Sexual rehabilitative needs of postmyocardial infarction patients
by Connie Margaret Schultz

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF NURSING
Montana State University

Abstract:
The purpose of this study was to determine congruence of sexual rehabilitative needs between postmyocardial infarction patients, their sexual partners and health care professionals. The author was interested in determining whether the sexual rehabilitative needs were met and how the health care professionals perceived their role in meeting these needs.

The methodology of this study included a questionnaire delivered by the researcher. Originally four sample groups were included: patients, sexual partners, physicians and nurses. Physicians were eliminated from the study because of the small number of questionnaires returned.

The findings of this study determined congruence of sexual rehabilitative needs between the registered nurses, patients and sexual partners. Nurses indicated they gave more information than patients stated they received. What information patients and sexual partners received was identified as given by the registered nurses.

The patients and sexual partners believed it should be the physician’s responsibility to give the sexual information. Nurses stated it was a joint responsibility of physicians and nurses. Nurses generally stated sexual teaching to be in the scope of nursing practice but indicated their own anxiety was the primary reason for not giving the information.

Implications for nursing include the need for assessment of patient readiness to receive information in the acute care setting and the importance of nurse’s awareness of the impact of illness on sexuality. Questions generated by the study include: (a) Is there a relationship between the perceived severity of illness and the length of time required for adaptation? (b) Does sexual teaching have an effect on the postmyocardial infarction patient's return to optimal sexual functioning?

STATEMENT OF PERMISSION TO COPY

In presenting this thesis in partial fulfillment of the requirements for an advanced degree at Montana State University, I agree that the Library shall make it freely available for inspection. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by my major professor, or, in his absence, by the Director of Libraries. It is understood that any copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Signature Connie K Schultz

Date 12 March 1982

SEXUAL REHABILITATIVE NEEDS OF POSTMYOCARDIAL INFARCTION PATIENTS

by

CONNIE MARGARET SCHULTZ

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF NURSING

Approved:

Chairperson, Graduate Committee

Head, Major Department

Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

March, 1982

ACKNOWLEDGMENT

I would like to take this opportunity to express my appreciation to the following people for their loyalty and support for which I am forever grateful: Dr. Jacqueline Taylor, committee chairperson, for her expert knowledge and continued inspiration throughout this study and graduate school, Sharon Hovey and Grace Johnson-Forsythe, committee members for their understanding, patience and assistance, Dr. Paul Renz, for his invaluable assistance with the data analysis, Pat Mueller for her willingness and dedication to pursue library resources in depth, my family and friends who assisted in many small but very important ways, and last but certainly not least to my husband, Jim, and children, Christopher and Jalynn, for without their sacrifice, love and encouragement, this all would not have been possible.

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The purpose of this study was to determine congruence of sexual rehabilitative needs between postmyocardial infarction patients, their sexual partners and health care professionals. The author was interested in determining whether the sexual rehabilitative needs were met and how the health care professionals perceived their role in meeting these needs.

The methodology of this study included a questionnaire delivered by the researcher. Originally four sample groups were included: patients, sexual partners, physicians and nurses. Physicians were eliminated from the study because of the small number of questionnaires returned.

The findings of this study determined congruence of sexual rehabilitative needs between the registered nurses, patients and sexual partners. Nurses indicated they gave more information than patients stated they received. What information patients and sexual partners received was identified as given by the registered nurses. The patients and sexual partners believed it should be the physician's responsibility to give the sexual information. Nurses stated it was a joint responsibility of physicians and nurses. Nurses generally stated sexual teaching to be in the scope of nursing practice but indicated their own anxiety was the primary reason for not giving the information.

Implications for nursing include the need for assessment of patient readiness to receive information in the acute care setting and the importance of nurse's awareness of the impact of illness on sexuality. Questions generated by the study include: (a) Is there a relationship between the perceived severity of illness and the length of time required for adaptation? (b) Does sexual teaching have an effect on the postmyocardial infarction patient's return to optimal sexual functioning?

Chapter 1

INTRODUCTION

Perhaps no area can crystallize the multidimensional interpersonal concerns that follow the sudden occurrence of myocardial infarcation so clearly as human sexuality (Lynch, 1979). The basic concept for this study is human sexuality. But just what is sexuality? There are volumes written on the subject without formulating a concise definition.

Abraham Maslow's theory of human motivation is based on the concept of needs that must be satisfied if health is to be attained and maintained (Maslow, 1954). Sexuality is a significant part of Maslow's needs for it pervades, affects and is affected by the higher order needs of security, love, belonging and esteem. Sexual activity is one of the low order basic needs necessary for species survival (Hogan, 1980). Maslow's conceptualization of sexuality can be viewed in a very holistic manner.

