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RESEARCH ARTICLE

A Prospective Study on Assessment of Quality of Life in Women Pre Operative and Post Operative Hysterectomy Patient in Gynaecology Department of A Tertiary Care Hospital

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ABSTRACT:
The study was about the assessment of quality of life in women pre operative and post operative hysterectomy patient. It's a prospective study carried out in 1 year (July 2015 to June 2016). The study was carried out in 300 bedded tertiary care hospitals. The department selected for the study was gynaecology. The patient underwent hysterectomy surgery were selected. A patient information form has been prepared to inform the patient about the purpose and necessity of the study. The quality of life was evaluated using questionnaire. There are two set of questionnaires. Pre operative questionnaire before surgery and post operative questionnaire after surgery were given to the patient's. There are score's given to each question. Per operative and post operative has been compared. The study population was about 50. Quality of life score before hysterectomy mean standard deviation value 14.34694±3.755546 and after hysterectomy mean standard deviation value 8.693878±3.70991 p value < 0.0001A significantly lower score was observed in patients after hysterectomy surgery. Quality of life scores showed a statistically significant p value<0.05 with 95% confidence interval. By comparing with before hysterectomy surgery after hysterectomy surgery quality of life was improved by decreasing the complication and score.

KEYWORDS: Hysterectomy, Pre-operative, Tertiary care hospital, Quality of life, Prospective study, Gynaecology, Questionnaire, Post operative.

INTRODUCTION:

Hysterectomy is one of the most commonly performed gynaecological operations. It is often performed for benign conditions such as menorragia, metrorrhagia, abdominal pain and dysmenorrhoea[1]. It is performed by one of the three methods available, which are abdominal hysterectomy, vaginal hysterectomy and laparoscopic hysterectomy[2].

The hysterectomy operation is traditionally performed through an abdominal or vaginal approach[3]. In 2003, over 600,000 hysterectomies were performed in the United States alone, of which over 90% were performed for benign conditions In the United Kingdom about 100,000 hysterectomies are performed annually[4]. Such rates being highest in the industrialized world has led to the major controversy that hysterectomies are being largely performed for unwarranted and unnecessary reasons[5]. Thus hysterectomy should only be offered to women whose family is complete. Removal of the uterus renders the patient unable to bear children and has surgical risks as well as long-term effects, so the surgery is normally recommended when other treatment options are not available. It is expected that the frequency of hysterectomies for non-malignant indications will fall as there are good alternatives in many cases[6]. The types of hysterectomy include total (i.e., removal of uterus and

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cervix) and subtotal ("supracervical" or "supravaginal," i.e., removal of uterus), with or without unilateral or bilateral oophorectomy[7]. Oophorectomy is frequently done together with hysterectomy to decrease the risk of ovarian cancer. However, recent studies have shown that prophylactic oophorectomy without an urgent medical indication decreases a woman's long-term survival rates substantially and has other serious adverse effects[8]. Particularly in terms of inducing early-onset-osteoporosis and this effect are not limited to pre-menopausal women; even women who have already entered menopause were shown to have experienced a decrease in long-term survivability post-oophorectomy[9].

Health status and quality of life outcomes measured prospectively and concurrently, complement mortality and morbidity measures. Quality of life is an important outcome variable in clinical research as medical interventions can affect it in both positive and negative ways[10]. Recent research also suggests that hysterectomy might improve quality of life[11]. Removing the uterus, many women are opposed to having a hysterectomy due, in large part, to the undesirable co morbidities such as inpatient hospitalization, prolonged fever, transfusion, scarring, relatively long recovery time to pre-surgical levels of activities, and elimination of future pregnancies[12,13,14]. The extent of surgery depends on the clinical diagnosis. Simple hysterectomy is usually performed for benign conditions while radical hysterectomy is reserved for suspected malignant diagnosis. The commonest indication is benign uterine diagnosis such as uterine fibroid, dysfunctional uterine bleeding, endometriosis and chronic pelvic pain[15]. There have been different ways in evaluating treatment, such as satisfaction and health status. In 1952, WHO reformulated the definition of health being "not only the absence of disease or infirmity, but also the presence of physical, mental and social wellbeing," hereby introducing a subjective element in the definition of health[16]. The subjective perception of health determines the quality of life. Instead of using outcomes such as satisfaction of treatment or health status, the treatment effect is increasingly measured as quality of life. Quality of life is measured ideally by questionnaires that have been validated to be reliable, reproducible, and specific[17]. In generic quality of life questionnaires, the general health is inquired, while in disease specific quality of life, the questions apply more to specific medical situations. The latter questionnaires are more appropriate to assess treatment effects. Quality of life should be distinguished from health status or satisfaction after treatments, which are considered causal items where the quality of life is based upon[18]. The main goal of hysterectomy is to resolve these symptoms in order to improve quality of life. In some patients this goal is not realized due to unwanted side effects related to the procedure itself [19,20].

