age, sex, race and personal background, but the investigator preferred to

develop a separate demographic instrument. Part IV responses concern the frequency of the subject's sexual encounters. This part was concluded to be not useful for this study, and was not included in the data collection instrument.

The third procedure is the process of actual data collection. The first step in this process was the distribution of the instrument. The data collection instrument was distributed between April 16 and June 4, 1979, to the registered nurses described in the sample population. There was no coercion to participate, and declining to be a subject resulted in no penalty or jeopardy to employment. The subjects received no compensation for their participation in the study.

The investigator obtained permission to visit classes to talk with students to explain the study. A data collection instrument was then given to those who volunteered to participate. Class time was not used for the students to complete the instrument. Those who volunteered were instructed to complete the instrument at their convenience and mail it to the investigator. The student subjects were informed that their participation, or declining to participate, would not be used in any way, positively or negatively, to influence their instructors' evaluation and grading of them.

In all recruitment of subjects, volunteers were given an addressed, stamped envelope for returning the data

collection instrument to the investigator. To assure anonymity, no consent form was used since consent to participate was assumed if the nurse completed and returned the instrument. The anonymity and self-administration of the instrument makes it possible for subjects not to respond to any questions or items they find sensitive or offensive. This option is clearly stated in the general instructions for each instrument. If subjects decided not to participate, they simply did not return the instrument to the investigator. Based on these precautions, the risk to subjects was considered to be minimal.

Limitations

Treece and Treece (1977, p. 300) emphasize the importance of discussing the weaknesses of the methodology so that readers may bear them in mind when considering the findings. The methodology for this study has limitations and disadvantages which need to be acknowledged. Babbie (1973, pp. 49-50), Polit and Hungler (1978, pp. 204-205), and Treece and Treece (1977, p. 150) serve as guides for exploring these limitations.

Survey findings are extensive rather than intensive. However, survey research gathers information which tends to be superficial. This limitation is true for this study.

Extraneous or intervening variables are not controlled. There is no manipulation of independent variables. Therefore, no clear cause-effect relationship can be ascertained.

The relationships between variables can best be considered as functional rather than causal relationships.

The cross-sectional survey approach indicates that the data are applicable only to the day or time collected. Also, the volunteer, convenience sample group cannot be considered fully representative of the total population of registered nurses who work with clients 50 years of age and older. These factors limit generalization of the findings. Generalization is also limited by the geographic setting, because sexuality attitudes and knowledge may be very different in other areas of the state or country.

A problem in using a self-administered questionnaire to collect data is that subjects may not respond truthfully or conscientiously. Subjects may give answers they think are expected or answers they think they should give, rather than their true reactions and responses. Also, regarding data collection, some validity but little reliability was ascertained for Parts III and IV of the instrument prior to its use.

Summary

This chapter has discussed the research design, sample population and setting, data collection instrument and procedures for this study. Also, the methodological limitations were acknowledged and described. The findings will be presented and analyzed in Chapter 4.

Chapter 4

FINDINGS

This chapter describes the results and findings of a survey of registered nurses' attitudes, knowledge and skills related to sexual health care of older clients. A demographic description of the sample group is presented, followed by reports of the data related to each of the three research questions. Interpretation accompanies the data presentation and the chapter concludes with a summary of the findings.

Sample Population

Of 73 data collection instruments distributed, 52 were completed and returned, a return rate of 71.2%. This high response rate (Babbie, 1973, p. 165) can be attributed at least partially to the instruments having been distributed via personal contact rather than by mail. At the same time, the return rate reflects respondents' high level of interest in the focus of the study. All of the returned instruments were completed thoroughly enough for inclusion in the study.

Age, Sex and Race/Ethnicity

Tables 1-3 present the numbers and percentages of respondents according to age, sex and race/ethnicity. Six (12%) of the respondents were 20-29 years old; 25 (48%) were 30-39; 12 (23%) were 40-49, and nine (17%) were aged 50 and over. Only three (6%) of the respondents were male;

Table 1

Numbers and Percentages of Respondents According to Age

Age group	N	%
20-29	6	12
30-39	25	48
40-49	12	23
50 and over	9	17
Total	52	100

Table 2

Numbers and Percentages of Respondents According to Sex

Sex	N	%
Male	3	6
Female	49	94
Total	52	100

Table 3

Numbers and Percentages of Respondents According to Race/Ethnicity

Race/ethnicity	N	%
Asian-American	2	4
White/Caucasian	48	92
Native American Indian	1	2
Other--Latin American	1	2
Total	52	100

49 (94%) were female. The race/ethnicity groups included two (4%) Asian-American, 48 (92%) white/Caucasians, one (2%) Native American Indian, one (2%) Latin-American, and no black/Negroes or Mexican-Americans. These figures reveal that respondents were most commonly 30-39 years old, female and white/Caucasian.

Marital Status and Number of Children

Tables 4 and 5 present information regarding the marital status and number of children living with the respondents. Eleven (21%) were single and never married; 30 (58%) were married; one (2%) was separated; seven (13%) were divorced, and three (6%) were widowed. Twenty-four (46%) had no children living with them; 26 (50%) had 1-3 children; two (4%) had 4-5 children, and none of the respondents had six or more children living with them. The modal respondant was married and lived with 1-3 children.

Years of Practice and Percentage of Older Clients

Tables 6 and 7 show the numbers and percentages of respondents' years as practicing nurses and the percentages of their clients 50 years of age and over. Five (10%) had been practicing nurses for 1-5 years; 15 (29%) for 6-9 years; 24 (46%) for 10-19 years, and eight (15%) respondents had practiced for 20 or more years. Respondents were asked to indicate the percentage of their clients 50 years of age and over; nine (17%) indicated 50-59%; 16 (31%) answered 60-74%, and 27 (52%) responded 75% or more. Thus,

Table 4

Number and Percentages of Respondents According to Marital Status

Marital status	N	%
Single/Never Married	11	21
Married	30	58
Separated	1	2
Divorced	7	13
Widowed	3	6
Total	52	100

Table 5

Number and Percentages of Respondents According to Number of Children Living with Them

Number of children	N	%
0	24	46
1-3	26	50
4-5	2	4
6 or more	0	0
Total	52	100

Table 6

Number and Percentages of Respondents According to Number of Years As a Practicing Nurse

Number of years	N	%
1-5	5	10
6-9	15	29
10-19	24	46
20 or more	8	15
Total	52	100

Table 7

Number and Percentages of Respondents According to Percentage of Clients 50 Years of Age and Over

Percentage	N	%
50-59%	9	17
60-74%	16	31
75% or more	27	52
Total	52	100

respondents were most commonly nurses who have been practicing for 10-19 years and who have 75% or more of their clients who are 50 years old and older.

Clinical Practice Areas and Settings

Respondents' areas of clinical practice are shown in Table 8. Fifteen (29%) indicated the medical-surgical area of practice, including two "cardiovascular" and one "CCU, ICU" (cardiac care unit, intensive care unit). Seven (13%) were in community (public) health; nine (17%), psychiatric-mental health, and 16 (31%) in the gerontological area of practice. In addition, five (10%) indicated two areas as follows: (a) two community health/gerontological, (b) two psychiatric-mental health/gerontological, and (c) one rehabilitation/gerontological. These five responses were placed in the "other" category.

Table 9 presents respondents' settings of clinical practice. Six subjects gave two categories of settings of clinical practice. Rather than divide these by fractioning, all of the responses were tallied, so that this item has a total of 58 responses. Sixteen (28%) identified acute inpatient as their setting of practice; 23 (40%) were in the extended care, skilled nursing facility, nursing home category. These three latter settings were combined into one category, extended care facility. No subjects indicated an outpatient clinic or doctor's office as their setting; six (10%) identified the public health department, visiting

Table 8

Numbers and Percentages of Respondents According to Area of Clinical Practice

Area	N	%
Medical-Surgical	15	29
Community (Public) Health	7	13
Psychiatric-Mental Health	9	17
Other		
Community Health/Gerontological	2	4
Psychiatric-Mental Health/Gerontological	2	4
Rehabilitation/Gerontological	1	2
Total	52	100

Table 9

Numbers and Percentages of Respondents According to Setting of Clinical Practice

Setting	N*	%
Acute Inpatient	16	28
Extended Care, Skilled Nursing Facility Nursing Home	23	40
Public Health Dept./Visiting Nurse Assn.	6	10
Inpatient Psychiatry	8	14
Other		
Hospital-Based Home Care Community Centers Community Settings--Independent Practice Private Practice and Outpatient Groups Long-Term Care--VA Hospital	5	8
Total	58	100

*Six respondents indicated two settings for a total of N of 58.

nurse association (combined into one category). Eight (14%) cited inpatient psychiatry, and five (8%) identified an "other" setting as follows: (a) "hospital based home care," (b) "community centers," (c) "community settings--independent practice," (d) "private practice and outpatient groups," and (e) "long-term care--VA hospital."

As shown in Tables 8 and 9, the respondents were most often from the gerontological area of clinical practice, especially if the "other" responses are included in this number. The most common clinical practice setting was the extended care facility. The medical-surgical area and acute inpatient setting were close seconds in their respective categories, indicating that both acute and chronic care nurses are well represented in the sample group.

Highest Level of Education

The highest level of respondents' education is presented in Table 10. Ten (19%) respondents had completed a diploma school of nursing; 12 (23%) an associate degree program. Four (8%) were registered nurses currently enrolled in a baccalaureate program; 10 (19%) were graduates of such a program. Eight (15%) were enrolled in a master's degree program; six (12%) had completed a master's program. Two (4%) held earned doctoral degrees. This information reveals that registered nurses with undergraduate preparation (36, 69%) were better represented in this sample than were those with graduate education (16, 31%).

Table 10

Numbers and Percentages of Respondents According to Highest Level of Education

Highest level of education	N	%	Undergraduate/graduate	N	%
Diploma	10	19	Undergraduate	36	69
Associate Degree	12	23			
Currently in Bacc. Program	4	8			
Baccalaureate Degree	10	19			
Currently in Master's Program	8	15	Graduate	16	31
Master's Degree	6	12			
Doctorate	2	4			
Total	52	100	Total	52	100

Courses in Human Sexuality and in Sexuality and Aging

Subjects' responses to the questions of whether they had taken a course in human sexuality or a course in sexuality and aging, as well as the number of hours of instruction if they had taken either of the courses, are shown in Tables 11 and 12. Twenty-eight (54%) had not had a course in human sexuality; 24 (46%) had taken such a course. Of those who had, eight (33%) reported 1-15 hours of instruction or contact; seven (29%), 16-30 hours; four (17%), 31-45 hours; and five (21%), 46 or more contact hours. Forty (77%) respondents had not taken a course in sexuality and aging; 12 (23%) had. For those who had taken such a course, seven (58%) reported 1-15 hours of instruction or contact; three (25%), 16-30 hours; and two (17%), 31-45 hours. Thus, less than half of the subjects had taken a course in human sexuality, and only about a fourth had taken a course in sexuality and aging. For those who had taken such courses, 1-15 hours of instruction or contact was the modal category of response.