Dulcer (1980) states that sexuality, a basic human characteristic, refers to "all those perceptions related to feeling like, acting like or being recognized as a man or woman." It is the culmination of biological heritage, moral and religious beliefs, culture, environment, the interaction with others and the individual's interpretation of all these experiences. This image in combination with one's

perception of his or her body and self worth form one's self concept (Dulcer, 1980; Wood, 1979).

What happens to sexuality after a Myocardial Infarction (MI)? Depending on the patient's viewpoint of the heart, knowledge that the heart has been damaged may lead to a severe body image disturbance which may cause the individual to unnecessarily restrict activity and view self as "less of a man/woman" (Hogan, 1980). Health professionals need to make sexuality a primary concern to help reinstate the positive attitude, sexual self-concept and body image (Okoniewski, 1979).

Research done on teaching of post-MI patients about sexuality, specifically sexual activity, indicates that although cardiologists say they counsel their patients about sexual activity, this counseling is minimal or non-existent (Hott, 1980). Tuttle, Cook and Fitch (1964) reported that two-thirds of men interviewed nine years post-MI reported that they had received no advice regarding sexual activity and the rest felt the information was nonspecific and vague. A second study noted that most physicians try to give general advice and then shift the ultimate decision to the patient (Klein, 1965). Papadopoulos (1978) found that many of the 135 post-MI subjects were not given information and professional advice about sexual activities.

What factors contribute to this lack of information given to the patient? Hott (1980) and Van Bree (1975) have given such reasons as

(a) lack of knowledge in human sexuality, (b) personal biases, (c) doctor-nurse conflicts, (d) nurse submission, (e) poor patient/doctor relationship and (f) professional prejudices. These factors in combination with the research presented on incidence of sexual teaching shows that medicine and nursing have defaulted in their responsibility in educating the patient about normal sexuality and sexual rehabilitation.

Statement of Purpose

The purpose of this study was to determine congruence of sexual rehabilitative needs between the health care professionals and the MI patients and sexual partners. The author was also interested in determining if the needs were being met and if so, by whom. Due to the descriptive nature of this study, hypotheses were not appropriate. The following questions serve as the basis for the data analysis.

1. What are the perceived sexual rehabilitative needs of post-MI patients and sexual partners upon discharge from the hospital?
2. Are these needs congruent with the needs assessed by the health professionals?
3. Are the rehabilitative needs being met by the health professionals?
4. Whose responsibility is it to provide the information to enable patients to make informed choices?

Definition of Terms

Sexuality: The totality of human beings which includes the biologic, sociocultural, psychological and ethical components of sexual behavior.

Sexual activity: Physical means of sexual fulfillment (e.g., hugging, touching, intercourse and masturbation).

Sexual rehabilitation: Process of actively assisting the patient to achieve and maintain his optimal state of sexual health.

Sexual partner: Spouse or "usual" partner with whom sexual activity is performed.

Patient: Person who has experienced a myocardial infarction.

Health professional: Physician or registered nurse involved in the care of the patient.

Needs: Information or questions concerning sexuality asked by the patient and/or family or assessed by the health professional as important in rehabilitation.

Congruence: Agreement of needs perceived by nurses, physicians, patients and sexual partners.

Chapter 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Historically there has been minimal documentation of the physiologic responses to sexual intercourse in the post-MI patient. There was little mention of the subject in the literature until very recently. Several researchers have found that many activities in daily living (e.g., stair climbing) and work produce cardiovascular demands and responses which are equal to or greater in duration and magnitude than sexual activity (Hellerstein and Friedman, 1970; Kavanaugh and Shephard, 1977; Larsen et al., 1980; Stein, 1977). These findings have done much to objectify information about the relationship of sexual activity to cardiac functions.

Assuming the patient is given the information for sexual rehabilitation, will he have the ability physically and emotionally to resume sexual activity? This can be determined only after a thorough assessment of the patient. Factors that need to be assessed include (a) pre-illness sexual activity, (b) general health of the patient and sexual partner, (c) extent of pathophysiologic and psychologic recovery from the MI, (d) phychosocial needs of the sexual partner and (e) functioning of the marital unit (Hellerstein and Friedman, 1970; Stein, 1976; Watts, 1976).

