MANIFESTATION OF DEPRESSION AND ANXIETY IN HYSTERECTOMY CASES

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Abstract

The present research evaluated depression and anxiety in patients undergoing hysterectomy during their pre-surgical and post-surgical phases. A pre-post research design was used. Sample considered of 50 hysterectomy patients, selected from the Gynaecology Department of Lady Willingdon Hospital of Lahore, Pakistan. Each subject was individually administered Depression Scale and Anxiety Check-List twice; i.e. 1-7 days before and 1-7 days after surgery. All the hysterectomy patients seemed to experience more depression (t=-2.55; df=48;*p,0.05) and anxiety (t=-5.74;df=48;*,0.05) during their post surgical phase as compared to their pre-surgical phase probably due to the psychosocial and cultural misconceptions and biased attitudes attached to "loss of uterus" in Pakistani society where a woman's status and role primarily revolves around her reproductive capacity. Research findings also indicate significant negative relationship between manifestation of depression and anxiety and emotional support provided by the spouse and family.

Statement of the Problem

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

Introduction

Hysterectomy is the surgical removal of the uterus. The uterus is a muscular, hollow pear shaped organ and is firmly anchored in the body by a number of ligaments. The organ itself consists of a thick muscular wall inside which is a thin lining, the endometrium (Atlas of the Body, 1980).

A total hysterectomy is the removal of the uterus and the cervix. A total hysterectomy may be abdominal or vaginal depending upon the route of removal of the uterus. Because vaginal hysterectomy has a lower morbidity and a more comfortable post-operative phase than the abdominal hysterectomy, there is a trend towards the former where it is suitable (Lewis & Chamberlain, 1991). A subtotal hysterectomy means that the cervix is not removed. This is an old fashioned procedure and is rarely practiced nowadays. According to Tindall (1973) the sub-total operation does not disturb the anatomy and length of the vagina and coitus is therefore not effected.

A total abdominal hysterectomy with bilateral salpingo-oophorectomy involves removal of the uterus, both tubes and ovaries. A radical hysterectomy (Wertheim's hysterectomy) includes removal of the uterus, both tubes and ovaries and lymph nodes of the pelvis. This procedure

is performed when there is gynaecological cancer (Lewis & Chamberlain, 1991).

A total abdominal hysterectomy with bilateral salpingo-oophorectomy and a radical hysterectomy effect estrogen levels as both procedures involves removal of the ovaries. Surgical menopause occurs due to these procedures and female sexuality may be effected due to decrease in the production of estrogens.

Most gynaecologists find that total hysterectomy is followed by less postoperative disturbance than is subtotal hysterectomy. The procedure is indicated when rapid enlargement of the uterus signals possible malignancy. In addition, hysterectomy may be done to resolve any of the following: abnormal uterine bleeding that may lead to anaemia, pelvic pain and secondary dysmenorrhea, urinary symptoms or uterine growth after menopause (Forrest, 1994). Removal of the uterus only does not physically interfere with sexual activity, but since it eliminates the possibility of childbearing, it is avoided in younger women if more conservative treatment is feasible (The Columbia Encyclopedia, 1993).

Traditionally, a woman's capacity to create, bear, and nurture a child is the very essence of her womanhood (Ashurst & Hall, 1989). Thus, the loss of the uterus via hysterectomy carries significant negative repercussions especially in the case of women from developing countries such as India, Bangladesh, Sri Lanka and Pakistan. As this surgical procedure results in the loss of reproductive capacity it is avoided in younger women even at the cost of their lives. The psychosocial and cultural importance of the uterus and the consequences of its removal have meaning

because the uterus is central to a woman's sense of wholeness and well being (Ashurst & Hall, 1989). Even for women who do not wish to have more children the uterus is not an organ to be discarded lightly. The very knowledge that she is 'normal' and the recurrent evidence of this by way of menstruation, are psychologically if not physically important (Tindall, 1993).

