Psychosocial Adaptation During Recovery from Hysterectomy

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None
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Abstract

Objective: The purpose of this study was to describe psychosocial adaptation as measured by anxiety, hostility, depression, self-esteem, body image, and sexual satisfaction in women following abdominal hysterectomy.

Design: A repeated measures descriptive design was used to describe psychosocial adaptation (anxiety, hostility, depression, self-esteem, body image, and sexual satisfaction) in the immediate recovery period of women following abdominal hysterectomy.

Setting: The study was conducted in Philadelphia, PA during hospitalization following a hysterectomy and in the participants' homes during the eight-week recovery period.

Participants: The sample consisted of 113 women who had experienced an abdominal hysterectomy. The mean age of the women was 47.5 years + 10.2 years. Level of education reported was: high school or less (4%), high school graduate (29%), and college or more (67%). Twenty percent reported a family income of less than $20,000, 34.9% had an income of $20,001 to $49,999, and 44.6% had an income of greater than $50,000. The majority were employed with 13.2% employed part time and 55.8% full time. Sixty-one percent of the sample was married. Sixty-four percent of the sample was Caucasian and 34% were African American.

Main Outcome Measures: Anxiety, depression, and hostility were examined using the Multiple Affect Adjective Checklist; self esteem with the Rosenberg Self-Esteem Scale; and sexual satisfaction and body image with the Derogatis Sexual Functioning Index.

Results: Significant overall positive changes in anxiety, depression, and hostility were noted across the four data points (p

Conclusion: Study participants suffered none of the negative psychosocial sequelae previously associated with hysterectomy. Future research needs to examine women's reactions at 6 and 12 months after surgery.

Background

Hysterectomy is one of the most frequently performed surgical procedures among women of reproductive age in the United States. According to the National Center for Health Statistics, 633,000 hysterectomies were performed in 2000. In 2007, approximately 517,000 women underwent hysterectomies (Bureau of Census, 2011) and this number has remained fairly stable. This common surgery is viewed as a stressful procedure by many women and has been associated with depression and anxiety as well as changes in self-esteem and in sexual functioning (Cohen, Hollingsworth, & Rubin, 1989). However, there has been wide variation in reports about mood and sexuality changes post hysterectomy (Bachman, 1990). The purpose of this study was to describe psychosocial adaptation as measured by anxiety, depression, hostility, self-esteem, body image, and sexual satisfaction in women following abdominal hysterectomy. The results reported here are part of a larger study that examined of earlier hospital discharge of women undergoing hysterectomies and the balance between cost and quality of care in health services (Brooten, et al., 1995; Hollingsworth & Cohen, 2000).

Early studies noted a 40% rate of depression post hysterectomy (Lindemann, 1941; Melody, 1962). Similarly, Drellich and Bieber (1958) reported increased emotional stress in hysterectomized women and suggested that the loss of the uterus was regarded by many women as a loss of femininity. However, more recent research fails to support these earlier findings. In fact, women have had generally positive outcomes, including less depression (Carlson, Miller, & Fowler, 1994; Lambden et al., 1997; Ryan, 1997). In the nationally representative British birth cohort study by Cooper, Mishra, Hardy, and Kuh (2009) psychological health was not related to hysterectomy status in women at age 53, when all hysterectomies were grouped together. However, the study also revealed that women who had undergone hysterectomies before the age of 40 had significantly poorer psychological health at age 53 than women who did not have the surgery. Some of the differences in findings related to post hysterectomy depression may be attributable to the time periods in which the studies were conducted. Perceptions of women and the ways in which women view themselves have evolved since the 1940s (Carlson, Miller, & Fowler, 1994). Fear and anxiety are associated with any surgical
procedure. However, most studies of women undergoing hysterectomy have focused on depression rather than anxiety as a post surgical consequence. Carter (1981) noted that fear and anxiety could be mitigated through careful preoperative education that prepared women for convalescence. Lowered self-esteem may be seen in women post hysterectomy who are experiencing depression. Webb and Wilson-Barnett (1983) found that social support plays a crucial role in coping. However, a more recent study found that women have reported greater interaction with family and friends after hysterectomies because of an increased desire for socialization and improved energy levels (Cabness, 2010). Positive support can build a person's self-esteem, confidence, and coping abilities, whereas negative support can erode and weaken these making coping more difficult. The loss of the uterus and the real or symbolic childbearing ability following hysterectomy has been historically associated with decreased sexual functioning (Dennerstein, Wood, & Burrows, 1977). More recently, studies negate the negative impact previously reported on sexuality (Lambden et al., 1997; Rhodes et al., 1999; Ryan, 1997). For instance, Cabness (2010) found that decreased anxiety about becoming pregnant led most respondents to report that their sexual experiences with their partners improved.

Design

A repeated measures descriptive design was used to describe psychosocial adaptation (anxiety, depression, hostility, self-esteem, body image, and sexual satisfaction) in the immediate recovery period of women following abdominal hysterectomy. Measurement occurred at two days, and one, four, and eight weeks post hysterectomy. Demographic variables were profiled using descriptive statistics and measures of central tendency. Inferential statistical tests were repeated measures ANOVA. For all statistical tests, the significance level was set at p≤0.05.