Summary

This demographic description provides a profile of the study respondents who work with older clients. This cross-section of registered nurses included representation from most groups, with the notable exception of non-Caucasian registered nurses. This lack is possibly a result of the "convenience" sampling procedures, but could also reflect an

Table 11

Numbers and Percentages of Subjects' Responses Regarding a Course in Human Sexuality

No/yes	N	%	Contact hours	N	%
No	28	54	0	0	0
Yes	24	46	1-15	8	33
			16-30	7	29
			31-45	4	17
			46 or more	5	21
Total	52	100	Total	24	100

Table 12

Numbers and Percentages of Subjects' Responses Regarding a Course in Sexuality and Aging

No/yes	N	%	Contact hours	N	%
No	40	77	0	0	0
Yes	12	23	1-15	7	58
			16-30	3	25
			31-45	2	17
			46 or more	0	0
Total	52	100	Total	12	100

underrepresentation of non-Caucasian nurses who work with older clients. Nurses who work in outpatient clinics or doctor's offices are also not represented in the study sample, but since all other settings of clinical practice are well represented, this deficiency does not seem particularly important.

The small number of respondents in the youngest age group (ages 20-29) may support the research finding that younger, or newly graduating, registered nurses tend not to choose to work in areas or settings with older clients (Gunter & Miller, 1977, p. 215). Therefore, their apparent underrepresentation in this sample population may actually be a reflection of the reality of gerontological nursing personnel. The percentage of male subjects (6%) is consistent with the number of men in the general nursing population (Jenny, 1975, p. 21). Data on other demographic variables about registered nurses who work with older clients are not available for comparison.

The typical respondent in this study sample was a 30-39 year old, Caucasian female, who was married, with 1-3 children, and had worked 10-19 years as a practicing nurse. Seventy-five percent or more of her clients were 50 years old or older, and she practiced in the medical-surgical or gerontological area, in an acute or long-term care setting. This nurse most frequently had undergraduate preparation, may have had a course in human sexuality, but probably had not taken a sexuality and aging course.

Research Question Number One

The first research question was: "What are registered nurses' attitudes toward, and level of knowledge about, sexual behavior?" This section reports the findings related to this question.

Total Sample Group

Table 13 presents the data for the total sample related to the first research question. The scores are normalized T-scores established in the development and standardization of the Sex Knowledge and Attitude Test (SKAT) with medical and nursing students and personnel. A score of 50.00 is considered the mean or average score. Scores above 60.00 are considered high; scores below 40.00 are low (Preliminary Technical Manual, 1973). Two low scores which were more than three standard deviations away from the mean score were dropped from the calculations because of the low probability of such scores being replicated and because of their skewing effect (Fitz-Gibbon & Morris, 1978, p. 34). One of these scores was for Knowledge; the other was in the Sexual Myths section of the SKAT. Therefore, the means for Knowledge and Sexual Myths are based on a total of 51, not 52.

Table 13 shows that the group's mean Knowledge score was 55.26, with a range of 34.16-68.38 and a standard deviation of 7.22. In the area of attitudes toward sexual behavior, the Heterosexual Relations mean score was 50.29 (31.57-61.13, S.D. 7.76). The mean score for the Sexual Myths scale was 54.43 (27.70-72.84, S.D. 9.80); the Abortion

Table 13

Sex Knowledge and Attitude Test Results
for Total Sample Population

SKAT area	N	Mean score	Range	Standard deviation
Knowledge	51*	55.26	34.16-68.38	7.22
Attitudes				
Heterosexual Relations	52	50.29	31.57-61.13	7.76
Sexual Myths	51*	54.43	27.70-72.84	9.80
Abortion	52	46.68	20.05-63.75	9.35
Masturbation	52	54.88	37.65-69.13	7.25

*Low score beyond 3 standard deviations excluded.

mean score was 46.68 (20.05-63.75, S.D. 9.35). The Masturbation scale mean score was 54.88 (37.65-69.13, S.D. 7.25).

These SKAT results indicate that the sample population's level of knowledge is about average, with most scores falling in the 40-60 range. Most of the attitude scale scores are also in the 40-60, average range, with exception of the abortion scale. Even the abortion scale results are not appreciably low since 70% of these scores are in a range of 37.33-56.03.

The attitudinal scales indicate that registered nurses tend to be about average in their acceptance of premarital and extramarital heterosexual relations, their rejection of myths and misconceptions about sexual behavior, their acceptance of abortion, and their acceptance of masturbation as healthy or permissible. This information added to the knowledge test results describes a group with about average knowledge and attitudes regarding sexual behavior and sexuality. This information is somewhat positive, because nurses who work with older people are often stereotyped as very lacking in knowledge of, and as being ultraconservative regarding, sexuality and sexual behavior.

Subgroup Descriptions

Further explanation of the SKAT results is provided by a breakdown and comparison of mean scores and standard deviations according to selected subgroups of the sample population. This subgroup information is for descriptive

purposes only; correlational procedures and significant differences for certain subgroups will be reported in the section regarding research question number two. Also, only summary statements will appear in the narrative; the reader should refer to the tables for details and specifics. The low scores, those beyond three standard deviations from the mean, were excluded from these computations (Fitz-Gibbon & Morris, 1978, p. 34).

Table 14 presents a breakdown of the SKAT means and standard deviations for four age groups. The younger-aged nurses tended to have higher knowledge scores and lower standard deviations than did the older nurses, except in the area of abortion. Younger nurses' scores suggest a more liberal feeling regarding heterosexual relations than did older nurses' scores, particularly those in the 50-or-over age group. Also, younger nurses appear more rejecting of sexual myths and misconceptions, and more approving of masturbation as healthy and acceptable, than older nurses. All age groups' mean scores for liberalness regarding abortion were in the lower average range, again with younger nurses indicating more acceptance than those in the 50 or over age group.

The SKAT score means and standard deviations for the marital status groups are in Table 15. The responses for separated, divorced and widowed nurses are combined in one group due to the small number of respondents in each of these categories. The data indicate that the single/never-

Table 14

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations for the Four Age Groups

Age group	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
20-29	6	56.02	3.55	51.85	6.84	58.17	3.11	46.10	8.75	57.43	4.94
30-39	25	56.51	5.73	52.71	6.83	55.73*	8.49	48.28	9.72	56.06	7.05
40-49	12	52.54	10.67	49.54	7.34	53.84	10.36	46.80	9.67	55.21	6.42
50 or over	9	54.83*	4.61	43.55	7.89	49.27	13.28	42.46	7.19	49.49	8.48
Total	52										

*Low score beyond 3 standard deviations excluded.

Table 15

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations for Marital Status Groups

Marital Status	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Mastrubation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Single/Never Married	11	58.87	4.32	55.75	4.42	60.74	8.46	50.61	9.21	59.44	5.36
Married	30	53.55	10.43	49.07	9.21	52.03*	9.37	47.16	9.67	52.50	6.52
Separated/ Widowed/ Divorced	11	56.40*	4.91	48.16	8.25	54.58	8.75	41.44	10.34	56.80	7.31
Total	52										

*Low score beyond 3 standard deviations excluded.

married nurses had more knowledge and greater liberalness in all attitude areas than did nurses who were or had been married.

Table 16 shows the breakdown of SKAT means and standard deviations for the groups in the item concerning number of years as a practicing nurse. The nurses with 1-5 years had consistently higher scores for knowledge and attitude scales than did the other groups. However, the small number of respondents in the 1-5 years group must be noted.

Mean scores and standard deviations for the item regarding percentage of clients 50 years of age and over are presented in Table 17. Nurses with the lowest percentage of older clients scored highest in the knowledge and attitudes concerning heterosexual relations and abortion. Nurses with 60-74% older clients scored highest in their rejection of sexual myths and misconceptions. The masturbation attitude mean scores were very comparable, with the nurses with 75% or more older clients scoring slightly lower than the other two groups.

Table 18 presents the SKAT means and standard deviations according to the respondents' area of clinical practice. The five "other" responses (community health/gerontological, two; psychiatric-mental health/gerontological, two; rehabilitation/gerontological, one) are combined in the gerontological nursing area responses. The psychiatric-mental health nurses scored highest in the areas of knowledge, attitudes toward premarital and extramarital

Table 16

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations for Groups in the Number of Years as a Practicing Nurse Item

Number of years in practice	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1-5	5	58.49	3.14	51.39	6.32	58.40	3.85	49.30	7.01	57.02	4.87
6-9	15	54.82	6.37	49.05	7.04	54.34	11.34	47.95	8.43	56.54	6.93
10-19	24	54.57*	9.05	48.81	8.37	55.08*	9.98	44.91	9.56	53.89	7.63
20 or more	8	56.02	5.62	49.38	7.26	50.27	8.36	47.99	8.18	53.39	8.49
Total	52										

*Low score beyond 3 standard deviations excluded.

Table 17

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations for Groups in the Percentages of Clients 50 Years of Age and Over Item

Percentage of Clients	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
50-59	9	58.45	3.21	52.05	3.08	48.70	5.41	51.24	3.67	55.41	5.63
60-74	16	55.43	4.24	50.04	4.72	55.35	9.16	45.26	6.28	55.51	5.29
75 or more	27	54.04*	8.76	49.86	6.90	54.00*	9.83	46.01	7.14	54.33	6.74
Total	52										

*Low score beyond 3 standard deviations excluded.

Table 18

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations for the Area of Clinical Practice Groups

Area of clinical practice	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Medical-Surgical	15	52.78	7.93	47.56	3.53	52.53*	8.17	45.04	6.13	52.66	4.84
Community Health	7	55.88	4.02	53.68	6.23	59.30	5.32	44.78	7.16	55.98	5.36
Psychiatric-Mental Health	9	58.67	3.06	54.17	4.47	57.55	3.86	47.31	9.74	59.71	3.81
Gerontological and other	21	55.36*	7.72	49.95	6.92	52.74	9.44	48.22	7.23	54.03	4.17
Total	52										

*Low score beyond 3 standard deviations excluded.

sexual activity and acceptance of masturbation. The community (public) health nurses indicated the strongest rejection of sexual myths and misconceptions. The gerontological nurses scored highest in their acceptance of abortion practices. The psychiatric-mental health and community health nurses' higher mean scores could reflect these groups' greater awareness and concern, than nurses in the other areas, of clients' "emotional" well-being, of which sexuality and sexual behavior are an important part.

The mean scores and standard deviations for the groups in the item concerning highest level of education are in Table 19. All the subjects with graduate preparation (currently in master's program, eight; master's degree, six; doctorate, two) are combined in one group. Also in one group are the subjects with a bachelor's degree (N = 10) and those currently enrolled in a baccalaureate nursing program (N = 4).

