



ASSESSMENT OF QUALITY OF LIFE AND ITS SOCIO-DEMOGRAPHIC AND CLINICAL DETERMINANTS AMONG PATIENTS WITH ENDOMETRIAL CARCINOMA.

Gynaecology

Silpi Kumari Ray*

Department of Obstetrics and Gynaecological Nursing, College of Nursing, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry, India-6. *Corresponding Author

Vahitha S

Lecturer, College of Nursing, JIPMER, Puducherry, India-6.

Dr T Parvathi

Assistant Professor, Department of Obstetrics & Gynaecology, JIPMER, Puducherry, India-6.

ABSTRACT

Introduction: Endometrial cancer is the sixth most common type of cancer globally and ranks 14th among causes of cancer-related deaths in women. Cancer negatively affect quality of life in all aspects physically, psychologically and socio-economically. Therefore, this study is aimed to assess the quality of life and its socio-demographic and clinical determinants among patients with endometrial carcinoma.

Methodology: A quantitative descriptive cross-sectional design was used. By using non probability convenience sampling technique 128 endometrial carcinoma patients who were attending regular treatment and follow up in WCH and RCC, JIPMER was selected as study participants. Semi-structured proforma was used for collecting socio-demographic and clinical determinants and for assessing the quality of life, standardized FACT-En questionnaire was used. The collected data was analyzed by using descriptive and inferential statistics.

Results: Among 128 subjects, 54 (42.2%) had poor quality of life, 52 (40.6%) had neither good nor poor quality of life, 14 (10.9%) had good quality of life, 8 (6.3%) had very poor quality of life and none of the subjects had very good quality of life. Family history of cancer ($p=0.004$), duration of disease ($p=0.032$) and type of treatment ($p=0.001$) were found to have a statistically significant association with quality of life among patients with endometrial carcinoma.

Conclusion: The present study concludes that majority of the patients with endometrial carcinoma had poor quality of life. Therefore, assessing quality of life is an important indicator to identify impact of cancer on physical wellbeing, social/family wellbeing, emotional wellbeing and functional wellbeing.

KEYWORDS

Endometrial carcinoma, Quality of life, socio-demographic, clinical determinants.

INTRODUCTION

Endometrial cancer is affecting 318,000 women per year globally. In the UK, endometrial cancer is the fourth most common cancer in women, but there is little public awareness about the disease. There is also very little research effort on international level: a simple PubMed search using the term 'endometrial cancer' revealed 28,218 references, compared with 85,926 for 'ovarian cancer' and 289,989 for 'breast cancer'. The incidence of endometrial cancer is rising, and more women are dying from the disease, despite improvements in overall survival.¹

After diagnosis of gynaecologic cancer the women are faced with the diagnosis itself, personal interpretation of cancer, physical effects of the disease, long and short term side effects of the treatment regimens and the reaction of family and friends.² Quality of life is a multidimensional concept which is defined as "extend to which one's usual or expected physical, emotional and social well-being is affected by a medical condition or its treatment". For cancer patients, all these aspects of life are influenced negatively.³

Both the National Cancer Institute (NCI) and the Food and Drug Administration (FDA) recently suggest that the goals of cancer research should be to improve not only survival rates but also quality of life of cancer survivors.⁴ The quality of life of cancer survivors is recently considered of great importance and nurses being an integral part of health care team plays an important role in identifying patients' problem which is affecting their quality of life.

MATERIAL AND METHODS

We conducted a descriptive cross-sectional study to assess the quality of life and to identify the socio-demographic and clinical determinants associated with quality of life among patients with endometrial carcinoma.

Participants

We included women with endometrial carcinoma who were attending treatment in WCH and RCC, JIPMER, Puducherry from August to October 2019. Total 128 samples were selected by using non probability convenience sampling technique. Women with psychiatric disorders and accompanying severe medical conditions and women who were not willing to participate were excluded from the study.

Sample size is estimated with an expected population of endometrial carcinoma patient with impaired quality of life as 0.75 at 5% level of significance and 10% relative precision. Sample size was calculated by open epi software version 3.1.

