Recovery After Hysterectomy: A Year-Long Look

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**Article ID:** WMC001761
**Article Type:** Research articles
**Submitted on:** 15-Mar-2011, 03:43:18 PM GMT  **Published on:** 16-Mar-2011, 10:20:59 PM GMT
**Article URL:** http://www.webmedcentral.com/article_view/1761
**Subject Categories:** OBSTETRICS AND GYNAECOLOGY
**Keywords:** Hysterectomy, Psychological Adjustment, Sexual Function, Depression, Self-Esteem, Body Image
**How to cite the article:** Cohen SM, Linenberger HK, Wehry LE, Welz HK. Recovery After Hysterectomy: A Year-Long Look. WebmedCentral OBSTETRICS AND GYNAECOLOGY 2011;2(3):WMC001761

**Source(s) of Funding:**
University of Texas Dean's Excellence Grant.

**Competing Interests:**
None.
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**Abstract**

Hysterectomy is one of the most frequently performed surgical procedures among women of reproductive age in the United States. In 2007, approximately 517,000 women underwent hysterectomies (Bureau of Census, 2011); this procedure is viewed as a stressful event by many women (Cohen, Hollingsworth, & Rubin, 1989). Hysterectomy carries the stress of surgery and potential postoperative complications and has been associated with anxiety, depression, changes in self-esteem, and in sexual functioning. This paper reports the results of a longitudinal study exploring the influence of hysterectomy on anxiety, depression, hostility, self-esteem, impact of event, body image, and sexual satisfaction over the year after surgery.

**Background**

Advances in healthcare have improved morbidity statistics for patients undergoing hysterectomy. Improved surgical technique, use of prophylactic antibiotics, and early ambulation have contributed to a reduction in complications such as bladder dysfunction and the morbidity associated with fever and thromboembolic disease (Jackson & Ridley, 1979; Wheels, Dorsey, & Wharton, 1978; Glover & Nagel, 1976; Hemsell, Reisch, Nobles, & Hemsell, 1983; Tchabo, Cutting, & Butler, 1985; Popkin, Martinez, & Carswell, 1983; Ohon & Galask, 1976). However, psychological responses of anxiety, depression, lowered self-esteem, and altered sexual functioning have been cited as problematic to women who have undergone hysterectomies (Meikle, Brody, & Pysh, 1977; Cohen et al., 1989). Early work in the area of depression post hysterectomy confirmed the notion that women were more depressed after hysterectomy than other kinds of surgery. Lindemann (1941) found a 40% rate of depression in women post hysterectomy, and this increase in depression was corroborated by Melody (1962). A Trinidadian study (Roopnarinesingh & Gopeesingh, 1982) found depression to be a major post-operative complication of hysterectomy, occurring in 38% of studied patients. However, most of the more recent research fails to support earlier findings regarding this incidence of depression. The review by Khastgir, Studd, and Catalan (2000) showed that adverse psychological outcomes are not directly the result of hysterectomies. With the improvement of gynecological symptoms and improving ovarian hormone levels, psychological symptoms improve in most women. In fact, more recent work cites generally positive outcomes post hysterectomy, including less depression (Carlson, Miller, & Fowler, 1994; Ferroni & Deebie, 1996; Lambden et al., 1997; Ryan, 1997; Rannestad, Eikeland, Helland, Qvarnstrom, 2001). In a nationally representative British birth cohort study by Cooper, Mishra, Hardy, and Kuh (2009), there was no association between hysterectomy and subsequent psychological health at age 53 when grouping all hysterectomies together. However, this masked significant variation in association by age; women who had undergone hysterectomy before age 40 had significantly poorer psychological health at age 53 than women who had not undergone hysterectomies. The time periods in which the studies were conducted may account for some of these differences in findings; since the 1940’s, perceptions of women, their roles, and the ways in which they perceive themselves have evolved (Carlson et al., 1994).