That a problem of lack of information and misconceptions exists

for the patient is exemplified by group therapy reports in which convalescent male cardiac patients expressed feelings of diminished libido, fear of death during intercourse and anxiety that exists at a preconscious level for many years (Bilodeau and Hackett, 1971; Bloch, 1975). Bilodeau (1971), a psychiatric nurse, had group meetings with post-MI patients and found the most frequently expressed concern related to sexuality. The sample, which was small, was selected randomly. In relation to the issue of sex, all members directly or indirectly admitted diminished libido and fear of death during intercourse, a fear that was shared by spouses. No member had discussed these concerns with the physician and no physician had introduced the subject.

Bloch (1975) did a study of early mobilization after an MI, specifically, evolution of sexual activity. One hundred patients were randomly selected for outpatient follow-up eleven months after the MI. There was a definite diminuation of sexual activity from before to after the MI. The reasons for this diminuation were unclear and multiple. Reasons given were decreased sexual desire, depression, anxiety, wife's decision, fear of relapse and sudden death, fatigue and impotence. No mention was given as to the lack of information given by health professionals.

The impact of lack of information and misconceptions was anxiety-producing for the sexual partner as well as the MI-patient

(Harding and Morefield, 1976; Mayou et al., 1978; Papadopoulos et al., 1980; Rudy, 1980; Skelton and Dominian, 1973). In response to the realization that women whose husbands had suffered an MI had common needs, Harding, an RN, and Morefield, a minister, started an interdisciplinary wive's support group in which six to seven wives per week participated. In a descriptive article, they stated how they had found that sexual fear was a very prominent concern but a difficult one to deal with in a group situation. A common expressed fear was "I'm afraid my husband will die on top of me!"

In yet another study reported by a registered nurse, Rudy (1980) described a study of patient and spouse causal explanations of an MI. Limitations of this descriptive study were the convenience sample of 50 patients and spouses and the nonstandardized questionnaire utilized. When exploring the ways in which the heart attack had affected the spouses, many wives said the illness had created problems for which they were not prepared. Uncertainty related to sexual activity was one of the three areas of concern. Through home interviews, Rudy also found that when patients resumed everyday activities, patients and spouses became aware that decisions confronted them and that they lacked relevant information to make the decision.

Papadopoulos (1980) focused on the impact of the heart attack on the sex life of the wives of the heart attack victims. Data collection was through interviews in the home with the sample obtained by

consent of the first 100 wives of patients discharged from the hospital. Some of the sexual concerns noted were inadequate sexual instructions, risk of sexual activity, sexual difficulties of the husband, change in sexual patterns, patient symptoms during intercourse and the emotional relationship of the couples. Forty-five wives had received some information about sexual activity prior to discharge with marked variation in the sexual instruction provided. Papadopoulos found that a significant higher percentage of wives who had received instructions such as "take it easy" and "it is alright to resume sexual activity as long as it is not strenuous" feared sexual activity after the MI. This may confirm the fact that the instructions were inadequate to alleviate fear or they may have created anxiety by raising questions of risk.

Studies by Mayou and others (1978) and Skelton and Dominian (1973) exemplified these points. Interviews were conducted with wives of MI patients from two to twelve months after discharge. With samples of 82 wives (Mayou) and 65 wives (Skelton) they noted that the level of sexual activity was affected by anxiety about the safety of intercourse. These fears of the wives may be displaced into avoidance of sexual activity, overprotection or resentment leading to a situation that is more detrimental than the underlying pathology (Brenton, 1968).

The two major fears experienced by post-MI patients are the fears

of imminent death and the loss of physical capacity (Cassem, 1957). The psychological response to these fears are exhibited as anxiety which interferes with sexual functioning and depression that alters the libido (Cassem and Hackett, 1973; Hellerstein and Friedman, 1970; Scalzi, 1973). The loss of physical capacity frequently is perceived by the patient as a severe threat to his self-esteem and to his concept of masculinity (Scalzi, 1978).

A person with a positive sexual self-concept is characterized by acceptance of, comfort with and value of self as male or female (Hogan, 1980). Body image, the internalized picture that an individual has of his physical appearance is closely allied with the sexual self-concept (Hogan).

Since an MI leaves physical change invisible, the patient must learn to modify his self-concept. To many men, cardiac damage means loss of courage, love and manliness and it portends dependency, incapacity and inactivity with a resultant threat to their sexual self-concept and resultant effect on their sexual rehabilitation (Hogan, 1980). A post-MI patient with a negative sexual self-concept in all probability will become a "cardiac cripple" due to his perception of himself as physically disabled despite physiological evidence to the contrary (Klein, 1965). According to Klein, a cardiac cripple is a person who considers himself permanently disabled because of heart disease although from a physician's point of view, the

disability is physiologically unjustified.

