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Mastectomies and their effect on sexual behavior

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Sixteen women who had had hysterectomies and eighteen women who had had mastectomies were mailed the Oregon Sex Inventory to see if any significant differences in sexual behavior occurred before or after surgery.

The mastectomy group showed a greater degree of change in their sexual behavior than the hysterectomy group. The mastectomy group reported a decrease in the importance of the breast during the sexual act after surgery and a decrease in their desire for intercourse after surgery. The hysterectomy group reported lowered sexual satisfaction after surgery.

The changes reported in this study although relatively small are statistically significant. The sample, because of the high income and education level may reflect some bias. The questionnaires were randomly sent but the women in both groups who responded seem to represent a definite socio-economic class of our society.

It is of interest to note that this is the first research study done on mastectomies that used a control group.

MASTECTOMIES AND THEIR EFFECT ON SEXUAL BEHAVIOR

by

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CHAPTER I

INTRODUCTION

The relationship of breast development to the physiological maturing of women was discussed by M. Bard (1955, 656-671) who wrote that the female breast has been so idealized in the United States that it has become a major source of a woman's identity with the feminine role. In addition, the size and shape of the breasts are often related to a woman's sexual desirability. As a result, breast development plays a singularly important role in the psychology of the American woman.

Each year one out of every 19 American women is affected by breast cancer (Cancer News, 1967, No. 2, 15). What happens to a woman when she finds she must have a mastectomy and lose one or both of her breasts? In answer to this question Harrell recently wrote, "When cancer is diagnosed you have two choices, you can return to a corner and die a little each day or you can live a fuller understanding of yourself (Harrell, 1972, 676-679)." When a woman hears the final words "You have a carcinoma of the breast," the impact has far-reaching consequences with which she will have to deal. Are some women better prepared to handle a crisis, and is this crisis more deeply felt in some than others?

Statistically how much importance does a woman place on her breasts in relation to other parts of her body? Weinstein (1964, 291-295) administered a questionnaire concerning preferences for

bodily parts to 1045 men and 986 women. Mean ranks of 12 parts in the female and 13 parts in the male were analyzed as a function of socio-economic status and age. On a scale of one to 10, with one being the least important and 10 being the most important, the rankings were (1) tooth (2) hallux (3) thumb (6) breast, ear (7) foot, hand (8) arm (9) nose, leg, eye (10) tongue. Socioeconomic or sex differences had little effect on the results. The sex-specific parts tended to decline in relative preference with age, while the rankings of the majority of the other bodily parts fell into clusters whose rankings remained quite consistent.

Weinstein (1967, 458-561) compared the previous results with data on women who had had mastectomies. The Ss were 538 women with unilateral mastectomies 227 right, 265 left; mean age 54 years; (range 30-79 years) performed from two to nine years earlier, and 52 women with bilateral mastectomies mean age 55 years; (range 40-69 years). Replies were received from different areas in the United States. The study indicated that a mastectomy does little to modify the relative value of the bodily parts. Although the subjective value of the breast is slightly reduced following amputation, it continues to maintain the same relative position of importance and similar mean rank.

The loss of a breast is certainly not an easy experience for any woman, especially in our culture, which places so high a value on the breast. For some women, the loss of the breast can be devastating because of the feeling that women's position in life depends on maintaining well-formed bodies. For some women, the loss of a breast signifies a profound lowering of their value as a person and makes them

feel less acceptable to others. A basic pattern of social adaptation has been disrupted, and as a consequence profound feelings of degradation and unworthiness may develop.

Mastrovito (1974, 141-143), in discussing the psychological impact of mastectomy wrote that certain psychological factors involved in the loss of a breast have a greater effect on some women than others. Mastrovito states that a woman who defines her femininity in terms of body shape is more adversely affected than a woman who places great emphasis upon physical activities and leadership functions, and has developed an ability to withstand stress and to solve problems through active intervention.

Some researchers postulate that psychological factors play a part in the etiology of cancer. For example, Renneker (1963, 106-123) holds that the results of his studies indicate that depressive reactions have an important effect by decreasing host resistance to cancer. He suggests that carcinogenical trends can be increased and/or reflected by the particular sexual malfunctions described or by disturbances in the maternal drive. Further, the progression or regression of hormone-dependent breast cancer may reflect the balance of strength between carcinogenic factors and host resistance. Both of these factors are composed of multiple variables, both biological and psychological. The cancer process appears to be a complex multi-causal chain reaction in which emotional forces may serve either as a connecting link or as a chronic stimulus to the process.

