1995

The knowledge base of women regarding hysterectomy

Margaret Love Andrews
San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_theses

Recommended Citation

Andrews, Margaret Love, "The knowledge base of women regarding hysterectomy" (1995). *Master's Theses*. 971.

DOI: <https://doi.org/10.31979/etd.xh65-nk9x>
https://scholarworks.sjsu.edu/etd_theses/971

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

**THE KNOWLEDGE BASE OF WOMEN
REGARDING HYSTERECTOMY**

**A Thesis
Presented to
The Faculty of the School of Nursing
San Jose State University**

**In Partial Fulfillment
of the Requirements for the Degree
Master of Science**

**by
Margaret C. Love
May, 1995**

UMI Number: 1374562

**Copyright 1995 by
Andrews, Margaret Love
All rights reserved.**

**UMI Microform 1374562
Copyright 1995, by UMI Company. All rights reserved.**

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI

**300 North Zeeb Road
Ann Arbor, MI 48103**

APPROVED FOR THE SCHOOL OF NURSING

Marcia Canton, R.N., Ph.D.

Bobbye Gorenberg, D.N.Sc., R.N.

Rose Hernandez, R.N., M.S.

APPROVED FOR THE UNIVERSITY

@ 1995

MARGARET LOVE ANDREWS

ALL RIGHTS RESERVED

ABSTRACT

THE KNOWLEDGE BASE OF WOMEN REGARDING HYSTERECTOMY

by Margaret C. Love

This descriptive study was based on Finck's (1986) study to determine women's knowledge of hysterectomy. This study used a sample of 94 women between the ages of 18-65 years of age in several northern California military housing complexes.

Data collection consisted of a 28-item questionnaire comprised of only fixed alternative questions. Eight categories of knowledge were used as the basis for comparison. Age and source of information were two factors identified which were related to the knowledge women possessed about hysterectomy. Women in this study generally did not believe the myth about hysterectomies that were reported previously in the literature.

ACKNOWLEDGEMENTS

To my husband Andy, my two sons, Tony and Marcus, and
the many friends for their love, support, and patience
during the quest for knowledge while coping with
the physical and emotional devastation that
followed my own hysterectomy.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
LIST OF FIGURES	viii
Chapter	
1. INTRODUCTION	1
Background	1
Statement of the Problem	2
Purpose of the Study	3
Summary	7
2. CONCEPTUAL FRAMEWORK	8
Introduction	8
Conceptual Framework	8
The Review of the Literature	20
Summary	29
3. METHODOLOGY	31
Research Design	31
Data Collection	31
Instrument	32
Analysis of the Data	33
Finck's Study	34
Summary	35

4.	FINDINGS AND INTERPRETATION	36
	Description of the Sample	36
	Description of the Sample Population	37
	Findings and Interpretation	37
	Indications for Hysterectomy	38
	Childbearing Aspects	40
	The Aftermath of Hysterectomy	40
5.	DISCUSSION	44
	Summary of the Study	44
	Conclusions	44
	Scope and Limitation	45
	Recommendations	46
	REFERENCES	48
	APPENDICES	
	Appendix A: Survey Instrument	54
	Appendix B: Institutional Review Board	
	Human Subjects Approval	56
	Appendix C: Data Collection Permission Letter	58
	Appendix D: Subjects' Rights Cover Letter	61
	Appendix E: Finck's Tool	63
	Appendix F: Hysterectomy Questionnaire Responses	69
	Appendix G: Percentage of Participants for	
	Demographic Characteristics	74
	Appendix H: Wyeth-Ayerst Copyright Permission	77

LIST OF TABLES

	Page
Tables	
1. Test Scores Based on Demographic Variables	39
2. Women's Responses in Finck's Hysterectomy Study	43

LIST OF FIGURES

	Page
Figures	
1. The Uterus	10
2. Framework for Relationships Among Variables Related to Hysterectomy	11
3. Types of Hysterectomies	25

Chapter 1

INTRODUCTION

Background

This descriptive study examined women's knowledge of hysterectomy. Hysterectomy holds different meanings for different women. "Because of the many significant meanings ascribed to the uterus, some women view hysterectomy as a threat to their health, vitality, and ability to function, and they may experience adverse psychosexual sequelae after this surgery" (Bachmann, 1990, p. 42). While the role of the uterus as the psychological gestalt of women may vary significantly from culture to culture, it should never be ignored.

Beliefs or religious teachings about fertility, child-bearing, and gender roles have been suggested by writers about hysterectomy to be potential influences on outcomes. Beliefs are assimilated over a long period of socialization and may play a part in the thinking even of those who do not formally practice a particular religion. In cultures where one religion is dominant, the religious teachings can approach the status of cultural values; this seems to be the case for the Mexican-Americans in Williams' (1973) study.

Another source of cultural values is scientific theory. Freudian ideas have achieved a wide cultural currency and have been adopted as popular beliefs, even when their sources may not be recognized (Craig & Patterson, 1963). Old wives' tales or popular myths have some basis in past experiences, as well as in religions and in other theories. The idea that hysterectomy is

followed by a prolonged convalescent period in which depression is an expected occurrence may arise partly from memories of older women who had the operation when medical and nursing care and anesthetics were less developed. Surgery without modern equipment and medications took longer and was, therefore, a greater physiological trauma. Early ambulation was not practiced, and this slower rehabilitation may have led to feelings of frustration and depression. According to Strausz (1993):

The women's health movement that arose in the 1970s as part of the second wave of feminism brought new questions and insights about the ways that we as women view our bodies. We learned that our reproductive organs are not solely vehicles for childbearing, but like other body parts, have multiple functions. For example, the uterus and ovaries are involved in sexual response and secrete hormones, both pre- and postmenopausally. Thus, it is our opinion that the uterus is important to a women's health and should not be removed unless absolutely necessary. (p. xi)

Statement of the Problem

Most women face the possibility that hysterectomy will be recommended, usually during young womanhood (Williamson, 1991). Hysterectomy is the second most frequent major surgical procedure in the United States, with approximately 500,000 cases performed annually (National Center for Health Statistics, Hospital Care Statistics Branch, 1990).

The biological function of the uterus, its role in sexuality, and its impact on the aging process can affect the quality of life when a hysterectomy must be performed (Florin, Henning-Schulze, Matschin, Schulze, & Sougioultzi,

1988). According to Williamson's (1991) findings, "Some women may not realize that they will no longer menstruate. Others may think that a uterus is necessary for orgasms. For others, a uterus represents strength. They believe its removal renders them incapable of performing the same amount of work" (p. 42). The woman who worries that she will not be able to keep up with the housework may be referring not only to the recovery period following her surgery, but may also fear some permanent change in the way she will be able to care for her family (Williamson. 1991).

Hysterectomy is an operation that has both symbolic and reproductive association for women. The uterus is significant not only because of its identification with youth and femininity, but also because of the role which it plays in menstruation, childbirth function, sexual sensation, and the significant hormonal contributions which it makes (Bachmann, 1990). Women clearly differ in terms of their emotional investment in the uterus, i.e., how a woman feels about herself and whether she regards hysterectomy as a threat to her health, femininity, or sexual significance (Bachmann, 1990).

Purpose of the Study

Research Questions

1. What knowledge do women possess regarding the physiological reasons for hysterectomy?
2. What knowledge do women possess regarding the psychological effects of hysterectomy?

The purpose of this study was to investigate what women, ages 18 to 65, in a northern California Army community knew about hysterectomy. The literature of the 1960s and 1970s drew attention to the interplay between the

psychological construct of self-concept and cultural beliefs and attitudes regarding the female organ (Williams, 1973). Others (Bowlby, 1973; Cooney and Potter, 1970) suggest that women view grief as an adaptive response to the loss of the uterus. In order to understand the meaning of a grief response to hysterectomy, it is important for the nurse to view these responses within the context of the woman's total ethnic environment.

Culture gives meaning to the myriad of behaviors and practices recognized as a distinct way of life in communities. Norms and values are an integral part of decision making related to what we do, say, and feel. Therefore, culture has a powerful effect on behavior. Health and illness can be interpreted and explained in terms of personal experiences and expectations. There are many ways in which we define our own health and illness and determine what these definitions mean to us in our daily lives.

We learn from our cultural and ethnic background how to be healthy, how to recognize illness, and how to be ill. The ways in which we define health and illness are related to the basic culture-bound values we attach to life's experiences and perceptions. (Spector, 1994, p. 29)

It is not possible to isolate the aspects of culture, religion, and ethnicity that shape a person's world view. Each is part of the other and all three are united within the person (Spector, 1994).

Finck (1986) conducted a descriptive study in which she attempted to discover the knowledge women had about the physiological and psychological reasons for and the effects of hysterectomy. The proposed study arose from this writer's need to understand and explain the mysterious changes that are experienced following a hysterectomy, as well as an account of what happens

to other women following this procedure. This descriptive study was based on Finck's study.

Definition of Terms

For purposes of this study, the following definitions were applied:

1. Cervix is the neck-like constricted lower end of the uterus.
2. Endometrium is the lining of the uterus.
3. Fallopian tubes refers to a pair of tubes that transport eggs from the ovaries to the uterus.
4. Fibroids are balls of benign smooth muscular and connective tissues. They have their own blood supply and grow accordingly to the location in the uterus: (a) submucous (inside the endometrium), (b) subserous (outside the uterine wall), and (c) intramural (within the uterine wall) (Goldfarb, 1990).
5. Fundus is the upper portion of the uterus above the cervix.
6. Hormone is a chemical produced at one site in the body which is responsible for the actions of an organ at another site. The primary hormone produced by the ovary is estrogen. "Estrogen is responsible for the development of the feminizing characteristics of women as well as playing a role in the menstrual cycle and in pregnancy" (p. 251).
7. Hysterectomy is an operation which involves the removal of the entire uterus. It *does not* include the removal of a woman's ovaries.
8. Knowledge is the fact or condition of what is known or learned through study or experience. Knowledge is defined as the number of correct responses to each question based on the literature.

Finck (1986) examined hysterectomy literature for reported misconceptions and devised the Hysterectomy Interview Schedule to measure selected knowledge women had about hysterectomy. The determination of correct responses to the questions also was based on the literature. The questions and the literature sources are provided. The results of the study, referred to as the Hysterectomy Knowledge Interview Schedule, provided only general guidelines for assessing the knowledge individual women possessed about hysterectomy. The reader must be cautioned to understand that this study provided information about women in a specific area and, therefore, must not be generalized to all women. Williams (1973) suggests that different cultural groups of women possess different knowledge in the area of hysterectomy as do women of different educational backgrounds.

9. Menopause is an era in a woman's life when she may no longer bear children and is "the complete cessation of all menstrual bleeding" (Lark, 1992, p. 4).