Adaptation to a disturbance in the body image and sexual self-concept depends upon the nature of the threat, the meaning of the threat to the individual, the person's coping ability, the response from significant others and the support available (Norris, 1970).

The fear and anxiety felt by the patient could also be due in part to how the sexual partner views him as a sexual being after the MI. If the patient's sexual partner is providing misleading information, that patient misinterprets the symptoms and behavior in a way that reinforces negative perception of himself (Klein, 1965). If the sexual partner views the patient as unable or incompetent to perform the usual activities, the patient may be relegated to a dependent position (Hogan, 1980). What are the sexual partner's feelings of sex role stereotypes? Can they adapt to role reversals? These are very important aspects to consider in the evaluation of the way the sexual partner views the patient and the MI.

Sexual rehabilitation is rehabilitation of the patient's sexuality as a total human and not only his ability to perform sexual intercourse. Lynch (1979) stresses the importance of intimacy, love and support as vital in the emotional rehabilitation of the patient and sexual partner. He states "if human love and affection are major influences on the heart, can the heart patient tolerate a significant reduction of the human affection that is shared in sexual activity?"

(p. 115). He felt the greater emphasis on pleasuring such as loving, touching, cuddling, caring and open communication, the fewer anxieties about erection.

In review of studies there was minimal mention of maintaining intimacy in the relationship. Papadopoulos' (1980) study of post-MI patient wives showed that a relationship between the emotional relationship of husband and wife and resumption of sexual activity existed. Of those whose relationships were good before the MI and who resumed sexual activity afterward, 47 percent were closer emotionally and 17 percent more distant. The converse was true of those who did not resume sexual activity and whose relationships were more distant. The couples whose relationship was closer had maintained open communication and expression of intimacy.

Sexual information is an important component of the rehabilitation of all patients although to date there is no published data accessible to the researcher substantiating its effectiveness. The goal of sexual information is to provide the patient the information he needs to make a personal choice in regard to sexual activity.

Mims (1975) has expanded three principles vital in providing sexual information to the patient.

1. Health professionals must be nonjudgmental in the acceptance of values of others.
2. Guidance should be given by education rather than indoctrination.

2. Guidance should be given by education rather than indoctrination.

3. Health professionals must help the patients make their own choices of conduct through education and counseling.

Health care professionals must carefully examine their personal feelings and sexual attitudes prior to beginning sexual counseling. They must have knowledge of normal sexuality as well as how the disease process may or may not affect the patient's sexuality (Jacobsen, 1974; Krozy, 1978). Misconceptions continue among health professionals which makes effective sexual counseling very difficult (Hott, 1980).

Are these principles being followed in providing sexual information for the post-MI patients? Hott (1980) conducted informal interviews with cardiologists, coronary care nurses, cardiac rehabilitation nurses and patients who had had a recent MI or undergone cardiac surgery. Her descriptive study utilized a small sample (N=39) which was randomly selected. Hott believed she heard enough consistent reports to confirm the fact that there is indeed a difference between what literature says should be done and what is actually being done by nurses and physicians. When asked, "How do you handle sexual problems of your patients?," physicians felt it was not necessary to bring up the subject unless the patient asked. Nurses were uncomfortable in talking about sexuality to older patients and felt providing sexual information was the physician's job. The patient's advice included

"take it easy" and "go back to what you did before," never examining "what they did before." Although the physicians said they informed the patient, the information was felt to be minimal or nonexistent.

Why do health professionals generally neglect the teaching about typical healthy sexuality and when they do teach, stress the misconceptions and myths? Reasons noted by Hott (1980) include (a) lack of training in sexual counseling, (b) personal biases and professional prejudices, (c) nurse-physician conflict, "whose job is it?," (d) the nurse sees herself in a subordinate position to the doctor, and (e) poor doctor-patient relationship. Health professionals feeling insecure about their own sexuality cope with their insecurities by either avoiding the situation or advising the patient without sensitivity, objectivity and empathy in relation to the patient's needs (Elder, 1970).

Several researchers have explored the incidence and quality of sexual teaching of post-MI patients and spouses (Bilodeau and Hackett, 1971; Larter, 1980; Papadopoulos et al., 1980; 1978; Tuttle et al., 1964). Papadopoulos (1978; 1980) in studies of wives and patients found that many patients are not given professional advice about sexual activity and many practicing physicians still avoid discussion of the topic. In his study of patients, 9.6 percent of the cases (N=135) had physicians who volunteered information and 45 percent stated that no information was given even though they requested it.