Whatever the etiology of cancer may be, the loss of one or two breasts would be traumatic to most women and the added fear that the

cancer may return and possibly cause death, creates a double burden for the women to bear.

Several studies have been done on the anxiety and depression that may occur in the cancer patient. One such study was conducted by Craig and Abeloff (1974, 1323-1327) on 30 patients admitted consecutively to an oncology research unit in May 1972. The patients were given the S C L-90, a self-report symptom inventory that assesses the degree to which the respondent was distressed by each of 90 items during the previous week. The items are clustered into scores in nine underlying symptom dimensions; somatization, obsessive-anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The first five dimensions were integral elements in the original Hopkins Symptom Checklist, which has been in use for over a decade in studies of psychiatric patients and has been widely validated in both pathologic and normal populations.

More than half of the cancer patients showed moderate to high levels of depression, and about one-third had elevated levels of anxiety. Nearly one-fourth had overall symptom patterns virtually identical to those seen in patients admitted to an emergency psychiatric service.

Studies reported thus far show that cancer may have an impact on the emotional well being of the patient. The fear of possible death that one lives with day by day is difficult to deal with. When body disfigurement (such as one experiences with the removal of the breasts) is involved one has to contend not only with the fear of death but also with the visible insult on the body from which one cannot escape.

Asken (1975, 56-59) expressed the belief that emotional suffering outweighs physical suffering in mastectomy cases. Generally the

predominant psychological reactions to mastectomies represent a sense of mutilation and a loss of feeling of femininity.

There are many facets of emotional suffering with which a mastectomy patient must deal. Klein (1971, 1660-1664) says that the mastectomy patient, in order to return to emotional equilibrium must: (1) accept the loss of her breast by fully mourning for that loss which necessarily includes fear that she might lose a husband or even, ultimately, her life; (2) reintegrate a self-image worthy of love and the rewards of life; and (3) begin to make peace with the albatross of potential recurrence with which she will have to live for the next five to ten years.

The emotional suffering that may occur after a mastectomy may have an impact on the patient's marriage. Anderson (1974/75, Vol 28, 10-12) whose wife had a mastectomy, says that a catastrophic psychological shock occurs when a woman has a breast removed. A woman needs assurance that her husband desires her, because she tends to feel undesirable. Occasionally, the husband may feel that his sexual compatibility is contingent on a total-body image and this is basic to a successful marriage. He may regard the operation as one that destroys the relationship because it is a threat to his sexual satisfaction.

Jamison, Wellisch and Pasnau (1978, 432-436) administered a questionnaire to 41 women who had undergone a mastectomy. A control group was not used. Included in the questionnaire were items devoted to the effect of mastectomy on sexual adjustment. These women were asked pre and post-operative open-ended questions dealing with frequency of intercourse, rating of spouses' reaction, effect on coital orgasm, sexual satisfaction in relationship to rating of spouse's reaction.

In the questions using a rating of no change in sexual activities and attitudes, 74 percent of the women interviewed reported no change. The investigators attributed this high percentage to the fact that the sample was composed of older, married Jewish women from a higher social class who were better educated, more financially stable and better informed medically than the general population of women who underwent mastectomies. Thus, the results of this study may be biased.

Other questions that were included dealt with (1) general demographic characteristics of the sample (2) findings pertaining to the mastectomy procedure itself (3) general emotional and physical adjustment before and after mastectomy (4) comparison of women who reported suicidal ideation after mastectomy with those who did not and (5) comparison of women younger than 45 years with women over 45 years. It was found that women who discovered a lump waited more than three months to consult their physician. Eighty-eight percent of these women had their mastectomy immediately following the biopsy. The emotional adjustment to the surgery was described by 60 percent of the women as very good, 23 percent good, seven percent adequate and ten percent not very good.

A section of questions dealing with clinical depression was included and it was found that 24.4 percent of the women stated that they had suicidal ideation after the mastectomy; 35.9% percent reported an increase in usage of tranquilizers and 15.4 percent reported an increase in the use of alcohol.