10. Ovaries are two glands that produce eggs and female hormones for several purposes and stimulate the lining of the uterus to prepare for the fertilized egg (Goldfarb, 1990).

11. Uterus (womb) is the organ that holds a baby from conception until birth (Goldfarb, 1990).

12. Vagina is a muscular tube 4 to 5 in. long that connects the uterus to the outside of the body. It is an exit passageway for menstrual discharge and delivery of babies, sexual intercourse, and fertilization of the egg (Goldfarb, 1990).

Summary

According to recent statistics in North America, a hysterectomy is performed about once every 30 seconds (Goldfarb, 1990). This surgery usually occurs at around age 35, when a woman is still in her reproductive years (Schwartz, 1993). Having a hysterectomy engages a very personal dimension of the woman, yet it happens in a health care system which is often perceived as impersonal.

The uterus is more than a receptacle for the fetus. While we still do not completely comprehend the role of the uterus, this lack of understanding is not a valid reason for removing it. It is true that there are many women who have expressed no untoward after-effects as a result of a hysterectomy, but others have revealed significant depression over the removal of their uterus. (Goldfarb, 1990, p. vii)

The medical literature is replete with reports not only of physical complications, but of emotional problems developing after hysterectomy. "However, we now possess a much better understanding of what happens to women when they have a hysterectomy and we have much improved modalities for coping with the physical and emotional devastation that often follows hysterectomy" (viii).

Chapter 2

CONCEPTUAL FRAMEWORK AND REVIEW OF THE LITERATURE

Introduction

In the literature, some women have defined their sense of self in relation to their ability to have children. Finck (1986), Williams (1973), and Williamson (1991) suggest that having children is expected of women and is, therefore, their duty and the reason for their existence on earth. "The uterus is a symbol of reproduction. If the woman's life work and sense of identity come from her childbearing role, hysterectomy can invoke a symbolic loss of purpose, even if it is performed after menopause" (Williamson, p. 43).

Conceptual Framework

The conceptual framework from Finck's (1986) study was adapted for this study: The basis for a woman's response to the hysterectomy experience is determined by her individual concept of her uterine anatomy and physiology. (See Figure 1.) The formulation of this concept includes a woman's accumulated knowledge about the function of the uterus, as well as personal perceptions of uterine anatomy and physiology derived from individual developmental experiences (Finck, 1986). "Realistic and imaginary functions attributed to the uterus intermingle to produce a psychologic response to hysterectomy that is unique to every women" (p. 201). In addition, some women have the misconception that the uterus is necessary as an organ of excretion to rid the body of wastes during menstrual periods, and many feel that menstruation is essential to good health. Women may also grieve over the

loss of “menstrual rhythmicity” and reproductive ability, even when they have suffered through difficulties directly related to menstruation (Williamson, 1991).

The literature on hysterectomy reveals frequently held perceptions of various functions attributed to the uterus. According to Finck (1986), these perceptions can be categorized into the various related areas of childbearing capacity which consist of: menstrual functioning, menopausal process, sexual capacity, and physical condition. Identification of the effects of hysterectomy on each area will assist in delineating the areas in which actual loss or change has taken place, as well as the areas that require temporary readjustment. The complex network of relationships among the variables can then be explored and comprehended. This conceptual framework will afford a more comprehensive view of the hysterectomy experience.

The structure of the conceptual framework is conceptualized in Figure 2. The theoretical framework can be used to identify areas in which nursing interventions can be made. “The focus of nursing intervention in each area can be derived from the description of the potential hysterectomy crisis along pertinent ego-function parameters” (Finck, p. 202). As a focus for nursing interventions, Finck used the following three parameters: (a) cognitive aspects, (b) affective aspects, and (c) object relations. A description of nursing interventions emphasizing the three ego-function parameters will enable the nurse to identify nursing interventions in each area and then individualize them to meet the needs of specific health care recipients.

Figure 1. The Uterus

Note. From Understanding hysterectomy & estrogen replacement therapy by Wyeth-Ayerst Laboratories (March 1993). Philadelphia: Author.

Figure 2. Framework for Relationships Among Variables and Areas Related to Hysterectomy.

Note. From Women in health and illness: Life experiences and crisis.

Philadelphia: Saunders.

Cognitive Aspects

Nursing intervention in the area of cognitive aspects consists primarily of providing information to health care recipients (Gambone, Lench, & Reiter, 1992). Researchers working in the area of hysterectomy suggest that information presented to a woman undergoing a hysterectomy can affect her psychological response to the procedure by reducing the reactions of anxiety, fright, and shock. An explanation of the procedure to be performed can help to prevent fright neurosis, which is often a major factor in the response to hysterectomy (Gambone et al., 1992).

Affective Aspects

Nursing interventions in this area concentrate on accepting, understanding, and providing support for expression of feelings women experience as related to hysterectomy. In order for this to be accomplished in an atmosphere of acceptance, it is necessary for the nurse to understand the possible implications of loss of the uterus. If the woman views this loss as significant, the nurse must be prepared to support and encourage expression of the grieving process. As the woman begins to redefine her role as a female, the nurse can guide the examination of her role and identity and provide support and encouragement.

Object Relations

These will be confined to those significant persons on whom the health care recipient is emotionally dependent. The focus will be on the motivation of significant persons to be accepting and supportive of expression of feelings by the woman as she undergoes the experience of hysterectomy. Relating to this is the largely neglected psychological effect of hysterectomy on the sex

partner, whose view of the patient may be abruptly altered. "Just as a woman may not be aware of what her uterus means to her without the subtle prodding of counseling, her sex partner may not be aware of the symbolism he attaches to his mate's uterus, which is often a potent icon of motherhood and femininity" (Bush & Rudy, 1992, p. 75).

Using an exploratory-qualitative approach to discover men's views about the effects of hysterectomy on women and the effects of women having hysterectomies on men's relationships with those women, Bernhard (1992) discovered that men's attitudes toward hysterectomy were largely negative. The men could not clearly articulate why they had their beliefs or how these beliefs were acquired. Although there was considerable confusion surrounding hysterectomy, the men also seemed to believe that they did not need to know more about hysterectomy. Their views apparently resulted from a lack of accurate knowledge about hysterectomy, as well as from a lack of communication about hysterectomy with the women they knew who had experienced hysterectomies, or with anyone else, including health care professionals.

Newman and Newman (1985) concluded that the reactions of, and relationships with, husbands or sexual partners of women who have had hysterectomies are important determinants in the women's recovery and psychosexual adjustment following the surgery. If the woman thinks that her male partner will reject her because she has had a hysterectomy, her health and recovery can be seriously impaired; hence the health of the family may be affected.

According to researchers Bush and Rudy (1992), urologists often encounter a similar situation with the partners of men who have undergone vasectomy. The researchers report that in both scenarios, to the surprise of all participants, the sterilized partners have often suffered denigrating devaluation and have found themselves in the middle of conflict and readjustment, sometimes with dire results.

Childbearing Capacity

Loss of femininity is a big concern for many women (Schwartz, 1993). Such words used to describe their losses were “empty,” “lost,” “unloved,” “wistful,” and “useless” (Giddings & Wood, 1991, p. 4). The loss of the choice to reproduce rather than the desire for more children per se may trigger feelings of sadness. The ability to bear children serves a wide variety of needs and functions. According to Giddings and Wood, the four symbolic themes used to identify the significance of the uterus are: (a) uterus (reshaping womanhood), (b) sexuality (redefining sexual experience), (c) power (retrieving control), and (d) life force (reclaiming energy). The first theme centers on the uterus itself and the way in which women had to reshape their ideas of womanhood. The second is related to sexuality and the way their sexual experience was redefined. In the third, power is the theme. In having the hysterectomy, women often had to relinquish a certain amount of power control to their physicians. The first area where power was an issue was in the decision-making process about having a hysterectomy. Much depended on the extent to which the woman participated in this process. Some women felt “rushed” or “bullied” into the operation and carried with them a considerable amount of anger, some of them for years. The fourth centers on the notion of

a life force and the way the hysterectomy enabled women to reclaim energy in their lives.

In viewing the extensive connections between the self-image of a woman and the ability to bear children, the sense of loss that occurs with the removal of the uterus can be comprehended. However, some women do not appear to experience an extensive sense of loss. According to Giddings and Wood (1991), some women did not feel any loss. For them, having a hysterectomy was a release. This was especially so for the women who had been bleeding copiously and almost continuously.

The National Center for Health Statistics (1990) reported that surgical sterilization is the leading method of birth control in the United States. An appalling number of these sterilizations have been accomplished by hysterectomy. "It is estimated that over 512,000 women undergoing hysterectomies in 1987 had their ovaries removed during surgery, whether the ovaries were healthy or not" (p. 115).

Menstrual Functioning

Hysterectomy causes the complete cessation of menstruation. "Hormones continue to maintain their cyclic pattern, but the accompanying menstrual bleeding no longer occurs" (Finck, 1986, p. 209). Thus, a hysterectomy will eliminate abnormal uterine bleeding but will not eliminate physical symptoms associated with menstruation, such as tension headaches, water retention, and irritability (Williamson, 1991, p. 43)

To understand the sense of potential loss experienced with the cessation of menses, the way in which the woman views the experience of menstruation must be examined and those functions she attributes to the process of

menstruation need to be identified. “For some women, the feeling of being a woman was bound up with the rhythmical functioning of their uterus, a sense of the rhythm of life” (Giddings & Wood, 1991, p. 4). Many women described their periods as like the rhythm of the seasons. However, some women reported frequent negative attitudes toward menstruation. Many women described their extreme bleeding as “nightmares.” “Super pads and Super-Plus tampons changed hourly throughout the night affected my life. Plastic pants and then the nightie, sheets and mattress protector also got saturated” (p. 5). Women may also grieve over the loss of menstrual rhythmicity and reproductive ability, even when they have suffered through difficulties directly related to menstruation. However, in spite of the complaints women have about menstrual periods, many still feel that menstruation is important to good health.

Menopausal Process

Cultural attitudes about the meaning of menopause, as well as socioeconomic realities, work opportunities, sexual beliefs, and health status all may contribute to how women respond to and experience menopause (Flint, 1989)

If one or both ovaries are left intact after hysterectomy, menopause should not be experienced, since the ovaries and not the uterus are responsible for the production of estrogen (Notelovitz & Tonnessen, 1993). However, some studies suggest that in a minority of women, the blood supply to the ovaries may be affected by surgical removal of the uterus, which may cause these women to experience hot flashes and other symptoms of estrogen deficiency (Cutler, 1988; Harris & MacLean, 1992; Strausz, 1993).

Premenopausal women who have had both ovaries removed experience a sudden severing of the hormones estrogen and progesterone and experience what is known as “surgical menopause” (Harris & MacLean). “Because the drop in those hormones is immediate rather than gradual, surgically menopausal women often experience more and much more severe symptoms of menopause, such as hot flashes and vaginal dryness” (p. 42).

