

Influence of Patient Education on Depression Status among Women Who Have Undergone Elective Hysterectomy

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Abstract: Hysterectomy is the most common surgery done on women and depression is one of the psychological morbidity following this operation. This paper aims to find the influence of patient-education on depression status of women following elective hysterectomy. A quasi experimental study was performed with 184 women in experimental group and 95 in control group. Demographic perform and Beck depression inventory were used to collect data. Depression status was measured at 3 stages: in the preoperative period, at discharge and at 4 months postoperatively. Majority of subjects in both groups had mild mood disturbance in the preoperative period. However in discharge and at 4 months after surgery, subjects in control group presented with mild to moderate level of depression as compared to the experimental group and their mean depression scores revealed statistical significance ($p < 0.001$). Preoperative level of depression in experimental group had significant association ($p < 0.05$) with their age and type of surgery undergone. The present study reveals how administering patient-education in planned sessions prove effective in reducing depression status among women who had undergone elective hysterectomy.

Keywords: Elective hysterectomy; Patient-education; Depression; Experimental group; Control group.

I. Introduction

Hysterectomy is one of the most gynecological procedures done on women. This operation often undertaken as a last resort to treat long term problems associated with reproductive complex. Hysterectomy performed along with oophorectomy result in instinct menopause due to sudden deprivation of female hormones in the body. Withdrawal of hormones can lead to visible emotional changes. Some investigators reported that 50% of patients present with abnormal emotions including anxiety or depression before hysterectomy¹.

Many women fear that undergoing this surgery can cause limited physical, sexual activity and rejection by male partner. Only limited number of women expresses their emotional feelings related to the operation directly to health care personnel and clarify their doubts. But most of them hid their emotional reactions. So it's felt need to provide patient education in a comprehensive manner even before operation and to be continued throughout hospitalization. Knowing what to expect in the body will prepare the women physically and mentally to recognize changes early, approach the health care facility if any intense symptoms.

The present study aimed to evaluate the influence of patient - education on depression status among women undergone elective hysterectomy.

Research Objectives

1. To assess the level of depression in preoperative period, discharge and at 4 months after surgery among subjects in experimental group and control group.
2. To compare the mean depression scores in preoperative period, discharge and at 4 months after surgery between subjects in experimental group and control group.
3. To associate the level of preoperative depression in experimental group with their selected demographic variables (Age, duration of complaints, preoperative diagnosis and type of surgery undergone).

II. Methodology

A quasi-experimental design with an evaluative approach, study was conducted in the district headquarter government hospital in Salem, Tamilnadu, India. Inclusion criteria include women in the age group of 30 to 60 years living with partner; in peri-menopausal stage; undergo elective hysterectomy for non-malignant conditions. Exclusion criteria were women suffering with debilitating illness like stroke and any form of cancer; those who have psychiatric illness; who undergo hysterectomy for emergency reason. Non-probability convenience sampling used to allocate the subjects into experimental group and control group. Forecasting attrition of subjects in follow up, the study began with 200 subjects in experimental group and 100 in control group. Demographic perform and Beck depression inventory were instruments applied to collect data.

Ethical clearance certificate obtained from the Ethical review board of the selected setting before beginning the study. Nature and objectives of the study was explained to each subject and written consent was obtained. Furthermore, they were assured on the privacy and confidentiality of the collected data. In preoperative period, demographic data was noted and baseline depression status was measured with beck depression inventory. Repeated measurement was done during discharge and at 4 months after surgery.

Experimental group received education in two phases. First phase was administered in the preoperative period which highlighted the various preoperative preparations including postoperative care. Second phase focused on home care instructions such as dietary modifications, daily activity, hygienic measures, after-effects of surgery and remedies to overcome those symptoms, sexual life, hormonal replacement therapy and follow up which was taught to the subjects in discharge, followed by a distribution of informational booklet. The control group received routine hospital care. Attrition rate was 5 in the control group and 16 in the experimental group. Collected data was analyzed with SPSS 17.0 and are presented as per the objectives of the study.

III. Results & Discussion

The demographic data of subjects revealed that in the experimental group, more than one quarter of subjects (33.7%) belonged to 36-40 years and in the control group 34.7% were between 41-45 years. Mean age in experimental group and control group were 43.97 ± 6.139 and 43.21 ± 6.199 respectively. Most of the subjects in both groups were illiterate, had 2 children and had their complaints less than 3 months. Fibroid uterus was a predominant diagnosis and Total Abdominal Hysterectomy and Bilateral Salphingo Oophorectomy was a most common surgical approach among subjects in both groups.