As could be expected, the subjects with graduate education had the highest average score, with the lowest standard deviation, in the knowledge protion of the SKAT, as well as having the highest mean scores for rejection of sexual myths and for acceptance of masturbation. The graduate group shared the highest mean scores with diploma level subjects in their acceptance and approval of abortion. The associate degree and baccalaureate level subjects were very close to each other in having the highest mean scores for acceptance of premarital and extramarital sexual activity. The higher

Table 19

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations According to Highest Level of Education Responses

Level of education	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Diploma	10	50.12	6.24	45.76	5.13	52.30	3.91	47.44	4.13	51.94	4.92
Associate Degree	12	53.69*	4.15	51.71	7.24	50.46	8.26	46.94	9.42	55.81	5.31
Baccalaureate Degree or Preparation	14	55.88	9.37	51.44	4.08	53.01	7.14	45.38	6.56	53.91	6.18
Graduate	16	58.99	3.98	49.93	5.26	60.34*	9.25	47.15	8.08	56.87	6.73
Total	52										

*Low score beyond 3 standard deviations excluded.

scores for the graduate level nurses could be attributable to their higher level of learning and information.

Mean scores and standard deviations for responses to the question concerning whether respondents had taken a course in human sexuality are found in Table 20. Table 21 shows the breakdown for the number of instruction hours categories. The responses in the latter table are only for the 24 respondents who had taken a human sexuality course.

The knowledge mean scores were very similar for both the nurses who had taken a sexuality course and those who had not completed such a course. Also worthy of note, the nurses who had not taken a course in sexuality had higher mean scores in all of the attitudinal areas than those who had taken a course. This result is supportive of Woods and Mandetta's (1975) finding that a course in human sexuality does not necessarily effect a liberalization of student's attutudes regarding sexual behavior and activity.

Concerning those who had taken a human sexuality course, there seems to be only a slightly positive relationship between increased number of instruction hours and higher scores. Those with 46 or more hours did have the highest mean scores for knowledge, acceptance of masturbation, and rejection of sexual myths. Those with only 16-30 hours in courses had the highest mean in acceptance of abortion; the 1-15 hours group had the highest mean score in acceptance of heterosexual relations.

The means and standard deviations according to

Table 20

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations According to Responses Regarding a Course in Human Sexuality

No/yes	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
No	28	54.53	7.92	52.37	8.03	55.59	7.04	48.74	7.13	55.98	5.34
Yes	24	54.98*	4.35	47.87	6.42	53.01*	9.36	44.28	8.42	53.59	6.25
Total	52										

*Low scores beyond 3 standard deviations excluded.

Table 21

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations According to Responses Regarding the Number of Instruction Hours in a Human Sexuality Course

Number of hours	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1-15	8	52.81*	8.42	50.26	9.13	48.30	7.03	45.47	6.24	51.27	5.16
16-30	7	55.34	4.63	48.96	3.24	53.82	8.12	47.90	9.13	55.29	5.23
31-45	4	55.07	2.87	45.91	3.96	53.10	6.05	42.74	3.27	52.18	4.82
46 or more	5	59.25	3.01	44.01	2.85	57.04*	6.14	38.54	4.05	56.06	4.97
Total	24										

*Low score beyond 3 standard deviations excluded.

responses regarding a sexuality and aging course and number of instruction hours are presented in Tables 22 and 23. The group who had taken such a course had a higher mean score for knowledge than those who had not taken a course. Those who had not had a course in sexuality and aging scored higher means in attitudes regarding heterosexual relations, sexual myths and abortion than those who had taken such a course. The two groups were very similar in their acceptance of masturbation, which is in the high average range.

For subjects who had taken a course in sexuality and aging, the 31-45 hours of contact group had the highest mean score for rejection of sexual myths. The 16-30 hours group scored highest in knowledge and their attitudes toward abortion. These two groups were almost equal in their mean scores for acceptance of masturbation. The 1-15 hours group scored highest in their acceptance of premarital and extramarital heterosexual relations.

Summary of Subgroup Descriptions

The data from Tables 14-23 suggest that younger, single nurses with fewer years of practice and a lower percentage of older clients tend to be most knowledgeable about and liberal toward sexual behavior. This tendency could be due to the fact that, in recent years, nursing education programs have included more content and courses in human sexuality (Mims & Swenson, 1978). Psychiatric-mental health nurses, community health nurses and nurses with graduate

Table 22

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations According to Responses Regarding a Course in Sexuality and Aging

No/yes	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
No	40	54.91*	9.10	50.56	7.36	55.18*	7.24	48.62	6.98	54.90	5.16
Yes	12	57.29	4.23	49.39	5.48	54.79	5.93	40.22	7.31	54.80	6.04
Total	52										

*Low score beyond 3 standard deviations excluded.

Table 23

Sex Knowledge and Attitude Test Mean Scores and Standard Deviations According to Responses Regarding the Number of Instruction Hours in a Sexuality and Aging Course

Number of hours	N	Knowledge		Heterosexual relations		Sexual myths		Abortion		Masturbation	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1-15	7	56.70	3.14	51.19	7.32	51.24	4.51	40.46	6.74	51.49	5.12
16-30	3	58.87	3.96	49.54	3.13	55.54	7.46	46.38	3.83	59.44	3.21
31-45	2	56.98	3.83	42.87	3.72	66.08	3.06	30.14	3.84	59.45	4.49
Total	12										

education also tend to have relatively high levels of knowledge and more liberal attitudes. The data give little indication that courses in sexuality and aging result in greater knowledge or increased liberalness concerning sexual behavior. Relationships between the finding will be explored and described more thoroughly in the section of this chapter concerning research question number two.

Research Question Number Two

The second research question sought information about relationships between selected characteristics and registered nurses' knowledge of, and attitudes toward, sexual behavior. For answers to this question, correlational procedures were carried out between knowledge and attitude scores and the variables of respondents' age and number of years as a practicing nurse. Also, tests for statistically significant differences were done for the items regarding area of clinical practice, highest level of education and sexuality courses. The low scores beyond three standard deviations of the mean were excluded in these calculations (Fitz-Gibbon & Morris, 1978, p. 34). The .05 level of confidence was used.

Correlational Procedures

Age. A product moment correlation coefficient, also referred to as the Pearson r (Polit & Hungler, 1978, pp. 530-533), was computed for the variables of age and each of the five SKAT scores. The significance of each association

was ascertained using a table for "Significant Values of the Correlation Coefficient, Levels of Significance" (p. 652), with degrees of freedom (df) of 50. Table 24 presents the results of the two-tailed Pearson r calculations.

The data in Table 24 indicate little correlation between age and knowledge of sexual behavior, acceptance of sexual misconceptions and acceptance of abortion activity. The data do show that increased age is inversely related to acceptance of premarital and extramarital heterosexual relations and to acceptance or approval of masturbation. These findings could be expected because older nurses were establishing their attitudes during a time when negative sanction of these sexual activities was prevalent. Also, older nurses are perhaps less willing than younger nurses to revise their attitudes and beliefs in accordance with the recent "freedom" and acceptance of masturbation and premarital sexual activity.

The significant correlations suggest that older nurses may have some difficulty dealing with clients' masturbatory and nonmarital sexual activity. Clients with whom they might therefore be less effective in providing sexual health care are unmarried persons without a sexual partner. This might be a serious problem since many older clients, especially women, are unmarried or widowed and have no sexual partner. Masturbation or nonmarital sexual activity could offer positive sexual outlets for these people, and if the nurse is rejecting or disapproving of such behavior, clients

Table 24

Correlation Coefficients of Age and the Five Sex Knowledge and Attitude Test Scores

SKAT area	Correlation coefficient	Significance
Knowledge	-.133*	Not significant
Heterosexual Relations	-.379	Significant at the .05 level
Sexual Myths	-.191*	Not significant
Abortion	-.159	Not significant
Masturbation	-.312	Significant at the .05 level

*Low score beyond 3 standard deviations excluded.

could experience increased suppression or repression of their sexuality.

At the same time, these correlations do not indicate what older nurses' behavior would be in providng sexual health care. It is very possible that older nurses would take responsibility for, or "own," their negative attitudes and not project them onto clients. The attitudes very likely influence the older nurses' personal behavior, but whether they actually interfere with giving effective sexual health needs or permitting clients' sexual expression needs to be explored further.

Years of practice. A correlation coefficient was also computed for the variables of the five SKAT scores and number of years as a practicing nurse. Table 25 shows the results of these calculations.

The data indicate that there are no significant correlations between nurses' number of years of practice and their knowledge of, and attitudes toward, sexual behavior. This finding would seem to belie the assertion that recent graduates are more knowledgeable and liberal regarding sexuality due to more sexuality content in nursing education programs. However, since there are only five nurses with only 1-5 years of practice in the sample group, the findings are inadequate for supporting or rejecting such an assertion without further study.

Table 25

Correlation Coefficients of Number of Years as a Practicing Nurse and the Five Sex Knowledge and Attitude Test Scores

SKAT area	Correlation coefficient	Significance
Knowledge	-.067*	Not significant
Heterosexual Relations	-.118	Not significant
Sexual Myths	-.167*	Not significant
Abortion	-.083	Not significant
Masturbation	-.179	Not significant

*Low score beyond 3 standard deviations excluded.

Tests for Significant Difference

To further explore associations among the variables, t tests for independent, unequal samples to determine significant differences were carried out for comparison of the mean SKAT scores of selected subgroups (Polit & Hungler, 1978, 548-550). A table, "Distribution of t, Probability" (p. 647) was used to determine whether the t-values were statistically significant at the .05 level, with 50 degrees of freedom (df).

Area of clinical practice. Significant differences in mean scores were explored for two groups from the item regarding area of clinical practice. One group was comprised of those who practice in the gerontological area (N = 16) and included the subjects who identified another area along with gerontological nursing (N = 5), for a total of 21. The second group was the combined group who indicated practice of medical-surgical nursing (N = 15), psychiatric-mental health nursing (N = 9), and community health nursing (N = 7), a total of 31.

This t test examined whether those who were more identified with, if not more involved in, the nursing care of older clients have sexuality knowledge and attitudes that are significantly different from nurses who identify less with gerontological nursing. Table 26 presents the results of this t-test computation, and reveals that no significant differences were found for any of the SKAT areas.

Table 26

Significance of Mean Differences of Gerontological Nursing Scores (N_A = 21) and "Other" Nursing Scores (N_B = 31)

SKAT area	$Mean_A$	$Mean_B$	Mean difference	t-value	Significance
Knowledge	55.19	55.36*	.17	.082	Not significant
Heterosexual Relations	50.86	49.95	1.41	.621	Not significant
Sexual Myths	55.61*	52.74	2.87	1.044	Not significant
Abortion	45.64	48.22	2.58	.975	Not significant
Masturbation	55.46	54.03	1.43	.707	Not significant

*Low score beyond 3 standard deviations excluded.

Level of education. Another t test for significant differences was computed to compare nurses with undergraduate preparation (N = 36) with those who have had graduate education (N = 16). Table 27 shows the results of this calculation. Again expectedly, the nurses with graduate education had significantly higher knowledge scores than did nurses with undergraduate preparation. Graduate-prepared nurses also scored significantly higher in their rejection of sexual myths and misconceptions. No significant differences were found for any of the other three attitude scales.

Sexuality courses. A t test was carried out to compare subjects who had taken a human sexuality course with those who had not taken such a course. As shown in Table 28, no significant differences were found, except in the area of heterosexual relations attitudes. This significant difference indicates that those who had not taken a sexuality course were more accepting of extramarital and premarital sexual activity.