MATERIAL AND METHODS:

The study was about the assessment of quality of life in women pre operative and post operative hysterectomy patient. It's a prospective study carried out in 1 year (July 2015 to June 2016). The study was carried out in 300 bedded tertiary care hospitals located at the ESI hospital, Ayanavaram, Chennai-600023. The department selected for the study was gynaecology. The patient underwent hysterectomy surgery were selected. A patient information form has been prepared to inform the patient about the purpose and necessity of the study. The quality of life was evaluated using questionnaire. There are two set of questionnaires. Pre operative questionnaire before surgery and post operative questionnaire after surgery were given to the patient's. There are score's given to each question. Pre operative and post operative has been compared. The assessment was carried out in two phases Pre operative and post operative. Statistical analysis will be done using T-TEST. The mean changes between the changes in quality of life before and after surgery would be calculated with $p < 0.05$.

RESULTS:

The total number of study population included from the study site during the study period was 50. Among the study population, the age was ranging from 20 and 80 above. The total number of 4% (2) patients were between the ages 20-30, 6% (3) patients between the age 31-40 ,34% (17) patients between the age 41-50, 50% (25) patients between the age 51-60, 4% (2) patients between the age 61-70 and 2% (1) patients were between 71-80 years(Table 1). Among the study population, educational level of patient 26% (13)of patient have been no school, 66% (33) of patient have been high school or less education level and 8% (4) of patient have been university level education(Table 2). Among the study population, employment status of patient 54% (27) have been employees, 4% (2) patient was student, 30% (15) of patient was housewife and nonemployee are 12% (6) of patient(Table 3). Among the study population, types of hysterectomy of patient 60% (30) have been subtotal hysterectomy, 24% (12) patient was total hysterectomy and radical hysterectomy are 16% (8) of patient(Table 4). Among the study population, obstetrical delivery of patient 36% (18) have been normal delivery and caesarian sections are 64% (32) of patient(Table 5). Among the study population, pregnancy of patient 90% (45) have been normal pregnancy and extrauterine pregnancy are 10% (5) of patient(Table 6). Among the study population, miscarriage of patient 76% (38) have been no miscarriage and miscarriage are 12% (24) of patient(Table 7). Among the study population, menopausal of patient 46% (23) have been non menopausal and menopausal are 54% (27) of patient(Table 8). Among the study population, pre operative score of patient 4% (2) have been good status,

40% (20) have been average status, 56% (28) have been poor status(Table 9). Among the study population, post operative score of patient 52% (26) have been good status, 46% (23) have been average status, 2% (1) have been poor status(Table 10). Among the study population, quality of life score before hysterectomy mean standard deviation value 14.34694±3.755546 and after hysterectomy mean standard deviation value 8.693878±3.70991 p value < 0.0001(Table 11).

DISCUSSION:

To our knowledge, this is the first trial to compare the impact of Pre-Operative versus Post-Operative hysterectomy on quality of life. A study by Shanthini NF et al[21] showed that retrospective study was done in 229 women who had undergone hysterectomy but our study prospective study was done in 50 women who undergone hysterectomy. There study was 2.5 year duration and the study was about evaluation of complications abdominal and vaginal hysterectomy but our study was 1 year duration and the study was about Quality Of Life in Women Pre-Operative and Post-Operative Hysterectomy. There study Age distribution higher number of patient undergone hysterectomy between 40 - 49 years 65.5% and lower number of patient undergone hysterectomy between 50 - 59 years 9.2% but our study higher number of patient undergone hysterectomy between 51 - 60 years 50% and lower number of patient undergone hysterectomy between 71 - 80 years 2%.