Sexual Capacity

Hormonal and physical changes associated with natural menopause may lead to sexual adjustment problems. These changes include thinning, dryness, and atrophy of the vaginal mucosa (Bush, & Rudy, 1992). “Uterus removal, compounded by the possible loss of estrogen and androgen, alters sensations and reactions that had been part of a woman's sexual response” (Williamson, 1991, p. 42). Williamson further states that when ovaries are compromised after hysterectomy, androgen levels often plummet, and with them, patient's sex drives. Another viewpoint to address the role of androgen balance after menopause showed that sexual thoughts and coitus decreased to a greater extent with a drop in testosterone levels than with reductions in estrogen concentration (Davidson & McCoy, 1985). Testosterone is the main androgen that increases proceptivity (sexual drive) and receptivity (response to sexual stimuli) in women (Kaiser & Morley, 1989; Wallen, 1990). High levels of testosterone have been linked to greater feelings of desire and more frequent sexual fantasies among postmenopausal women who take testosterone (Notelovitz & Tonnesson, 1993).

Physical Condition

Physical effects of hysterectomy include the mortality rate of the surgery, frequently occurring physical symptoms experienced after the surgery, and the characteristics of the recovery period.

The mortality risk from hysterectomy is relatively low (Coulter, 1988), but the risk of secondary complications is relatively high (Strausz, 1993). "Of the 500,000 to 600,000 women who undergo this operation in the United States each year, about 600 will die as a direct consequence of the surgery" (p. 3). "Women who have medical diseases, such as diabetes and hypertension, are more likely to develop complications, including death, after surgery" (p. 54). Supporting this theory, White (1993) suggests that black women undergo a disproportionate number of hysterectomies, and the mortality rate for the operation is twice as high for black women as it is for white women. "The chance of dying is directly related to your age, increasing from 1 in 1000 before the age of 45, to 2 in 1,000 between the ages of 45 and 65, and to 20 in 1,000 after age 65. Six hundred women die each year as a result of complications following hysterectomies" (Arnot, 1993, p. 260). After analyzing more than 50,000 patients, Kjerulff (1993) reported that black women were nearly three times as likely to remain hospitalized for more than 10 days, and three times as likely to die in the hospital. The most frequent (and usually reversible) complications arise from anesthesia, bleeding during surgery, postoperative infection, and rarely from perforation of the bladder or bowel (Notelovitz & Tonnessen, 1993).

The length of the recovery period from hysterectomy varies. Richards (1976) found that the recovery period (time from hospital discharge until the

person felt fully recovered) was an average of 2 months. Schwartz (1993) estimates from 6 days in the hospital and up to 6 weeks to recover. Harris and MacLean (1992) found the average time for the women in their study to feel fully recovered after hysterectomy was 11.8 months. The wide variation reported in the length of the recovery is difficult to understand. Vaginal hysterectomy could influence a positive reactional outcome based on substantial savings in costs as well as in time away from work (Harris & MacLean, 1992).

Psychologic Condition

The notion of a posthysterectomy syndrome, a group of complaints noted specifically after hysterectomy, is not new and was popularized in the 1970s by Richards (1974). The syndrome consists of symptoms such as depression, diminished sexual drive, a variety of sexual dysfunctions, menopausal symptoms (whether the ovaries were removed or not), and an increased need for psychiatric help following hysterectomy. In a subsequent study, Richards found that 70% of women developed depression within 3 years of surgery, but only 30% developed depression after other operations. Numerous other studies in recent decades have found that 10-37% of women were similarly affected by hysterectomy (Augustine, Bhattacharyya, & Chaudhury (1992); Dennerstein, 1977; Florin et al., 1988; Gath, 1990).

In a presentation organized by the Department of OB/GYN of the Albert Einstein College of Medicine in New York City, Bachmann (1991) repeated a modern view: "With proper care, women should have no trouble dealing with the aftereffects of hysterectomy" (p. 63). Lack of information and misbeliefs may impede adequate coping (Folkman & Lazarus, 1984) and increase the

sense of helplessness, thereby negatively affecting post-surgical adaptation (Schmitt & Woolridge, 1973). "Perception is presented as a basic concept in the framework and it is a major component in the process of human interactions and transactions within the environment which gives meaning to one's experience, represents one's image of reality, and influences one's behavior" (King, 1981, p. 24). King's formulations of self, body image, time, and space reflect the conceptual interrelationships within personal systems. "Perception is a basis for developing a concept of self reflected in patterns of growth dimensions of the environment that, in turn, influences a concept of self" (p. 24).

The Review of the Literature

History

The idea of removing the uterus arose at least 2000 years ago as a consequence of a rare but catastrophic complication of delivering a baby, called "inversion of the uterus" (Strausz, 1993). In this situation the uterus is inverted, turning inside out, resulting in swollen and discolored tissue hanging outside the vagina. Unless the uterus is replaced back into the pelvis, shock and or infection will occur, resulting in death within a few hours or days (Strausz, 1993).

Uterine inversion may occur spontaneously. Most often, according to Strausz, it happens because unskilled attendants aggressively pull on the umbilical cord to speed up the delivery of the afterbirth. Smellie (1752), a British obstetrician of the 18th century, was outspoken about the dangers of pulling on the umbilical cord, citing the risk of uterine inversion. Reports in

the literature of vaginal hysterectomies for inverted womb (uterus) were performed by Shemison, a Greek physician in the second century A.D.

Accounts of vaginal hysterectomy began to appear in Germany, Italy, and Spain in the 16th century (Strausz, 1993). As before, the operation was performed as an emergency in the management of the inverted womb that could not be replaced after a delivery. There were reports that a duck-billed instrument called a “speculum” was being used in continental Europe for the amputation of the cervix and the excision of fibroids.

Accounts of the first total abdominal hysterectomy in the United States, with removal of the uterus as well as the cervix, was performed by Mary Dixon Jones in 1889. The use of carbolic acid and anesthesia by English surgeons some 20 years later, reduced the numbers of death from infection to 11 percent. (p. 24)

During the first half of the 20th century, hysterectomy was reported to be the accepted treatment for heavy bleeding associated with fibroids and gynecological cancer (Strausz, 1993). Radical hysterectomy, which removed more tissue, was found to give better results for women whose cancer had spread deep into the cervix (Strausz).

Types of Hysterectomies

The term, “hysterectomy,” refers to the surgical removal of the uterus. In previous years, only the body of the uterus was removed. This procedure was referred to as a “partial” hysterectomy or “subtotal” hysterectomy. More commonly performed today is the “total” hysterectomy, an operation which involves the removal of the entire uterus. A “radical” hysterectomy is the

removal of the entire uterus plus the lymph nodes and surrounding ligaments (Bachmann, 1990).

There are two surgical methods used to remove the uterus. In an abdominal hysterectomy, a 4- to 6-inch incision is made in the lower abdomen through which the uterus is removed. In a vaginal hysterectomy, the uterus is removed through the vagina, and there is no visible scar (Ling, Lipscomb, Stovall, & Summitt, 1992). (See Figure 3.)

In some literature, removal of the uterus and the ovaries is referred to as a panhysterectomy or complete hysterectomy. This is often confused with total hysterectomy. Removal of the ovaries is referred to as a bilateral oophorectomy, and removal of the fallopian tubes is known as a salpingectomy. Therefore, a woman who has had her entire uterus, fallopian tubes, and ovaries removed abdominally is referred to as having had a total abdominal hysterectomy and bilateral salpingo-oophorectomy (LaVecchia, Luchini, Mezzopane, Negri, & Parazzini, 1993).

Incidence of Hysterectomy

Research of the 1960s and 1970s reported an increase of hysterectomies with the invention of antibiotics, blood transfusion services, and improved anesthesia (Speert, 1980; Wangenstein, 1978). "As it became safer, hysterectomy rates increased and became an acceptable solution to birth control" (p. 27).

Wright (1969) expressed the opinion that elective hysterectomy was perfectly justifiable. Wright believed that once a woman's family was completed, eliminating cancer and the nuisance of bleeding and pain warranted surgery. "The uterus has but one function: reproduction. After the last

planned pregnancy, the uterus becomes a useless, bleeding, symptom-producing, potentially cancer-bearing organ and, therefore, should be removed” (p. 560).

Traditionally slow to change their ways and indifferent to the ground swell of criticism, American gynecologists responded resourcefully by finding reasons to perform, year after year, ever larger numbers of hysterectomies. Hysterectomy statistics were first collected in 1965 by the National Center for Health Statistics (NCHS), currently a branch of the Department of Health and Human Services. According to NCHS (1992), the hysterectomy business grew by an impressive 68% during the 10-year span from 1965 to 1975.

Hysterectomy is the second most common major surgical procedure in the United States (Williamson, 1991). “Approximately 665,000 hysterectomies are performed each year, half of which are performed on women who are still in their reproductive years” (p. 42). According to this report, the average age of women undergoing hysterectomy is 42.7 years. A high interregional variation in its rate and a national rate two times that of many Western European and Scandinavian countries have caused considerable concern regarding the appropriateness of many hysterectomies in the United States. The reasons for such disparities are not fully understood, nor is there evidence in the literature that uterine disease is significantly more common in one region than another.

Some experts speculate that the disparities arise from differences in physician training, the style of medical practice in an area, or even the availability of gynecologists and hospital beds. Bernstein, Brook, Hicks, Keeseey, Kosecoff, McGlynn, Roth, Sherwood, & Siu (1993) conducted a study

comparing care in seven health plans at seven managed care organizations. Overall, about 16% of women underwent hysterectomy for reasons judged to be clinically inappropriate. Only one plan had significantly more hysterectomies rated inappropriate compared with the group mean (27%, unadjusted). Adjusting for age and race did not affect the rankings of the plans and had little effect on the numeric results. A woman is more likely to undergo a hysterectomy if her doctor is paid a fee for the surgery than if she belongs to a prepaid health plan (Bernstein et al., 1993). More surgery means more income in fee-for-service practice; less surgery means less expense in prepaid health plans. Whatever the explanation, the end result is that women may receive different advice, depending on where they live or which doctor they see.

According to Dan Jackson Data Users Support Group in Sacramento, California, approximately 50,968 hysterectomies were performed in that state in 1992 (personal communication, April 19, 1993). The Community Hospital of the Monterey Peninsula (CHOMP) reported an annual average of 270 hysterectomies in 1992 (N. Lathrom, personal communication, May 1993).

The average hospital cost of a total abdominal hysterectomy is \$11,435 (CHOMP, 1993). "A hysterectomy usually requires 4 to 6 days in the hospital and up to 6 weeks to 6 months to recover. Most women take approximately 4 to 6 weeks off from work" (Lathrom). The annual cost in the United States is estimated at over \$2 billion (Bernstein et al., 1993). According to Ling et al. (1992), "The mean hospital charge for vaginal hysterectomy was \$4891."