Tuttle, Cook and Fitch (1964), stated that two-thirds of the patients they studied who had suffered an MI received no advice from health professionals while the advice received by the remaining was so vague that it way useless. No total sample size was given in the report.

A study at Boston Veterans Administration Hospital (Pinderhughes, 1972) of interrelationships between sexuality and illness found that the patient perceived the physician as initiating discussions of sexual activity far less frequently than the physicians thought they did. A Texan cardiologist reported that 90 percent of his colleagues counseled on sex of which 83 percent suggested limited sexual activity, 50 percent suggested abstinence for two to three months and 13 percent advised unlimited sexual activity (Green, 1975). Hellerstein (1969) reported 94 percent (N=2054) of physicians questioned said they counseled on sex. Eighty-seven percent reported using clinical judgement and evaluation of tolerance of daily activities and 18 percent reported evaluating functional capacity by standard exercise testing.

One needs to consider here, however, that information and instructions given during hospitalization may not be well recalled (Mayou et al., 1976). Another point to consider is not the fact of whether it was given but the quality of the information given. Was it applicable and pertinent information? Instructions that go beyond the actual activity of the patient may unnecessarily alarm him (Green,

1975).

Conceptual Framework

In summary, many factors effect the congruence of sexual rehabilitative needs perceived and assessed by the patients, sexual partners and health professionals. The accuracy of the perceived needs of the patient and sexual partner by the health professionals are dependent on many variables. The health professionals must accept their own sexuality and examine carefully their personal feelings, attitudes and prejudices prior to sexual counseling (Scalzi, 1978). If this is not done, sexual counseling may be totally ineffective. Accurate perception of needs demands that the health professional has the knowledge of normal sexuality as well as the effects of heart disease on sexuality (Jacobsen, 1974).

The specific needs of the patient and sexual partner for counseling are very important. It is of utmost importance for the health professional to get to know the patient as a person, what the patient was like before the MI and his/her sexual behavior and intimacy needs before the MI (Labley, 1975). Preconceived attitudes and health beliefs about heart disease effect the concerns about sexual activity post-MI. A predominant health belief is that sexual activity and exercise are harmful and potentially fatal to cardiac patients (Montiero, 1979). Questions asked by the patient may depend

functioning has been shown to be impaired by the patient's negative reaction toward his MI (Hogan, 1980; Klein, 1965). The last factor that influences the perceived needs of the patient and sexual partner is the partner's reaction to the patient after the MI. Is there a change in the way the sexual partner views the patient as a sexual being? The sexual partner must be flexible so she can adjust to the changing relationship and overcome sex-role stereotypes for instance. The sexual partner's attitude toward the patient may either hinder or promote recovery and increase or decrease the anxiety felt by the patient (Wishnie et al., 1971).

All of these factors influence the information provided by the health professional and the questions asked by the patient and sexual partner. If the sexual information is inaccurate, not given or given but not according to the patient's needs, misconceptions continue. Having received little or no advice from the physician, the client sets his own patterns which often times represents a considerable deviation from the previous sexual activity (Tuttle et al., 1964). The suggested change in behavior is based on misconceptions and fear and the results are personal frustration, marital tension and general unhappiness (Griffin, 1973).

Much of the anxiety about resuming sexual relations due to misconceptions and unrealistic fear can be decreased through adequate instructions (Scalzi, 1973). Congruency of needs perceived by the

instructions (Scalzi, 1973). Congruency of needs perceived by the patient and sexual partner and the information given by the health professional will enable the patient and sexual partner to make appropriate life style decisions specifically concerning sexual rehabilitation.

Chapter 3

METHODOLOGY

Introduction

The design used was consistent with a descriptive ex post facto study in which the independent variable was not directly manipulated by the researcher (Polit and Hungler, 1978). It was the purpose of the researcher to determine similarities in the sexual rehabilitative needs of the patient as perceived by the patient and assessed by the health professionals.

Population

There were three target populations for this study from which the samples or accessible populations were drawn. The target populations were patients, sexual partners, physicians and registered nurses.

Samples

One sample consisted of patients and their sexual partners. The population was all Myocardial Infarction (MI) patients and their sexual partners who experienced their first MI within six months prior to the study. The purposive method of sample selection was utilized. Purposive sampling is a method of nonprobability selection which proceeds on the belief that a researcher's knowledge about the population and its elements can be used to handpick the cases to be

included in the sample (Polit and Hungler, 1978). In using any type of nonprobability sampling, one must be cautious of influences and conclusions drawn from the data.

