

DEPRESSION AND ANXIETY IN MASTECTOMY CASES

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ABSTRACT

The present research evaluated depression and anxiety in patients undergoing mastectomy during their pre-surgical and post surgical phases. A Pre-Post Research Design was used. Sample consisted of 50 married mastectomy patients, selected from the Surgery Department of Mayo Hospital, Hameed Latif Hospital and Jinnah Hospital of Lahore, Pakistan. Each subject was individually administered Depression Scale and Anxiety Check-List twice; that is: 1–7 days before and 1–7 days after surgery. The mastectomy patients showed greater depression and anxiety ($t = 1.68$; $df = 48$; $*p < 0.05$) in the pre-surgical phase as compared to their post surgical phase probably due to the emphasis on body image and long-term psycho-social and sexual conflicts associated with the loss of this organ.

STATEMENT OF THE PROBLEM

The present research is an attempt to investigate depression and anxiety as experienced by patients undergoing mastectomy during their pre-surgical and post-surgical phases.

INTRODUCTION

Breast cancer is the most common form of cancer in women. It has been widely studied across the globe with respect to its psychological impact because it is a disease which threatens an organ that is intimately associated with the female self-image, self-esteem, sexuality, femininity, and reproductive and nurturing capacity (Massie & Holland, 1991). Not all breast lumps are cancerous. There are

three kinds of breast lumps: cysts (fluid filled sacs, also called fibrocystic disease or cystic mastitis), fibroadenomas, and malignant tumours. If a malignancy is confirmed the treatment is some form of mastectomy, that is, surgical removal of the breast (Hyde, 1991).

Most cancer treatments, including surgery can be extremely unpleasant. Surgery often requires a great amount of recuperation, sometimes new physical problems, and may cause substantial disfigurement (Kaplan & Kerner, 1998). Altered body image is a change in the perception of one's appearance, bodily functions or state of health with the potential for a change in self-esteem. This may be triggered by an actual physical change such as injury, surgery, illness (Adams & Bromley, 1998).

Mastectomy is a frequently performed but emotionally stressful surgical procedure performed all around the world (Euster, 1979). According to Ashurst and Hall (1989) a woman's identity, her perception of herself as a woman, her femininity, and her self-confidence are closely bound to her body-image. The effects of mutilating surgical techniques, such as mastectomy, are well known and disturbances in body-image and psychosexual functioning have been commonly reported (Dean, Hughes, Hughson et al., Maguire, Morris, as cited in Watson, 1991). Consequently physical disability or disfigurement may have profound impact on body-image (Heatherton & Hebl, 1998).

Breast cancer victims who must undergo mastectomies often feel an added loss of femininity along with their struggle with the death and dying process (Leake & Friend, 1998). The majority of women find the loss of a breast extremely distressing. Many women speak of feeling "mutilated" or "incomplete" and their self-image as a woman may be challenged (Roberts & Adam, 1987). A woman about to undergo mastectomy has to deal with the loss of a body part, which may be important among other things to her femininity and sexuality (McPherson & Anderson, 1987).

The diagnosis of breast cancer is threatening on many levels. Most obvious are the fact that the patient's life is placed in jeopardy by the disease and the fact that surgical intervention for the disease is disfiguring. The patient not only has to cope with the blow to her femininity, but also with the constant reminder of the potentially life-threatening disease (Ashurst & Hall, 1989). Woods (as cited in Joiner & Fisher, 1981) discusses the cultural emphasis on the female breast as a symbol of femininity and as a reinforcement for the desire for a whole and perfect body. Breast shape and size are presented by the media as a criterion for sexual desirability. Bard and Sutherland (as cited in Joiner & Fisher, 1981) relate a woman's reaction to her mastectomy to her individual perception of the breast and her personal psychosexual development. They suggest an interaction of cultural, physiological, and psychological factors that determine the individual meaning of the breast to each woman. In a developing country like Pakistan where media and other agencies of socialization play an important role in emphasising the importance of physical attractiveness and "sex appeal" for females acceptance of

the alteration in body image may be very difficult for such women undergoing mastectomy who seem to adhere to feminine roles assigned to them by society. Due to the patriarchal system prevalent in Pakistan, women lack access to decision-making and civic and economic resources. The social role traditionally assigned to the female is limited to its reproductive and sexual capacity. Any changes which may harm a woman's ability to fulfill this role may have serious repercussions.