(Seasons Magazine, 1993, p. 3)

Figure 3. Types of Hysterectomies.

Symbolism and Cultural Aspects

Since ancient times, the uterus has had important psychosexual and sociocultural significance (Walker, 1988). Campbell (1955) cites that symbols of the uterus existed as early as the Paleolithic era, and in Sanskrit the same word used for “womb” is used for “temple.” “The ancient Greek word for uterus (*hystera*) is derived from the word meaning ‘after,’ referring to the placenta or, in lay terms, the afterbirth” (Walker, p. 41). Bieber and Drellich (1958), Craig and Patterson (1963), Drummond (1984), Gates, Menzer, and Morris (1957), and Sloan (1978) conducted research on the importance of the uterus as a psychosexual organ. According to their research, most women have a desire to bear children, a need that has both instinctual and learned components. Another interesting part of the research revealed that even in women who do not want more children, the premature loss of childbearing ability may create worries about accelerated aging, inadequacy, incompleteness, and loss of femininity.

A woman who becomes particularly distressed by hysterectomy, regardless of the reason, may need extra sympathy and support, or perhaps, even some grieving time to adjust to the changes in her life. Those who experience a persistent sense of grief may benefit by talking with a professional counselor. According to Shaffer (1993), the National Center for Health Statistics in 1992 confirmed that more than one-third of all women in the United States will have undergone hysterectomy by the age of 60. The overall rate of hysterectomy has declined nationally since the mid-1970's, but age distribution for the surgery has remained relatively stable. “More than three-fourths of all hysterectomies in the United States are performed on

women between the ages of 20 and 49, the rate being highest among women between the ages of 35 and 44, primarily because of fibroids" (Shaffer, p. 4).

Indication for Hysterectomy

Fibroids are responsible for approximately 200,000 hysterectomies per year (Goldfarb, 1990). Dranov (1993), Finck (1986), and Strausz (1993) defined fibroids as benign tumors of the uterus, generally slow in growth and painless except when pressure is applied. The term fibroid (myoma) refers to the fact that the tissue comprising a fibroid is fibrous-like. Fibroids are actually smooth muscles in origin, have their own blood supply, and are predominantly noncancerous (Christmas, 1994). A major concern has been the causes of fibroids. No one really understands why or how fibroids develop, but some experts believe that they start out as one tiny smooth muscle cell that goes awry in the uterus (Dranov, 1993; Strausz, 1993). According to Dranov, between 20% and 40% of all women eventually develop fibroids.

How much trouble fibroids cause depends to a large extent on their location and size. "Fibroids within the central muscle layer of the uterus are called intramural or interstitial tumors. Those on the outside protruding into the abdominal cavity are so-called subserous or serosal types, and those that invade the endometrium, submucous leiomyomas" (Goldfarb, 1990, p. 42). "Often changing their size and shape, the single or multiple growth can range from pea size to a large grapefruit" (White, 1993, p. 291).

A growing body of literature suggests that fibroids in the uterus is a common phenomena, occurring in 40% of all women over 40 years of age (Christmas, 1994; Finck, 1986; Goldfarb, 1990). Fibroid tumors affect a startling 50-75% of all African-American women (Christmas, 1994). Women

who have never had children and nonsmokers also seem to be at greater risk of developing fibroids (Goldfarb, 1990). While there may appear to be an hereditary factor in the prevalence of fibroids in African-American women, there is no medical evidence to support the theory that black women are genetically predisposed to the growths (White, 1993).

Endometriosis is a condition in which the lining of the uterus migrates to other pelvic structures, such as the fallopian tubes, the ovaries, or the outside of the uterus, causing severe pain and bleeding in the abdominal cavity before and during menstruation (Goldfarb, 1990). The National Center for Health Statistics (1992) reports that more than two-thirds of all hysterectomies performed in the United States are performed for endometriosis and uterine prolapse. "Damage to supporting muscles and ligaments can allow the uterus to sag, or 'prolapse,' into the vagina" (Hysterectomy and Its Alternatives, 1990).

Adenomyosis is most commonly seen in women in their 40s, usually after the peak of their childbearing years (Finck, 1986). "Because adenomyosis usually spreads throughout the uterine muscle wall, hysterectomy is considered to be the most complete course of treatment" (Wigfall-Williams, 1982).

According to a 1993 study by Bourne, Campbell, Collins, Peernet, Waddle, and Whitehead (cited in Goldfarb, 1990), only 11% of hysterectomies in the United States are performed for ovarian or uterine cancer. While uncommon, ovarian cancer is difficult to detect and frequently deadly (Strausz, 1993).

In America, about 1 woman in 70, or 1.4 percent, will develop ovarian cancer. Swedish and Norwegian figures are slightly higher. Rural Japanese women have a very low risk; but if they move to America, they begin to develop ovarian cancer at the rate of their new compatriots. (p. 252)

Many women are ignorant about what happens to the space left after a hysterectomy (Coffey, 1993). Reports in the literature indicate that some women think they have a “hole” inside after the uterus is removed (Coffey, 1993; Raphael, 1976). “Women often have only a crude understanding of what the surgeon has done to their anatomy, knowing only that their womb has been removed” (Coffey, p. 5). Researchers agree that the uterus is shaped like a pear and kept in place at the top of the vagina by stout ligaments (Finck, 1986; Goldfarb, 1990; Strausz, 1993). They also suggest that the main functions of the uterus are those of childbearing and menstruation. Finck's (1986) research reveals that when the uterus is removed from the body, fluid and the slight readjustment of other organs displace the resultant gap.

Summary

Although hysterectomy is the second most frequent major surgical procedure in the United States, there is a paucity of studies by researchers to investigate what women actually know about the reasons for and effects of this surgical procedure. Several studies were found that pertained to the emotional needs of women experiencing hysterectomies (Drummond, 1984; Newman & Newman, 1985; Sloan, 1978). However, the available literature confirmed that surgical patients, in general, need more support and information from hospital staff than they routinely receive (Gambone, Lench, & Reiter, 1992). “A

woman's preoperative outlook is a good indicator of whether she will suffer depression and a resultant loss of sexual desire” (Williamson, 1991, p 42). Those women who insist that a hysterectomy won't affect them are most likely to exhibit “postoperative psychopathology” (Newman & Newman, 1985). Some women deny the potential impact of hysterectomy because health professionals tend to minimize its implications. “Whether they wish to encourage the patient toward a positive outlook or because the hysterectomy seems routine to them, nurses and physicians may not encourage the patient to analyze the possible effects” (Williamson, p. 42). A study conducted by Engelsmann, Lalinec-Michaud, and Marino (1988) reveals that the prospect of hysterectomy creates more stress and immediate depression among women than do comparable surgeries.

Surgical nurses have developed excellent care plans for the immediate physical care of their patients, but the educational and counseling needs are often neglected. Nurses can improve their care of women undergoing hysterectomy by first assessing any misconceptions their patients might have. Nurses are in an ideal position to gently alleviate anxieties resulting from the misconception or situation. “Alleviating a woman's misconceptions about hysterectomy and teaching her how to cope with the therapy can keep manageable inconveniences from becoming major sexual dysfunctions” (Williamson, 1991, p. 47).

Chapter 3

METHODOLOGY

This chapter describes the research method of the study. The research design, data collection, and analysis of the data are included.

Research Design

The study utilized a descriptive design to determine the knowledge women possessed regarding the physiological reasons for and the psychological effects of hysterectomy. The findings will add to the present body of knowledge and could serve as a basis for increased funding and support. The results may also serve as an impetus for further research.

Data Collection

Data were collected from a convenience sample of 140 women in several northern California military housing complexes. Approval was obtained from Finck (1986) to use the instrument (Appendix A). Prior to administering the survey packets, the researcher obtained approval from the San Jose State University Institutional Review Board-Human Subjects to proceed with the study (Appendix B). Permission for data collection was granted in writing by the United States Army Nurse Corps (Appendix C). Subjects' rights were outlined in a cover letter (Appendix D) that was attached to the questionnaire (Appendix E). The hysterectomy questionnaire response frequency results appear in Appendix F.

There were a total of 140 survey packets distributed to women in every third house of each complex. Instructions were provided, both verbally and in writing, to participants regarding their voluntary and anonymous participation

and the rationale for the study. The survey packets were distributed to participants on April 30, 1994 with instructions that return of the completed questions and face sheets implied voluntary and informed consent to participate in the study. Participants were given access to the researcher's telephone number and were asked to return the surveys within 10 days. On May 8, 1994, 94 surveys had been received by mail, thus rendering a response rate of 67%.

Instrument

In an attempt to discover the level of knowledge women possess about the reasons for and the effects of hysterectomy, Finck (1986) examined hysterectomy literature for misconceptions and devised a test that measured selected knowledge women had about hysterectomy. The study results, referred to as the Hysterectomy Knowledge Interview Schedule, was developed specifically for her masters thesis on the knowledge women had about hysterectomy. Finck's tool was a pencil and paper test containing 28 test items and consisted of only fixed alternative questions. Areas of knowledge were divided into three sections. Section I contained 14 true/false questions. Section II contained 12 multiple choice questions; and section III contained 2 multiple choice questions, with more than one correct answers for each question. The content validity of Finck's measurement tool was established by a panel of experts in sociology, psychology, and women's health. This review determined from high content validity was also determined to have high reliability.

Analysis of the Data

The data for this study were collected and stored in sealed manilla envelopes. All data were subjected to descriptive statistical analysis, similar to that used by Finck. The analysis and data interpretation were done with the assistance of a statistical consultant. A descriptive summary of the content of all categories across all participants was prepared. Descriptive statistics were used for the demographic variables. Questions were prepared based on research and clinical practice with women having hysterectomies, as well as from literature reviews. According to Finck's (1986) model, women's knowledge of hysterectomy was analyzed for content and grouped into preset categories based upon the eight categories of hysterectomy compiled from the literature. The unstructured data were analyzed using the Hysterectomy Knowledge Interview Schedule that was developed for Finck's study. Each questionnaire was scored according to the number of preset categories. When the participants responded more than once to the classified category, the response was counted as 1. Section I was worth a total of 28 points; section II was worth 12 points; and section III was worth 10 points. The score for each questionnaire was worth 50 points. For demographic data analysis, means and sample standard deviations were tabulated for each participant.

The data analysis was similar to that contained in Finck's (1986) study. Eleven demographic characteristics obtained from the participants included age, culture, religion, marital status, education, further schooling, employment, children, number of children, menopause, hysterectomy, and knowledge about hysterectomy. Each of the characteristics was divided into subsets that identified the category within that characteristic. Age was divided into four

subsets; culture into five subsets; marital status into four subsets; education into two subsets; further schooling into three subsets; employment into two subsets; children into two subsets; the number of children into four subsets; menopause into two subsets; having a hysterectomy into two subsets; and information sources into nine subsets.

