A comparative study of Body Image Perception and Depression among normal women and women who have undergone mastectomy

Omar Habib, Urfain Habib, Nazima Mehraj

Abstract
Women are the most important part of our society. As woman makes a family, family makes a home and homes make a society. We can never think of a society that would come into existence without the contribution of women. The modern society has started recognizing the individual identity of women. She is believed to have her aspiration, abilities and qualities. Now, women are becoming not only a significant unit of the society but also influencing the course of social change in society. So, their well-being (psychological or physical) is of utmost importance to us. As breast cancer treatment improves and genetic screening brings 'compelling' insight into cancer risk, women face agonizing choices about how far to go in the name of prevention. It’s a familiar paradox: When we screen more people more often for cancer, we don’t just help by finding life-threatening cancers sooner; we also hurt by giving some people with pre-cancers or low-risk cancers overly aggressive treatments. This adversely affects their physical and psychological well-being. In this study we will compare the two psychological variables (Body Image Perception and Depression) among normal women and women who have undergone mastectomy. Participants consisted of purposely selected 40 mastectomy patients and 40 normal females (control group). Age of the mastectomy patients ranged between 25 to 40 years and so does the age of control group. Body image scale developed by Secord and Jourard (1953) and Depression scale (1961) developed by Aaron Beck was used. Results showed significant difference in both depression and body image perception among the two groups.

Keywords: Women, Breast Cancer, Mastectomy, Body Image Perception, Depression.

Introduction
Women's health in India can be examined in terms of multiple Indicators, which vary by geography, socioeconomic standing and Culture (Chatterjee, A, and VP Paily, 2011) [7]. To adequately improve the health of women in India, Multiple dimensions of wellbeing must be analyzed in relation to Global health averages and also in comparison to men in India. Health is an important factor that contributes to human wellbeing and economic growth (Ariana, Proochista and Arif Naveed, 2009) [3]. Currently, women in India face a multitude of health problems which ultimately affect the aggregate economy’s output. Addressing the gender, class or ethnic disparities that exist in healthcare and improving the health outcomes can contribute to economic gain through the creation of Quality human capital and increased levels of savings and Investment (Ariana, Proochista and Arif Naveed, 2009) [3].

Breast Cancer
Cancer starts when cells begin to grow out of control. Cells in nearly any part of the body can become cancer, and can spread to other areas of the body. Breast cancer is a malignant tumor that starts in the cells of the breast. A malignant tumor is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too (American Cancer Society, 2016) [1].

Mastectomy
Mastectomy is the removal of the whole breast. There are five different types of mastectomy: "simple" or "total" mastectomy, modified radical mastectomy, radical mastectomy, partial mastectomy, and subcutaneous (nipple-sparing) mastectomy.
1. Simple or total mastectomy concentrates on the breast tissue itself:
   - The surgeon removes the entire breast.
   - The surgeon does not perform auxiliary lymph node dissection (removal of lymph nodes in the underarm area). Sometimes, however, lymph nodes are occasionally removed because they happen to be located within the breast tissue taken during surgery.
   - No muscles are removed from beneath the breast.
2. Modified radical mastectomy involves the removal of both breast tissue and lymph nodes:
   - The surgeon removes the entire breast.
   - No muscles are removed from beneath the breast.
3. Radical mastectomy is the most extensive type of mastectomy:
   - The surgeon removes the entire breast.
   - The surgeon also removes the chest wall muscles under the breast.
4. Partial mastectomy is the removal of the cancerous part of the breast tissue and some normal tissue around it. While lumpectomy is technically a form of partial mastectomy, more tissue is removed in partial mastectomy than in lumpectomy.
5. During subcutaneous (“nipple-sparing”) mastectomy, all of the breast tissue is removed, but the nipple is left alone. Subcutaneous mastectomy is performed less often than simple or total mastectomy because more breast tissue is left behind afterwards that could later develop cancer. Some physicians have also reported that breast reconstruction after subcutaneous mastectomy can result in distortion and possibly numbness of the nipple. Because subcutaneous mastectomy is still an area of controversy among some physicians, your doctor may recommend simple or total mastectomy instead (Breastcancer.Org, 2016).