Jamison et. al. (1978, 432-436) recommended that future studies use two control groups: a postoperative group of general surgical patients to tease out the effect of surgery, and a group of women who

have had surgery such as a hysterectomy for uterine cancer to separate out the effects of surgery for a life-threatening disease. The study did not deal with the issue of death and the possibility of metastases and/or a second mastectomy because it was felt that such questions should be dealt with using an interview format rather than through a questionnaire.

A woman has two areas that are important factors in the sexual relationship. The vagina (called the primary sexual area) and the breasts (called the secondary sexual area). The studies dealing with the effect of mastectomies on emotions and sexual attitudes have been discussed. The investigator feels it is relevant to present available studies that have been done on the possible effects that a hysterectomy (which involves the primary sexual area) may have on a woman's emotional and sexual life.

Green (1973, 442-444) states that women who have preoperative conflicts in sexual identity and those who have had a history of somatic disturbances related to the uterus are more likely to have greater problems in adjusting to a hysterectomy.

Polivy (1974, 417-426) in discussing womens' psychological reactions to hysterectomies, generally agreed with an earlier conclusion of Bard (1955, 656-671). Both authors felt that a woman's "identity" is related to her concept of personal "femininity" which is composed of many factors including physical attractiveness and ability to bear children. A woman's breasts, genitals and reproductive organs in relation to her own self-evaluation, are essential to her adaptation. Polivy concluded that loss of sexuality has no biological foundation in human

subjects, excluding procreative functions--if a decrease of sexual appetite occurs after surgery it has a psychological base rather than a physical one. To this hypothesis Polivy directs her review and quotes studies which have dealt with the woman who has undergone a hysterectomy.

Polivy regards the loss of the uterus as an assault or injury to a woman. The feeling of loss is somewhat parallel to that reported in the studies done on mastectomies in that concern is directed to a loss of sexual desire, ability to respond sexually--culminating in the loss of the husbands' interest.

Polivy quoted Menzer (1957, 379) who found that women who reacted well to hysterectomies were those who used their intellect to deal with the emotional effects of the operation. Polivy also quoted Hollender (1960, 498) who examined data obtained from females admitted to Syracuse Psychiatric Hospital. Pelvic operations seemed to be the precipitating factor in 4.5 percent of admissions at this institution as compared with a rate of 2.5 percent for other types of operations.

Since 33 percent of hysterectomies are done without pathologic findings, Barker (1968, 91-95) said a hysterectomy may be a way of dealing with the neurotic woman and possibly many women who are candidates for a hysterectomy may be emotionally disturbed before the operation.

Another study concluding that sexual dysfunction was psychologically caused by hysterectomies was done in England by Dennerstein, et. al. (1977, 92-96). Thirty three patients were interviewed and 37 percent complained of an immediate deterioration of their sexual relationships, resulting in a loss of desire for sexual intercourse.

As in the Polivy report, the investigators talked about the symbolic importance of the uterus to the feminine self-image of many women. The control group were women who had undergone oophorectomy (which leaves the uterus intact, but removes the tubes and ovaries). Dennerstein (1977, 92-96) found estrogen therapy to be of no benefit in the treatment of "the decreased or absent libido" following both hysterectomy and oophorectomy. The investigators concluded that it was not known what effect, if any, estrogens and progesterons have on human sexual behavior. The psychological expectation of what the outcome of the operation would be seemed to be the determining factor that influenced the outcome of the response to the surgery.

Conflicting results appeared in a study done by Meikle (1977, 36-41). Fifty-five hysterectomy patients were compared with 38 patients undergoing cholecystectomy and 60 having tubal ligations. The Profile of Mood States was used as the index for the study. It was found that no special psychological disturbance occurred as a result of a hysterectomy in comparison with the control group which had a cholecystectomy (excision of the gall bladder). Meikle discussed the psychological importance of childbearing and the emotional damage which may occur if this ability is removed. His findings did not support the hypothesis that a hysterectomy results in a greater degree of mood disturbance than does surgery procedures of other organ systems.

All four of the studies which involved hysterectomies discussed identity and the symbolic importance placed on the organ which is to be removed. The emotional attachment that one places on the lost organ seems to play an important part in the adjustment period following surgery.

The prevailing view seems to be that both mastectomies and hysterectomies may have a disturbing influence on sex life after surgery, which may be caused by removing organs that are physically and psychologically involved with the sexual act. A comparison of sexual behavior between two groups of women before and after surgery would be of interest because the differential effects that mastectomies and hysterectomies have on the sexual lives of women may indicate a different value placed upon the breast or uterus in relation to sexual feelings and behavior.