Finck's Study

Finck's (1986) study investigated what women knew about hysterectomy. The sample population was selected at random from a telephone listing of a specified geographical area of a Midwest metropolitan suburb. Of the 300 women selected, 201 agreed to participate. Data were collected by use of a mail questionnaire. Finck's tool, the Hysterectomy Knowledge Interview Schedule, was developed by incorporating all of the reports contained in the literature of knowledge and misconceptions held by women about the reasons for and effects of hysterectomy.

Demographic data indicated that they were Caucasian (98%) and either Protestant (58%) or Catholic (31%). They were usually married (91%), with children (88%). The majority of the women had completed high school (95%), and over half of the women either attended or had completed college. Of the women selected, 28% had undergone a hysterectomy.

Corrected responses were calculated and questions were categorized into areas of knowledge. The majority of the women who responded to Finck's study knew the reasons for and the effects of hysterectomy. Only 38% of the women answered the question regarding the functions of the uterus correctly. Thus, it seems well established that more education is needed in the area of the female reproductive system. One-fourth of the women thought there would

be an empty space where the uterus had originally been. This is an important concept to correct, because it leads to speculation and concern by women who wonder if things will pass through “the hole” or whether something was left behind in surgery to fill “the hole” (Finck, 1986, p. 207).

Summary

The data analysis process of Finck's (1986) study assisted this researcher with the descriptive statistics gathered from the unstructured data. The findings from the data analysis are presented in Chapter 4.

Chapter 4

FINDINGS AND INTERPRETATION

The findings and interpretation from a survey of the knowledge base of women regarding hysterectomy are presented in this chapter. Demographic characteristics of the sample respondents are also described.

Description of the Sample

Surveys were distributed to a sampling of 140 women in several northern California military housing complexes. Of the 140 data collection questionnaires that were distributed, 94 women responded, representing a return rate of 67%. The participants were asked questions on general demographic information and knowledge as it related to personal perceptions of hysterectomy.

Eight categories of knowledge from Finck's (1986) study, derived from the nursing literature, were used as the basis for comparison. The research questions were:

1. What knowledge do women possess regarding the physiological reasons for hysterectomy?
2. What knowledge do women possess regarding the psychological effects of hysterectomy?

The data were analyzed by the researcher. The analysis and interpretation were similar to Finck's (1986) study in the following order: a description of the sample population; the findings and interpretation of the closed-ended questions pertaining to women's knowledge of hysterectomy.

Description of the Sample Population

Appendix G represents the sample's demographic data. The percentages were calculated on the sample size of 94. Each of the demographic characteristics were divided into subsets. This data reveals that out of 94 responses, 36.2% were 36-45 years of age; 33% were 46-65; 24.5% were 26-35; and 6.3% were 18-25 years of age. The majority of these women were white (68.1%); 20% were black; 2.1% were oriental; and 9.6% were classified as "other" (where "other" is listed, no classification was listed).

The highest and lowest percentages per demographic characteristic of the sample population showed that 62.8% were married, and only one person was widowed. Over half of the women had attended or completed college (52.1%), while only one person did not complete high school; 86.2% were employed. Appendix G also shows that 64.9% had children, with 85.1% having one to two children. Of the 94 women who participated in the survey, 27% had undergone hysterectomy. Over half claimed to be in menopause (60.6%). Of the total, 54.3% received their sources of information from magazines and the news; 56.4% from doctors or nurses; 77.7% from schools or college classes; 69.1% from family and friends; 45.7% from books and pamphlets; and only 29.8% from television. Of the total, 58.5% knew someone who had undergone hysterectomy, and 93.6% knew something about hysterectomy. Only 9.6% had heard about hysterectomy through other means. There were no sources listed by these respondents.

Findings and Interpretation

Correct responses were calculated and questions were categorized into areas of knowledge. Table 1 shows the means, standard deviation, and number

of respondents in each category (age, culture, religion, and had hysterectomy). The mean of correct response for the sample was 42.1 (based on a possible 50 points). Standard deviation was 4.8 for a total of 94 surveys. It is interesting that knowledge differed according to age. Women 36-45 years of age had a mean score of 43.45; those 18-25 a score of 37.00; those 26-35 a score of 40.54; and those 46-65 a score of 41.00. Knowledge also varied according to culture. White women had a mean score of 43.30; black women a score of 38.50; orientals a score of 39.50; and "other" women a score of 41.80. Women who chose no religion had a mean score of 45.90; with 42.20 for Catholic; 43.20 for Protestant; 39.00 for Jewish, and 38.60 for "other" religion.

Comparison of knowledge between women in the sample who had undergone hysterectomy and women who did not have a hysterectomy revealed that women who had undergone hysterectomy had a mean score of 43.21 compared to 41.65 for those who had not. Questions most frequently answered correctly and incorrectly in each area are listed in Appendix H.

Indications for Hysterectomy

The results of the study indicated that 58.5% of the women knew that the most frequent reason for removal of the uterus was the presence of fibroids. Of those responding, 14.9% believed that most hysterectomies were performed because the woman had cancer, and 12.8% believed that most hysterectomies were performed unnecessarily. The majority of the women (84%) knew that having a hysterectomy would not cure premenstrual tension, whereas 16% believed it was the cure. Of those responding, 93% knew that hysterectomies were not the result of excessive sexual activity.

Table 1

Test Scores Based on Demographic Variables (N = 94)

Demographics	Means	S.D.	<u>n</u>
Age			
18-25	37.00	3.27	5
26-35	40.54	4.80	23
36-45	43.45	3.80	34
46-65	41.00	5.30	31
Culture			
White	43.30	4.80	64
Black	38.50	4.30	19
Oriental	39.50	5.20	2
Other	41.80	3.70	9
Religion			
Catholic	42.20	4.80	24
Protestant	43.20	4.00	36
Jewish	39.00	4.20	1
None	45.90	0.00	9
Other	38.60	3.50	23
Had Hysterectomy			
No	41.65	4.71	68
Yes	43.21	4.87	26

Childbearing Aspects

Correct responses of all questions in this area were within a 10% difference, with the majority answering all questions correctly. Of those responding, 90% of the women knew that hysterectomy produced total and irreversible loss of childbearing ability. Although only 10.5% of the women did not believe that being able to have children was an important part of the way women perceive themselves, 8.6% believed that if a woman already had all the children she wanted, a hysterectomy would have no emotional effect on her. Six percent of the women believed that if a woman was unmarried and did not want children, a hysterectomy would not have any emotional effect on her; and 13.8% believed that a hysterectomy performed after a woman had gone through menopause would have no emotional effect on her. Of the total, 16% thought that women had the same emotional response to hysterectomy as they did to tubal ligation.

The Aftermath of Hysterectomy

Psychological

Of those responding, 84% knew that emotional response to hysterectomy and tubal ligation differed and that a woman can be affected emotionally by hysterectomy, even if it occurred after menopause. Over 92% knew that many women went through a period of depression after hysterectomy, and 97.9% knew that most women did not need psychiatric help after hysterectomy.

Menstrual Function

Of those responding, 3.2% believed that after hysterectomy the menstrual period either did not stop but became irregular, or continued to occur as it had before the hysterectomy (4.2%). Overall, the majority of the participants believed that the menstrual period stopped entirely and never returned (92.6%).

Menopausal Process

Of those responding, 63.7% knew that after a hysterectomy, menopause would occur at the normal time. Over 24% thought that menopause would be brought on by hysterectomy, and 12.8% thought menopause could be prevented by hysterectomy. Of the total, 96.8% knew that the uterus should remain in the body unless it became diseased, whereas only one respondent thought that it should never be removed.

Sexual Functioning

The majority of the women (86.2%) knew that hysterectomy did not end a woman's desire for sex and that intercourse would feel the same to the sexual partner of a woman who had undergone hysterectomy. The great majority of women responded correctly to all questions in this area with an overall percentage of 80.

Changes in the Anatomy

Of those responding, 89.4% knew the general size of the uterus was that of an orange, and 91.4% knew that fluid filled in the spaces left by uterine removal. Over 93% knew that the ovaries continued to function normally after recovery from hysterectomy; 56% knew that the ovaries would continue to function; 14% thought ovaries functioned at a reduced rate; and 30% thought the ovaries no longer functioned at all after hysterectomy. Women's responses,

when asked to select the functions of the uterus and ovaries, are shown in Table 2. Of the women studied, 96.7% knew that one of the functions of the uterus was for the growth of a baby; 70.2% knew that the uterus held menstrual blood; 18.1% knew that the uterus produced hormones, and 2.1% thought that the uterus controlled a woman's sex drive. Of those responding, 97.9% knew the function of the ovaries was to release eggs; 73.4% thought the ovaries produced hormones; 7.4% thought the ovaries held menstrual blood; and 16.0% thought the ovaries controlled a woman's sexual drive.

Table 2

Women's Responses in Finck's Hysterectomy Knowledge Study.

Functions	Percentage
Functions of Uterus	
Holds menstrual blood	70.2
Place where sexual intercourse occurs	2.1
Produce hormones	18.1
Place where baby grows	96.7
Controls a woman's sexual drive	2.1
Functions of Ovaries	
Hold menstrual blood	7.4
Produce hormones	73.4
Release eggs	97.9
Control a woman's sexual drive	16.0
Place where sexual intercourse occurs	0.0

Chapter 5

DISCUSSION

This chapter summarizes this study. Conclusions, scope and limitations, and recommendations are presented.

Summary of the Study

This descriptive study was conducted at a northern California Army community. The purpose of this study was to investigate what women, ages 18 to 65, knew about hysterectomy. The research questions focused on whether women's knowledge of hysterectomy varies according to their demographic characteristics, perceptions, and symbolic association to the uterus.

A survey questionnaire consisted of fixed alternative questions. The design of the questionnaire by Finck (1986) allowed for collection of data. A total of 94 women participated in the survey.

Conclusions

There were differences of knowledge women possessed about hysterectomy according to various areas related to hysterectomy. There were differences of knowledge women possessed about hysterectomy according to whether or not they had undergone hysterectomy. Knowledge about hysterectomies was a variable. Age and source of information were two factors identified which were related to the knowledge women possessed about hysterectomies. Women in this study generally did not believe the myths about hysterectomies that were reported previously in the literature.

Physical appearance and sexual functioning as related to hysterectomy were the two areas in which women had the highest frequency of correct responses. Many women, although they did not believe myths about hysterectomy, did not possess factual knowledge about the actual reasons for and effects of hysterectomy. Many women equated hysterectomy with tubal ligation in terms of medical safety and psychological response. Many women did not have accurate knowledge about the functions of their reproductive organs. The functions of the ovaries in particular were confusing to many women. There were differences in the degree of importance women placed on the ability to have children as it affected their self-image. These differences also occurred on the basis of whether or not the woman had undergone a hysterectomy.