**Body Image**

Body image, as a component of self-concept includes feeling feminine and attractive, enjoying one’s body as a symbol of social expression. Body image relates to one’s feelings, perceptions, and attitudes towards one’s physical self; appearance, functionality (Secord and Jourard, 1953) [14].

**Depression**

Everyone occasionally feels blue or sad. But these feelings are usually short-lived and pass within a couple of days. When you have depression, it interferes with daily life and causes pain for both you and those who care about you. Depression is a common but serious illness.

Many people with a depressive illness never seek treatment. But the majority, even those with the most severe depression, can get better with treatment. Medications, psychotherapies, and other methods can effectively treat people with depression.

There are several forms of depressive disorders.

Major depression—severe symptoms that interfere with your ability to work, sleep, study, eat, and enjoy life. An episode can occur only once in a person’s lifetime, but more often, a person has several episodes.

Persistent depressive disorder—depressed mood that lasts for at least 2 years. A person diagnosed with persistent depressive disorder may have episodes of major depression along with periods of less severe symptoms, but symptoms must last for 2 years.

Some forms of depression are slightly different, or they may develop under unique circumstances. They include:

- Psychotic depression, which occurs when a person has severe depression plus some form of psychosis, such as having disturbing false beliefs or a break with reality (delusions), or hearing or seeing upsetting things that others cannot hear or see (hallucinations).
- Postpartum depression, which is much more serious than the “baby blues” that many women experience after giving birth, when hormonal and physical changes and the new responsibility of caring for a newborn can be overwhelming. It is estimated that 10 to 15 percent of women experience postpartum depression after giving birth.
- Seasonal affective disorder (SAD), which is characterized by the onset of depression during the winter months, when there is less natural sunlight. The depression generally lifts during spring and summer. SAD may be effectively treated with light therapy, but nearly half of those with SAD do not get better with light therapy alone. Antidepressant medication and psychotherapy can reduce SAD symptoms, either alone or in combination with light therapy.

Bipolar disorder, also called manic-depressive illness, is not as common as major depression or persistent depressive disorder. Bipolar disorder is characterized by cycling mood changes—from extreme highs to extreme lows (National Institute of Mental Health, 2016).

Previous studies have suggested that body image is an important concern for breast cancer survivors (Petronis et al., 2003; Ashing-Giwa et al., 2006) [12, 4]. All of treatment (mastectomy) changes women's definition of self; making them feels less of a woman (Anagnostopoulos et al, 2003; Ashing-Giwa et al., 2009; Sertöz et al., 2009) [2-15].

Body image and sexual function may be influenced medical factors. Mastectomy may make a woman feel unattractive and create negative body image concerns. A mastectomy can cause a complete loss of sensation in the chest area (Farooqi, 2005) [9]. Female sexual desire inhibit after surgical and adjuvant treatment. Partners of cancer survivors report fatigue, sleep disturbance, mood disorders, relationship difficulties, lifestyle disruption, and poor quality of life (Hodgkinson et al., 2007) [10].

Hysterectomy and mastectomy operations deeply influence the perception of women’s body image. However, depression is often developed after oncology surgery, contributes to the deterioration of women’s sexuality and spouse relation (Bayram and Sahin, 2008) [5].

In a study group comprising 94 patients being treated in Ege University Radiation Oncology Clinic, İzmir Aktaş Oncology Hospital, İzmir Aegean Obstetrics and Gynecology Training and Research Hospital for breast and gynecological cancer (42 patients underwent mastectomy, 52 patient underwent Hysterectomy). The results showed body image was more negative in mastectomy patients. Mastectomy was also associated with depression. Hysterectomy was associated with greater sexual problems and difficulties with spouse relationships (Zimmermann et al., 2010) [16].