The sample size of 20-25 patients and their sexual partners (40-50 total sample) was based on the average number of documented MI patients discharged from two area medical centers over a three month period. The final sample was 22 patients and their sexual partners. Access to this population was gained through prior arrangement with the patient's physician and coronary care personnel. Patients in the sample experienced their first MI within the time frame limitations of the study. Controlling for the number of MIs experienced helped to eliminate knowledge due to prior experience. The patient was to be six weeks to six months post-MI. This allowed time for the patient to have consent from his physician to engage in sexual activity. The sexual partner was not limited to the spouse. In contemporary society it is not unusual for the sexual partner to be nonmarital. It is important to know whether the patient was sexually active prior to admission because if the couple was previously inactive, information about sexual activity may produce more stress, (Hott, 1980).

The second sample consisted of Registered Nurses (RN). The population of nurses was all RNs at two local medical centers who worked at least 24 hours per week and who had worked in the Coronary Care Unit (CCU), intermediate care of cardiac rehabilitation at least

six months. Because of the small population in the area, the sample selection was a total sample of RNs in the two hospitals. The sample size was 36 RNs. Access to this group was through the respective hospitals' Director of Nursing and clinical supervisors.

A third sample consisted of physicians. The population of physicians included all those who admitted, followed and discharged patients with the diagnosis of MI in the two area medical centers. Due to the small population, the sample included all physicians who agreed to participate. The sample size was fifteen physicians with specialties in cardiology, internal medicine and general practice.

It was not possible to control for age or sex because of the small sample size. The data were analyzed utilizing inferential statistics which take external variables such as these into consideration. The external variable of age was also tested as an independent variable.

Protection of Human Rights

When human beings are used as subjects of research investigation, great care must be exercised in assuring that the rights of those human beings are protected (Polit and Hungler, 1978). Polit and Hungler note three areas that must be considered for the protection of human subjects: (a) informed consent, (b) freedom from harm and (c) privacy, anonymity and confidentiality.

Informed consent was dealt with in the cover letter which explained the purpose of the study, described the questionnaire, assured confidentiality and requested voluntary participation (see Appendix A, Cover Letter). Informed consent was inferred upon completion and return of the questionnaire. Due to the nature of the data collection (personal contact), anonymity was impossible to achieve. The respondents were made aware of this fact and were assured that the individual responses would be held in utmost confidentiality and that anonymity would be maintained in the final research report. No physical harm would come from the study. Due to the sensitive subject matter of sexuality, patients were reassured and reminded that if any questions made them uncomfortable, they were to feel free to choose whether to complete the questionnaire in part, completely or not at all.

Selection of a Tool

A questionnaire that was personally delivered to the respondents was chosen for this study. The advantages to this method are (a) the personal contact of the respondent with the researcher seemed to have a positive effect on the rate of questionnaire return, and (b) the appearance of the researcher can be an advantage in terms of explaining and clarifying the purpose of the study (Polit and Hungler, 1978). Administration of the interview by the researcher, however,

was very time consuming and expensive.

Tool Description

The data for this study was collected through means of a questionnaire developed by the researcher. The purpose of the questionnaire was to determine congruence of sexual rehabilitative needs assessed by the professional and those needs perceived by the patient and sexual partner.

The information in the tool was divided into two sections: (a) general demographic material and (b) assessment of needs and evaluation of knowledge and practice. The reader is referred to Appendix B for an example of demographic data collected. The section on assessment of needs and evaluation of knowledge and practice, was based on nine statements pertaining to sexual activity and MIs. Items were selected by reviewing current patient education material for post-MI patients and other references of theoretical basis to sexual information (Cambre, 1978; Weiss, 1980; Wood, 1979). The items covered nine areas: (a) medications, (b) importance of intimacy, (c) chest pain occurrence, (d) sex after meals, (e) work required by the heart, (f) emotional response to an MI, (g) masturbation, (h) position of sexual intercourse, and (i) resumption of sexual activity. All respondents were asked to answer five questions in relation to each statement. These questions were designed to answer the research

questions presented in the statement of purpose.