Woods (as cited in Joiner & Fisher, 1981) argues that the value assigned to the lost breast will probably be influenced by the extent to which the woman attributes self-worth and acceptability to her external looks and body appearance. In such traditional societies where women relate to others (especially men) through physical attractiveness, feelings of self-rejection may develop profoundly when they perceive their bodies as having been disfigured by mastectomy. In Third World countries like Pakistan, females are the most underprivileged, poorly educated, economically deprived and the most oppressed class. The socialization process reinforces feminine role and status as "sex objects" and great importance is attached to a woman's body image. Thus, mutilation or loss of such an important organ especially related with their femininity is perceived as an assault on their womanhood and their social identity.

Peck (as cited in Joiner & Fisher, 1981) argues that anxiety is the most common patient response followed by depression characterised by appearing sad or having lost interest in usual pursuits. Furthermore, defense mechanisms such as denial and displaced anxiety are common. Bard and Sutherland (as cited in Joiner & Fisher, 1981) found expression of anxiety and tension as emotional reactions during the postoperative period.

The mastectomy patient's role in social, sexual and interpersonal situations may be altered in various ways after surgery. Harrell (as cited in Joiner & Fisher, 1981) wrote that a woman must learn how to cope not only with herself but also with the reactions of others, especially her male counterpart, to her surgery. The absence of a breast and the importance attached with body image may elicit various reactions from others, especially the spouse, which have to be dealt with. The mastectomy and its physical and psychological aftermath can profoundly affect a woman's professional outlook as well. It has been generally observed that mastectomy is a traumatic experience for professional women as well as housewives in Pakistan. The altered body image as a result of mastectomy may be very difficult for women to accept. In addition, lack of professional help and emotional support at home may be potential factors that may contribute to the development of depression and anxiety in such patients.

Depression is one of the most common adult psychological problems. Depression may occur in combination with medical illnesses for both physiological and psychological reasons. Depression is a common reaction to a serious medical event, or major surgery and can also be an early symptom of a medical disease (Miller, Norman, & Dow, 1988). Nearly all people who become physically ill

have to make some degree of social and psychological adjustment. Minor disturbances of mood may be common, however for some patients the psychological consequences are maladaptive in various ways (Lloyd, 1991) depending on the nature of their surgery.

Lipowski (as cited in Lloyd, 1991) describes threat, loss, gain or relief, challenge, and insignificance the five major categories of the meaning of illness. When an illness is perceived as a threat the patient focuses on the anticipation of physical or psychological damage. This perception is highlighted when there is considerable doubt concerning the nature of the illness and its outcome. Thus, one's perception of a loss or threatening illness is greatest during the period immediately following the onset of acute illness or when an established illness takes an unusual course with the development of new and unexpected symptoms. Anxiety is then the commonest emotional accompaniment.

According to Lipowski (as cited in Lloyd, 1991) loss refers to either an anatomical or symbolic loss associated with illness. Anatomical loss of body parts, for example, amputation, mastectomy or colectomy requires major psychological adjustment but a symbolic loss is no less important if illness involves irreparable damage to self-esteem, status or pursuit of cherished goals. Lipowski (as cited in Lloyd, 1991) states that the subjective significance of the part of the body affected is a crucial factor in determining the emotional response and coping behavior. The more highly valued the body part or function the more intense the psychological reaction. Thus, it has been argued that loss of symbolically significant organs like the uterus or breast will carry major emotional repercussions.

The reactions experienced by women undergoing mastectomy are similar to those of bereavement, i.e., an initial phase of disbelief that it has been removed, followed by sadness and depression (McPherson & Anderson, 1987). Freud (1950/1909) in his major work on depression, "Mourning and Melancholia" described both normal mourning and melancholia (depression) as responses to the loss of someone or something that was loved. Psychodynamic theories emphasise the concept of loss as a precipitant of depression, with particular emphasis on the experience of a lost love object.