STATEMENT OF HYPOTHESIS

The psychiatric and psychosomatic journals have reported several studies involving psychological factors that play a part in the etiology of cancer and the emotional disruption that occurs after cancer surgery. Few studies have been done that deal directly with the effect of mastectomies on sexual behavior using a control group of women who had undergone hysterectomies.

It is hypothesized that women who have undergone mastectomies will show a greater degree of change in reported sexual behavior as a direct result of surgery than women that have undergone hysterectomies.

CHAPTER II

METHOD

Several physicians in the Oregon Metropolitan area and an organization called the Eugene Reach to Recovery Group were asked to participate in this study by providing names of patients to whom two questionnaires would be mailed. Because of confidentiality the questionnaires were mailed directly from the offices of the doctors and the Eugene Reach to Recovery Group.

A sex background questionnaire and the MMPI (Minnesota Multiphasic Personality Inventory) were used in the first mailings. A letter was enclosed which described the project and a self-addressed return envelope was included. The name of the investigator was not used. The questionnaire was returned to a box office number.

The sex background inventory consisted of 14 background information questions, and ten before and after surgery questions which included information about sexual attitudes and behavior. A rating scale was used which had a range of one to five for all variables.

It was the intention of the investigator to have a scale to measure anxiety and the MMPI was included in the first fifty mailings. After a return of five out of the first 50 mailings, the decision was made to eliminate the MMPI to encourage a higher percentage of return.

A total of one hundred questionnaires were mailed, fifty questionnaires to women who had undergone mastectomies and fifty questionnaires to women who had undergone hysterectomies. Thirty-four women responded. Women who had mastectomies made up the experimental group and (N = 18) responded. Women who had hysterectomies made up the control group and (N = 16) responded, which consisted of 15 women who had benign hysterectomies and one woman with a malignant hysterectomy.

DESCRIPTION OF SUBJECTS

The average ages of the two groups of women and their husbands was calculated and is shown in (Appendix A). The difference between the mean ages of the two groups was tested with Students' t and no significant difference was found ($t = 0.927$, $p < .05$).

Over 90 percent of the women in each group were married. The experimental group had been married an average of 23 years and the control group an average of 19.5 years. Over 90 percent of the marriages were first marriages. The experimental group had 17 first marriages, one divorced, no widowed and no singles. The control group had 14 first marriages, one divorced, no widowed and one single.

The educational backgrounds of the two groups were very similar. The control group included five high school level, 10 college level and one masters level. The experimental group included five high school level, 12 college level and one masters level.

The mean income was $27,805 for the experimental group and $33,133 for the control group. Since the distributions of incomes for both groups was quite skewed the Mann Whitney U test was done to see

if the groups differed on average income. The results indicated the groups did not differ significantly (U = 109.5).

CHAPTER III

RESULTS

The differences in the average responses for the two groups to each of the items was tested with Student's *t* (Table I). The groups differed only on question ten. The mastectomy group placed much less importance on the breast during the sexual act after surgery ($t = 2.145$; $p < .05$).

The difference between the means for each group was tested with Student's *t* for correlated groups (Table II). The mastectomy group reported a substantial decrease in their desire for intercourse following surgery ($t = 1.76$; $p < .05$) on the before and after portion of question two. The hysterectomy group showed no change.

The hysterectomy group reported a decrease in sexual satisfaction ($t = 1.77$; $p < .05$) on the before and after portion of question six. The mastectomy group showed no change.