While fear and anxiety are associated with any surgical procedure, most studies have focused on depression rather than anxiety as a post surgical consequence of hysterectomy (Roopnarinesingh & Gopeesingh, 1982; Richards, 1978; Webb & Wilson-Barnett, 1983b; Webb, 1986). Johnson and colleagues (Johnson, Christman, & Stitt, 1985; Johnson, Dabbs, & Leventhal, 1970) and Carter (1981) focused on pre-operative anxiety and post-operative sequelae in surgical patients. Carter (1981) suggested that the fear and anxiety that does exist is often mitigated by timely provision of clear information concerning convalescence. However, specific to women undergoing hysterectomy, there is a lack of data concerning the level of fear and anxiety. There is some evidence to suggest lowered self-esteem in women post hysterectomy, particularly those who report depression (Drummond & Field, 1984). Research has shown that social support plays a crucial role in coping (Webb & Wilson-Barnett, 1983a). Positive support has been shown to enhance self-esteem, confidence, and coping ability; conversely, negative support makes coping more difficult by eroding these perceptions. Webb and Wilson-Barnett (1983a) also found the operation was perceived as less painful and less restricting of activities than had been expected. Cabness (2010) found that most...
women reported increased socialization after a hysterectomy due to more energy and an increased desire for contact with friends and family. Similarly, Ferroni and Deeble (1996) found that in the context of more social support, patients positively supported by their husbands restarted their sex lives earlier than women without such support. As with mood, sexual functioning is frequently presented as negatively affected by hysterectomy; early studies reported deterioration of sexual health after surgery. The loss of the uterus and thus the real or symbolic childbearing ability has been viewed as a major alteration which decreased both sexual interest and pleasure. For example, Dinnerstein, Wood, and Burrows (1977) examined sexual response post hysterectomy and found that 37% of the women reported a deterioration in their sexual relations after hysterectomy. However, Cabness (2010) found that most of the respondents of the study reported that their sexual experiences improved and that they felt relief due to no risk of pregnancy. Furthermore, several studies found that sexual activity increased after hysterectomy (Ferroni & Deeble, 1996; Rhodes, Kjerulff, Langenberg, & Guzinski, 1999).

Other early examination of sexual adjustment after hysterectomy found that pre-operative levels of both sexual activity and satisfaction were the best predictors of post-operative functioning (Kruger, Hassell, Goggins, Ishimatsu, Pablico, & Tuttle, 1979). Although the literature suggests loss of the womb alters feelings of femininity, the group studied by Cosperand colleagues (1978) did not reveal these findings. In fact, 75% of the women interviewed expressed relief that the surgery was performed. Their feelings of femininity, sexual desire, and desirability were positive, suggesting that hysterectomy did not adversely affect self-concept (Casper et al., 1978). Although more recent studies show that women do not experience significant changes in sexual functioning after recovery from hysterectomy, most gynecologic texts still cite alterations in sexual functioning as a major complication (Casper, 1978; Humphries, 1980; Jackson, 1979).

Variability in findings on psychosocial variables post hysterectomy led to the current study. Our purpose was to measure selected psychosocial variables at four points of time over the first year after hysterectomy in order to characterize the experience among contemporary women.

Design

The overall design of the research project was a repeated measures descriptive study using established tools to describe participant responses on anxiety, depression, hostility, self-esteem, impact of event, and sexual functioning.

Sample

Data were collected in a metropolitan area in the south central United States. Participants who had undergone a hysterectomy for benign indications were recruited in two hospitals to provide a socio-demographic mix of patients. The indications for benign hysterectomy are 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. Participants 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. Sixty-five women were recruited into the study and were retained for the first three data points. Women were lost to follow-up at the one-year data point, resulting in a total of 57 women who completed all four interviews (1 week, 8 weeks, 6 months, 1 year post hysterectomy).

Results

Sample

The sample included 65 women aged 23 to 70 years with a mean age of 42 (±9.4) years. Forty-seven of the women were European American, 13 were African American and 5 were Hispanic American. Most of the women were married (66%). Only 15% of the participants were childless. Educational levels ranged from less than high school to graduate degrees, but 78% had attended college. The majority of the women worked outside the home (75%) and many had family incomes above $50,000 (40%).

Indications for surgery were reported as myomas (35.4%), dysfunctional uterine bleeding (29.2%), endometriosis (7.7%), uterine prolapse (7.7%), cervical intraepithelial neoplasia (CIN,1.5%), and other (18.5%). Sixty-nine percent of the participants underwent abdominal hysterectomies while 31% had vaginal hysterectomies. Thirty four percent utilized hormone therapy post-surgery.
Psychosocial Outcomes

For the MAACL-R, the anxiety subscale could range from 0 to 21 with >8 indicating clinical anxiety, the depression subscale could range from 0 to 40 with >10 indicating clinical depression, and the hostility subscale could range from 0 to 78 with >9 indicating clinical hostility. There were no significant differences in anxiety, depression, or hostility across the four measurement points. Table 1 details mean scores for anxiety, depression, and hostility. Overall, participants were not anxious, depressed, or hostile at the first and subsequent measures, and none of the scores for participants fell into clinical ranges for anxiety, depression, or hostility.