Instruments

The Multiple Affect Adjective Check List - State Form (MAACL) was used to measure anxiety, depression, and hostility. The MAACL consists of 132 affect-connoting adjectives and provides measures of self-reported moods based on recent factor analyses. Reliability and validity of the MAACL have been reported for a college population. The internal consistency estimates (coefficient alphas) are adequately high. Across the scales used in this study, the median internal reliability over eight samples was reported as 0.85 (range = 0.69 to 0.95). The test-retest reliabilities of the state forms for the five scales were appropriately low, indicating their sensitivity to change of mood (Lubin, et al., 1986). Higher scores indicate higher anxiety, depression, and hostility.

Self-esteem was measured with the Rosenberg Self-Esteem Scale (Rosenberg, 1972), which was devised to achieve a unidimensional measure of global self-regard. The scale consists of ten items that were answered on a four-point Likert response scale ranging from strongly agree to strongly disagree. Positively and negatively worded items were used to reduce response set. The total score reflects the degree of positive self-esteem with higher scores indicating greater self-esteem. A two-week test-retest reliability coefficient of 0.85 for this scale was obtained by Silber and Tippett (1965) and established its concurrent validity by correlating it with three other measures of self-esteem.

Sexual functioning was measured by the Derogatis Sexual Functioning Inventory (DSFI). The scale is a multidimensional measure for estimating the frequency, quality, and attitudes toward sexual behavior. It consists of ten areas: information, experience, drive, attitudes, psychological symptoms, affects, gender role definition, fantasy, body image, and satisfaction. The scale also contains the Global Sexual Satisfaction Index (GSSI), which reflects the individual's perception of the quality of their sexual activities. Lower scores on the GSSI indicate greater sexual satisfaction. Internal consistency and high test-retest coefficients both show the reliability of the DSFI (Derogatis & Melisaratos, 1979). The DSFI has been validated in multiple populations including healthy and dysfunctional groups, and has been normed in male, female, heterosexual and homosexual subjects. Several subscales of the DSFI were not used since they duplicated data from the MAACL and the Rosenberg Self-Esteem Scale. The subscales used included body image and satisfaction. The mean GSSI score for young adult non patient controls is 14.66±4.44. The body image subscale is a personal rating of the individual's view of their body. Mean score for young adult non patient controls is 8.89±1.05 (Derogatis & Melisaratos, 1979). Lower body image subscale scores indicate greater positive body image.

Procedure

Women undergoing abdominal hysterectomy for benign conditions and for Stage I endometrial cancer were recruited from a private group practice and a gynecology clinic for participation in the study. The benign indications for hysterectomy were leiomyomata uteri, excessive uterine bleeding, endometrial...
hyperplasia, pelvic pain, benign ovarian neoplasm, cervical dysplasia (including carcinoma in situ), pelvic relaxation, endometriosis, adenomyosis, and pelvic inflammatory disease. Potential subjects were contacted by a co-investigator either prior to surgery or on the first postoperative day for an introduction to the study and to obtain signed informed consent. Subjects were at least 21 years old, English speaking, lived within a 50 mile radius of the hospital, and had a working telephone in the home.

Data on anxiety, depression, hostility, and self-esteem were collected during hospitalization (two days post hysterectomy), and at one, four and eight weeks post discharge. Sexual functioning data were collected at four and eight weeks post discharge.

Results

Sample
Of the 130 women enrolled in the original study, 17 were not included for the following reasons: cancer diagnosis (1), procedure other than an abdominal hysterectomy was performed (7), patient request (5), request of the physician (2), no phone (1), and inability to answer questions (1). The final sample included 113 women who underwent an abdominal hysterectomy. Demographic data are detailed in Illustration 1. Note the mean age of the women was 47.5±10.2 years, although ages ranged from 29-78 years, and most were married (61%). The education level of the sample was high, with 66.8% reporting college attendance or more.

Psychosocial Adaptation
Variables representing psychosocial adaptation are detailed in Illustration 2. Anxiety, depression, and hostility were highest in the immediate post-operative period and decreased over the eight weeks. The scores for anxiety and depression decreased significantly between hospitalization and one week post surgery (t=4.08, pppppp)

Data obtained from the Rosenberg Self-Esteem Scale were limited due to lack of variability, with the majority of women in the study having high self-esteem scores. The scores remained stable over the study period. Two subscales of the Derogatis Sexual Functioning Index were analyzed. Of the 113 subjects, only 103 subjects completed the Derogatis Sexual Functioning Index. The Global Sexual Satisfaction Index (GSSI) mean scores at four weeks (4.11±2.08) and at eight weeks (4.76±2.20) fell in the midrange of satisfaction. The GSSI scores decreased over time (t=-3.06, p=0.005) indicating positive movement in satisfaction. The mean scores for the body image subscale of the GSSI were 21.42±7.31 at four weeks and 20.16±6.87 at eight weeks. These scores indicated subjects viewed their body image less positively than young adults; however, the scores decreased from four to eight weeks (t=2.605, p=0.01), meaning their body image became more positive.