TABLE I

PRE- AND POST-OPERATIVE MEANS, STANDARD DEVIATIONS AND t VALUES FOR HYSTERECTOMY AND MASTECTOMY GROUPS

Question	Hysterectomies group I			Mastectomies group II			
	X	S	N	X	S	N	t
1. Preop	2.69	1.03	16	2.67	.47	18	.0128
1. Postop	2.6	.97	15	2.78	.65	18	-.1011
2. Preop	2.4	.54	15	2.72	2.51	18	-1.411
2. Postop	2.53	1.12	15	3.22	.82	18	-1.374
3. Preop	3.8	1.12	15	4.22	.77	18	1.247
3. Postop	3.85	3.74	14	4.29	.72	17	-.2580
4. Preop	2.18	1.63	16	1.19	2.23	17	-.1212
4. Postop	2.29	1.76	14	2.43	1.03	16	-.3387
5. Preop	1.47	.69	15	1.63	2.06	16	.3734
5. Postop	1.4	.68	15	1.88	1.98	16	1.137
6. Preop	4.06	1.16	16	4.39	6.04	18	-.9942
6. Postop	3.67	1.67	15	4.17	1.20	18	-.1204
7. Preop	3.8	1.6	15	3.77	1.48	18	.0693
7. Postop	3.6	2.26	15	3.5	1.79	18	.2021
10. Preop	4.38	4.98	13	4.11	5.75	18	.5272
10. Postop	4.55	.27	11	3.83	.97	18	2.205*

* $p < .05$

TABLE II

SUMMARY OF THE TEST OF THE DIFFERENCE BETWEEN MEANS FOR MASTECTOMY AND HYSTERECTOMY CORRELATED GROUPS

Hysterectomy Group		Mastectomy Group	
Question	t	Question	t
1	.8888	1	1.376
2	.6193	2	-1.761*
3	1.658	3	0.0
4	0.0	4	1.0
5	1.0	5	-1.223
6	1.7752*	6	.461
7	-1.381	7	0.0
10	1.335	10	.9165

*p < .05

CHAPTER IV

DISCUSSION

The difference that occurred between the two groups on question ten, involving the importance of the breasts in the sexual act, shows that the focus of the mastectomy group had changed following surgery in that the breast was no longer considered an important part of the sexual act. It would be reasonable to consider that the surgery had played an important part in bringing about this reduced importance. The mastectomy group showed a significant difference in the *t* test of the difference between means on question two reporting a decrease in the frequency of intercourse. The hysterectomy group reported a decrease in sexual satisfaction following surgery.

There could be many contributing factors relating to the mastectomy group's change in attitude regarding the importance of the breast during the sexual act. Culturally, the breast has been associated with the sexual act and to have the breast removed and replaced by ugly scar tissue would require an emotional adjustment. It is reasonable to consider that the removal of the breast may have had some effect on one's sexual relationships, requiring a long range adjustment. For some, this adjustment may be accomplished overtly through the support and counsel of others and for others overtly as Menzer (1957,379) found by the woman using her intellect to deal with the anxiety that occurs.

The difference that occurred between the two groups on question ten involving the importance of the breasts in the sexual act differ from the Weinstein study (1969, 458-561) on the importance of bodily parts before and after a mastectomy. The Weinstein study reported the same relative importance and similar mean rank before and after surgery. However, the mean age of the women in Weinstein's group with unilateral mastectomies was 54 years (range 30-79) and bilateral mastectomies was 52 years (range 40-69). The group in this study was on the average seven and one-half years younger than those in the Weinstein study. This study may represent a more sexually active age group which could be reflected in a different attitude regarding the breast.

Mastrovito (1974, 141-143) talked about a woman's adjustment to surgery in terms of the relative importance she places on her breasts in helping her to define her femininity and suggested that a woman's coping abilities are greater if she has learned to use outside achievements to reinforce her feminine concept. This is not easily accomplished when one considers the influence that television, movies and fashion magazines play in reinforcing the correlation between sexual desirability and body image to the American woman. American women from early childhood are bombarded with this specific kind of input. Unless a woman is fortunate enough to possess an exceptional amount of inner confidence, or lives in a strong support system that enforces her self-worth and femininity on a level apart from her physical attributes, she may have an extremely difficult time adjusting to a situation which takes away a part of her body that she has previously associated with her sexuality and femininity.

The differences found in the t test of the difference between the means of the mastectomy group are interesting. In question two the mastectomy group reported a significant decrease in desire for intercourse. This difference suggests that the surgery could have been a strong variable contributing to this change. The primary sexual organ (the vagina) was not involved in the surgery but the women's attitude toward intercourse had changed. Much speculation could be done on the variables that contributed to this change. One important factor would be the loss of the breast and the feeling of inadequacy that follows. Another variable to consider would be depression which was shown in the study of Craig (1974, 1323-1327). The depression shown by these cancer patients was similar to patients admitted to an emergency psychiatric service. Such a severe degree of depression, if it does occur, could manifest itself in a decrease in sexual desire.