Self-esteem scores could range from 0 to 6 with lower scores indicating higher self-esteem. Overall, participants had high self-esteem which did not change significantly over time. Table 1 details mean self-esteem scores across time.

The Impact of Event total score could range from 0 to 75 with higher scores indicating greater negative impact of the hysterectomy. It was comprised of two subscales, avoidance (actively not thinking about the hysterectomy) of which possible scores could range from 0 to 40 with higher scores indicating greater avoidance, and intrusion (unwanted thoughts about the hysterectomy) with possible scores ranging from 0 to 35 with higher scores indicating greater intrusion. Table 2 details mean total impact, avoidance, and intrusion scores across time. Total impact of the event in this study was significantly different across time with the greatest negative impact occurring at 1 week and the least negative impact at 1 year post-surgery, F=4.0, p=.01. The avoidance subscale was not significantly different across time; however, the intrusion subscale indicated greater intrusion experienced at week 1 and significantly less at 1 year post hysterectomy, F=6.7, p=0.001.

Sexual functioning was measured by the DSFI body image subscale, which could range from 0 to 60. Lower scores on this subscale indicated greater positive body image. There were no significant differences across time in our sample; however, scores decreased from week 8 to year one post hysterectomy. The GSSI reflected perception of the quality of sexual activities and could range from 0 to 10 with higher scores indicating more positive global sexual satisfaction. There was no significant difference across time on this variable. Table 3 profiles positive body image and global sexual satisfaction mean scores across three measurement points.

References

International Journal of Nursing Studies, 20, 97.
Illustrations

Illustration 1

Anxiety, Depression, Hostility, and Self Esteem in Women Post Hysterectomy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Week 1</th>
<th>Week 8</th>
<th>6 Months</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)N</td>
<td>M(SD)N</td>
<td>M(SD)N</td>
<td>M(SD)N</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.6(±2.1)65</td>
<td>1.3(±2.2)65</td>
<td>1.3(±1.9)65</td>
<td>1.6(±2.3)58</td>
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<td>Depression</td>
<td>1.4(±2.3)65</td>
<td>0.8(±1.6)65</td>
<td>0.7(±1.4)65</td>
<td>1.2(±2.4)58</td>
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<td>Hostility</td>
<td>1.3(±2.2)65</td>
<td>1.3(±2.3)65</td>
<td>1.5(±2.7)65</td>
<td>2.2(±3.6)58</td>
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<td>Self Esteem</td>
<td>0.7(±1.1)65</td>
<td>0.4(±0.9)65</td>
<td>0.5(±1.0)65</td>
<td>0.6(±1.4)58</td>
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</table>

M=mean
Illustration 2

Total Impact of Hysterectomy With Avoidance and Intrusion Subscales

<table>
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<th>Variable</th>
<th>Week 1</th>
<th>Week 8</th>
<th>6 Months</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
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<td>M(SD)N</td>
<td>M(SD)N</td>
<td>M(SD)N</td>
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<tr>
<td>Total Impact</td>
<td>12.9(±12.8)65</td>
<td>9.0(±11.4)65</td>
<td>7.5(±11.6)65</td>
<td>6.5(±11.8)58*</td>
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<td>Avoidance</td>
<td>5.4(±7.0)65</td>
<td>4.2(±5.7)65</td>
<td>3.3(±6.2)65</td>
<td>3.4(±6.5)58</td>
</tr>
<tr>
<td>Intrusion</td>
<td>7.3(±7.0)65</td>
<td>4.8(±7.0)65</td>
<td>4.2(±6.0)65</td>
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</tr>
<tr>
<td></td>
<td>3.1(±5.8)58**</td>
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</tr>
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</table>

*p=.01

**p=.001

M=mean
Illustration 3

Body Image and Global Sexual Satisfaction After Hysterectomy

<table>
<thead>
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<th>Variable</th>
<th>Week 8</th>
<th>6 Months</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)N</td>
<td>M(SD)N</td>
<td>M(SD)N</td>
</tr>
<tr>
<td>Body Image</td>
<td>22.4(±7.8)65</td>
<td>21.6(±7.2)65</td>
<td>20.1(±7.2)58</td>
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<tr>
<td>Global Sexual Satisfaction</td>
<td>5.3(±2.0)57</td>
<td>5.7(±1.8)57</td>
<td>5.3(±2.0)57</td>
</tr>
</tbody>
</table>

M=mean
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