Beck, Rush, Shaw, and Emery (as cited in Miller, Norman, & Dow, 1988) have also argued that the experience of significant loss can predispose someone to depression by activating depressogenic cognitive schema. Thus, it may be argued that when the loss of a breast is perceived a catastrophic by the patient, the greater the debilitating impact it would have on her form of depression and anxiety.

Depression has long been associated with the concept of loss (Freud & Bowlby as cited in Barker, 1992) and a relationship between certain losses and the onset of depression has been observed by a number of researchers (Barker, 1992). Changes in health status are often referred to in the context of the experience of "loss." People experience loss when there has been the loss of a relationship through death or separation, failure, removal or alteration of body parts, whether external or internal; or an alteration in physical, psychological or social

functioning. Such experiences may be acute or gradual, temporary or permanent, obvious to others or possible to conceal (Adams & Bromley, 1998).

Freud (as cited in Ahmad & Munaf, 1991) states that the fundamental determinant of automatic anxiety is the occurrence of a traumatic situation; and the essence of this is an experience of helplessness on the part of the ego in the face of an accumulation of excitation, whether of external or of internal origin, which cannot be dealt with. Anxiety is the response of the ego to the threat of the occurrence of a traumatic situation. Such a threat constitutes a situation of danger. Internal dangers involve separation from, or loss of a loved object, or a loss of its love—a loss or separation which might in various ways lead to an accumulation of unsatisfied desires and so to a situation of helplessness.

Baum (1995) suggests that surgical procedures like mastectomy are emotionally stressful and may lead to depression and anxiety in females undergoing these procedures. The removal or alteration of body parts, which are symbolically significant, may cause major emotional repercussions to the females whose femininity and role-identity seems to be threatened by such procedures. Traditionally, the breast contributes to a woman's sexual identity and physical appearance. They are related to the concepts of femininity, sexuality, procreation, and motherhood and are necessary parts of a woman's body-image across cultures (Ashurst & Hall, 1989). The main purpose underlying the current research project is to investigate the emotional repercussions this surgical procedure might cause. The present research is an attempt to investigate depression and anxiety as experienced by patients undergoing mastectomy during their pre-surgical and post surgical phases.

Thus, it may be argued that there is sufficient clinical data that suggest that mastectomy is emotionally stressful and may lead to depression and anxiety in females undergoing this procedure. The removal or alteration of a body part, which is symbolically significant to one's identity may cause major emotional repercussions to the females whose femininity and role-identity seems to be threatened by such a procedure. In the context of the Pakistani society it can be argued that emphasis on females' body-image by media and all the agents of socialization, are such circumstances in which mutilation or removal of such a vital organ may cause serious threat to their womanhood. Removal of this organs and lack of emotional support at home may result in emotional problems and women may manifest anxiety and various depressive symptoms. The objective of the current research project is to investigate the emotional repercussions mastectomy might cause. Thus, it focuses on evaluating differences in depression and anxiety as manifested by patients undergoing mastectomy before and after surgery.

METHODOLOGY

The sample consisted of 50 mastectomy cases. The mastectomy cases ($N = 50$) were selected from the Surgery Departments of Mayo Hospital (82%), Hameed

Latif Hospital (8%), and Jinnah Hospital (10%) of Lahore, Pakistan. The researcher selected only those patients whose age was between 30–60 years and were married. It may be argued that there is sufficient clinical data that suggest that incidence of this type of surgery (mastectomy) is highest in this age range across the globe (Baum, 1995). Moreover, the researcher selected only those patients who had been married for 10 or more years, with at least one child to control the confounding effect of not having any child.