This study provided some implication that women were interested in the reasons for and effects of hysterectomy. This conclusion is based on the number of women willing to participate.

Scope and Limitation

The closure of this northern California Army post limited the sample population of this study. A larger sample size of this military population could have been possible prior to July 1, 1993. However, by that date, a total of 138 families had moved from the post (Clawson, 1993). According to Clawson, the families represented were federal employees, active duty Coast Guards, students from a local Navy graduate school, and civilian families of departed troops. The cultural mix differed from previous populations of this military facility in that it did not represent populations normally found in other military housing complexes.

Another limitation of the study focused on the reliability of the sample to answer questions correctly. The small sample size was also a limitation. A larger random sample would have been more representative of the population and might have rendered more accurate results.

Recommendations

Within hysterectomy literature itself, there is much controversy about the reasons for and effects of hysterectomy. The selection of correct answers to Finck's Hysterectomy Knowledge Interview Schedule was based on the research results documented in the literature. In order to clearly define accurate knowledge about the reasons for and the effects of hysterectomy, more research using appropriate, standardized criteria and a format that is methodologically sound needs to be undertaken.

Cultural patterning of the feminine role may be an important factor in the misconceptions women have about hysterectomy (Williams, 1973). Therefore, the use of a cross-cultural study population is recommended for future research conducted for the purpose of determining women's knowledge about hysterectomy.

Much of the content of the Hysterectomy Knowledge Interview Schedule was derived from isolated reports in the literature of misconceptions held by women about hysterectomy. This tool, composed of only close-ended questions, could not identify misconceptions held by women about hysterectomy that were not reported previously in the literature. In order to develop a more valid tool for measuring knowledge which women possess about hysterectomy, interviews and open-ended questions could be utilized. A

comparison of the results obtained by various data gathering methods could help to define a more accurate and effective data gathering tool.

Because accurate evidence is so difficult to obtain, much still remains unknown. Efforts put forth by nurses through research to identify the effects of stress on the functioning of the female reproductive system may also help to reduce the incidence of surgical treatment for a psychoemotional problems.

REFERENCES

References

- Arnot, B. (1993). Hysterectomy. Good Housekeeping, pp. 258-263.
- Augustine, M., Bhattacharyya, T. K., & Chaudhury, S. (1992). Psychosis following hysterectomy. Journal of Personality and Clinical Studies, 8, 177-179.
- Bachmann, G. (1990). Psychosexual aspects of hysterectomy. Women Health Issues, 1, 41-49.
- Bernhard, L. (1992). Men's views about hysterectomies and women who have them. Image: Journal of Nursing Scholarship, 24, 177-181.
- Bernstein, S., Brook, R., Hicks, N., Keeseey, J., Kosecoff, J., McGlynn, E., Roth, C., Sherwood, M., & Sui, A. (1993). The appropriateness of hysterectomy: A comparison of care in seven health plans. Journal of American Medical Association, 269, 2398-2402.
- Bieber, I., & Drellich, M. (1958). The psychological importance of the uterus and its functions. Journal of Nervous and Mental Disorders, 126, 322-336.
- Bowlby, J. (1973). Attachment and loss. Separation, anxiety, and anger. New York: Basic Books.
- Bush, I. M., & Rudy, D. R. (1992). Hysterectomy and sexual dysfunction: You can help. Patient Care, 26, 67-69.
- Campbell, J. (1955). Pagan and Christian mysteries: Papers from the Eramos yearbooks. New York: Bollinger.
- Christmas, R. (1994). Fibroids, a report. Essence, pp. 59-62.
- Clawson, S. (1993, August 13). Goodbye light fighters. Fort Ord Panorama, 53, p. 8.
- Coffey, N. (1993). Hysterectomy: The shocking truth. Woman's Newspaper, 54, 1-3.

- Cooney, S., & Potter, L. (1970). Saying goodbye: A case study about the experience of hysterectomy. Nursing Praxis in New Zealand, 7, 31-33.
- Coulter, A. (1988). Do British women undergo too many or too few hysterectomies? Social Science and Medicine, 27, 987.
- Craig, J., & Patterson, R. (1963). Misconceptions concerning the psychological effects of hysterectomy. American Journal of Obstetrics and Gynecology, 85, 104-111.
- Cutler, W. B. (1988). Before and after. New York: Harper & Row.
- Davidson, J. M., & McCoy, N. L. (1985). A longitudinal study of the effects of menopause on sexuality. Maturitas, 7, 203-210.
- Dennerstein, L. (1977). Sexual response follow hysterectomy and oophorectomy. OB/GYN, 49, 92-96.
- Dranov, P. (1993). When the diagnosis is fibroids. American Health, 12, 68-74.
- Drummond, J. (1984). Emotional and sexual sequelae following hysterectomy. Health Care Women Int, 5, 261-271.
- Engelsmann, R., Lalinec-Michaud, M., & Marino, J. (1988). Depression after hysterectomy: A comparative study. Psychosomatic, 3, 307-317.
- Engelsmann, F., & Lalinec-Michaud, M. (1989). Cultural factors and reaction to hysterectomy. Social Psychiatry Epidemiology, 24, 165-171.
- Finck, K. (1986). The potential health care crisis of hysterectomy. In D. K. Kjervik & I. M. Matinson (Eds.), Women in health and illness: Life experiences and crisis (pp. 200-217). Philadelphia: Saunders.
- Flint, M. (1989). Cultural and subcultural meanings to menopause. Menopause Management, 11, 13-15.

- Florin, I., Henning-Schulze, H., Matschin, E., Schulze, C., & Sougioultzi, C. (1988). Psychological distress after hysterectomy: A predictive study. Psychology and Health, 2, 1-12.
- Folkman, S., & Lazarus, R. S. (1984). Coping and adaptation. In D. Gentry (Ed.), Handbook of behavioral medicine. New York: Basic Books.
- Gambone, J. C., Lench, J. B., & Reiter, R. C. (1992). Appropriateness of hysterectomies performed for multiple preoperative indications. Obstetrics and Gynecology, 80, 902-905.
- Gates, P., Menzer, D., & Morris, T. (1957). Patterns of emotional recovery from hysterectomy. Psychosomatic Medicine, 19, 379-388.
- Gath, D. (1990). Psychological and physical determinants of premenstrual symptoms before and after hysterectomy. Psychological Medicine, 20, 565-572.
- Giddings, L., & Wood, P. (1991, July). The symbolic experience of hysterectomy. Nursing Praxis in New Zealand, 6, 3.
- Goldfarb, H. A. (1990). The no hysterectomy option: your body, your choice. New York: Wiley.
- Harris, D. E., & MacLean, H. (1992). Recovering from a hysterectomy. New York: Harper Collins.
- Kaiser, F. E., & Morley, J. E. (1989). Sexual function with advancing age. Medical Clinic of North America, 73, 1483-1495.
- King, I. (1981). A theory for nursing. New York: Wiley.
- Kjerulff, K. (1993, November 15). Black women risk more during hysterectomies. The Monterey Herald, p. 155.
- Lark, S. (1992). The menopause self-help book: a women's guide to feeling wonderful for the second half of her life. Berkeley: Celestial Arts.

- LaVecchia, C., Luchini, L. Mezzopane, R., Negri, E., & Parazzini, F. (1993).
Hysterectomy, oophorectomy, and subsequent ovarian cancer risk.
Obstetrics and Gynecology, 81, 363-366.
- Ling, F., Lipscomb, G., Stovall, T., & Summitt, R. (1992). Randomized
comparison of laparoscopy-assisted vaginal hysterectomy with standard
vaginal hysterectomy in an outpatient setting. Obstetrics and Gynecology,
80, 895-901.
- National Center for Health Statistics, Hospital Care Statistics Branch. (1992).
National hospital discharge survey. In Advance data from vital and health
statistics no. 159 (DHHS Publication No. PHS 88-1250). Hyattsville, MD:
U.S. Public Health Service.
- National Center for Health Statistics, Hospital Care Statistics Branch. (1990).
In Advance data from vital health statistics, no. 13 (DHHS Publication No.
PHS 113-118). Hyattsville, MD: U.S. Public Health Service.
- Newman, G., & Newman, L. (1985). Coping with the stress of hysterectomy.
Journal of Sex Education and Therapy, 11, 65-68.
- Notelovitz, M., & Tonnessen, D. (1993). Menopause and midlife health.
New York: St. Martin.
- Raphael, B. (1976). Psychiatric aspects of hysterectomy. In Howells, J.
(Ed.), Modern perspectives in the psychiatric aspects of surgery. New
York: Brunner/Mazel.
- Richards, D. (1976). A post-hysterectomy syndrome. Lancet, 983-985.
- Schmitt, F., & Woolridge, P. (1973). Psychological preparations of surgical
patients. Nursing Research, 22, 108-116.
- Schwartz, J. (1993). Moving forward after hysterectomy. Seasons Magazine,
pp. 3-6.

- Shaffer, C. (1993, February). Moving forward after hysterectomy. Seasons Magazine, pp. 3-6.
- Sloan, D. (1978). The emotional and psychosexual aspects of hysterectomy. American Journal of Obstetrics and Gynecology, 8, 213-217.
- Smellie, W. (1752). Treatise on the theory and practice of midwifery, 1752.
- Spector, R. E. (1994, Winter/Spring). Diversifying your approach. Minority Nurse, 28-51.
- Speert, H. (1980). Obstetrics and gynecology in America, a history. Baltimore: Waverly.
- Strausz, I. K. (1993). You don't need a hysterectomy. New and effective ways of avoiding major surgery. Menlo Park: Addison-Wesley.
- Walker, B. G. (1988). The woman's dictionary of symbols and sacred objects. San Francisco: Harper and Row.
- Wallen, K. (1990). Desire and ability: Hormones and the regulation of female sexual behavior. Neuroscience and Behavioral Reviews, 14, 233-241.
- Wangensteen, O. H. (1978). The rise of surgery. Minneapolis: University of Minnesota Press.
- White, E. (1993). The black women's health book: Speaking for ourselves. Seattle: Seal Press.
- Wigfall-Williams, W. (1982). Hysterectomy: Learning the facts, coping with the feelings, facing the future. New York: Kesend.
- Williams, M. (1973). Cultural patterning of the feminine role. Nursing Forum, 12, 386.
- Williamson, M. (1991). Sexual adjustment after hysterectomy. Journal of Gynecology and Neonatology, 21, 42-47.
- Wright, R. C. (1969). Hysterectomy: Past, present and future. Obstetrical Gynecological, 33, 560-567.