Discussion

The results of this study confirm the findings of Lambden et al. (1997), Ryan (1997), and Rhodes et al. (1999), and suggest that during contemporary women's recovery from hysterectomies, psychosocial variables change in a positive direction. Women in our study had high self-esteem that remained so over the course of immediate convalescence. This may partially be attributed to the high educational level of the sample, which has been linked to higher self-esteem in previous work (Hunter, Battersby, & Whitehead, 1986).

The mood measures (MAACL) of anxiety, depression, and hostility were indicative of a positive mood. Women were neither clinically depressed nor untowardly anxious. In fact, all three measures of mood moved in a positive direction across time, with less anxiety, depression, and hostility occurring at eight weeks post surgery.

For those women who participated in the study, recovery after hysterectomy was relatively uneventful. They suffered none of the negative psychosocial sequelae previously associated with hysterectomy. Not surprisingly, the body image subscale scores were significantly higher than those of the young adult non patient norms, and this indicates a lower body image for our sample. A wide age range was represented in this study (29-78), however the body image subscale was probably reflective of the mean sample age of 47.5 years. Self-image would be expected to be different from younger women. It is entirely reasonable to find that U.S. women in midlife have a less positive body image than do younger women, as youth is modeled in advertising and popular television.

The GSSI scores indicated moderate satisfaction with their sexual relationship. The scores stayed in the moderate range with a significant positive movement from week 4 to week 8. These data refute early work that suggested hysterectomy's negative impact on sexuality. This may be the result of changing views about womanhood and women's roles, or it may be that this highly educated group had a more positive view of sexuality prior to their surgeries. Future studies should include baseline measures prior to hysterectomy to determine changes.
Clinical Implications

Hysterectomy continues to be a common surgery performed on women. Physiological complications following surgery have been significantly reduced by the use of prophylactic antibiotics, shorter hospital stays, and sophisticated surgical techniques. The stereotypical view of a woman who has had a hysterectomy as depressed and sexually troubled is being replaced by a more positive view, which was confirmed by our study. By informing women of our findings, nurses can help to allay fear and anxiety, as well as dismantle old beliefs that hysterectomy negatively affects mood and sexual functioning. It is also important for this new information to appear in textbooks and other educational materials as a way to inform health care providers about the effects of hysterectomy on these important aspects of women's lives. Informed health care providers can better prepare women and provide more realistic expectations of the immediate post hysterectomy recovery period. Future work in this area should focus on post hysterectomy psychosocial variables over a longer time frame. This would provide additional information and perhaps even greater insight into women's psychosocial responses.

References

2. Brooten, D., Naylor, M., York, R., Brown, L., Hollingsworth, A., Roncalli, M., Cohen, S.,
Illustrations

Illustration 1

Illustration 1

**Characteristics**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Mean Age ±SD</td>
<td>47.47 ±10.17 range 29-78</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
</tr>
<tr>
<td>High School or Less</td>
<td>4.0%</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>29.2%</td>
</tr>
<tr>
<td>College Attendance or more</td>
<td>66.8%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>Divorced/ Separated/ Widowed/ Single</td>
<td>38.9%</td>
</tr>
<tr>
<td>Married</td>
<td>61%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>64.3%</td>
</tr>
<tr>
<td>African-American</td>
<td>33.9%</td>
</tr>
<tr>
<td>Asian</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; $20,000</td>
<td>20.5%</td>
</tr>
<tr>
<td>$20,001 - $49,999</td>
<td>34.9%</td>
</tr>
<tr>
<td>&gt;$50,000</td>
<td>44.6%</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
</tr>
<tr>
<td>Unemployed or retired</td>
<td>31%</td>
</tr>
<tr>
<td>Employed part time</td>
<td>13.2%</td>
</tr>
<tr>
<td>Employed full time</td>
<td>5%</td>
</tr>
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**Illustration 1: Demographics**
**Illustration 2**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Day 2</th>
<th>Week 1</th>
<th>Week 4</th>
<th>Week 8</th>
</tr>
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<tbody>
<tr>
<td>Anxiety</td>
<td>1.88±2.42</td>
<td>1.19±1.86</td>
<td>0.80±1.47</td>
<td>1.05±1.80</td>
</tr>
<tr>
<td>Hostility</td>
<td>1.11±2.10</td>
<td>0.72±1.34</td>
<td>0.81±1.47</td>
<td>1.05±2.04</td>
</tr>
<tr>
<td>Depression</td>
<td>0.93±1.49</td>
<td>0.53±1.37</td>
<td>0.50±0.89</td>
<td>0.51±1.47</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>3.34±0.41</td>
<td>3.38±0.42</td>
<td>3.37±0.43</td>
<td>3.39±0.43</td>
</tr>
<tr>
<td>Body Image</td>
<td>NA</td>
<td>NA</td>
<td>21.42±7.31</td>
<td>20.16±6.87</td>
</tr>
<tr>
<td>Sexual Satisfaction</td>
<td>NA</td>
<td>NA</td>
<td>4.11±2.08</td>
<td>4.76±2.20</td>
</tr>
</tbody>
</table>
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