Procedure

After getting the approval from Nursing Research Monitoring Committee (JIP/CON/NRMC/M.Sc/2018/OBG/3) and Institutional Ethics Committee & Human studies (JIP/IEC/2019/0034). A written consent was obtained from participants. A semi-structured proforma for collecting socio-demographic and clinical determinants were used. The socio-demographic profile includes age, educational status, marital status, occupation, monthly income and domicile. The clinical determinants consist of weight, height, BMI, age at menarche, Age at marriage, number of children, duration of married life, use of contraceptives, menopausal status, use of hormone replacement therapy, history of infertility and reproductive diseases, family history of cancer, comorbidities, smoking and alcohol consumption, duration of disease, type of treatment, histopathology profile and general health. FACT- En (version 4) was used to assess the quality of life among the participants. The data collection procedure took about twenty to thirty minutes for each participant. The collected data was computed and analysed by appropriate statistical methods.

Outcome

The primary outcome of the study was to assess the quality of life and its socio-demographic and clinical determinants among women with endometrial carcinoma. We assessed their quality of life and based on the findings prepared an information booklet on "Ten actions you can take to improve your quality of life" was given to the participants.

Statistical Analysis

The collected data from the participants was transferred into Excel master sheet & analysis was done by using Statistical package for social science (SPSS) Version 23. The distribution of independent variables such age, educational status, occupation, marital status, monthly income, domicile, weight, height, BMI, age at menarche, age at marriage, number of children, duration of married life, use of contraceptives, menopausal status, use of hormone replacement therapy, history of infertility and reproductive diseases, family history of cancer, comorbidities, smoking and alcohol consumption, duration

of disease, type of treatment, histopathology profile and general health was expressed in terms of frequency and percentage. The distribution of dependent variables i.e. quality of life (domain-wise) was expressed in terms of mean with standard deviation. The association between quality of life and its socio-demographic and clinical determinants was carried out by using chi-square. All statistical analysis was carried out at 5% level of significance with p value < 0.05 as statistically significant.

RESULTS

Primary outcome

Figure 1 shows that out of 128 subjects, 54 (42.2%) had poor quality of life, 52 (40.6%) had neither good nor poor quality of life, 14 (10.9%) had good quality of life, 8 (6.3%) had very poor quality of life and none of the subjects had very good quality of life.

Figure 1. Distribution Of Quality Of Life Among Patients With Endometrial Carcinoma. (N=128)

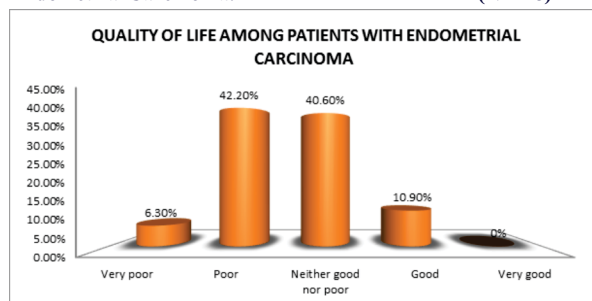


Table 1 shows Correlation of quality of life (domain-wise) among patients with endometrial carcinoma. The Pearson correlation r-values indicates positive correlation between physical well-being and

social/family well-being (0.113), social/family well-being and emotional well-being (0.225), additional concerns and physical well-being (0.782) and negative correlation between emotional well-being and functional well-being (-0.583), functional well-being and additional concerns (-0.607). The correlation between social/family well-being and emotional well-being (p=0.016), emotional well-being and functional well-being (p=0.001), functional well-being and additional concerns (p=0.001) and additional concerns and physical well-being (p=0.001) were found to be statistically significant.

Table 1. Correlation Of Quality Of Life (domain-wise) Among Patients With Endometrial Carcinoma.