APPENDIX A
Letter of Approval

HCS

**Health
Counseling
Services**

6465 Wayzata Boulevard
Minneapolis, MN 55426
612-544-3290

*Holly Branch, RN MS CS
Karen Finck, RN MS CS
Nancy Lundborg, RN MA
Bonnie Peplinski, RN*

55

September 29, 1993

Margaret Andrews
279 Ardennes Circle
Fortord, CA 93941

Dear Ms. Andrews,

If you choose to do so, you have my consent to replicate the study: A
Descriptive Study of Selected Knowledge Women Have About the Physiological
and Psychological Reasons for and Effects of Hysterectomy.

You have consent to use the questionnaire: Hysterectomy Knowledge Interview
Schedule, or to adapt it to your specific needs.

Since I believe informed, respectful treatment of women in the health care
system remains an issue, it is imperative for nursing research in this area to
continue. I wish you success in your endeavors.

If you require further assistance, please do not hesitate to contact me.

Sincerely,

Karen Finck, RN MS CS

APPENDIX B
Institutional Review Board-Human Subjects Approval

Office of the Academic Vice President • Associate Academic Vice President • Graduate Studies and Research
One Washington Square • San José, California 95192-0025 • 408/924-2480

TO: Margaret Love Andrews
279 Ardennes Circle
Fort Ord, CA 93941

FROM: Serena W. Stanford *Serena W. Stanford*
AAVP, Graduate Studies and Research

DATE: April 26, 1994

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

"The Knowledge Base of Women Regarding
Hysterectomy"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research projects, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Serena Stanford immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that each subject needs to be fully informed and aware that their participation in your research projects is voluntary, and that he or she may withdraw from the project at anytime. Further, a subject's participation, refusal to participate or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted. If you have questions, please contact me at (408) 924-2480.

APPENDIX C
Data Collection Permission Letter

SGRD-OP

30 September 1992

MEMORANDUM FOR ANC Officers in Long Term Health Education
SUBJECT: Nursing Research Procedural Guidelines for ANC Officers in Long Term Health Education Training.

1. **Purpose:** The purpose of this memorandum is to provide direction to ANC Long Term Health Education Training (LTHET) students requesting permission to conduct research within the Army Medical Department (AMEDD).
2. **Scope:** These guidelines apply to all ANC LTHET students wishing to conduct research within the AMEDD.
3. **References:**
 - a. Army Regulation 40-38, Clinical Investigation Program
 - b. Army Regulation 600-46, Attitude and Opinion Survey Program
 - c. Army Regulation 600-50, Standards of Conduct
 - d. HSC Regulation 40-23, Management of Clinical Investigation Protocol and Report
 - e. Guide for the Care and Use of Laboratory Animals, NIH Publication No. 85-23, Revised 1985.
 - f. "U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training," 1985.
4. **Definitions:**
 - a. Clinical Investigation: Consists of the organized inquiry into clinical health problems that are of concern in providing health care to the beneficiaries of the military health care system, including active duty personnel, dependents and retired personnel (AR 40-38).
 - b. Health Care Delivery Studies: Consists of the application of scientific methods to the study of the availability, organization, administration and management of health services, to include the efficiency and effectiveness with which such services are delivered.
5. **Exemptions:**
 - a. The following studies are exempt from AR 40-38, and hence, from review by a Clinical Investigation Committee, Department of Clinical Investigation at the MEDCEN (see Appendix A) when the only involvement of human subjects is:

- (1) health care delivery studies or routine epidemiological surveys that involve tests or procedures of no more than minimal risk (see definition in para 4b);
 - (2) studies in educational settings that involve normal educational practices;
 - ✓(3) research involving the use of educational tests when the data are recorded in such a way that subjects cannot be identified directly or indirectly;
 - (4) research involving survey, interview procedures or the observation of public behavior except when all of the following conditions exist:
 - (a) responses or observations are recorded in such a way that subjects can be identified directly or through identifiers linked to the subject;
 - (b) subject's responses or recorded observations if they become known outside the research, could reasonably place the subject at risk of criminal or civil liability or be damaging to subject's financial standing or employability;
 - (c) the research deals with sensitive aspects of the subject's own behavior such as illegal conduct, drug use, sexual behavior or use of alcohol;
 - (5) research involving the collection or study of existing data, documents, records and pathological or diagnostic specimens if these sources are publicly available, or if the information is recorded in such a way that subjects cannot be identified directly or through identifiers linked to the subject.
- b. If it is determined, based on the definition in AR 40-38, that the protocol involves a Health Care Delivery study or is defined as exempt, the study does not require full review by the Clinical Investigation Committee. However, the student should submit a memorandum to the chief, CIC, requesting an expedited review or a review for minimal risk. Include in this memorandum the proposal and the university institutional review board (IRB) approval.

In addition the student should obtain and include an approval from the Commander, and Chief, Department of Nursing, at the host facility.

- c. No attempt has been made to fully explicate AR 40-38. Each officer is responsible for complying with AR 40-38.
6. General:
- a. Time Required:

APPENDIX D
Subjects' Rights Cover Letter

School of the Applied Arts and Sciences • Department of Nursing
One Washington Square • San Jose, California 95192-0057 • 408/277-2692

To Whom It May Concern:

You are being asked to take part in a research study which I am conducting through San Jose State University. I am a Major in the United States Army Nurse Corps and am conducting my research for the completion of my Masters degree in Nursing.

I am soliciting your help in this research by asking you to complete the enclosed questions and face sheet. It will take approximately 10 to 15 minutes to answer the 40 questions. This is all you will be asked to do.

Many women today are undergoing hysterectomies. Surgical removal of the uterus has become the second most often performed operation in the country. Your answers to the questions will give nurses additional information on what women do and do not know about hysterectomy. The combined answers of all participants in this study will give to nursing useful information which can then be used to improve the quality of patient teaching and nursing care administered to women.

You have been chosen at random. You do not need to have had a hysterectomy to participate in this research. The only requirement to participate is that you be a women 18-65 years of age.

You are free to choose whether or not to participate in this study. There are no risks and/or benefits anticipated from participation. Your anonymity is assured, and all data will be reported as group data, kept confidentially in a sealed manila envelope locked in my home. Return of the completed questions and face sheet implies voluntary and informed consent for your responses to be used in this study.

If you have any questions about this study, I can be reached at (408) 899-5628. If you have any complaints about the research, please contact Bobbye Gorenberg, Ph.D. at (408) 924-3131. Questions or complaints about research, subjects' rights, or research-related injury may be presented to Serena Stanford, Associated Academic Vice President for Graduate Studies and Research at (408) 924-2480. Thank you for your time—it is most appreciated.

Proud to Care

Major Margaret Love Andrews

APPENDIX E

Finck's Tool

FACE SHEET

Please check the appropriate boxes or fill in the blanks.

What is your:

Age Range

☐ 18-25 ☐ 26-35 ☐ 36-45 ☐ 46-65

Cultural Background

☐ White ☐ Black ☐ Oriental ☐ Indian ☐ Other ____

Religion

☐ Catholic ☐ Protestant ☐ Jewish ☐ None ☐ Other ____

Marital Status

☐ Single ☐ Married ☐ Divorced/Separated ☐ Widowed

Education

☐ Completed high school ☐ Did not complete high school

Further Schooling

☐ Vocational/Business ☐ Some College ☐ Completed College

Are you employed?

☐ Yes ☐ No

Do you have children?

☐ No ☐ Yes How many? ☐ 1-2 ☐ 3-4 ☐ over 4

Have you had a hysterectomy?

☐ No ☐ Yes

Are you going through or have you completed menopause (change of life)?

☐ No ☐ Yes

Where did you hear about hysterectomies? (Check all that apply.)

☐ magazine or newspaper articles ☐ television programs
☐ doctors or nurses ☐ someone who had the surgery
☐ high school or college classes ☐ I have heard nothing about them
☐ family or friends ☐ Other _____
☐ books or health pamphlets

Thank you for your help. Now, please return the completed hysterectomy questions and this face sheet to me in the enclosed, stamped, addressed envelope.

Hysterectomy Knowledge Interview Schedule

Hysterectomy Questions

Hysterectomy is the removal of a woman's uterus (or womb). In this questionnaire, hysterectomy does not include the removal of a woman's ovaries.

SECTION I

In this section, please check the box in the "True" column if you think the statement is true. If you think the statement is false, then check the corresponding box in the "False" column. If you are uncertain about the answer, please make the best guess.

EXAMPLES:

True	False	
(X)	()	0. Hysterectomy is the removal of a woman's uterus.
()	(X)	0. Hysterectomy includes the removal of a woman's ovaries.

NOW PLEASE ANSWER ALL THE QUESTIONS IN THIS SECTION:

True	False	
()	()	1. Most hysterectomies are performed because the woman has cancer.
()	()	2. Most hysterectomies are performed to save a woman's life.
()	()	3. Some hysterectomies are performed unnecessarily.
()	()	4. Hysterectomies will cure premenstrual tension (headaches and depression before a menstrual period).
()	()	5. Women get hysterectomies as a result of an over-active sex life.
()	()	6. After hysterectomy, most women's desire for sex will end.
()	()	7. After hysterectomy, it is impossible for a woman to give birth to a child.
()	()	8. For many women, being able to have children is an important part of the way they see themselves.
()	()	9. If a woman has all the children she wants, a hysterectomy will have no emotional effect on her.
()	()	10. If a woman is unmarried and does not want children, a hysterectomy will have no emotional effect on her.

SECTION I (Cont.)

True False

☐	☐	11. Women have the same emotional responses to having a hysterectomy as to having a tubal ligation (tubes tied).
☐	☐	12. After hysterectomy, many women go through a time of depression.
☐	☐	13. After a woman goes through menopause (change of life), a hysterectomy will not affect her emotionally.
☐	☐	14. After hysterectomy, most women must get psychiatric help.

SECTION II

This Section contains 12 multiple-choice questions. Please choose one answer from each of the questions in the Section.

1. After a hysterectomy, a woman's menstrual period
 - ☐ a. stops entirely and never returns
 - ☐ b. does not stop, but becomes irregular
 - ☐ c. continues as it was before the hysterectomy

2. A woman's menopause (change of life)
 - ☐ a. can be prevented by having a hysterectomy
 - ☐ b. will be brought on by a hysterectomy
 - ☐ c. will occur when it normally would

3. After a woman reaches menopause (change of life),
 - ☐ a. her uterus should be removed to prevent the woman from getting cancer
 - ☐ b. her uterus should remain in her body unless it becomes diseased
 - ☐ c. her uterus should never be removed

4. After a hysterectomy, most women
 - ☐ a. cannot have sexual intercourse ever again
 - ☐ b. can have sexual intercourse, but it will never feel the same to her
 - ☐ c. can have sexual intercourse, and it will feel the same to her as it did before the hysterectomy

SECTION II (Cont.)