A study by Miriam Kuppermann et al[22] showed that less than high school education was 38% and 76% of patient was employed or self employed. In a other study Michael A Okunlola et al[23] Showed that educational level 64.4% had tertiary education, 22.0% had secondary, 13.3% had primary education and 44.4% were unskilled workers, 40.0% were professionals, 15.6% were skilled workers. By compare to our study educational level 26% of patient had no school, 66% of patient had high school or less, 8% of patient had university level education and employment status 54% were employees, 4% were student, 30% were housewife, 12% were nonemployee. A study by Jan-Paul W. R. Roovers et al showed that highest number of patients undergone surgical procedure were total abdominal hysterectomy 51%,vaginal hysterectomy were 26%, lowest number of patients undergone surgical procedure were subtotal abdominal hysterectomy 22%. In our study highest number of patients undergone surgical procedure were subtotal hysterectomy 60%, total hysterectomy were 36%, lowest number of patients undergone surgical procedure were radical hysterectomy 4%. In the same study Jan-Paul W. R. Roovers et al showed that total number of patients undergone caesarean section were 21.4% and normal obstetrical delivery were 78.6%. In our study number of patients undergone caesarean section were 64% and normal obstetrical delivery were 36%. A study by Carlos A. Delroy et al[24] showed that Menopausal status of women Premenopausal patient were 17.9% and Postmenopausal patient were 82.1%. In our study premenopausal women were 46% and menopausal women were 54%. A study by Gerson Weiss et al[25] showed that Overall health at visit before hysterectomy excellent were 7%,very good were 31%, good were 41%, fair\poor were 20% and Overall health at visit after hysterectomy excellent were 10%,very good were 41%, good were 32%, fair\poor were 17%. In our study pre operative health score good were 4%, average were 40%, poor were 56% and post operative health score good were 52%, average were 46%, poor were 1%.

A study by Carlos A. Delroy et al showed that Comparison between pre operative and postoperative scores p value significant difference is indicated by $p<0.05$ and a significantly improved in the postoperative time when compared to preoperative status. In a other study by Jan-Paul W. R. Roovers et al showed that before surgery patient had many complication and problems but after surgery patient had decrease percentage of complication and problem compared to before surgery. Similarly a study by Ali Yavuzcan et al[26] showed that Compare between pre operative and postoperative complication decrease the percentage after post operative.

Table 1: Age Wise Distribution Of Study Population

AGE GROUP	TOTAL (N=50, %)
20-30	(2) 4%
31-40	(3) 6%
41-50	(17) 34%
51-60	(25) 50%
61-70	(2) 4%
71-80	(1) 2%

Table 2: Education Level Of Study Population

EDUCATION LEVEL	TOTAL (N=50, %)
NO SCHOOL	(13) 26%
HIGH SCHOOL OR LESS	(33) 66%
UNIVERSITY	(4) 8%

Table 3: Employment Status Of Study Population

EMPLOYMENT STATUS	TOTAL (N=50, %)
EMPLOYEE	(27) 54%
STUDENT	(2) 4%
HOUSEWIFE	(15) 30%
NONEMPLOYEE	(6) 12%

Table 4: Types Of Hysterectomy Of Study Population

TYPES	TOTAL (N=50, %)
SUBTOTAL HYSTERECTOMY	(30) 60%
TOTAL HYSTERECTOMY	(18) 36%
RADICAL HYSTERECTOMY	(2) 4%

Table 5: Obstetrical Delivery Of Study Population

OBSTETRICAL DELIVERY	TOTAL (N=50, %)
NORMAL DELIVERY	(18) 36%
CAESARIAN SECTIONS	(32) 64%

Table 6: Pregnancy Of Study Population

PREGNANCY	TOTAL (N=50, %)
NORMAL PREGNANCY	(45) 90%
EXTRAUTERINE PREGNANCY	(5) 10%

Table 7: Miscarriage Of Study Population

MISCARRIAGE	TOTAL (N=50, %)
NO MISCARRIAGE	(38) 76%
MISCARRIAGE	(12) 24%

Table 8: Menopause Of Study Population

MENOPAUSE	TOTAL (N=50, %)
PRE MENOPAUSAL WOMEN	(23) 46%
MENOPAUSAL WOMEN	(27) 54%

Table 9: Pre-Operative Hysterectomy Score

SCORE	STATUS	PERCENTAGE
0-7	GOOD	(2) 4%
8-14	AVERAGE	(20) 40%
15-22	POOR	(28) 56%

Table 10: Post-Operative Hysterectomy Score

SCORE	STATUS	PERCENTAGE
0-7	GOOD	(26) 52%
8-14	AVERAGE	(23) 46%
15-22	POOR	(1) 2%

Table 11: Score: Pre-Operative And Post-Operative Hysterectomy

QUALITY OF LIFE	MEAN±S.D	P VALUE
PRE-OPERATIVE	14.34694±3.755546	< 0.0001
POST-OPERATIVE	8.693878±3.70991	

CONCLUSION:

From our prospective study it can be concluded that which was conducted in 50 patients recently hysterectomy surgery completed. Quality of life questionnaire with two reviews before and after hysterectomy surgery. The score obtained before hysterectomy surgery scoring and after hysterectomy surgery scoring. A significantly lower score was observed in patients after hysterectomy surgery. Quality of life scores showed a statistically significant p value<0.05 with 95% confidence interval. By comparing with before hysterectomy surgery after hysterectomy surgery quality of life was improved by decreasing the complication and score

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