The psychological importance of the uterus and the results of its malfunctions are significant because the uterus is an organ associated with fundamental aspects of 'being well' as a woman (Ashurst & Hall, 1989). The side effects of this surgical treatment invariably cause some loss of function such as cessation of menstruation, infertility and hormonal imbalance. These changes may in turn influence sexual functioning. Patients may also experience general feelings of malaise which are threatening to females especially, in a traditional society where females are supposed to live within the four walls of their houses and bear children. Jochimsen (as cited in Branolte-Bos, 1991) found that 82% of hysterectomy patients reported a poor body-image which may be attributed to the importance attached to this organ. The socialization process instills the value of the uterus and its functions and of the body as a whole which may lead to perceptions of poor body image and inadequacy.

Gynaecological cancer like breast and uterine cancer may be experienced as a serious assault on female identity. It may also have a connotation leading to feelings of shame, embarrassment or ignorance (Branolte-Bos, 1984). At a socio-cultural level, gynaecological cancers may threaten the female image. Negative feelings about body-image and self-esteem may also effect a woman's sexual identity.

Studies (Ohkawa, Tanaka, Morikawa, Takeda & Katoh, 1992; Lalinec-Michaud & Engelsmann, 1985) suggest that a high proportion of women experience depression after hysterectomy. Wren (1978) suggests that the possible cause for regret in women for the loss of their uterus is related to the concept that the uterus is the source of a woman's femininity and the loss of this organ makes her less of a woman.

Many women are surprised to find that after they have undergone hysterectomy they feel 'spoiled' and less valuable (Lewis & Chamberlain, 1991). Hysterectomy has traditionally been regarded as having an adverse effect on women's sexuality because it is thought to reduce their sense of femininity (Gath et al as cited in Lloyd, 1991). Women are referred to psychiatrists much more commonly after hysterectomy than after any other operation (Tindall, 1993). According to Roeske (1978) the most frequent psychopathological reaction is depression because a mourning process occurs as a woman reintegrates her gender identity after the operation. Nonetheless, it requires a strong social support system and inner strength.

A woman's capacity to create, bear, and nurture a child is the very essence of her womanhood (Ashurst & Hall, 1989). Pakistan is a country with a birth rate of 3.1%, the highest in the world. Mainly parents, especially the father, desire a large family and, in particular a large number of sons in Pakistan (Mubasher & Sathar, 1997). As hysterectomy results in the loss of reproductive capacity it is avoided in younger women mainly because great importance is attached to having sons in Pakistan. Hysterectomy if performed in younger women is like a death-knell as it

signals an end to their capacity to produce children particularly sons.

A woman who is unable to produce children is viewed as being incomplete and is assigned a low status within the family as well as society. Her inability to produce children isolates her and raises doubt about her self-worth. This may cause the woman to reassess the meaning and purpose of her marriage (Khalid, 1996). Loss of the ability to bear children may also result in increasing family pressures and at times divorce or re-marriage of the husband.

Depression is one of the most common adult psychological problems. Depression may occur in combination with medical illness for both physiological and psychological reasons. Depression is a common reaction to a serious medical event, such as major surgery and can 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 psychological adjustment. Minor disturbances of mood may be common, however for some patients the psychological consequences are maladaptive in various ways (Lloyd, 1991).

Lipowski (as cited in Lloyd, 1991) describes threat and loss as two of 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, the perception 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 behaviour. 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 for women across the globe.

The reactions experienced by women undergoing hysterectomy are similar to those of bereavement; that is: an initial phase of disbelief that it has been removed, followed by sadness and depression (McPherson & Anderson, 1987). Freud (1909/1950) 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 emphasize 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.