Whether a course in sexuality and aging in addition to a human sexuality course resulted in differences in knowledge or attitudes regarding sexual behavior was explored by comparing the mean scores for these groups. The mean scores of subjects who had taken only a human sexuality course (N = 14) were compared with the mean scores of those who had taken both a general sexuality course and a sexuality and aging course (N = 10). Table 29 presents the results of the t-test calculations for the two groups.

Table 27

Significance of Mean Differences of Scores of Nurses with Undergraduate Preparation (N_A = 36) and Nurses with Graduate Education (N_B = 16)

SKAT area	$Mean_A$	$Mean_B$	Mean difference	t-value	Significance
Knowledge	53.54*	58.99	5.45	2.658	Significant at the .05 level
Heterosexual relations	50.45	49.93	.52	.221	Not significant
Sexual Myths	51.96	60.34*	8.38	3.036	Significant at the .05 level
Abortion	46.47	47.15	.68	.240	Not significant
Masturbation	54.00	56.87	2.87	1.232	Not significant

*Low score beyond 3 standard deviations excluded.

Table 28

Significance of Mean Differences of Scores of Subjects Who Had a Sexuality Course (N_A = 24) and Those Who Had Not (N_B = 28)

SKAT area	$Mean_A$	$Mean_B$	Mean difference	t-value	Significance
Knowledge	56.14*	54.53	1.61	1.032	Not significant
Heterosexual Relations	47.87	52.37	4.50	2.124	Significant at the .05 level
Sexual Myths	53.01*	55.59	2.58	1.154	Not significant
Abortion	44.28	48.74	4.46	1.721	Not significant
Masturbation	53.59	55.98	2.39	1.170	Not significant

*Low score beyond 3 standard deviations excluded.

Table 29

Significance of Mean Differences of Scores of Subjects Who Had Only a Sexuality Course (N_A = 14) and Those Who Had a Sexuality Course and Sexuality and Aging Course (N_B = 10)

SKAT area	$Mean_A$	$Mean_B$	Mean difference	t-value	Significance
Knowledge	55.36*	57.16	1.80	.703	Not significant
Heterosexual Relations	47.84	47.91	.07	.092	Not significant
Sexual Myths	51.83*	54.56	2.73	.565	Not significant
Abortion	48.73	38.03	10.70	3.894	Significant at the .05 level
Masturbation	52.87	54.60	1.73	.542	Not significant

*Low score beyond 3 standard deviations excluded.

Interestingly, the only significant difference was found in attitudes toward abortion, an area which is usually not a concern in the sexual health care of clients 50 years of age and older. The nurses who had taken only a sexuality course showed significantly more accepting attitudes toward abortion than did those who had taken both a general sexuality course and a sexuality and aging course.

Summary

The correlational procedures and *t*-test calculations resulted in the findings that: (a) older nurses tend to be less accepting of premarital and extramarital sexual activity and of masturbation, (b) nurses with graduate education tend to have more knowledge of sexual behavior and are more rejecting of sexual myths, (c) nurses who have not taken a human sexuality course tend to be more accepting of premarital and extramarital sexual relations, and (d) nurses who have had a course in sexuality, but not in sexuality and aging, tend to be more accepting of abortion. However, in general, there seems to be little correlation or relationship between registered nurses' knowledge and attitudes regarding sexual behavior and the characteristics explored in the data collection instrument.

The absence of correlation or relationship is notable, especially when combined with the result that most scores fell into the "average" range, compared to other health care providers, of 40-60. These results suggest that registered

nurses who work with older clients have at least an average potential for providing effective sexual health care for their clients. Of course, the "convenience" nature of this sample must be considered before generalizing the findings to the total population of nurses who work with clients 50 years of age and over.

Research Question Number Three

The third research question sought information about how, and to what extent, sexual health care is integrated into the total nursing care of clients 50 years of age and older. Subjects responded to behavioral statements in the areas of: (a) client assessment, (b) client care planning, (c) client care implementation, (d) client care evaluation, (e) characteristics of nursing personnel, and (f) external factors influencing sexual health care. The respondents were instructed to estimate how often the various behaviors and activities were carried out by themselves and what they thought was the experience of other nurses. An exception to this dual response was the section concerning external factors, in which only one response was requested. The four alternatives for responding were: (a) Always, (b) Frequently, (c) Seldom, and (d) Never.

During Client Assessment

Tables 30 and 31 present the frequencies and percentages of subjects' responses to the items regarding assessment of clients' sexual health status. These results

Table 30

Frequencies and Percentages of Responses to the Client Assessment Items for "Self"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
An atmosphere is created which is conducive to discussion of sexuality or sexual concerns	2	4	19	36	26	50	5	10	0	0	52	100
Some questions are included in initial nursing assessments related to sexual health or problems	1	2	12	23	26	50	13	25	0	0	52	100
Nursing personnel "listen" for nonverbal clues and elicit verbalization of underlying sexual concerns	6	11	23	44	18	35	5	10	0	0	52	100
A full sexual history is part of the nursing assessment of clients	1	2	4	8	24	46	22	42	1	2	52	100

Table 31

Frequencies and Percentages of Responses to the Client Assessment Items for "Other Nurses"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
An atmosphere is created which is conducive to discussion of sexuality or sexual concerns	0	0	4	8	35	67	13	25	0	0	52	100
Some questions are included in initial nursing assessments related to sexual health or problems	0	0	4	8	27	52	21	40	0	0	52	100
Nursing personnel "listen" for nonverbal clues and elicit verbalization of underlying sexual concerns	1	2	4	8	36	69	11	21	0	0	52	100
A full sexual history is part of the nursing assessment of clients	0	0	1	2	20	38	30	58	1	2	52	100

indicate that an atmosphere conducive to discussion of sexuality is seldom or never created during client assessment. Also, most frequently, questions related to sexual health are not included in initial nursing assessments. Picking up on nonverbal clues and encouraging discussion of sexual concerns occur most of the time according to subjects' responses for "self"; however, subjects reported that they believe this activity occurs much less often for "other nurses." A full sexual history is seldom or never part of the nursing assessment of clients.

The "no response" for the fourth item, "A full sexual history is part of the nursing assessment of clients," was accompanied by the statement, "Don't do a full history of any area--that's too prolonged for community encounters." Additional comments appeared in the space for "other" responses. One subject stated that "always--physical concerns of client . . . and client comments on physical problems are focus of assessment in greater number of client contact." Another subject indicated that "seldom--historical information on patient is evaluated with sexual concerns in mind." Other subjects wrote the following statements:

1. "Nursing homes tend to ignore sexual needs. If patients express concerns, then nursing staff attempt to assist. But majority of patients seem to buy the myth that old people lose their sexual drives."

2. "This field of health care is ignored in geriatric

patients for many reasons--no time, no training, no interest, no research, age of patients, mental status, etc." These comments added to the numerical results suggest that sexual health assessment is given inadequate attention in the nursing care of older clients.

During Client Care Planning

The frequencies and percentages of responses to items concerning sexual health care planning appear in Tables 32 and 33. The results for all of the items indicate that most often sexual health is not considered when planning for clients' care. The responses for self in the first item, "Clients' sexuality is recognized when planning nursing care," were the least negative; 40% of the time, clients' sexuality is "always/frequently" recognized when planning nursing care. However, the other responses suggest that, beyond being "recognized," clients' sexuality is given little attention in nursing care plans.

Additional comments were made regarding these items. One subject stated that she and co-workers experience "no resistance" from physicians and administrative personnel in their "CCU, ICU" work setting concerning planning for meeting clients' sexual needs. Other comments were: (a) "Frequently--clients are more apt to verbalize sexual concerns after establishment of a trusting nurse-patient relationship," and (b) "Never--sexual problems are almost never dealt with in my skilled nursing facility."

Table 32

Frequencies and Percentages of Responses to the Client Care Planning Items for "Self"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Clients' sexuality is recognized when planning nursing care	6	11	15	29	25	48	5	10	1	2	52	100
Opportunities for sexual expression are included in planning nursing care	2	4	12	23	27	52	9	17	2	4	52	100
Regular nursing care planning conferences are held related to sexual needs and/or problems	0	0	5	10	24	46	20	38	3	6	52	100
Supervising nurses guide subordinates (LVNs, aides, technicians) in planning for meeting clients' sexual needs	0	0	12	23	30	58	7	13	3	6	52	100
Nursing personnel are successful in dealing with resistance from physicians in planning for meeting clients' sexual needs	2	4	6	11	31	60	10	19	3	6	52	100
Nursing personnel are successful in dealing with resistance from family members in planning for meeting clients' sexual needs	1	2	10	19	30	58	9	17	2	4	52	100
Nursing personnel are successful in dealing with resistance from administrative personnel in planning for meeting clients' sexual needs	2	4	7	13	30	58	9	17	4	8	52	100

Table 33

Frequencies and Percentages of Responses to the Client Care Planning Items for "Other Nurses"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Clients' sexuality is recognized when planning nursing care	1	2	8	15	34	66	8	15	1	2	52	100
Opportunities for sexual expression are included in planning nursing care	0	0	3	6	29	56	19	36	1	2	52	100
Regular nursing care planning conferences are held related to sexual needs and/or problems	0	0	2	4	23	44	27	52	0	0	52	100
Supervising nurses guide subordinates (LVNs, aides, technicians) in planning for meeting clients' sexual needs	0	0	3	6	35	67	14	27	0	0	52	100
Nursing personnel are successful in dealing with resistance from physicians in planning for meeting clients' sexual needs	0	0	4	8	32	61	14	27	2	4	52	100
Nursing personnel are successful in dealing with resistance from family members in planning for meeting clients' sexual needs	0	0	7	13	31	60	14	27	0	0	52	100
Nursing personnel are successful in dealing with resistance from administrative personnel in planning for meeting clients' sexual needs	0	0	4	8	33	63	14	27	1	2	52	100

During Client Care Implementation

Tables 34 and 35 present the frequencies and percentages of responses to items regarding implementation of sexual health care in the nursing care of older clients. The results indicate that seldom or never is intervention carried out directed toward positive sexual health care. The most positive responses were for "self" concerning providing information to clients about the interrelationship of their sexuality and their health problems. For this item, nurses indicated that 41% of the time, information is always or frequently given to clients.

For the item regarding making referrals, one subject explained that referrals are "frequently" made, "but clients seldom accept referrals due to their own discomfort." In the space for "other" responses, another subject commented that "in extreme cases, sexuality problems are discussed with a social worker." Again, the comments and results suggest that little or no intervention is aimed at enhancing older clients' sexual health.