Sl. No	Correlation Of Quality Of Life (domain-wise)	Mean	Standard Deviaton	'r' Value	'p' Value
1	Physical Well- Being	14.9	7.15	0.113	0.231
	Social/Family Well-Being	15.7	3.56		
2	Social/Family Well-Being	15.7	3.56	0.225	0.016*
	Emotional Well- Being	13.5	5.01		
3	Emotional Well- Being	13.5	5.01	-0.583	0.001**
	Functional Well- Being	5.27	4.33		
4	Functional Well- Being	5.27	4.33	-0.607	0.001**
	Additional Concerns	37.2	13.4		
5	Additional Concerns	37.2	13.4	0.782	0.001**
	Physical Well- Being	14.9	7.15		

Secondary Outcome

Table 2 depicts that the family history of cancer (p=0.004) and duration of disease (p=0.032) and type of treatment (p=0.001) were found to have a statistically significant association with quality of life but there is no significant association between socio-demographic variables and quality of life among patients with endometrial carcinoma.

Table 2 Association Of Quality Of Life Among Patients With Endometrial Carcinoma With Their Selected Clinical

(N=128)

SL. NO.	CLINICAL DETERMINANTS	QUALITY OF LIFE								χ^2	df	p-value
		VERY POOR		POOR		NEITHER POOR NOR GOOD		GOOD				
		N	%	N	%	N	%	N	%			
1	BMI									6.79	9	0.658
	<18.5	0	0	1	50	1	50	0	0			
	18.5-24.9	0	0	1	50	1	50	0	0			
	25-29.9	0	0	16	38.1	21	50	5	11.9			
	≥30	8	9.8	36	43.9	29	35.4	9	11			
2	Age at menarche (in years)									4.40	6	0.622
	11-13 years	4	5.3	30	39.5	35	46.1	7	9.2			
	14-16 years	4	7.8	24	47.1	16	31.4	7	13.7			
	More than 16 years	0	0	0	0	1	100	0	0			
3	Number of children									13.6	12	0.323
	1	0	0	1	25	3	75	0	0			
	2	0	0	9	39.1	11	47.8	3	13			
	3	2	3.5	23	40.4	25	43.9	7	12.3			
	4	3	10.3	16	55.2	8	27.6	2	6.9			
	5	3	20	5	33.4	5	33.3	2	13.3			
4	Age at marriage									5.59	6	0.470
	Less than 18 years	1	2.4	14	34.1	20	48.8	6	14.6			
	18-22 years	7	8.9	37	46.8	28	35.4	7	8.9			
	23-28 years	0	0	3	37.5	4	50	1	12.5			
5	Duration of married life									5.97	3	0.113
	Less than 25 years	0	0	3	20	10	66.7	2	13.3			
	More than 25 years	8	7.1	51	45.1	42	37.2	12	10.6			
6	Use of contraceptives									3.00	3	0.391
	Yes	6	5.7	43	41	46	43.8	10	9.5			
	No	2	8.7	11	47.8	6	26.1	4	17.4			
7	History of infertility									-	-	Constant
	Yes	0	0	0	0	0	0	0	0			
	No	8	6.3	54	42.2	52	40.6	14	10.9			
8	History Of Any Reproductive Diseases									-	-	Constant
	Yes	0	0	0	0	0	0	0	0			
	No	8	6.3	54	42.2	52	40.6	14	10.9			
9	Menopausal status									2.80	3	0.423
	Pre	0	0	5	31.3	9	56.3	2	12.5			
	Post	8	7.1	49	43.8	43	38.4	12	10.7			