The effect of other "loss states" such as child birth where the foetus breaks its special link with the mother, and hysterectomy where the capacity to bear children is lost have also been studied (Barker, 1992). 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 and Munaf, 1991) states that the fundamental determinant of automatic anxiety is the occurance 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 occurance 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 hysterectomy are emotionally stressful and may lead to depression and anxiety in females undergoing this procedure. The removal or alteration of body parts, which are symbolically significant for traditional femininity, may cause major emotional repercussions to the females whose femininity and role-identity seems to be threatened by such procedures. The uterus contributes to a woman's sexual, reproductive and social identity. They are related to the concepts of femininity, sexuality, procreation and motherhood and are necessary parts of a woman's body-image (Ashurst & Hall, 1989). The present research is an attempt to investigate depression and anxiety as experienced by patients undergoing hysterectomy during their pre-surgical and post surgical phases.

Umegaki, Minami, Katou, Kawasaki, Fukunaga and Shimizu (1992) studied the changes in the psychological status of 63 patients who had undergone a simple hysterectomy procedure in Japan. They administered the Spielberger's rating scale "The State - Trait Anxiety Inventory" (STAI), Self-Rating Depression Scale (SDS), Maudsley Personality Inventory (MPI) and the Baum Test. Ratings obtained show a significant decrease in anxiety post operatively but no significant change in depressive mood during the pre-operative period. 75% of the patients manifested psychological fragility or lability in the Baum test. Research findings suggest that depressive mood affected strictly the psychological status in post-operative period more than anxiety. It is also suggested that depressive mood during the pre-operative period is responsible for the post-operative psychological disturbance.

Ohkawa, Tanaka, Morikawa, Takeda and Katoh (1992) studied psychosomatic reaction to hysterectomy in Japan. Subjects (N=120) who had undergone simple hysterectomy were examined before and as long as one year after the operation. Anxiety scores of the subjects were high before surgery and rapidly declined postoperatively. High scores on depression were observed before and two weeks after the operation. A close correlation was observed between the results of psychological tests and the number of psychological symptoms. Psychosomatic disorders associated with hysterectomy are characterized by various symptoms but mainly by a depressive state. Less psychological and physiological symptoms were observed 6 months after the hysterectomy.

Thornton, McQueen, Rosser, Kneale and Dixon (1997) conducted a research in the U.K. which investigated changes in negative mood states of women undergoing hysterectomy. A sample of 89 women responded to a questionnaire 3 weeks before surgery. 54% of the sample reported anxiety and 26% reported depression at clinical levels during the preoperative period, with an additional number (n=16 anxiety; n=19 depression) at borderline status. Clinical levels of anxiety significantly decreased postoperatively when measured 2 and 6 months after surgery. Levels of depression at these times were respectively 13% and 11% of the sample that provided postoperative information. These data confirm previous reports of high levels of negative mood states in patients referred for surgical hysterectomy. Analysis of individual profiles indicated that 83% of those with clinical levels of anxiety showed improved status after surgery.

Methodology

The present research followed a Pre-Post Testing design. A true experimental design could not be used because the variables of interest: depression and anxiety in patients undergoing hysterectomy were pre-existing in the population and thus could not be randomly assigned nor manipulated by the researcher. The current research made use of the non-probability purposive sampling technique because the sample was purposively selected on the basis of certain characteristics i.e.: type of surgery (hysterectomy). Probability sampling could not be used because the probability of occurance of each element could not be specified as the sample (patients undergoing hysterectomy) was not normally distributed in the population and willingness and availability of the sample could not be specified.

The sample consisted of 50 hysterectomy cases. All the hysterectomy cases (N=50) were selected from the Gynaecology Department of Lady Wellingdon Hospital of Lahore, Pakistan. The researcher selected only those patients who voluntarily participated in this research project and whose age was between 30 to 60 years. It may be argued that there is sufficient clinical data that suggest that incidence of this type of surgery 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. 84% of the cases underwent a total hysterectomy and 16% a total abdominal hysterectomy with bilateral salpingo-oopherectomy.