During Client Care Evaluation

The frequencies and percentages of responses to items concerning evaluation of sexual health care appear in Tables 36 and 37. The results indicate that criteria for success of sexual health care are seldom, if ever, met. Clients "always" or "frequently" demonstrate behaviors indicating effective nursing intervention in sexual health care less

Table 34

Frequencies and Percentages of Responses to the Client Care Implementation Items for "Self"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Nursing personnel provide information to clients about the relationship between their health problems and their sexuality	4	8	17	33	21	40	10	19	0	0	52	100
Nursing personnel carry out sexuality education with their clients	0	0	11	21	31	60	10	19	0	0	52	100
Nursing personnel provide counseling to clients regarding sexual problems and concerns	2	4	13	25	30	58	7	13	0	0	52	100
Nursing personnel make referrals to sources for sexual problems requiring intervention beyond their ability	3	6	12	23	32	61	5	10	0	0	52	100

Table 35

Frequencies and Percentages of Responses to the Client Care Implementation Items for "Other Nurses"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Nursing personnel provide information to clients about the relationship between their health problems and their sexuality	0	0	6	12	35	67	11	21	0	0	52	100
Nursing personnel carry out sexuality education with their clients	0	0	2	4	36	69	14	27	0	0	52	100
Nursing personnel provide counseling to clients regarding sexual concerns and problems	0	0	4	8	37	71	11	21	0	0	52	100
Nursing personnel make referrals to sources for sexual problems requiring intervention beyond their ability	0	0	4	8	37	71	11	21	0	0	52	100

Table 36

Frequencies and Percentages of Responses to the Client Care Evaluation Items for "Self"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Clients describe the current status of their sexual functioning	0	0	12	23	31	60	9	17	0	0	52	100
Clients freely express concerns or problems related to their sexuality	0	0	9	17	37	71	6	12	0	0	52	100
Clients verbalize understanding of the effect of their medical illness, such as diabetes or heart disease, on their sexual behavior and functioning	0	0	12	23	35	67	5	10	0	0	52	100
Clients verbalize understanding of the effect of their surgical procedures, such as mastectomy or prostatectomy, on their sexual behavior and functioning	0	0	15	29	32	61	5	10	0	0	52	100
Clients verbalize understanding of the effect of their medications on their sexual behavior and functioning	0	0	9	17	37	71	6	12	0	0	52	100
Clients recognize the relationship between sexual health and their total health	1	2	7	13	38	73	5	10	1	2	52	100

Table 37

Frequencies and Percentages of Responses to the Client Care Evaluation Items for "Other Nurses"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Clients describe the current status of their sexual functioning	0	0	4	8	35	67	12	23	1	2	52	100
Clients freely express concerns or problems related to their sexuality	0	0	1	2	42	81	8	15	1	2	52	100
Clients verbalize understanding of the effect of their medical illness, such as diabetes or heart disease, on their sexual behavior and functioning	0	0	7	13	38	73	6	12	1	2	52	100
Clients verbalize understanding of the effect of their surgical procedures, such as mastectomy or prostatectomy, on their sexual behavior and functioning	0	0	6	12	36	69	9	17	1	2	52	100
Clients verbalize understanding of the effect of their medications on their sexual behavior and functioning	0	0	2	4	41	79	8	15	1	2	52	100
Clients recognize the relationship between sexual health and their total health	0	0	4	8	39	75	8	15	1	2	52	100

than 25% of the time. The only exception to this is clients verbalizing understanding of the effect of their surgical procedures on their sexuality. However, this exception is only in the responses for "self," for whom the criterion is achieved "frequently" 29% of the time.

Five added comments were made by respondents regarding the evaluation items. On a positive note, one nurse stated that in her coronary care unit, "Sex is very much an issue--patients don't seem to have difficulty expressing sexual concerns." Less positively, another subject wrote, "Clients frequently provide nonverbal clues of underlying sexual concerns which are ignored by nurses." The other comments were:

1. "Nursing personnel are not geared to discussing, dealing with or solving any sexual behavior on the part of the geriatric patient in my skilled nursing facility."

2. "Nursing home populations have a high percentage of patients who are confused or have just 'given up.' A self-sufficient elderly population would not respond to their sexuality in this way. Nursing home patients and staff are for the most part all 'institutionalized'."

3. "The nurses I work with are about 50 or 60 years old and still Victorian in their thinking."

Characteristics of Nursing Personnel

Tables 38 and 39 present the frequencies and percentages of responses to items concerning nurses' perception of their knowledge, attitudes and skills related to sexual

Table 38

Frequencies and Percentages of Responses to the Items Regarding Characteristics of Nursing Personnel for "Self"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Nurses have adequate knowledge of human sexuality in general	3	6	35	67	13	25	0	0	1	2	52	100
Nurses have adequate knowledge regarding sexuality and the aging process	3	6	27	52	19	36	2	4	1	2	52	100
Nurses are comfortable with their own attitudes and feelings concerning sexuality and sexual health care	6	12	35	67	10	19	0	0	1	2	52	100
Nurses have adequate preparation and/or skills in sexual health care and sexuality education and counseling	2	4	19	36	26	50	4	8	1	2	52	100

Table 39

Frequencies and Percentages of Responses to the Items Regarding Characteristics of Nursing Personnel for "Other Nurses"

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Nurses have adequate knowledge of human sexuality in general	0	0	11	21	37	71	3	6	1	2	52	100
Nurses have adequate knowledge regarding sexuality and the aging process	0	0	6	12	38	73	7	13	1	2	52	100
Nurses are comfortable with their own attitudes and feelings concerning sexuality and sexual health care	1	2	10	19	37	71	3	6	1	2	52	100
Nurses have adequate preparation and/or skills in sexual health care and sexuality education and counseling	1	2	4	8	36	69	10	19	1	2	52	100

health care. The responses for "self" indicate that most often subjects saw themselves as: (a) having adequate knowledge of human sexuality and of sexuality and aging, and (b) being comfortable with their own attitudes concerning sexuality. Their view of their preparation and skills was less positive; they saw themselves as "always" or "frequently" adequate in sexual health care education and counseling less than half (40%) of the time.

The responses to these items for "other nurses" suggest that most often they do not have adequate knowledge, are not comfortable with their own attitudes, and do not have adequate preparation and skills in sexual health care. An added comment stated that, regarding sexuality and sexual health care, "the whole subject, in every respect, is generally ignored in this hospital." The combined results suggest that many, if not most, nurses who work with older clients do not have adequate knowledge of sexuality, are not comfortable with their own attitudes and feelings, and do not have adequate preparation and skills for providing effective sexual health care for clients.

External Factors Influencing Sexual Health Care

The frequencies and percentages of responses to items regarding external factors which influence sexual health care in the nursing care of older clients appear in Table 40. The results indicate that external factors most often are not conducive to effective sexual health care. In fact,

Table 40

Frequencies and Percentages of Responses to the Items Regarding External Factors Influencing Sexual Health Care

Item	Always		Frequently		Seldom		Never		No response		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Inpatient settings provide for clients' sexual expression	0	0	3	6	38	73	10	19	1	2	52	100
Inpatient settings provide adequate privacy for clients' meeting sexual needs	0	0	2	4	31	60	18	34	1	2	52	100
Clients are willing and able to share concerns or problems regarding sexuality	0	0	5	10	43	82	4	8	0	0	52	100
Administrative personnel approve and support sexual health care for clients, including clients' sexual activity or expression	0	0	4	8	36	69	11	21	1	2	52	100
Nursing supervisors and charge nurses approve and support sexual health care for clients, including sexual activity or expression	0	0	5	10	39	75	7	13	1	2	52	100
Physicians approve and support sexual health care for clients, including sexual activity or expression	0	0	6	12	35	67	10	19	1	2	52	100
Family members approve and support sexual health care for clients, including sexual activity or expression	0	0	1	2	42	81	8	15	1	2	52	100

the responses strongly suggest that the factors described are major barriers to providing sexual health care. Inpatient settings do not contribute to positive sexual health, and clients are not willing or able to express concerns about their sexuality. Very importantly, administrative personnel, nursing supervisors, physicians and family members most often are not supportive or approving of sexual health care for older clients.

Additional comments by respondents added to the results. One subject stated that "frequently" there is "less provision/allowance for sexual activity or expression provided from LVNs/NAs, etc." Another nurse wrote that "areas of sexual health care are never discussed unless a problem develops." Yet another comment was that "many people over 50 have a very strong religious background and masturbation and adultery are totally out of the question." A very informative comment was:

> Nurses have limited power in nursing homes. They can teach and make suggestions, but ultimately must bend to the wishes of administration and doctors. Family members exert a great influence on policy too. Many families refuse to acknowledge their parents' sexuality, labeling it as confused behavior. Where families are supportive, administration and nursing tend to bend and assist in meeting sexual needs. Where families are not supportive, then the nursing home does nothing to assist the patient.

Summary

The responses and results concerning how, and to what extent, sexual health care is integrated into the nursing care of older clients provides a somewhat negative view of the situation. In terms of the nursing process:

1. Attention is not often given to sexuality or sexual problems in the assessment of older clients' health status.

2. Planning for care does not usually include consideration of older clients' sexuality and sexual needs.

3. Interventions directed toward enhancing older clients' sexual health are seldom implemented.

4. Criteria for effective sexual health care of older clients are infrequently met.

These responses reflect that many, if not most, nurses who work with older clients are not comfortable with their own attitudes and feelings, and do not have adequate knowledge and skills for providing sexual health care. Also external factors which influence sexual health care appear to be major hindrances or barriers to assisting older clients attain positive sexual health and sexuality.

Summary of Findings

The subject group for this study was representative of registered nurses who work with older clients. However, non-Caucasian nurses were very underrepresented. The typical respondent was a 30-39-year old, white/Caucasian female, who was married, with 1-3 children, and with 10-19

years as a practicing nurse. A large number of her clients were 50 years of age and older, and she worked in an acute or long-term, medical-surgical or gerontological, clinical setting. She had an undergraduate level of education, may have had a course in human sexuality, but probably had not taken a sexuality and aging course.

Based on the findings from this sample group, registered nurses who work with older clients have an average level of knowledge about sexual behavior. They are also about average in their: (a) acceptance of premarital and extramarital heterosexual activity, (b) rejection of sexual myths and misconceptions, (c) acceptance of abortion, and (d) approval of masturbation as acceptable or healthy. This "average" is in comparison with other medical and nursing personnel, not the general population, which suggests that these nurses would be able to provide sexual health care at least as well as other health care providers. They should be able to integrate sexual health care in their nursing care by employing the nursing process of assessment, planning, implementation and evaluation to promote and enhance clients' sexual health and sexualtiy.

The findings of the subgroup descriptions suggest that younger nurses with fewer years of practice and fewer older clients are more knowledgeable and liberal concerning sexual behavior. Also, psychiatric-mental health nurses and community health nurses, as well as those with graduate education, tend to have greater knowledge and more accepting

attitudes than do nurses in other subgroups. The data provided little indication that human sexuality courses or courses in sexuality and aging result in increased knowledge or liberalness regarding sexual behavior.

The statistical procedures carried out to explore significant correlations and differences indicated that older nurses are less accepting of premarital and extramarital sexual behavior and of masturbation, and nurses with graduate education have greater knowledge of sexual behavior and are more rejecting of sexual myths than those with undergraduate preparation. Also, nurses who have not taken a course in human sexuality tend to be more accepting of premarital and extramarital heterosexual relations. Otherwise, there seems to be minimal correlation or significant difference between the characteristics and subgroups explored in the data collection instrument and registered nurses' knowledge of, and attitudes toward, sexual behavior.