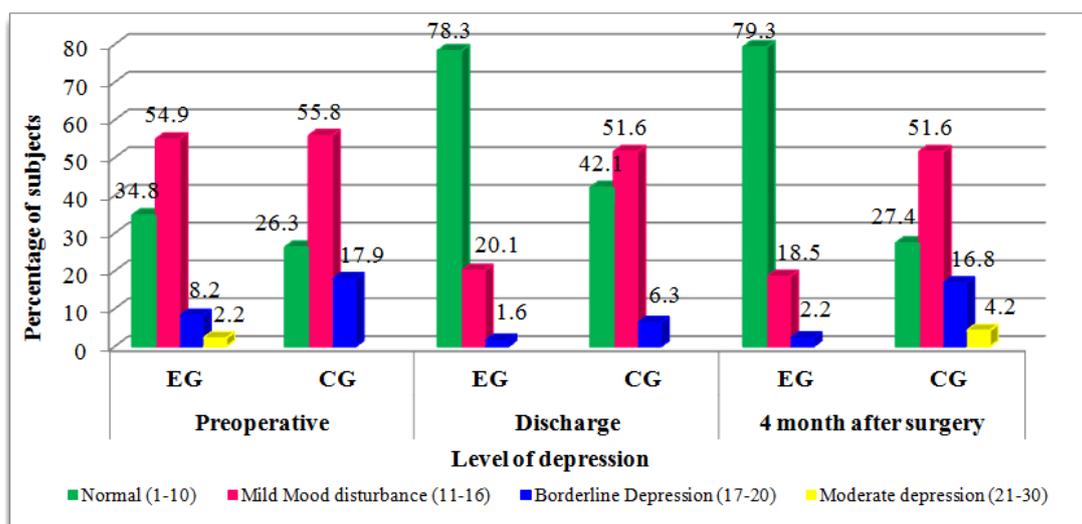


Figure 1: Level of depression in experimental group and control group.

Out of 184 subjects in experimental group, 2.2% had moderate depression, 8.2% had borderline depression, 54.9% had mild mood disturbance and only 34.2% exhibited normal status; in control group 17.9% had borderline depression, 55.8% had mild mood disturbance and 26.3% had normal status in preoperative period. At discharge in experimental group, 1.6% had borderline depression, 20.1% had mild mood disturbance and majority 78.3% had normal status; in control group 6.3% had borderline depression, 51.6% had mild mood disturbance and nearly half of them (42.1%) presented with normal status. At 4 months postoperatively the depression status changed drastically in experimental group with control group; 2.2 % versus 16.8% had borderline depression; 18.5% versus 51.6% had mild mood disturbance; 79.3% versus 27.4 % of normal status. 4.2% experienced moderate depression in control group and none of the subjects in experimental group had this (Figure 1). These study findings are supported with a similar study conducted by Shaheen Shah, Mahboob Ahmed Wagan, Syed Saud and Fareeda (2007)².

In the preoperative period, there was no statistical significance ($p > 0.05$) between groups since the mean depression scores (Experimental: 12.47 ± 3.066 ; Control: 12.83 ± 3.772) were same. Mean depression scores declined subsequently in experimental group as compared to control group in discharge (Experimental: 9.23 ± 2.963 ; Control: 11.66 ± 3.800) and at 4 month after surgery (Experimental: 9.41 ± 3.056 ; Control: 12.76 ± 4.665) and these findings were also statistically significant ($p < 0.001$).

Table 2: Comparison of depression scores between experimental group and control group
(N=279)

S.No	Point of measurement	Experimental (n ₁ =184)		Control (n ₂ =95)		t-test	p value
		Mean	SD	Mean	SD		
1.	Preoperative period	12.47	3.066	12.83	3.772	0.855	0.393 ^{NS}
2.	Discharge	9.23	2.963	11.66	3.800	5.879	0.000***
3.	4 month after surgery	9.41	3.056	12.76	4.665	7.192	0.000***

***p<0.001. NS - Not Significant.

These results are similar to a study conducted by Fen Wang, Chun-Bo Li, Shenghua Li, Quan Li (2014) among women who had undergone hysterectomy showed that before intervention both groups were same in their depression level (PI group: 17.8±3.5; Control group: 17.0±4.5). After intervention, there was a decline in depression scores (9.4±6.8) in PI group as compared to control group (15.3±5.4) and these differences were statistically significant (p<0.01)³.

Table 3: Association between preoperative level of depression in experimental group with their selected demographic variables
(n₁=184)

S.No	Demographic Variables	χ ²	p value
1.	Age	54.957	0.000***
2.	Duration of complaints	12.786	0.119 ^{NS}
3.	Preoperative diagnosis	13.290	0.102 ^{NS}
4.	Type of Surgery undergone	22.404	0.001**

***p < 0.001. **p < 0.01. NS-Not Significant

Association between preoperative depression and selected demographic variables showed significant association (p<0.05) only with their age and type of surgery undergone. Women in the younger age (36-40 years) and those who undergone total abdominal hysterectomy and Bilateral Salphingo oophorectomy experienced moderate depression in the pre-test. Reason could be fear of losing feminine organ, fear of impairment in sexual function and fear of partner relationship after surgery.

These findings contradict with the study conducted by NahalRaza, Ahmed Waqas, Mehak Jamal (2015) in which higher scores on depression subscale were significantly associated with increasing age of subject (Spearman's rho =0.213, p <0.05)⁴. However, the same study showed no significant association between depression with reason for hysterectomy and this factor supports the present study's findings.

IV. Conclusion

The present study's findings reveal that providing patient-education in a comprehensive manner to women would undergo elective hysterectomy helps to reduce depression scores after surgery. Further it recommends that health care personnel must consider emotional aspect of women as a vital part and support with necessary information to prevent psychiatric morbidity in the future.

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