1. Do you agree or disagree with the statement? This question was included to test the knowledge base and determine attitudes of the respondents in relation to sexual activity and heart attacks.
2. How important do you feel the information is to heart attack patients upon discharge from the hospital? Five choices were given: (a) very important to give at this time, (b) important to give at this time, (c) irrelevant, (d) important not to give at this time, and (e) very important not to give at this time. The data obtained from the responses to this question was compared statistically between the RN's and patients, RN's and sexual partners and patient and sexual partners.
3. Was/is this information given upon discharge from the hospital? Three choices were given for responses: (a) definitely, (b) somewhat, and (c) not at all. Responses to this question were compared statistically between the nurses and patients, nurses and sexual partners, nurses and total patient/sexual partner group and sexual partner and patient.
4. By whom was this information given? Choices included: (a) nurse, (b) doctor, (c) both and (d) other. No statistical testing was done on this information. Conclusions were drawn

by means of discussing the results and differences in responses between the three sample groups.

5. Who do you feel should be responsible for giving the information? Responses included (a) nurse, (b) doctor, (c) other and (d) no preference. Comparisons were discussed between who gave the information and who the respondent felt should have given the information in all three groups. The possible role conflicts of the nurses were also examined.

In addition to the questions relating to the statements about sex and the MI, a general question was included in the questionnaire to determine discharge instruction needs of post-MI patients. All three groups werre asked to rank seven areas of discharge instructions usually given to MI patients. These seven areas included (a) activities of daily living, (b) medications, (c) diet, (d) exercise, (e) resumption of sexual intercourse, (f) risk factors and (g) signs/symptoms indicating the patient should contact physician. The mean rank-order of each item was determined and compared between the three groups.

The professionals who participated were also asked to rank six statements in order of priority to determine reasons for not doing sexual teaching. The choices included (a) not a priority need of the patient, (b) insufficient sexual knowledge, (c) it is the nurse's role, (d) it is the physician's role, (e) subject too private to

discuss and (f) high level of own anxiety. Again, a mean rank-order of each item was calculated to determine the most likely reason why sexual teaching is not done.

Reliability and Validity of Tool

The questionnaire was reviewed by a cardiologist and coronary care nurse not involved in the study for clarity and content validity. Due to the small patient population in the area no pilot study was done to test validity and reliability.

Data Analysis

Due to the descriptive nature of this study, the small sample size and the use of nominal and ordinal data, nonparametric statistics, specifically the Mann-Whitney U test, was utilized in the data analysis (Polit & Hungler, 1978). Chi Square was also used to determine if two or more groups differed in some way when nominal level data was collected. For purposes of this study the level of significance was $p < .10$.

Mann-Whitney U

The Mann-Whitney U allowed the researcher to determine the probability that two independent samples were drawn from the same population. More specifically, the Mann-Whitney was used to determine whether the summed ranks of one group were significantly higher than

those of the other group (Kviz & Knafl, 1980). This test is one of the most powerful of the nonparametric tests and is a useful alternative when the researcher wishes to avoid tests that make assumptions or when the measurement is weaker than interval data (Seigel, 1956). The Mann-Whitney U is based on the assumption that the samples are drawn from two identical populations and that the two samples have the same distribution (Seigel). The Mann-Whitney U was utilized in this study when comparing two sample groups (e.g., RN to patients, RN to sexual partners and sexual partners to patients).

Chi Square

The chi square is a statistical test commonly used when the researcher has nominal level data and wants to determine if two or more groups differ in some way. Chi square does not indicate direction of strength of the relationship between variables under study but only the probability that a relationship exists (Kviz and Knafl, 1980). Chi square was used in this study to determine significant differences in responses among the sample groups for age and education.

Chapter 4

RESULTS

Introduction

Results of this study are presented in two parts. First a description of the samples and demographic data is presented. The second relates the findings to the four research questions in the chapter under statement of purpose.

Description of the Samples

Questionnaires were distributed to three different sample groups. In the Registered Nurse (RN) sample, 36 questionnaires were delivered to the nursing supervisors for distribution in July, 1981. Twenty questionnaires were returned within two weeks. The RNs were reminded to return the questionnaire at one month by both the researcher and the RN's respective supervisor. Five additional responses were given with a total return of 25 questionnaires (69 percent) (see Table 1 - Response Rate).

Fifteen questionnaires were personally delivered to the physicians during the months of June and July, 1981. Three questionnaires were returned within two weeks. Reminder notes were sent after one month from which one additional questionnaire was received. The total return was four (27 percent) questionnaires (see Table 1, Response Rate).

Table 1. Response Rate of Personally Delivered Questionnaire.

	RN	Patient	Sexual Partner	Physician
Initial return	20	16	13	3
One month return	5	0	0	1
Total received	25	16	13	4
Total sent	36	22	19	15

Questionnaires to the patient and sexual partner were delivered to the home during the months of July, August and September. Twenty-two patients and 19 sexual partners received the questionnaires. Sixteen patients and 13 sexual partners had returned their questionnaires two weeks after delivery. Reminder phone calls to the respondents who did not return the questionnaires were done one month after delivery. No additional questionnaires were received. Total questionnaire return rate was 16 (73 percent) patients and 13 (81 percent) sexual partners. (See Table 1, Response Rate.)