The findings regarding how, and to what extent, sexual health care is integrated into the nursing care of older persons indicated that the nursing process is not often used to enhance clients' sexual health or assist them with sexuality problems. Also, nurses are generally not comfortable with their feelings and attitudes, and most nurses are viewed as not having adequate knowledge and skills for giving sexual health care. External factors influencing sexual health care, particularly administrators, physicians and clients' families, are not helpful; most often, they are

barriers to providing this care.

This chapter has presented the results and a summary of the findings of this survey study. Chapter 5 describes inferences and recommendations based on these results and findings.

Chapter 5

INTERFERENCES AND RECOMMENDATIONS

This chapter begins with a summary of the descriptive survey of registered nurses' attitudes, knowledge and skills related to sexual health care of older clients. This summary provides an overview of the study, and describes limitations and weaknesses of the methodology which became apparent after the study was completed (Isaac & Michael, 1971, p. 161). Following the summary, inferences drawn from the results will be presented, and suggestions for use of the findings will be made. Finally, recommendations for further research will be offered.

Summary

This study gathered information about three questions regarding the sexual health care of older clients.

1. What are registered nurses' attitudes toward, and level of knowledge about, sexual behavior?

2. Is there any correlation between selected demographic characteristics of registered nurses and their knowledge and attitudes about sexual behavior?

3. How, and to what extent, is sexual health care integrated into the nursing care of older clients?

A descriptive survey approach was used to obtain information from 52 registered nurses, at least 50% of whose clients were 50 years old or older. The data collection instrument combined parts of a standardized test, the Sex Knowledge

and Attitude Test (SKAT), and a questionnaire developed by the investigator. The instrument was anonymously self-administered and returned to the investigator by mail. The return rate was 71.2%.

In addition to the inherent limitations of the methodology described in Chapter 3, other weaknesses in the results should be noted (Babbie, 1973, p. 340; Polit & Hungler, 1978, pp. 606-607). The sample group was primarily white/Caucasian; only 8% of the subjects were from other racial or ethnic groups. Also, Part III of the instrument, which sought information about how, and to what extent, sexual health care is integrated in the nursing care of older clients, presented problems for some subjects. These problems are best illustrated by the following remarks from two respondents:

1. "I have no idea how other nurses function and will not project." "Items seem biased toward institutional settings--hard to see applicability in community to the self-directed elder."

2. "I was tempted to chuck it when I got to Part III. It was inapplicable to my practice and I found it hard to make the extrapolations. The bias toward institutional care is clear. I suppose most nurses are working with the aged there, but that's not where most of the folks are." "Projecting my opinions of other nurses is futile. I do not work with other nurses, especially all those in institutional settings, so I haven't the foggiest notion."

Only one respondent described difficulty with the SKAT parts used. This person commented, regarding the attitudes portion, "I cannot fit some of their questions into the format." However, this subject was able to complete the test thoroughly enough for scoring. For the most part, the SKAT sections seemed adequate for obtaining the information about knowledge and attitudes.

The major findings related to the three research questions were:

1. Based on this sample group, registered nurses who work with older clients have an average level of knowledge about sexual behavior. They are also about average in their: (a) acceptance of premarital and extramarital heterosexual relations, (b) rejection of sexual myths and misconceptions, (c) acceptance of abortion, and (d) acceptance of masturbation. These "averages" are in comparison with other medical and nursing personnel, not the general population.

2. Statistical procedures resulted in few significant relationships between selected demographic characteristics and the nurses' attitudes and knowledge regarding sexual behavior. A significant correlation was found between increased age and decreased acceptance of extramarital relations and of masturbation ($p < .05$). Nurses with graduate education were found to have significantly greater knowledge of sexual behavior than those with undergraduate preparation ($p < .05$). Also, nurses who had not had a human sexuality

course were significantly more accepting of premarital and extramarital heterosexual relations than were those who had taken such a course ($p < .05$). Otherwise, little correlation or relationship were found between the registered nurses' knowledge of, and attitudes toward, sexual behavior and the characteristics or subgroups explored in the data collection instrument.

3. The findings regarding how, and to what extent, sexual health care is part of the nursing care of older clients indicated that nursing personnel most often do not include sexual health care in their assessment of clients' needs, or in their planning, implementation and evaluation of nursing care and services. Also, nurses are most often not comfortable with their own attitudes and feelings about sexuality and sexual health care, and nurses are generally viewed as not having adequate knowledge and skills for giving sexual health care. External factors are most often hindrances to sexual health care, most notably lack of support from administrative personnel, physicians and clients' families.

Inferences

The findings indicate that registered nurses who work with older clients should be able to provide sexual health care at least at the basic level (Mims & Swenson, 1978). They should be able to use the nursing process of assessment, planning, implementation and evaluation to promote and enhance older clients' sexual health and sexuality. At the

same time, the "average" knowledge and attitudes suggest that for more than "basic" sexual health care, these nurses would need greater knowledge, and very likely, a greater awareness and acceptance of their attitudes and feelings about sexuality. At their present level, most of the nurses would probably not be able to do sexuality education and counseling. Nor would they be comfortable in "permission giving," conveying to clients that sexuality and sexual expression are acceptable and healthy (pp. 122-123).

The negative correlation between age and acceptance of heterosexual relations and masturbation suggests that older nurses may have difficulty in dealing with older clients' masturbatory and nonmarital sexual activity. However, it cannot be concluded that these negative attitudes actually interfere with older nurses providing sexual health care. This phenomenon would need to be explored further to determine the effect of these attitudes on sexual health care giving.

Another inference regarding the SKAT scores is that nurses with graduate preparation tend to have more knowledge of sexual behavior than do nurses with undergraduate education. Also, nurses who have not had a human sexuality course tend to be more accepting of heterosexual premarital and extramarital sexual activity than do nurses who have taken such a course. All of the findings from the comparisons between nurses who had and those who had not taken a human sexuality course raise the question of how much value

such a course is for helping nurses provide effective sexual health care.

Important inferences can be made regarding the status of sexual health care in the nursing care of older clients. The findings strongly suggest that, in spite of nurses' "average" knowledge and attitudes, very little sexual health nursing care is being provided to older clients. Not only must effort be directed toward increasing knowledge and awareness and acceptance of attitudes, but also the external factors and problems need attention. These external influences are perhaps more serious hindrances and barriers to positive sexual health care than nurses' knowledge of, and attitudes toward, sexual behavior and sexuality.

In general, all of these findings are in support of the literature review which concludes that the integration of sexual health care in the nursing care of older clients is lacking and inadequate. This assertion and the study conclusions provide a basis for suggestions for use of the findings.

Suggestions for Use of Findings

The findings strongly support the need for sexual health care education and preparation for nurses who work with older clients. These nurses need assistance in gaining more knowledge of sexuality, and also in increasing their awareness and acceptance of their attitudes and feelings regarding sexual behavior. In addition to the attitudes and

knowledge, the education and preparation should focus on skills for sexual health care, and these findings indicate that these skills should include behaviors for dealing with the hindrances to sexual health care. The nurses need to learn the art and science of negotiation, education, assertion and even confrontation, so they will be able to deal effectively, on behalf of the client, with administrative personnel, physicians and clients' families. This area of skills is within the roles described by Woods (1979): (a) facilitator of a milieu conducive to sexual health, and (b) consultant to other helpers (p. 98).

Along with nurses and other nursing personnel needing to learn more, it is apparent that people in the other disciplines, particularly administrative personnel and physicians, also need to learn more about sexual health care. These people should be questioned and interviewed or surveyed to determine why they are resistive or uncooperative in sexual health care. Whether their hindering is due to lack of knowledge or to misunderstanding of the importance of sexuality and sexual expression, they need to work toward collaborating with other health care workers in providing effective sexual health care.

Nurses who have increased knowledge, such as those with graduate education and younger nurses more recently graduated from undergraduate programs, should be encouraged to teach and share their knowledge with other nursing personnel. These nurses should also take the lead and

serve as role models in working with older clients to promote and maintain these people's positive sexuality and sexual health. Nursing personnel who work with older clients would also likely benefit from consultation from nurses in areas where sexual health is perhaps more recognized and understood, such as community health nurses and psychiatric-mental health nurses.

Recommendations for Further Study

More research is needed in the area of sexuality, aging and nursing. This study merely begins to examine a topic of health care that needs continued investigation. Much could be gained from repeating this study for more specific and detailed information. This is especially true for Part III of the data collection instrument, which sought information about how, and to what extent, sexual health care is part of the total nursing care of older clients. Multivariate analysis of the data from this study, as well as future studies, would provide more indepth information about the interrelationship between attitudes, knowledge and skills in sexual health care.

In repeating this investigation, a better representation of all racial and ethnic groups should be a goal. Also, Part III of the data collection instrument needs further development, testing and revision to minimize the institutional care bias and respondents' difficulty in completing the items, and to increase the instrument's

reliability and validity. The entire methodology needs review and revision to make it more concise and effective.

Action research should be carried out to explore methods for providing preparation for all nursing personnel who work with older clients to provide effective sexual health care. Other subgroups of nursing personnel, such as licensed vocational nurses and nurse aides, should be questioned to determine their attitudes, knowledge and skills related to sexual health care of older clients.

Action research also needs to be directed at administrative personnel, physicians and clients' family members. This effort should perhaps be preceded by an exploration of their attitudes toward and beliefs about sexuality and sexual health care. The cooperation of these groups is essential for sexual health care to become an integral part of the health care of older clients.

The effects of courses in human sexuality and sexuality and aging need to be explored more carefully. The courses need to be examined to determine whether they do indeed provide what is needed for giving effective sexual health care. The teaching of sexual health care skills needs more inclusion in these courses.

Older clients' sexuality and sexual needs and problems need to be explored much more. Along with this effort, action research aimed at determining how best to assist older clients with their sexual concerns would add to their total health care. Sexuality education should be increased

with older persons, and be evaluated for its effectiveness in enhancing the positive sexual health of older persons.

Concluding Statement

Sexual health care is the rightful expectation of each and every nursing client. This research investigation has been an important beginning in the effort towards older clients receiving their rightful due, effective sexual health care. Sexuality and sexual behavior are inherent in the human condition and nursing personnel and other health care providers should meet the challenge of assisting older clients to experience a fully human existence with positive sexual health.

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APPENDIX A

Data Collection Instrument

GENERAL INSTRUCTIONS

Thank you for your time and assistance.

1. Please complete the four parts of the questionnaire in the order in which they are presented. You may omit any question, or questions, if you find them too personal. All parts will be hand-tallied so you may use any pencil or pen to mark your responses.

2. Parts I and II are sections of a standardized test, the Sex Knowledge and Attitude Test (SKAT). Please mark your responses for these two parts on the answer sheet provided.

3. Since the intent of this study is to assess your current level of knowledge, please do not use books or other materials for assistance in answering the questions in Part II.

4. Parts III and IV were developed specifically for this study. Please mark your responses for these two parts in the blanks provided on the right side of the pages.

5. Completion of all four parts should take not more than two hours. If the time seems too long, feel free to put the questionnaire aside and come back to it later. However, it would be best to complete a part before you stop.