The aim of this study was to compare depression and body image perception among women who are normal and women who have undergone mastectomy. Therefore, keeping this aim in mind following hypothesis were formulated:

**H01:** There is no significant difference in body image perception between normal women and women who have undergone mastectomy.
Ho2: There is no significant difference in depression level between normal women and women who have undergone mastectomy.

**Ethical Considerations**

In order to carry out the research, permission was granted from the department of oncology, SMHS Hospital, Srinagar. The patients were further informed about the purpose of the study and they were assured of their right to refuse participation or to withdraw at any stage. They were briefed that the study data would be kept anonymous. The patient reported information will be kept confidential. It was also stated that in case of refusal, a patient’s privacy would be respected in accordance with the policies of Oncology or Gynecology Units and it would in no way hinder any treatment that patient may receive.

**Instruments**

Two scales were used in the study:

- **Body Image Scale (BIS)**  
  This scale developed by Secord and Jourard (1953) [14]. This scale measures the level of satisfaction with various body parts. It consists of 40 items. Lower scores indicate higher levels of dissatisfaction.

- **Beck Depression Scale (BDS)**  
  This is a self-report scale, developed by Beck (1961) [6] in order to measure level of depression. The scale is having 21 items. Subjects are asked to choose the statement most coherent to their situation. Every item is having four optional statements, scaled from 0 to 3.

Data collection was done in two phases. In first phase 40 mastectomy patients were traced and approached. The study details were explained verbally to them and they were also given a written outline of the study to read if they so wished. In this phase data collection was done in hospital as well as at the home of few mastectomy patients. In second phase 40 normal female subjects were approached for data collection. This was done at OPD section of the hospital. These included the female subjects who had visited the hospital for routine checkups. Data collection took place over a month.

**Result**

Data was subjected to statistical analysis using SPSS, Version 16.0 (Statistical Package for Research in Social Sciences). Keeping the objectives of the present study in mind, following statistical values were obtained; Mean S.D and t-value. The results are shown in following tables-

**Table 1**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>S.D</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Image Perception</td>
<td>Mastectomy patients</td>
<td>40</td>
<td>20.2</td>
<td>5.14</td>
<td>5.3*</td>
</tr>
<tr>
<td></td>
<td>Normal females</td>
<td>40</td>
<td>12.6</td>
<td>3.64</td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05 level

The t-value of 5.3 indicates that the body image perception of mastectomy patients and normal females differs significantly. Therefore, our hypothesis Ho1 is rejected.

**Table 2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>S.D</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>Mastectomy patients</td>
<td>40</td>
<td>15.4</td>
<td>5.8</td>
<td>1.6*</td>
</tr>
<tr>
<td></td>
<td>Normal females</td>
<td>40</td>
<td>12.0</td>
<td>7.4</td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05 level

The t-value of 1.6 indicates that the depression level of mastectomy patients and normal females differs significantly. Therefore, our hypothesis Ho2 is rejected.

**Discussion and Conclusion**

In our study it was established that cases with mastectomy had depressive symptoms and problems regarding body image. The problem cancer brings differs according to the disease type, stage, therapy type and period. In our study, the stage of the disease had no effect upon depression and body image. A diagnosis of a life threatening disease such as cancer has a negative effect upon the psychological taste, well-being and life quality of the patients, starting at the very point of receiving the diagnosis. Surgical therapy causes various fears and anxiety, and is perceived as a loss. When cancer is perceived as a loss in physical strength, roles, expectations and a future, the patients show depressive reactions. Same results were reported in an earlier study (Özkan, 1993) [13]. The female reproductive organs and breasts represent sexuality, fertility and motherhood, and are of great importance in a woman’s existence. Mastectomy causes a negative effect upon the woman’s self-confidence, body image, emotional status and relationships. Therefore, it should be carried out only and only if there is no other alternative.

**References**