Jamison et al., (1978, 432-436) quoted several women's impressions of the mastectomy procedure and its effect on their sexual relationships. One remark was particularly supportive of the results of the present study. "I have always enjoyed sex with the person I love to a great extent and have been multi-orgasmic. This is over because love from a man is. I am now a freak; I couldn't inflict this upon a man." Also from the Jamison study, "My deep depression has destroyed my libido, I have no sex drive at all." Two women in the present study expressed similar feelings somewhat more succinctly. "Wish I could say to hell with it all," and, "If I could only forget my deformity."

These women are expressing a psychological change brought about by a surgical procedure. Perhaps as Menzer (1957, 379) suggests, it would be of benefit for the physician and hopefully an attending psychologist to have some index of the patient's emotional stability before and after surgery. This information could help in determining what support system would be of benefit to the patient's emotional adjustment to the surgery.

In the present study, the hysterectomy group reported a significant decrease in sexual satisfaction with their mates following surgery. Polivy (1974, 417-426) and Dennerstein (1977,92-96) both state that the loss of sexuality has no biological foundation in human subjects. However, if the desire for intercourse is present and satisfaction is decreased, variables contributing to this change should be considered. There may be an imbalance in the hormonal output after surgery resulting in the glands secreting less lubrication fluid which could result in great discomfort during intercourse. There are replacements for the lubricating fluid, however, some women may not be aware of this and be hesitant to discuss this problem with their physicians.

Another variable may be depression, which, if present, before the surgery could be increased through the trauma of the surgical procedure. Barker (1968, 91-95) has reported that 33 percent of hysterectomies are done without pathological findings. Many women seeking a hysterectomy may have psychological problems that make it difficult for them to deal with a situation that requires adjusting to the bodily change that may be brought about through surgery. This could have a direct effect on

a woman's sexual response and attitudes reflecting itself in decreased sexual satisfaction.

CHAPTER V

CONCLUSIONS

The mastectomy group showed a greater degree of change in their sexual behavior than the hysterectomy group. The mastectomy group reported a decrease in the importance of the breast during the sexual act after surgery, and a decrease in their desire for intercourse after surgery. The hysterectomy group reported lowered sexual satisfaction after surgery. The changes reported in this study although relatively small are statistically significant.

The women in this study were from a higher economic and social class and were better educated than women in general. The mean combined family income for the women in this study was $36,500 as compared to the 1976 national mean family income of $14,022 (Cleveland, 1978-9). Sixty-nine percent of the hysterectomy group and seventy-two percent of the mastectomy group had college degrees. It may be that the women in this sample were better able to afford some type of supportive therapy and had better tools to work with. The sample, because of the high income and education level, may reflect some bias. The questionnaires were randomly sent but the women in both groups who responded seem to represent a definite socio-economic class of our society.

It is of interest to note that this is the first research study done on mastectomies that used a control group.

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APPENDIX A

BACKGROUND INFORMATION

1. Age_____ 2. Mate's age_____ 3. Marital status_____

4. If married, how many years?_____ 5. Which marriage_____

6. Ages of children_____

7. Number of people living at home with you_____

8. Highest grade completed in school or college_____

9. Current family income per year_____

10. Your occupation_____

11. If you had a hysterectomy, was it malignant or benign?_____

12. When did your surgery occur?_____

13. If you had a mastectomy, did you have one or two breast removed?___

GENERAL INFORMATION

Please use a checkmark between brackets.

1. How frequently do you and your mate have sexual intercourse?

Before surgery

/	/	/	/	/
Once a day	2 to 4 times a week	once a week	once every two weeks	not at all

After surgery

/	/	/	/	/
Once a day	2 to 4 times a week	once a week	once every two weeks	not at all

2. How frequently would you like to have sexual intercourse?

Before surgery

once a day	2 to 4 times a week	once a week	once every 2 weeks	not at all

After surgery

once a day	2 to 4 times a week	once a week	once every 2 weeks	not at all

3. Who usually initiates having sexual intercourse?

Before surgery

female always	female usually	both equally	male always	male usually

After surgery

female always	female usually	both equally	male always	male usually

4. For how long do you and your mate usually engage in sexual foreplay (kissing, petting, etc.) before having intercourse?

