



**ORIGINAL RESEARCH PAPER**

**Medical Science**

**PSYCHOLOGICAL MORBIDITY FOLLOWING HYSTERECTOMY IN EASTERN INDIAN POPULATION**

**KEY WORDS:** Hysterectomy, Surgical Menopause, Depression, Psychological Morbidity.

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**ABSTRACT**  
**INTRODUCTION:** Hysterectomy is the commonest gynecological operation. It can be associated with psychological morbidity due to multiple factors. Though few studied showed on the contrary.  
**MATERIALS AND METHODS:** An observational study was conducted in a tertiary care center in West Bengal where 100 post hysterectomy patients who consented to be recruited, had undergone Bengali version of SRQ-20, and a semi structured questionnaire one month after hysterectomy.  
**RESULT AND ANALYSIS:** 64% had screener positive psychiatric morbidity. Occupation of the patient, type of operation and nature of histopathology can predict the occurrence of psychiatric morbidity.  
**CONCLUSION:** Post hysterectomy associated with significant psychiatric morbidity. Pre-post or case-control study with longer follow up would render stronger results.

**INTRODUCTION:**  
 Hysterectomy is one of the most commonly performed gynecological operation worldwide. The association of psychiatric disorder following hysterectomy is 38.8% according to a study with Bengali population from Bangladesh(1). But result of study is varies across studies. Some studies observed lack of association with psychiatric morbidity(2). Following hysterectomy there is sudden onset of surgical menopause and feeling of loss of femininity and loss of attractiveness (3,4) leads to several psychological symptoms such as psychosis, depression(2), emotional liabilities, psychosexual dysfunction, loss of libido(5) , mood disorders(6), several abnormal behavioral patterns. On the other hand, it relieves array of disabling symptoms. That also can be stress reliever for patients (7), which improves pre-operative psychiatric symptoms.

But these studies mostly have very small sample size. Also, the patient population across conflicting studies may be characteristically different. Hence there could be different determinants that might predict the post hysterectomy psychiatric morbidity. This study tried to explore psychiatric morbidity in a tertiary hospital in eastern Indian predominantly Bengali population.

**MATERIALS & METHODS:**  
 This study was conducted in a tertiary care hospital of West Bengal in the Department of Gynecology and Obstetrics in collaboration with department of Psychiatry of another tertiary care hospital. The study included consecutive patients with who undergone hysterectomy who have given consent to be included in the study. The study had excluded patients with hysterectomy from obstetric causes and known pre-operative history of psychiatric morbidity. Those who were recruited in the study were given a semi-structured questionnaire containing some socio-demographic and clinical variables, and pre-validated Bengali translation SRQ-20 (8,9), a well-recognized screener for psychiatric morbidity at one month follow up by the gynecologist who received a short training from the psychiatrist to apply and score the screener. Regarding 20 items non-psychotic scale, six/seven was taken as a cutoff point. In four item psychotic scale, zero/one was considered as cut-off(10). 115 patients were approached among those 100 consented and recruited in this observational study.

**RESULTS:**  
 Total 100 patients had given consent for that study. Socio -

demographic and clinical characteristics are shown in table 1.

**Table 1: Descriptive statistics of hysterectomy patients.**

		Descriptive Statistics (N=100)
Age		40.84 ± 7.262
Married in Years		25.12 ± 9.302
Education	Not gone to school	32%
	Primary Education	28%
	Secondary Education	40%
Occupation	Housewife	92%
	Working	8%
Number of children	<=2	61%
	>2	39%
Family Type	Joint	56%
	Nuclear	44%
Family Relation	Good	84%
	Moderate	8%
	Poor	8%
Marital Relation	Satisfactory	76%
	Moderate	20%
	Unsatisfactory	4%
Type of Hysterectomy	Vaginal Hysterectomy without BSO	4%
	Abdominal without BSO	20%
	Abdominal + BSO	72%
	Extended Wertheim's	4%
Hot Flush	Absent	28%
	Present	72%
Other Post-operative Complications	Absent	96%
	Present	4%
Histopathology	Benign	88%
	Malignant	12%

64% among participants were SRQ-20 screener positive for psychiatric morbidity.

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Socio-demographic and clinical characteristics were explored for possible association with status of psychiatric morbidity. Results shown in table 2.