5. After a hysterectomy, most women
☐ a. will not be able to have an orgasm again
☐ b. will have an orgasm if she did before the surgery
☐ c. will be able to have an orgasm even if she couldn't have one before the surgery
☐ d. I am unsure what an orgasm is
6. After a woman is recovered from a hysterectomy, her desire for sex will probably
☐ a. increase
☐ b. decrease
☐ c. remain the same as it was before the hysterectomy
7. A man
☐ a. will not be able to have sexual intercourse with a woman who has had a hysterectomy
☐ b. can have sexual intercourse with a woman who has had a hysterectomy, but it will feel different to him
☐ c. can have sexual intercourse with a woman who has had a hysterectomy, and it will feel the same to him
8. What is the general size of a non-pregnant uterus?
☐ a. an orange
☐ b. a grapefruit
☐ c. a large cantaloupe
9. When the uterus is removed from a woman's body,
☐ a. there is an empty space where the uterus was
☐ b. fluid fills in the space and the other organs move slightly to fill in the space
☐ c. the doctor inserts a sponge-like substance in the empty space during surgery
10. After a woman is recovered from hysterectomy, the ovaries
☐ a. no longer function
☐ b. function at a reduced rate
☐ c. function as they did before the hysterectomy

SECTION II (Cont.)

11. Most hysterectomies are performed because
- ☐ a. the woman has fibroids (non-cancerous growths) in her uterus
 - ☐ b. the woman has cancer
 - ☐ c. most hysterectomies are done unnecessarily
12. General recovery time for most major surgery is 3 months (until a person feels totally like him/herself again). What is the recovery time for a hysterectomy?
- ☐ a. 6 weeks
 - ☐ b. 3 months
 - ☐ c. 1 year
 - ☐ d. a woman never feels like herself again after a hysterectomy

SECTION III

In this Section, put a check in the box before all of the correct answers to each question. You may check more than one answer for each question.

1. What is the uterus responsible for in the body?
- ☐ a. It holds menstrual blood
 - ☐ b. It is where sexual intercourse occurs
 - ☐ c. It produces hormones
 - ☐ d. It is where a baby grows until birth
 - ☐ e. It controls a woman's sex drive
2. What are the ovaries responsible for in the body?
- ☐ a. They hold menstrual blood
 - ☐ b. They produce hormones
 - ☐ c. They store and release eggs
 - ☐ d. They control a woman's sex drive
 - ☐ e. They are where sexual intercourse occurs

APPENDIX F
Hysterectomy Questionnaire Responses

Hysterectomy Questionnaire Responses

Question	Answers	n	Percentages	Correct Answers
Most hysterectomies are performed because the woman has cancer.	True False	14 80	14.9 85.1	False
Most hysterectomies are performed to save a woman's life.	True False	18 76	19.1 80.9	False
Some hysterectomies are performed unnecessarily.	True False	82 12	87.2 12.8	True
Hysterectomies will cure premenstrual tension	True False	15 79	16.0 84.0	False
Women get hysterectomies as a result of an over-active sex life.	True False	1 93	1.1 98.9	False
After hysterectomy, most women's desire for sex will end.	True False	4 90	4.3 95.7	False
After hysterectomy, it is impossible for a women to give birth to a child.	True False	85 9	90.4 9.6	True
For many women, being able to have children is an important part of the way they see themselves.	True False	84 10	89.4 10.6	True
If a woman has all of the children she wants, a hysterectomy will have no emotional effect on her.	True False	8 86	8.6 91.4	False
If a woman is unmarried and does not want children, a hysterectomy will have no emotional effect on her.	True False	6 88	93.6 16.0	False
Women have the same emotional responses to having a hysterectomy as to having a tubal ligation.	True False	15 79	16.0 84.0	False

Question	Answers	n	Percentages	Correct Answers
After hysterectomy, many women go through a time of depression.	True False	87 7	92.6 8.4	True
After a woman goes through menopause, a hysterectomy will not affect her emotionally.	True False	13 81	13.8 36.2	False
After hysterectomy, most women must get psychiatric help.	True False	2 92	2.1 97.9	False
After hysterectomy, a woman's menstrual period (a) stops, (b) becomes irregular, (c) continues as it was before.	A B C	87 3 4	92.6 3.2 4.2	A
A woman's menopause (a) can be prevented by having a hysterectomy; (b) will be brought on by a hysterectomy; (c) will occur when it normally would.	A B C	12 23 59	12.8 24.5 63.7	C
After a woman reaches menopause: (a) her uterus should be removed to prevent cancer; (b) her uterus should remain in her body unless it becomes diseased; (c) her uterus should never be removed.	A B C	2 91 1	2.1 96.8 1.1	B
After a hysterectomy, most women (a) cannot ever have sexual intercourse; (b) can have intercourse, but is will never feel the same to her; (c) can have sexual intercourse and it will feel the same to her as before.	A B C	0 13 81	0 13.8 86.2	C

Question	Answers	n	Percentages	Correct Answers
After hysterectomy, most women: (a) won't be able to have an orgasm again; (b) will have an orgasm if she did before surgery; (c) will have an orgasm if she couldn't before surgery; (d) I am unsure of what an orgasm is.	A B C D	1 74 12 1	1.1 85.0 12.8 1.1	B
After a woman is recovered from a hysterectomy, her desire for sex will probably: (a) increase, (b) decrease (c) remain the same as it was before the hysterectomy.	A B C	6 18 70	6.4 19.1 75.5	C
A man (a) won't be able to have intercourse with a woman who has had a hysterectomy; (b) can have intercourse with a woman who has had a hysterectomy, but it will feel different; (c) can have intercourse, and feels the same.	A B C	0 6 88	0 6.4 93.6	C
What is the general size of a nonpregnant uterus? (a) an orange, (b) a grapefruit, (c) a large cantaloupe.	A B C	66 28 0	70.2 28.8 0	A
When the uterus is removed, (a) there is an empty space, (b) fluid fills in and other organs move over, (c) the doctor inserts a substance in the space.	A B C	24 70 0	25.5 74.5 0.0	B
After a woman has recovered from a hysterectomy, the ovaries (a) no longer function, (b) function at a reduced rate; (c) function as they did before the hysterectomy.	A B C	14 15 65	14.9 15.1 70.0	C

Question	Answers	n	Percentages	Correct Answers
Most hysterectomies are performed because (a) the woman has fibroids, (b) the woman has cancer, (c) most hysterectomies are done unnecessarily.	A B C	55 17 22	58.5 18.1 23.4	A
(Answered that the uterus both holds menstrual blood and babies.)	No Yes	28 66	29.8 70.2	Yes
The ovaries hold menstrual blood.	No Yes	87 7	93.6 7.4	No
The ovaries produce hormones	No Yes	25 69	26.6 73.4	Yes
The ovaries store and release eggs.	No Yes	2 92	2.1 97.9	Yes
The ovaries control a woman's sex drive.	No Yes	79 15	84.0 16.0	No
The ovaries are where sexual intercourse occurs.	No Yes	94 0	100.0	No
(Answered that the ovaries both produce hormones and release eggs.)	No Yes	6 20	23.1 76.9	Yes

APPENDIX G
Percentage of Participants for Demographic Characteristics

Percentage of Participants for Demographic Characteristics (N = 94)

Demographic Characteristics	n	Percentage
Age		
18-25	6	6.3
26-35	23	24.5
36-45	34	36.2
46-65	31	33.0
Cultural Background		
White	64	68.1
Black	9	20.0
Oriental	2	2.1
Indian	0	0
Other	9	9.6
Religion		
Catholic	24	25.5
Protestant	36	38.3
Jewish	2	2.1
None	9	9.6
Other	23	24.5
Marital Status		
Single	12	12.8
Married	59	62.8
Divorced/Separated	22	23.4
Widowed	1	1.1
Schooling		
Completed High School	4	4.3
Did Not Complete H.S.	1	1.1
Vocational/Business	8	8.5
Some College	29	30.9
Completed College	49	52.1
Missing	3	3.1
Employed		
No	13	13.8
Yes	81	86.2
Children		
No	33	35.1
Yes	61	64.9
How Many Children		
1-2	80	85.1
3-4	12	12.8
Over 4	2	2.1

Demographic Characteristics	n	Percentage
Have Had Hysterectomy		
No	68	72.3
Yes	26	27.7
Having Menopause		
No	68	72.3
Yes	26	27.7
Magazine and News		
No	43	45.7
Yes	51	54.3
Doctors or Nurses		
No	41	43.6
Yes	53	56.4
School or College Courses		
No	73	77.7
Yes	21	22.3
Family or Friends		
No	29	30.9
Yes	65	69.1
Books or Pamphlets		
No	51	54.3
Yes	43	45.7
Television		
No	66	70.2
Yes	28	29.8
Knew Someone Who Had Hysterectomy		
No	39	41.5
Yes	55	58.5
Knew Nothing		
No	88	93.6
Yes	6	6.4
Heard Other Means		
No	85	90.4
Yes	9	9.6

APPENDIX H

Wyeth-Ayerst Laboratories Permission Letter

P.O. BOX 8299, PHILADELPHIA, PA 19101-8299

DIRECT DIAL NUMBER:
(610) 971-2630

FAX: (610) 964-3811

LEGAL DIVISION

March 8, 1994

Major Margaret Love Andrews
279 Ardennes Circle
Fort Ord, CA 93941

Re: Copyright Permission

Dear Major Andrews:

Your letter requesting permission to reproduce the photograph of different types of hysterectomies from *Seasons* magazine, Vol. 2, Issue 1, for use in a master's degree thesis entitled "Women's Knowledge of Hysterectomy", has been forwarded to my attention.

I am enclosing two copies of a copyright permission form which outlines the terms under which we will grant permission for the use of this photograph. If the terms contained therein are acceptable to you, please countersign one copy and return same to my attention.

Sincerely,

Sheila B. Connor

SBC/srm
Enclosure

COPYRIGHT PERMISSION FORM

On behalf of Wyeth-Ayerst Laboratories, I authorize Major Margaret Love Andrews of Fort Ord, CA, to reprint photographs from *Seasons* magazine, Vol. 2, Issue 1, concerning different types of hysterectomies, on the following conditions:

1. The Wyeth-Ayerst copyright notice will appear in the respective text as follows: "Courtesy of Wyeth-Ayerst Laboratories, Philadelphia, PA";
2. This license is royalty-free; and
3. This license is expressly limited to use in a master's degree thesis entitled "Women's Knowledge of Hysterectomy".

If the above meets with your approval, please counter-sign and return the original to us.

WYETH-AYERST LABORATORIES

MAJOR MARGARET LOVE ANDREWS

By: Charles L. RossBy: Major Margaret AndrewsDate: 3/8/94Date: 3/12/94