Before surgery

1 to 6 minutes	7 to 10 minutes	11 to 15 minutes	16 to 30 minutes	30 minutes to 1 hour

After surgery

1 to 6 minutes	7 to 10 minutes	11 to 15 minutes	16 to 30 minutes	30 minutes to 1 hour

5. Does the male have any trouble in getting an erection, before intercourse begins?

Before surgery

never	less than 25%	50% of the time	75% of the time	over 90% of the time

After surgery

never	less than 25%	50% of the time	75% of the time	over 90% of the time

6. Overall, how satisfactory to you is your sexual relationship with your mate?

Before surgery

extremely unsatisfactory	moderately unsatisfactory	extremely satisfactory	moderately satisfactory

After surgery

extremely unsatisfactory	moderately unsatisfactory	extremely satisfactory	moderately satisfactory

7. If you try, is it possible for you to reach orgasm through sexual intercourse?

Before surgery

never	25% of the time	50% of the time	75% of the time	90% of the time

After surgery

never	25% of the time	50% of the time	75% of the time	90% of the time

8. List three things about your own sexual behavior that you would most like to change.

Before surgery

1.

2.

3.

After surgery

1.

2.

3.

9. List three things about your mate's sexual behavior that you would most like to change.

Before surgery

1.

2.

3.

After surgery

1.

2.

3.

10. Please list the degree of importance you feel the breasts have in the sexual act.

Before surgery

slightly unimportant	extremely unimportant	not involved	slightly important	extremely important

After surgery

slightly unimportant	extremely unimportant	not involved	slightly important	extremely important

Please list any personal feelings that you feel may be helpful to others in relation to your hysterectomy or mastectomy.

APPENDIX B

DESCRIPTION OF SUBJECTS

Hysterectomies Group I

Age Wife	Age Hus	Children	Income	
53	55	3	$------	
44	56	2	29,000	
46	48	2	15,000	
42	46	3	50,000	
39	27	3	28,000	
36	40	2	90,000	
41	41	2	15,000	
56	62	1	15,000	
49	60	2	13,000	
47	52	4	40,000	
36	48	4	25,000	
--	--	2	16,000	
35	34	4	14,000	
46	51	2	50,000	
39	40	3	50,000	
49	60	2	45,000	
41	48.6	2.5	33,133	$\bar{X}$
		Med. =	28,000	

Education	
High School	5
College	10
Masters	1

Marital Status	
Married	14
Divorced	1
Widowed	0
Single	1

Average Years Married	19.5

Marital Status	
First	12
Second	2

Mastectomies Group II

Age Wife	Age Hus	Children	Income	
50	49	6	$ 7,200	
53	62	2	5,500	
51	64	3	25,000	
52	56	3	30,000	
56	64	3	--	
54	55	2	60,000	
52	52	3	22,000	
34	38	2	40,000	
52	53	2	35,000	
42	45	3	45,000	
43	45	2	35,000	
43	48	3	40,000	
49	51	4	24,000	
46	45	0	13,000	
40	41	3	19,000	
46	50	3	10,000	
51	52	5	--	
44	46	2	60,000	
47.6	50.3	2.8	27,805	$\bar{X}$
		Med. =	27,500	

High School	5
College	10
Masters	1

Married	17
Divorced	1
Widowed	0
Single	0

Average Years Married	23

First	15
Second	3

APPENDIX C

There were some comments that appeared regularly in both the hysterectomy and mastectomy grops in questions eight and nine and also on question 11.

Question 8: List three things about your own sexual behavior that you would most like to change.

Hysterectomy Group:

Before surgery:

Be more aggressive sexually and less fatigued.

Be able to create more desire in my mate.

After surgery:

The responses were similar to the before surgery responses.

Mastectomy Group:

Before surgery:

More responsive and aggressive.

More accepting of my body.

More orgasms.

Greater sexual understanding.

Fewer inhibitions.

After surgery:

More orgasms.

Forget deformity.

Desire to have breast back.

Wish I could say to hell with it all.

Both groups expressed the desire to be more aggressive sexually in the before surgery questions. It is interesting to note that the mastectomy group placed more emphasis on orgasms before or after surgery. The responses of the mastectomy group after surgery would indicate that a new variable has been introduced in the sex act, the loss of a breast. The reference to this loss may indicate that a disruptive state has occurred.

Question 9: List three things about your mate's sexual behavior that you would most like to change.