6. Please complete and return the questionnaire and answer sheet within ten (10) days.

If you have any questions, feel free to contact me:

Virgil Parsons
1700 Civic Center Drive, #304
Santa Clara, California 95050
Phones: Home (408) 241-4430
Office (408) 277-2697

ANSWER SHEET FOR PARTS I AND II

1. Mark down through the letter of your response as illustrated:

Part I - 36. A B C Ø E
Part II - 72. T F

2. The items for Parts I and II are printed on both sides of the pages, but do not respond to the items on the page labeled Part III: Background. Please ignore that page and continue.

3. Feel free to remove the staple and take apart the questionnaire for your convenience in marking your response.

4. Please do not write in the space directly below.

PART I

1. A B C D E	2. A B C D E	3. A B C D E	4. A B C D E	5. A B C D E
6. A B C D E	7. A B C D E	8. A B C D E	9. A B C D E	10. A B C D E
11. A B C D E	12. A B C D E	13. A B C D E	14. A B C D E	15. A B C D E
16. A B C D E	17. A B C D E	18. A B C D E	19. A B C D E	20. A B C D E
21. A B C D E	22. A B C D E	23. A B C D E	24. A B C D E	25. A B C D E
26. A B C D E	27. A B C D E	28. A B C D E	29. A B C D E	30. A B C D E
31. A B C D E	32. A B C D E	33. A B C D E	34. A B C D E	35. A B C D E

PART II

1.T F	2.T F	3.T F	4.T F	5.T F	6.T F	7.T F	8.T F	9.T F
10.T F	11.T F	12.T F	13.T F	14.T F	15.T F	16.T F	17.T F	18.T F
19.T F	20.T F	21.T F	22.T F	23.T F	24.T F	25.T F	26.T F	27.T F
28.T F	29.T F	30.T F	31.T F	32.T F	33.T F	34.T F	35.T F	36.T F
37.T F	38.T F	39.T F	40.T F	41.T F	42.T F	43.T F	44.T F	45.T F
46.T F	47.T F	48.T F	49.T F	50.T F	51.T F	52.T F	53.T F	54.T F
55.T F	56.T F	57.T F	58.T F	59.T F	60.T F	61.T F	62.T F	63.T F
64.T F	65.T F	66.T F	67.T F	68.T F	69.T F	70.T F	71.T F	

PART I: ATTITUDES

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

A. Strongly agree

B. Agree

C. Uncertain

D. Disagree

E. 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.

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. Anxiety differentially affects the timing of orgasms in men and women.

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

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

6. Social class is directly correlated with the frequency of incest.

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

8. The incidence of extramarital intercourse is constant for males between the ages of 21 and 60.

9. Nearly half of all unwed girls in America have sexual intercourse by 19.

10. There are two kinds of physiological orgastic responses in women, one clitoral and the other vaginal.

11. Impotence is almost always a psychogenic disorder.

12. Tranvestitism (a form of cross-dressing) is usually linked to homosexual behavior.

13. There was as much premarital coitus a generation ago as there is now.

14. Sexual attitudes of children are molded by erotic literature.

15. In some successful marriages sex adjustment can be very poor.

16. Homosexuals are more likely to be exceptionally creative than heterosexuals.

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

18. Homosexuality comes from learning and conditioning experiences.

19. In responsive women, non-coital stimulation tends to produce a more intensive physiological orgastic response than does coitus.

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

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

22. The body build of most homosexuals lacks any distinguishing features.

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

24. Exhibitionists are latent homosexuals.

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

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

27. Impotence is the most frequent cause of sterility.

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

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

30. A higher percentage of unmarried white teenage girls than unmarried black teenage girls in the United States have had intercourse with four or more partners.

31. The attitude of the average American male towards premarital intercourse is shaped more by his religious devoutness than by his social classes.

32. In teaching their daughters female sex roles, middle-class mothers are more affected by cultural stereotypes than mothers in other social classes.

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

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

35. Nursing a baby usually protects the mother from becoming pregnant.

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

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

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

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

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

41. Approximately one out of three adolescent boys has a homosexual experience leading to orgasm.

42. Impotence in men over 70 is nearly universal.

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

44. Women who have had several sex partners before marriage are more likely than others to be unfaithful after marriage.

45. 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.

46. Sexual maladjustment is the major cause of divorce.

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

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

49. The circumcized male has more trouble with ejaculatory control than the uncircumcized male.

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

51. Varied coital techniques are used more often by people in lower socioeconomic classes.

52. Individuals who commit rape have an unusually strong sex drive.

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

54. Exhibitionists are no more likely than others to commit sexual assaults.

55. The ability to conceive may be significantly delayed after the menarche (onset of menstruation).

56. Many women erroneously consider themselves to be frigid.

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

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

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

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

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

62. The sex drive the male adolescent in our culture is stronger than that of female adolescent.

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

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

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

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

67. LSD usually stimulates the sex drive.

68. Seven out of ten parents desire formal sex education in the schools.

69. For every female that masturbates four males do.

70. Douching is an effective form of contraception.

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

PART III

This part seeks information about how, and to what extent, sexual health care is integrated into total nursing care of clients 50 years of age and over. Please indicate your own responses and also what you think other nurses' response would be. Place the letter of one of the alternatives in the list below that fits your own experience and one for what you think is the experience of other nurses.

A. Always B. Frequently C. Seldom D. Never

	Self	Other Nurses
1. During Client Assessment		
a. An atmosphere is created which is conducive to discussion of sexuality or sexual concerns.	a. ___	___
b. Some questions are included in initial nursing assessments related to sexual health or problems.	b. ___	___

c. Nursing personnel "listen" for nonverbal clues and elicit verbalization of underlying sexual concerns. c. ___ ___

d. A full sexual history is part of the nursing assessment of clients. d. ___ ___

e. Other _____

_____

_____ e. ___ ___

2. During Client Care Planning

a. Clients' sexuality is recognized when planning nursing care. a. ___ ___

b. Opportunities for sexual expression are included in planning nursing care. a. ___ ___

c. Regular nursing care planning conferences are held related to sexual needs and/or problems. c. ___ ___

d. Supervising nurses guide subordinates (LVNs, aides, technicians) in planning for meeting clients' sexual needs. d. ___ ___

e. Nursing personnel are successful in dealing with resistance from physicians in planning for meeting clients' sexual needs. e. ___ ___

f. Nursing personnel are successful in dealing with resistance from family members in planning for meeting clients' sexual needs. f. ___ ___

g. Nursing personnel are successful in dealing with resistance from administrative personnel in planning for meeting clients' sexual needs. g. ___ ___

h. Other _____

_____

_____ h. ___ ___

3. During Client Care Implementation

a. Nursing personnel provide information to clients about the relationship between their health problems and their sexuality. a. ___ ___

b. Nursing personnel carry out sexuality education with their clients. b. ___ ___

c. Nursing personnel provide counseling to clients regarding sexual concerns and problems. c. ___ ___

d. Nursing personnel make referrals to sources for sexual problems requiring intervention beyond their ability. d. ___ ___

e. Other _____

_____

_____ e. ___ ___

The following statements are selected criteria for determining the success or effectiveness of nursing interventions in sexual health care. Please indicate your opinion about how often these criteria are achieved, and feel free to add others that occur to you. Mark a response for your own experience and one for what you think is the experience of other nurses using the following alternatives:

A. Always B. Frequently C. Seldom D. Never

4. During Client Care Evaluation

a. Clients describe the current status of their sexual functioning.	a.	___	___
b. Clients freely express concerns or problems related to their sexuality.	b.	___	___
c. Clients verbalize understanding of the effect of their medical illness, such as diabetes or heart disease, on their sexual behavior and functioning.	c.	___	___
d. Clients verbalize understanding of the effect of their surgical procedures, such as mastectomy or prostatectomy, on their sexual behavior and functioning.	d.	___	___
e. Clients verbalize understanding of the effect of their medications on their sexual behavior and functioning.	e.	___	___
f. Clients recognize the relationship between sexual health and their total health.	f.	___	___
g. Other _____ _____ _____	g.	___	___
h. Other _____ _____ _____	h.	___	___

5. Characteristics of Nursing Personnel

Use the alternatives listed below to mark a response for yourself and for how you think it is for other nurses.

A. Always B. Frequently C. Seldom D. Never

a. Nurses have adequate knowledge of human sexuality in general. a. ___ ___

b. Nurses have adequate knowledge regarding sexuality and the aging process. b. ___ ___

c. Nurses are comfortable with their own attitudes and feelings concerning sexuality and sexual health care. c. ___ ___

d. Nurses have adequate preparation and/or skills in sexual health care and sexuality education and counseling d. ___ ___

e. Other _____

_____

_____ e. ___ ___

6. External Factors Influencing Sexual Health Care

The following statements concern selected factors that influence sexual health care of clients 50 years of age or over. Please list any additional factors that you or other nursing personnel have encountered, experienced or observed. Only one general response for all nursing personnel and practice is requested here. Use the same alternatives as in the other sections.

A. Always B. Frequently C. Seldom D. Never

How Often?

a. Inpatient settings provide for clients' sexual expression. a. ___

b. Inpatient settings provide adequate privacy for clients' meeting sexual needs. b. ___

c. Clients are willing and able to share concerns or problems regarding sexuality c. ___

d. Administrative personnel approve and support sexual health care for clients, including clients' sexual activity or expression. d. ___

e. Nursing supervisors and charge nurses approve and support sexual health care for clients, including sexual activity or expression. e. ___

f. Physicians approve and support sexual health care for clients, including sexual activity or expression. f. ___

g. Family members approve and support sexual health care for clients, including sexual activity or expression. g. ___

h. Other _____

_____

_____ h. ___

i. Other _____

_____

_____ i. ___

PART IV

General Information

This information will be strictly anonymous, and will in no way be used to reveal anyone's identity. Please mark your responses in the blanks on the right.

1. Age

   A. 20-29 B. 30-39

   C. 40-49 D. 50 or over 1. ___

2. Sex

   A. Female B. Male 2. ___

3. Race/Ethnicity

   A. Asian-American D. Mexican-American

   B. Black/Negro E. Native American Indian

   C. White/Caucasian F. Other _____ 3. ___

4. Marital Status

   A. Single/Never Married C. Separated

   B. Married D. Divorced

   E. Widowed 4. ___

5. Number of Children Living with You

   A. None C. 4-5

   B. 1-3 D. 6 or more 5. ___

6. Number of Years As a Practicing Nurse

   A. 1-5 C. 10-19

   B. 6-9 D. 20 or more 6. ___

7. Percent of Clients 50 Years of Age and Over

   A. 50-59% B. 60-74% C. 75% or more 7. ___

8. Area of Clinical Practice

   A. Medical-Surgical

   B. Community (Public) Health

   C. Psychiatric-Mental Health

   D. Gerontological

   E. Other _____ 8. ___

9. Setting of Clinical Practice

   A. Acute Inpatient

   B. Extended Care, Skilled Nursing Facility, Nursing Home

   C. Outpatient Clinic, Doctor's Office

   D. Public Health Department, Visiting Nurse Association

   E. Inpatient Psychiatry

   F. Other _____ 9. ___

10. Highest Level of Education

   A. Diploma

   B. Associate Degree

   C. Currently in Baccalaureate Program

   D. Baccalaureate Degree

   E. Currently in Master's Program

   F. Master's Degree

   G. Doctoral Preparation

   H. Doctorate

   I. Other _____ 10. ___

11. Have You Had a Course in Human Sexuality?

   A. Yes B. No 11. ___

12. If Yes, How Many Hours of Instruction or Contact Were There in the Course?

A. 1-15 C. 31-45

B. 16-30 D. 46 or more 12. ___

13. Have You Had a Course in Sexuality and Aging?

A. Yes B. No 13. ___

14. If Yes, How Many Hours of Instruction or Contact Were There?

A. 1-15 C. 31-45

B. 16-30 D. 46 or more 14. ___

This completes your participation in this investigation. Please return the test material and completed answer sheets to the investigator via the stamped, addressed envelope. Thank you very much for your time, assistance and cooperation.