The mean age of the sample (hysterectomy patients) was 42.4 years. The level of Education ranged from 1-16 grades. 64% of the sample was uneducated, 16% were between grade 1 to 10, and 20% between grade 11 to 14. 36% of the sample were working and 64% were non-working women. 8% of the sample had 1-2 number of children; 45% had 3-4; 27% had 5-6 and 8% had 7-10 (See Table 1). It may be argued that in Pakistan a woman's role as a home-maker and mother is emphasised and she is usually economically and emotionally dependant on her male counterpart as her protector and provider, such as, the father, husband, brother or son. Level of education is low and women attach great importance to their role of child-bearing. Social support networks are important in recovery and adjustment to the fact that she has lost the ability to bear children which was previously her focal role and has become "barren". Lack of confidence in oneself and poor social and economic skills may also be factors that often contribute to a patient's lack of psychological and psychosocial adjustment to hysterectomy.

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

Variables	Hysterectomy Cases N=50	
	Frequency	Percentage
Subject's Age :		
30-39 (years)	14	28
40-49	30	60
50-59	5	10
60-	1	2
Level of Education :		
Illiterate	32	64
Grade 1-10	8	16
Grade 11-14	10	20
Grade 15-16	0	-
Occupation :		
Working	18	36
Non-working	32	64
Marital Status :		
Married	50	100
Duration of marriage :		
10-15 (years)	7	14
16-20	12	24
21-25	14	28
26-30	15	30
31-35	1	2
36-40	1	2
Total Monthly Income :		
1500-6499	10	20
6500-11499	22	44
11500-16499	5	10
16500-21499	13	26
21500 – 26499	-	-
26500-31499	-	-
No. of Children :		
1-2	4	8
3-4	23	45
5-6	19	27
7-8	1	2
9-10	3	6

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

Instruments:

Depression Scale, Anxiety Check-List and Personal History Questionnaire were constructed. The rationale for the Depression Sclae 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 three 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 Gynaecology Department of Lady Wellington Hospital of Lahore, Pakistan.

After obtaining informed consent from the patients and assuring them of confidentiality, the researcher first administered the Personal History Questionnaire to collect demographic information from the patients. The Anxiety Check-List and Depression Scale were individually administered by the researcher to the hysterectomy patients. Each patient was evaluated on the Depression Scale and Anxiety Check-List twice: 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 (Table 2) suggest significant difference in depression ($t=-2.55; df=48; *p<0.05$) of hysterectomy patients during the pre-surgical and post surgical. It can be observed that greater depression is manifested in the post surgical phase by patients undergoing hysterectomy ($M=12.48$) as compared to their pre-surgical phase ($M=10.44$) (See Table 2). According to Lipowski (as cited in Lloyd, 1991) anatomical loss of body parts which have a symbolic significance are a crucial factor in determining emotional response. As the uterus is a highly valued body part, its loss carries physical and emotional repercussions and may result in intense psychological reactions across the globe. It can be argued that in Third World countries like Pakistan, great importance is attached to the females' capacity to bear children because in such traditional societies females are "perceived" as "reproduction machines." Patients who have undergone hysterectomy have to come to terms with their incapacity to bear children, which can threaten their self-worth. Researches conducted by Ohkawa, Tanaka, Morikawa, Takeda, and Katoh (1992) and Roeske (1978) suggest that high levels of depression are observed before and after surgery.

Table 2

***Pre and post scores of hysterectomy patients on the Depression Scale.**

Depression Scores	N	M	SD	SE	t
Pre-Surgical Scores	50	10.44	4.31	0.80	-2.55*
Post-Surgical Scores	50	12.48	3.71		

t=-2.55; df=48;*p,0.05

Current research findings (t=-.5.74;df=48;*p<0.05) also indicate significant difference in anxiety in hysterectomy patients during the pre surgical and postsurgical phases. The current results indicate that pre-surgical anxiety (M=13.38) is low as compared to post-surgical anxiety (M=27.10) (See Table 3). Easterday, Grimes and Riggs (1983) state that nearly one-fourth of all women develop some psychological morbidity after undergoing hystrerectomy and women are much more commonly referred to psychiatrists after hysterectomy than any other operation. According to Wilson-Barnett (1992) medical procedures evoke anxiety and discomfort and many patients remain inadequately prepared to face this experience. This significant difference indicates that anxiety does not decrease post operatively and is a common reaction to the fear of the unknown. It may be argued that in a society like Pakistan women are viewed as "breeding machines" due to which loss of an organ vital to femininity, inability to fulfill the "role identity" demanded by the prevailing culture, incapacity to bear children and physiological changes accompanying the surgery might cause post-operative anxiety to increase. Moreover, there is

no concept of couple therapy or sex-education in Pakistani society which could help the patient grapple with her fears and misconceptions about her sexual role and function after hysterectomy.