Hysterectomy Group:

Before surgery:

That he could be as turned on by the rest of my body as he is by my breasts.

Not always wait for a "go" signal from me. He's so considerate it makes me feel guilty.

Not go through a session of fondling, groping, etc. before I get up every morning. It's like a ritual. Feel like a toy.

Lack of fore-play.

Better erections.

More affection.

After surgery:

Lack of patience or understanding of change in me because of vaginal dryness due to surgery.

I like my husband the way he is.

No change.

Just have a good erection.

Mastectomy Group:

Before surgery:

To be able to have a hard erection.

More sexual fore-play.

Try a little tenderness.

After surgery:

To be able to have a hard erection.

More sexual fore-play.

More mental sexual fore-play.

I don't want him to look at me without my clothes on.

I wish he would feel more at ease with me.

It appears that the two groups in both the before and after questions are equally interested in better erections and more sexual fore-play.

The questionnaire ended with, "Please list any personal feelings that you feel may be helpful to others in relation to your hysterectomy or mastectomy."

Hysterectomy Group:

> I do not see why a hysterectomy should make a difference except the woman can be more relaxed. I think the rest of it is mind over matter. I enjoy sexual relations even though I may not have an orgasm.

Really feel hysterectomy didn't affect our lives at all.

Accept it and make the best of it. If a hysterectomy comes in the thirties it can mean you are finished with the monthly periods and it is great.

Too many women use the excuse of "tired, my hysterectomy, bad back, etc." as an excuse for non-sexual relations. They need to be able to openly talk with their mates about unsatisfactory sexual relationships. Something needs to be done about communication between people, married or unmarried.

The surgery removed a continuing fear of cancer or unusual bleeding.

After the operation, the complete freedom from periods, bleeding and contraception worries gave me a whole new outlook.

Great, wish I had it done long before.

I was having a lot of emotional problems. The doctor prescribed Elavil. This has helped me. I am normal again.

I do not hurt like I did before. I enjoy sex more since it doesn't hurt. I never let him know that it hurt because I enjoyed it.

I wonder how many hysterectomies could have been avoided?

I feel vaginal dryness during sex is a direct result of surgery. I did not have the problems before, in fact, just the opposite was true. I am sure my sex drive has diminished since surgery...I don't know why... it is not because of any fault or change in my husband.

I am sorry I didn't have my hysterectomy twenty years ago.

He seems so preoccupied with my breasts. If I lost them, I wonder what he would do. I have discomfort because of the surgery. My vagina is shortened and there is no natural lubrication. I cannot have hormone replacement. I just do not have a desire for sex anymore.

Nothing has changed except two less worries...pregnancy, menstruation.

Mastectomy Group:

> The right mental attitude and mature outlook is very important. I've been fortunate. I do not feel any different. Contributing to my complete recovery, both physically and mentally, may be the fact that my husband is a physician.
>
> Fortunately my husband has never had "hang-ups" about his own sexuality or self-confidence. Our relationship did not change really. I am a Reach to Recovery volunteer with his blessings. I don't have a complex about it. Of course, I wish it hadn't happened and pray it will not recur. It just did not affect our sex life. This played an immense part in my spiritual and emotional recovery. I feel I would not have nor would adjust so quickly to a double mastectomy.
>
> Sometimes I feel I've cheated my husband with having only one breast. Sometimes I feel he is oversexed and I can't always meet his demands.
>
> Naturally it would be nice to have two breasts but I have never looked back with sorrow over my loss...actually I feel I gained, a whole new life. It's just part of life's checks and balances.
>
> My entire postoperative adjustment hinged on my husband's reaction. Fortunately each of us fills many needs besides sexual needs.
>
> I am not the one to ask. My husband and I have never had a good sexual relationship. The mastectomy certainly didn't help our situation. I think I'd much rather have a hysterectomy than a mastectomy...at least you can hide it.
>
> Our sexual relationship improved after my surgery because my husband began to have more concern for my sexual needs. He was extremely supportive after surgery...it, in fact, brought us closer together. The loss of a breast in itself made no difference, but the trauma of having cancer made us both appreciate each other even more.

Both groups have placed a great emphasis on the attitude of the husband and the support that he gives after his wife has undergone surgery. It appears that the mastectomy patient places a slightly greater importance on the husband's attitude, which may reflect her need for greater support than the woman who has undergone a hysterectomy.