**Table 2: Probable determinants of psychiatric morbidity in hysterectomy patients**

		Psychiatric Morbidity		Significance
		Absent (n=36)	Present (n=64)	
Age		42.67 ± 9.692	39.81 ± 5.264	p= 0.108 (t Test)
Years married for		26.33 ± 9.514	24.44 ± 9.186	P= 0.330 (t Test)
Number of children		2.44 ± 0.843	2.61 ± 1.341	P= 0.506 (t Test)
Occupation	Housewives	36	56	P=0.048 (Fisher's exact test)
	Working	0	8	
Education	Not gone to school	12	20	P= 0.541 (χ <sup>2</sup> test)
	Primary Education	12	16	
	Secondary Education	12	28	
Marital Status	Married	32	60	P=0.454 (χ <sup>2</sup> test)
	Widow	4	4	
Family Type	Joint	20	36	P= 0.946 (χ <sup>2</sup> test)
	Nuclear	16	28	
Past History of mental illness	No	36	60	P=0.294 (Fisher's exact test)
	Yes	0	4	
Hysterectomy status	Vaginal Hysterectomy without BSO	0	4	P=0.000 (χ <sup>2</sup> test)
	Abdominal without BSO	16	4	
	Abdominal + BSO	20	52	
	Extended Wertheims	0	4	
Hot Flush	No	12	16	P=0.373 (χ <sup>2</sup> test)
	Yes	24	28	
Post-operative Complication	No	36	60	P=0.294 (Fisher's Exact test)
	Yes	0	4	
Histopathology	Benign	28	60	P=0.026 (Fisher's exact test)
	Malignant	8	4	

Gynaecological characteristics were also assessed. Histo-pathological characteristics associated significantly with type of hysterectomy (Pearson's χ<sup>2</sup> P=0.000) in table 3.

**Table 3: Histopathology across different types of hysterectomy**

		Histopathology		
		Benign	Malignant	
Type of Hysterectomy	Abdominal without BSO	16	4	20
	Abdominal + BSO	68	4	72
	Extended Wertheims	0	4	4
	Vaginal Hysterectomy without BSO	4	0	4
Total		88	12	100

Similarly, demographic characteristics explored for association with type of hysterectomy by one-way ANOVA in table 4. In post hoc tests, significant difference lies in Abdominal without BSO with all others in association with years married for, with Wertheim's only in age parameters, and in case of number of children parameter abdominal hysterectomy with bilateral salpingo-oophorectomy is different from other 3 types of hysterectomy.

**Type 4: Demographic characteristics is associated with type of hysterectomy.**

	Abdominal without BSO (Mean ± SD)	Abdominal + BSO (Mean ± SD)	Extended Wertheims (Mean ± SD)	Vaginal Hysterectomy without BSO (Mean ± SD)	Significance
Age	40.00± .000	38.20±14.014	41.22±3.994	48.00±0.000	P=0.077
Married for (Years)	30.00±0.000	19.40±12.390	26.00±8.046	33.00±0.000	P=0.005
Number of Children	2.00±0.000	1.80±0.410	2.82±1.282	2.00±0.000	P=0.003

**DISCUSSION:**

In this study psychiatric morbidity was found to be 64% among post hysterectomy patients. Which is definitely more than most other studies (1). But here the psychiatric morbidity was assessed by screening questionnaire only and no confirmatory DSM diagnosis were determined. Though as the cases were devoid of a psychiatric diagnosis and treatment pre operatively, but no pre-test screen was used. Hence there may be a possibility of over estimation. But clearly the number is more than the normal population, hence the study endorses post hysterectomy increase of psychiatric morbidity. Which is

supported by quite a few studies (1,11,12), while refuted by some other studies(2,7,13).

This study shown that occupation, histopathological nature of the uterus and type of hysterectomy are determining factors for occurrence of psychiatric morbidity in post hysterectomy patients. Very few studies examined the determining factors. Some refuted any determinant(13,14) while others found few (15) like nullipara (16) or satisfaction with surgery(17). Though study structures were varied. While some relied pre-post design, some assessed immediate effect, some assessed

long term follow up. Few studies observed on long term follow up to prove there were no psychiatric morbidity(13).

Though not related to psychiatric morbidity, as clinical gynecological decision perspective had shown that type of surgery is positively associated with resultant histopathology results. Type of hysterectomy also varied significantly with 'years married for' and 'number of children'.

**CONCLUSION:**

The study had shown that significant number of post hysterectomy patients had some psychiatric morbidity one month after hysterectomy. Study with larger sample size, longer term follow-up. Pre-post or case-control design of study would have rendered better information. DSM diagnosis after screening questionnaire also could have added more value. In spite of time, money and manpower constraint, this study had rendered useful information that psychological support in post hysterectomy patients should seriously be considered. In future further study with testing of such treatment module can be carried out.

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