The mean age of the sample (mastectomy patients) was 44.7 years. The level of education ranged from 1–16 grades; 48% of the sample was uneducated, 38% were between grade 1 to 10, 12% between grade 11 to 14, and 2% were between grade 15–16. Five percent of the sample were working and 95% were non-working women (see Table 1). It is observed that in Pakistani society woman's role as a home-maker and mother is emphasized and she is usually dependent on her male counterpart as her protector and provider, such as, the father, husband, brother, or son. In addition, their level of education is low and economical autonomy is unstable; thus, women in general attach great importance to their body image and personal and social attributes. It may be argued that the lack of confidence in oneself, poor social support system, non-availability of professional help such as counseling or therapy, and absence of independent economic means may be factors which contribute to a female patient's psychological adjustment problems pertaining to mastectomy.

INSTRUMENTS

Depression Scale, Anxiety Check-List, and Personal History Questionnaire were constructed. The rationale for the Depression Scale was derived from DSM IV (1994) and Beck Depression Inventory (1993). It measured the severity of depression in each patient during their pre and post-surgical phases and consisted of 19 items. The rationale for the Anxiety Check-List was derived from DSM IV (1994) and Taylor Manifest Anxiety Scale (1951) and consisted of 55 items. Items pertaining to physical, psychological, and social symptoms experienced during this stressful period were included in the Scale and Check-List. Each item was scored on a 3-point scale ranging from 0–2. A score of 0 indicated absence of the symptom. A score of 1 indicated occurrence of the symptom with mild severity. A score of 2 indicated occurrence of the symptom with greatest severity.

PROCEDURE

Official permission was sought to draw sample from the Surgery Departments of Mayo Hospital, Hameed Latif Hospital, and Jinnah Hospital of Lahore, Pakistan. Only those patients were selected who voluntarily participated in this research. After obtaining informed consent from the patients and assuring them of confidentiality, the researcher first administered the Personal History

Table 1. Descriptive Characteristics of the Sample ($n = 50$)

Variables	Mastectomy Cases	
	Frequency	Percentage
Subject age		
30-39 (years)	15	30
40-49	14	28
50-59	16	32
60-	5	10
Level of education	24	48
Illiterate	19	38
Grade 1-10	6	12
Grade 11-14	1	2
Grade 15-16		
Occupation	5	5
Working	45	95
Non-working		
Marital status	50	100
Married		
Duration of marriage	12	24
10-15 (years)	8	16
16-20	4	8
21-25	9	18
26-30	11	22
31-35	3	6
36-40	3	6
41-45		
Total monthly income	1	2
1,000-1,499	36	72
1,500-6,499	5	10
6,500-11,499	2	4
11,500-16,499	4	8
21,500-26,499	1	2
26,500-31,499	1	2
Number of children		
1-2	10	20
3-4	15	30
5-6	18	36
7-8	6	12
9-10	1	2

Note: Percentage of each sub-classification is based upon the total number of subjects in the group: mastectomy cases ($n = 50$).

Questionnaire to collect demographic information from the patients. The researcher administered the Anxiety Check-List and Depression Scale (twice) to the mastectomy cases individually: during the pre-surgical phase (1–7 days prior to surgery) and post surgical phase (1–7 days after surgery).

RESULTS AND DISCUSSION

Research findings suggest significant difference in pre-surgical and post-surgical anxiety in mastectomy patients ($t = 1.68$; $df = 48$; $p < 0.05$) (see Table 2). Decrease in post surgical anxiety ($M = 26.80$) is consistent with Lipowski's (as cited in Lloyd, 1991) view that when an illness is perceived as a threat the patient focuses on the anticipation of physical or psychological damage. It may be argued that decrease in post surgical anxiety may suggest decrease in anticipation and lessening of doubts and fear of the unknown. It may be stated that surgery is often perceived as a major, emotionally stressful experience and relief at having passed through the ordeal successfully might result in decrease in anxiety post-operatively.

The diagnosis of breast cancer causes severe psychological repercussions. This is because of the sudden need for a mutilating breast operation and because of the threatening confrontation with a potentially lethal disease. Fear of recurrence of cancer and doubts about the success of the surgery may cause high anxiety in patients undergoing mastectomy. In Pakistan great importance is attached to body-image and a woman is recognized for her physical attributes. Lack of education and awareness may cause increased anxiety in the patients at the loss of a vital feminine organ.