APPENDIX B

Research Protocol

A DESCRIPTIVE SURVEY OF REGISTERED NURSES' KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO SEXUAL HEALTH CARE OF OLDER CLIENTS

BACKGROUND

Now that sexual health care has become an accepted part of total health care, nursing personnel have a responsibility to promote sexual health when providing care and services.(15) Unfortunately, most nurses have not had the educational experiences needed to acquire the knowledge and skills to provide care for clients with sexual concerns.(18) This is particularly true in the nursing care of older people where many nurses and other health care givers seem to ascribe to the prevalent assumptions that:

> . . . (1) old people do not have sexual desire; (2) they could not make love even if they did want to; (3) they are too fragile physically and it might hurt them; (4) they are physically unattractive and therefore sexually undesirable; (5) anyway, the whole notion is shameful and decidedly perverse. (6:112)

To provide effective sexual health care, nurses must have accurate information regarding human sexuality, be accepting of their own sexual values and practices as well as those of others, and develop skills in sexuality education and counseling.(18:121) In order to assist nurses who work with older clients to achieve these aims, more information is needed about the current status of the three dimensions of sexual health care--knowledge, attitudes and

skills. In discussing sexual health care, Lief and Payne describe the interaction of "attitudes, skills, and knowledge (the ASK formula) as an interlocking feedback system."(14:2026)

There are a number of writings, but few research reports, concerning the sexual health care of older persons.(4, 7, 11, 13, 23, 24, 27) There have been no studies which have assessed the status and extent of sexual health care in the nursing care of older clients. The non-research writings consistently point out the need for an "exploration of the role of the nurse in intervention in the sexual concerns of clients."(11:676) This study addresses this need by exploring registered nurses' attitudes, skills and knowledge related to the sexual health care of older persons.

SPECIFIC AIMS

This study will gather information about three questions. For registered nurses who work with clients 50 years of age and older:

1. What are the attitudes concerning, and level of knowledge about, sexual behavior?
2. Is there any correlation between selected personal characteristics, such as age, level of preparation and area of clinical practice, and nurses' knowledge and attitudes about sexual behavior?
3. How, and to what extent, is sexual health care integrated into total nursing care?

The aim of the study is to identify and describe registered nurses' attitudes, skills and knowledge related to the sexual health care of older clients. Writers have stated that nurses' attitudes are too conservative, skills are deficient and knowledge is lacking for giving adequate sexual health care to older persons.(5, 9, 14, 15, 18) However, none of this has been documented through research, and more accurate and specific information is much needed.(10)

Information gained from this study will provide a basis for planning and providing educational experiences regarding sexual health care of older clients, and the investigation will furnish valuable information about the sexual health care component of total health care. Also, the findings could reveal unshared or uncommunicated information and strategies for providing sexual health care. In writing about sexuality, aging and nursing, Steffl states:

> No doubt personnel in institutions, especially those giving direct care to patients, could tell us much more about coping strategies and innovations, but our taboos have made it too dangerous for them to do so.(23:152)

SIGNIFICANCE OF THE STUDY

The most direct benefit of this study will be to nursing personnel who work with older clients in that the results will provide information about an important dimension in the planning and delivery of total health care to this population. More important, this study is urgently needed as a beginning point to deal with older clients' suffering resulting from their sexuality being ignored,

negated or suppressed. With knowledge gained from this study, nursing personnel can be better prepared to care for the total individual, including the person's sexuality.

METHODS

Study design. This research is a base-line descriptive survey, using a standardized test (SKAT) and a researcher-designed questionnaire for data collection. Univariate descriptive statistics and correlational procedures will be the major means for treatment and analysis of the data. The duration of the study, including analysis and reporting, is expected to be about six months.

Subject group. The subjects for the study will be a cross-sectional convenience sample of approximately 50 registered nurses who work with clients 50 years of age and older. These nurses will be selected from volunteers who work in a variety of clinical settings, including acute inpatient, long-term care, outpatient, public health and inpatient psychiatry. A criterion for an individual to participate is that 50 percent or more of the nurse's clients should be 50 years old or older. Three ways of recruiting subjects will be used:

1. One means will be to place an advertisement in the newsletter of a regional nurses' association. The ad will briefly explain the study, request volunteer participation, and give the name and phone number of the investigator.

2. The second method will be for the investigator to

attend a meeting of a gerontological nursing interest group and request volunteers to serve as subjects. These nurses will be also asked to inform registered nurses with whom they work of the study. As in the advertisement, the name and phone number of the investigator will be provided so that interested persons may volunteer.

3. Thirdly, baccalaureate and graduate nursing students at San Jose State University who are practicing registered nurses working with clients 50 years of age and over will be requested to participate. Permission will be sought from the students' instructors to talk with the students, and after an explanation of the study by the investigator (or by the instructor if the instructor prefers), data collection instruments will be distributed. Class time will not be used for students' completing the instrument. Instead, those volunteering will be instructed to complete the data collection tool at their convenience and return it to the investigator.

In addition to these three methods, it is very possible that nurses will hear of the study by word-of-mouth and contact the investigator to volunteer to participate. When this occurs, the volunteer will be provided a data collection instrument for completion. In all recruitment, volunteer respondents will be given an addressed, stamped envelope for returning the data collection instrument to the investigator. To assure anonymity, no consent form will be used since consent to participate is assumed if the nurse

completes and returns the self-administered instrument.

There will be no coercion to participate. Declining to be a subject will result in no penalty or jeopardy to employment. Student subjects will be informed that their participation, or refusal to participate, will not be used in any way, positive or negative, to influence their instructor's evaluation and grading of them.

Specific procedures. Upon volunteering to participate, subjects will be provided with a data collection instrument with instruction to return it to the investigator after completion via the stamped, addressed envelope. The data collection instrument is self-administered, anonymous and composed of four parts.

Parts I and II are the first two sections of the Sex Knowledge and Attitude Test (SKAT), a test developed and standardized as a teaching and research tool.(14) Part I measures attitudes and is composed of 35 statements to which the subject responds with level of agreement, ranging from Strongly Agree to Strongly Disagree. The attitudes section contains four attitudinal subscales: heterosexual relations (HR), sexual myths (SM), abortion (A), and masturbatory (M). Part II contains 71 true-false items for measuring factual knowledge. Written permission to use these sections of the SKAT will be obtained from the SKAT copyright holder, the Marriage Council of Philadelphia, Inc. Test booklets and answer sheets will then be purchased from this agency.

Part III of the data collection instrument seeks

information about how, and to what extent, sexual health care is integrated into total nursing care of clients 50 years of age and over. This questionnaire was developed by the investigator and pretested with a group of registered nurses who would not be a part of the study sample. On this questionnaire, subjects are instructed to indicate a response for themselves and one for other nursing personnel according to level of frequency, ranging from Always to Never. Six areas are covered in this questionnaire: assessment of client, planning for nursing care, implementation of nursing inverventions, evaluation of nursing action, characteristics of nursing personnel, and external factors influencing sexual health care.

Part IV asks for demographic information about the subjects, including age, sex, race/ethnicity, marital status, setting of clinical practice and highest level of education. Identifying information, such as name, address or place of employment, is not requested, nor is such identification wanted.

Special procedures. Other than the data collection instrument described in the Specific procedures section, no special procedures will be used in this investigation.

Time schedule. The maximum length of time for completion of all four parts of the data collection instrument is two hours. Most subjects will finish in one to one-and-one-half hours. No further time or effort will be required of subjects after they return the completed instrument.

Qualifications of investigator. The principal investigator of this study is a registered nurse with ten years of clinical experience and five years' experience in teaching. He is currently an Assistant Professor in the Department of Nursing, San Jose State University, San Jose, California. Academically, he has earned a Master of Science degree with a concentration in psychiatric nursing and community mental health nursing, and presently is a candidate for the Doctor of Nursing Science degree at the University of California, San Francisco. In the past two years, he has undergone extensive preparation and reading and has taught in the areas of human sexuality, sexuality and nursing, and sexuality and aging. The faculty sponsor for this investigation is Sarah E. Archer, Dr.P.H., Associate Professor, Department of Mental Health and Community Nursing, School of Nursing, University of California, San Francisco.

Compensation of subjects. The subjects will receive no compensation for their participation in this study.

Precautions to minimize risks. Subjects' participation in the study will be totally voluntary, and this will be emphasized when explaining and presenting the study to potential subjects. Completed instruments will be returned directly to the investigator, and responses will be kept anonymous. No identification of individuals is possible or sought.

The data collection instrument is self-administered

which makes it possible for subjects not to respond to any question or items they find sensitive or offensive. This option is clearly stated in the general instructions for each instrument. Also, if subjects decide not to participate, they may simply not return the instrument to the investigator. Thus, the risk factors are considered to be minimal.

CLOSING STATEMENT

Including sexual health care in comprehensive health care is part of nursing's challenge to create a fully human environment for clients. This study is a much needed step toward assisting nursing personnel to meet this challenge.

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APPENDIX C

Letters

April 2, 1979

William R. Miller, PhD
Director of Research
Marriage Council of Philadelphia, Inc.
4025 Chestnut Street, 2nd Floor
Philadelphia, PA 19104

Dear Dr. Miller:

Enclosed you will find my order and check for SKAT materials I plan to use in conducting a descriptive survey of registered nurses' attitudes, knowledge and skills related to sexual health care of older persons. This study is for my dissertation in the Doctor of Nursing Science program at the University of California, San Francisco.

In reviewing the SKAT test booklet, I find that Parts III and IV are not appropriate for my study, and the answer sheets are not practical for use. Therefore, I am requesting your permission to use only Parts I and II of the test booklet and to develop my own answer sheet for these parts.

Your prompt reply will be appreciated. Thank you for your assistance and cooperation.

Sincerely,

Virgil Parsons

Virgil Parsons, RN, MS

1700 Civic Center Drive, #304
Santa Clara, CA 95050

VP/nl
Enclosure

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

April 6, 1979

Virgil Parsons, R.N., M.S.
1700 Civic Center Drive, #304
Santa Clara, CA 95050

Dear Mr. Parsons:

In response to your letter of April 2nd to Dr. William Miller, permission is granted to use only Parts I and II of the Sex Knowledge and Attitude Test and to develop your own answer sheet for these parts in your study of registered nurses' attitudes, knowledge and skills related to sexual health care of older persons.

Thank you for your interest in S.K.A.T. and good luck in your research.

Sincerely,

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

/jm
Encls.

(Replication)