Demographic Data

Registered Nurses

The sample of Registered Nurses (RN) consisted of 96 percent females with 24 females and one male responding. The age range was 22-64 years with the mean of 33.76 years. The age distribution is

presented in Table 2 (Age Distribution of Samples).

Table 2. Age Distribution of Samples.

	RN	Patient	Sexual Partner
20 - 29	15	0	0
30 - 39	4	1	1
40 - 49	2	4	4
50 - 59	3	7	4
60 - 69	1	3	3
70 - 79	0	1	1
Totals	25	16	13
Means	33.7	54.6	52.8

Thirty-six percent of the RNs were single, 56 percent were married and 8 percent divorced. Of the total sample, 40 percent were Baccalaureate graduates (BSN), 36 percent Diploma School of Nursing graduates and 24 percent Associate Degree graduates. The year of graduation from nursing school ranged from 1945 to 1981 with the mean 1970.5. Fifty-two percent of the RNs worked exclusively in the Coronary Care Unit (CCU), 44 percent worked on the medical ward, 16 percent worked a combination of CCU and medical and 4 percent worked in cardiac rehabilitation. These nurses had worked in this area anywhere from six months to thirteen years with the mean of 4.94 years.

Physicians

Due to the small number of responses, no statistical testing was done with this data. It is only included to present the characteristics of those who did respond. The ages ranged from 32-52 (mean 43.5), they were all male, married and included speciality areas of cardiology (1) and internal medicine (3).

Patients

The sample consisted of 13 males (81 percent) and three females (19 percent). The age range was 39-73 with the mean of 54.6 (see Table 2, Age Distribution of Samples). The relationship of age to whether the questionnaires were returned or not was insignificant (x^2= 1.7207, df=1, p>.10). Twenty-one patients (94 percent) were married with one (6 percent) being widowed. The level of education ranged from the eighth grade to four years of college. Five of the 16 patients had not completed high school. Occupations of the patients were primarily blue collar (88 percent). Four of the patients were retired, three were working full time, four were working part time due to limitations post-Myocardial Infarction (MI) and five were unable to work at the time of the interview. The time frame since the MI ranged from six to 24 weeks. Eight of the patients had had a cardiac catherization and four had had a coronary artery bypass graft done. Thirteen of the patients were engaging in sexual activity and sexual

intercourse in the period of time prior to the MI. A question on frequency was deleted because the meaning was not clear to the respondents.

Sexual Partners

The sample of sexual partners consisted of two males (15 percent) and 11 females (85 percent) all of whom were married to the patients. The age range was 34-73 (mean 52.8) (see Table 2, Age Distribution). The educational level ranged from ninth grade to four years of college. Only two of the sexual partners had not completed high school. All eleven were engaging in sexual activity and sexual intercourse in the period of time prior to the MI of the patient.

Needs Identification

Format for the presentation of needs identification is presented according to each of four original research questions. Descriptions of each sample's responses are compared under each statement.

1. What are the perceived sexual rehabilitative needs of post-MI patients and sexual partners upon discharge from the hospital? This question was evaluated according to responses to three separate questions on the questionnaire: (a) Do you agree/disagree with the statement? (b) How important is the information? (c) Rank the discharge instructions in order of importance.

To evaluate the knowledge and attitudes of the respondents, the results of the agree/disagree question are presented (see Table 3, Agree/Disagree Responses). The responses to the statements on medications, sex after heavy meals, work required, and resumption of sexual activity were according to the desired responses. The responses to the statement on touching reflected attitudes, therefore, there was no desired response.

The desired responses to four of the statements were found to be in conflict with various physicians and conditions of patients. The responses to these four statements showed variation between the three sample groups.

1. If a person has chest pain during intercourse, he should stop, rest until the pain subsides and then resume. According to current literature (Fardy et al., 1980; Weiss, 1980; Cambre, 1978), this statement is false. These references state that if chest pain occurs during or after intercourse, check with the physician before attempting sexual activity again. This practice may depend upon the patient's physician. Therefore, the statement could possibly be true for a particular physician's patient population. The majority of the patients (87 percent), sexual partners (92 percent) and RNs (56 percent) felt the statement was correct.
2. Diminished sexual activity is a normal response the first 6-8