Analysis of the current research findings suggest no significant difference in pre- and post-surgical depression ($t = 0.96$; $d = 48$; $p > 0.05$) in mastectomy patients (see Table 3). Greater depression ($M = 14.56$) is manifested in the pre-surgical phase by patients undergoing mastectomy. Research conducted

Table 2. Pre- and Post-Anxiety Scores of Mastectomy Patients on Anxiety Check List^a

Anxiety scores	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i>
Pre-surgical scores	50	31.56	14.43	2.83	1.68*
Post-surgical scores	50	26.8	13.90		

$t = 1.68$; $df = 48$; $*p < 0.05$.

^a*M* = Arithmetic mean, *SD* = standard deviation, *SE* = standard error; Pre-surgical scores refer to subjects' scores on Depression Scale or Anxiety Check-List 1–7 days prior to surgery; Post-surgical scores refer to subjects' scores on Depression Scale or Anxiety Check-List 1–7 days after surgery.

Table 3. Pre- and Post-Depression Scores of Mastectomy Patients on Depression Scale

Depression scores	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i>
Pre-surgical scores	50	14.56	7.25	1.395	0.96
Post-surgical scores	50	13.22	6.68		

$t = 0.96$; $df = 48$; $p > 0.05$.

by Umegaki, Minami, Katou, Kawasaki, Fukunaga, and Shimizu (1993) also suggests that depression levels in patients undergoing mastectomy are high pre-operatively. According to Baum (1995) the diagnosis of breast cancer is threatening on many levels, the most obvious of which is the fact that the patient's life is placed in jeopardy by the disease and that surgical intervention of the disease is disfiguring. The impending threat of loss of a major organ inherently essential to womanhood may lead to helplessness on the part of the patient which may lead to manifestation of depression. It can be argued that as individuals are victims of a serious disease it may promote feelings of helplessness and hopelessness. After surgery patients may feel that some measures have been taken to combat the debilitating disease due to which they may feel a certain degree of control. The belief that the surgeon or physician has now controlled the cancer may result in temporary alleviation of depression. Depression may decrease initially but as awareness of alteration in body image is realised and adverse psychosocial and sexual consequences are encountered depression may increase. It has been observed that in Pakistan the woman's role as a sexual partner and "breeding machine" is emphasized. Doubts about one's appearance and desirability as a sexual partner are factors that may play an important role in development of depression. Furthermore, physical disfigurement may have a profound impact on body-image, which can threaten self-esteem (Heatheron & Hebl, 1998).

The physical effects of mastectomy are clearly visible. The removal of the breast not only alters physical appearances but also deprives a woman of a basic way of relating to others as a wife and a mother. She must also learn how to cope with not only herself but with reactions of others like her spouse and children to her surgery (Harrell as cited in Joiner & Fisher, 1981). Women suffering from breast cancer need strong emotional support, acceptance and understanding for they are dependent on others to boost their self-worth (Kapoor, Ahmad, & Ahmad, 1987).

The period before surgery appears to be of maximum stress for most women and counseling particularly before surgery may help to lessen apprehensions (Jamison, Wellisch, & Pasnau, 1978). It may be argued that due to

lack of emphasis on psychotherapeutic interventions and rehabilitation programs many patients may overlook the psychological aspect associated with their surgery. In a conservative society like Pakistan, intolerance for psychological diseases may also inhibit females from expressing their true feelings. Counseling, rehabilitation, psychotherapy and family therapy may help in relieving psychological stress felt by the family and depression and anxiety in the patient.

According to Jamison, Wellisch, and Pasnau (1978), the effect of surgery on the female's self-concept and role of social support system in recovery are related. Low levels of support from family and spouse indicate poorer outcome. Counseling of family members may help in effective coping with stress they may be undergoing due to the illness of the patient. Attention must be paid to the needs of the patients in terms of psychological and emotional support after surgery, which may result in decrease in depression and anxiety. Support by the family and social network and sharing of apprehensions by the patient with her social support network will ensure a speedier recovery. Adequate post-operative healthcare guidelines must be provided by the professionals to the family members to ensure effective coping of the patient as well as the family.

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