Table 3

Pre and Post Scores of hysterectomy patients on Anxiety Check-List.

Anxiety Scores	N	M	SD	SE	t
Pre-Surgical Scores	50	11.38	10.86	2.39	-5.74*
Post-Surgical Scores	50	27.10	13.00		

t=-5.74; df=48;*p<0.05

Research findings indicate that both pre and post depression and anxiety is highest for patients in the lowest income brackets (earning Rs.1000-6499 per month). It may be argued that unavailability of financial support and concern about the expense of the surgery is an important factor which may play a part in increased symptomology. Lower socio economic status is usually accompanied by minimal or absence of education and awareness which may increase level of depression and anxiety.

Table 4

Pre and Post Depression Scores of Hysterectomy Cases according to Total Monthly Income.

Total Monthly Income	Means of Pre-Surgical Depression Scores	Means of Post-Surgical Depression Scores
1000-6499	9.27	13.36
6500-11499	11.17	12.91
11500-16499	7.00	10.80
16500 & above	11.07	12.30

N = 50

Table 5

Pre and Post Anxiety Scores of Hysterectomy Cases according to Total Monthly Income.

Total Monthly Income	Means of Pre-Surgical Anxiety	Means of Post-Surgical Anxiety Scores
1000-6499	16.95	32.45
6500-11499	13.56	29.91
11500-16499	11.00	23.20
16500 & above	9.92	22.00

N = 50

The period before surgery appears to be of maximum stress for most women and counselling particularly before and after surgery may help to lessen apprehensions (Jamison, Wellisch & Pasnau, 1978). Table 6 and 7 indicate the presence of a significant negative relationship between pre surgical depression and anxiety and emotional support given by the family. Further analysis also reveals a significant negative relationship between depression (pre

and post surgical) and anxiety (post surgical) and emotional support given by the husband.

Table 6

Correlation between pre and post depression scores of hysterectomy cases and emotional support (husband and family).

	Husband's Emotional Support	Family's Emotional Support
Pre-Surgical Depression	-.072	-.071
Post-Surgical Depression	-.012	-.103

Table 7

Correlation between pre and post anxiety scores of hysterectomy cases and emotional support (husband and family).

	Husband's Emotional Support	Family's Emotional Support
Pre-Surgical Anxiety	-.093	-.139
Post-Surgical Anxiety	-.088	-.143

According to Jamison, Wellisch and Pasnau (1978) the effect of surgery on the female self-concept and role of social support in recovery are related. Low levels of support from family and spouse indicate poorer outcome. Counselling 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.

Due to lack of emphasis on psychotherapeutic interventions and rehabilitation programs many patients may overlook the psychological aspect associated with their surgery. The professionals too are too busy and even tight-lipped about these crucially important areas pertaining to the rehabilitation of hysterectomy patients. Intolerance for psychological diseases may also inhibit females from expressing their true feelings. Counseling, rehabilitation and psychotherapy may help in relieving psychological stress felt by the patient. This is all the more important in the cultural context of Pakistani society, where lack of education or awareness and social concern for the welfare of the 'oppressed' female is not given due attention. In Pakistani society, females are occupied with fulfilling the multifarious roles assigned to them by society. Due to this their health suffers which is compounded by a blatant disregard for their welfare, even in their hour of need such as recovering/recuperation from major surgery. It is suggested that sharing of apprehensions by the patient with their families may serve to reduce the patient's anxiety and depression and assist her recovery.

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