10	Use of hormone replacement therapy									-	-	Constant
	Daily	0	0	0	0	0	0	0	0			
	Weekly	0	0	0	0	0	0	0	0			
	Occasionally	0	0	0	0	0	0	0	0			
	Never	8	6.3	54	42.2	52	40.6	14	10.9			
11	Smoking									-	-	Constant
	Daily	0	0	0	0	0	0	0	0			
	Weekly	0	0	0	0	0	0	0	0			
	Occasionally	0	0	0	0	0	0	0	0			
	Never	8	6.3	54	42.2	52	40.6	14	10.9			
12	Alcohol consumption									-	-	Constant
	Daily	0	0	0	0	0	0	0	0			
	Weekly	0	0	0	0	0	0	0	0			
	Occasionally	0	0	0	0	0	0	0	0			
	Never	8	6.3	54	42.2	52	40.6	14	10.9			
13	History of hypertension									2.80	3	0.423
	Yes	6	8	32	42.7	27	36	10	13.3			
	No	2	3.8	22	41.5	25	47.2	4	7.5			
14	History of diabetes mellitus									2.37	3	0.498
	Yes	7	8.1	35	40.7	36	41.9	8	9.3			
	No	1	2.4	19	45.2	16	38.1	6	14.3			
15	Family History of cancer									12.2	3	0.004*
	Yes	3	33.3	4	44.4	2	22.2	0	0			
	No	5	4.2	50	42	50	42	14	11.8			
16	Duration of disease									13.8	6	0.032*
	<1 year	4	4	37	37.4	47	47.5	11	11.1			
	1-2 years	4	15.4	15	57.7	5	19.2	2	7.7			
	2-3 years	0	0	2	66.7	0	0	1	33.3			
	>3 years	0	0	0	0	0	0	0	0			
17	Type of treatment									72.9	6	0.001**
	Chemotherapy	2	18.2	9	81.8	0	0	0	0			
	Radiotherapy	3	9.1	30	90.9	0	0	0	0			
	Surgery	3	3.6	15	17.9	52	61.9	14	16.6			
	Any other treatment	0	0	0	0	0	0	0	0			
18	Histopathology profile									3.20	3	0.361
	Type 1	8	6.5	50	40.7	51	41.5	14	11.4			
	Type 2	0	0	4	80	1	20	0	0			
19	General health									2.76	3	0.429
	Very good	2	3.1	26	40.6	29	45.3	7	10.9			
	Good	6	9.4	28	43.8	23	35.9	7	10.9			
	Bad	0	0	0	0	0	0	0	0			
	Very bad	0	0	0	0	0	0	0	0			

DISCUSSION

The present study was conducted to assess the quality of life and its socio-demographic and clinical determinants among patients with endometrial carcinoma. It was seen that among 128 patients with endometrial carcinoma, majority 54 (42.2%) had poor quality of life, 52 (40.6%) had neither good nor poor quality of life, 14 (10.9%) had good quality of life, 8 (6.3%) had very poor quality of life and none of the subjects had very good quality of life. Our study result are consistent with other study conducted to assess the quality of life among cancer patients (Nayak MG, 2017). The result showed that out of 768 cancer patients, 82.3% of them had low quality of life scores.⁵ Another study that showed similar result was conducted by (Li C 2015) on quality of life in endometrial cancer survivors and concluded that the quality of life was poor in the endometrial cancer survivors. To improve their life quality, earlier psychological counselling should be offered to these survivors.⁶

There was no significant association between socio-demographic variables and quality of life among patients with endometrial carcinoma. But clinical determinants like **family history of cancer (p=0.004), duration of disease (p= 0.032) and type of treatment (p=0.001)** were found to have a statistically significant association with quality of life among patients with endometrial carcinoma. The findings are supported with similar study conducted to assess the relationship between family history of cancer and the risk of endometrial cancer in first-degree relatives. The study was conducted among 454 endometrial cancer cases and 908 controls. Family history of intestinal cancer was directly associated with endometrial cancer. The study concluded that family history of endometrial, uterine or intestinal cancer in first-degree relatives is associated with an increased risk of endometrial cancer (Lucenteforte E, 2009).⁷

A study on quality of life in long-term survivors of early stage endometrial cancer. A total of 328 survivors who had completed cancer

treatment more than 3 years ago, were grouped into two i.e. one with surgery alone and other surgery with adjuvant radiotherapy. The study concluded that patients treated for early stage endometrial cancer with surgery has good prognosis and the low risk of psychosocial and physical long-term effects (Dobrzycka B, 2017).⁸ In our study we found that patients who has received early treatment and has undergone surgery has better quality of life which was supported by the above study.

There are some limitations in our study. Since we conducted the study only in one hospital, the findings may not be generalizable.

CONCLUSION

The present study concludes that majority of the patients with endometrial carcinoma had poor quality of life. Health care personnel mainly focus on the survival of cancer patient rather than their quality of life. It is an inevitable fact that patients with cancers care more about how they will live instead of how long. So, there is a need to develop appropriate evidence-based practice guidelines for the assessment and management of quality of life.

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