# ORIGINAL RESEARCH PAPER

Oncology

# EVALUATION OF QUALITY OF LIFE AND ANXIETY AMONG PATIENTS WITH CERVICAL CANCER.

**KEY WORDS:** 

Hamza	PhD scholar Clinical Psychology, Department of Psychiatry, J. N. Medical College, Aligarh Muslim University, Aligarh, U.P.			
Dr. Deoshree Akhouri	Associate Professor, Department of Psychiatry, J.N. Medical College, Aligarh Muslim University, Aligarh			
Dr. Seema Devi*	Additional Professor, State Cancer Institute, Department of Radiation Oncology, IGIMS, Patna, Bihar. *Corresponding Author			
Dr. Anupam Anand	P.G 3rd Year Student, State Cancer Institute, Department of Radiation Oncology, IGIMS, Patna, Bihar.			

TO A GTPA

Background: - As per World Health Organization, 4th most common type of cancer is cervical cancer globally whereas in India it is the 2nd most common type. It can be defined as the occurrence of malignant cells in the cervix - the lower part of the uterus that connects to the vagina and can be of two types, they are Squamous cell carcinoma and Adenocarcinoma. It can be cured or managed if diagnosed at an early age. Multiple sexual partners and bad sexual hygiene are some of the most common causes of this type of cancer in India. Women diagnosed with cervical cancer faces psychological problems e.g., depression, anxiety, stress etc. All these factors play significant role to decrease quality of life of the individual. Numerous studies have been done on these psychological issues but there is a paucity of research on their quality of life and anxiety particularly in Indian scenario. Aims & Objectives - The objectives of the present study were to assess and compare the quality of life and anxiety between the cervical cancer and normal people. Methodology: - In the present cross-sectional study, total of 120 subjects were taken according to pre decided inclusion and exclusion criteria, in which, 60 patients diagnosed with cervical cancer by Radiotherapist with age range 18-60 years, females, literate and illiterate belonging from the rural and urban population were included in present study. 60 normal subjects were matched accordingly and assessed by General Health Questionnaire (GHQ), then whose score was <3 was included in the study after that both groups were assessed on WHOQ OL-BREF and Hamilton Anxiety Rating Scale. Results & Conclusion: - Findings of the present study suggests that cervical cancer patients have poor quality of life and increased anxiety than normal patients.

# INTRODUCTION

Cervical cancer is among one of the mainly prevalent gynecological malignancies in women worldwide (Siegel, R. L., Miller, K.D., & Jemal, A. (2019). Among all cancer, Cervical Cancer prevalent 6-29% women in India, with the highest rate in Mizoram and lowest in Dibrugarh. Our country alone have one-fourth burden of it. It is one of the principal reasons for mortality (17%), with the highest accountability of cancer deaths among women aged between 30-69 years. In a study done by Institute for Health Metrics and Evaluation, 2011 it is estimated that Cervical Cancer will occur in 1 in 53 women in their life span in India. Early screening of this illness can reduce mortality; however, there is need for early screening (Singh, M. P et al., 2020). In chronic illness like cancer, patients thought of their lives unpredictable, which automatically leads to poor psychosocial well-being and poor Quality of life. Treatment strategies and screening modalities have largely evolved these past years resulting in an improvement of survival. However, treatment modalities are associated with long term side effects that significantly impacts quality of life (Quality of Life) in cervical cancer survivors. Physical issues including fatigue, pain, and nausea are the most commonly reported issues in cc patients, which is part of quality of life. The Quality of Life of patients with Cervical Cancer is an essential assessment for personalizing treatment and providing better care (Kim, M.-K. et al. 2016). Cervical Cancer survivors had clinically significant problems with social functioning, constipation, diarrhea, severe lymphedema, menopausal symptoms, reduced body image, sexual or vaginal functioning, as well as difficulties with their finances compared with the general female population (Quinten, C. et al, 2009), due to which their physical, psychological, social and environmental domains of quality of life have decreased. There are lots of consequences of this illness and its treatment method which leads to impact the whole areas of the individual's life. The nature of this disease leads to poor

quality of life of the patients as well as of their caregivers (Rahman, Z., et al.,2017). Individuals' quality of life is a multifaceted model and is a composite model that reflects patients experience with disease and long-term sequel. Therefore, in the present study was carried out to know the quality of life of Cervical Cancer patients on each domain of WHO Quality of Life-Bref physical, psychological, social relationship and health, as they suffered a lot during the diagnosis and treatment period sometimes without caregivers. Since India is culturally, demographically divergent from other countries, so here we assess cervical cancer patients on psychosocial domains of the quality of life and anxiety, so that we can provide the locally relevant status of their mental health for further planning for intervention or other uses.

# **OBJECTIVES**

The objective of present study was to assess and compare the cervical cancer patients with normal population on each domain of quality of life and anxiety.

# Hypothesis

- There will be significant difference between cervical cancer and normal people on each domain of quality of life.
- There will be significant difference between cervical cancer and normal people on anxiety.

# METHODS AND MATERIALS Study Sample

A sample of 60 Cervical Cancer patients diagnosed by radiotherapist from the radiotherapy, department of J.N. Medical college, Aligarh Muslim University, Aligarh, UP and Radiotherapist from State Cancer Institute, Department of Radiation Oncology, Indira Gandhi Institute of Medical Science, Patna, Bihar were taken into the study through

purposive sampling method as per the exclusion and inclusion criteria of the study and 60 normal patients who scored <3 on General Health Questionnaire were included in the study as per the inclusion and exclusion criteria.

# **Inclusion Criteria**

Cervical cancer patients

- Age range 18-60 years
- Females
- Both urban and rural
- · Literate and illiterate
- · Diagnosed with cervical cancer by radiotherapist
- Give oral or written consent Normal people
- Age range 18-60 years
- Females
- Both urban and rural
- Literate and illiterate
- · <3 scores on General Health Questionnaire
- Give oral or written consent

### **Exclusion Criteria**

Cervical Cancer

- · Below 18 and above 60 years
- Males
- Diagnosed with other type of cancer
- Females with intellectually disability, hearing or visually impairment and with severe medical condition
- · Did not give oral or written consent Normal People
- Below 18 and above 60 years
- Males
- >3 on General Health Questionnaire
- · Did not give oral or written consent

#### Measurement

Semi structured sociodemographic data sheet: - This semi structured Performa was developed by researcher to collect the details of the subject regarding sociodemographic details. This Performa includes details like their name, age, gender, area, type of family, education, marital status, residents, profession, present illness, etc.

General Health Questionnaire-12: - It is 12 items questionnaire to assess or identify minor psychiatric disorders in general populations. Score above than 3 indicates any kind of psychiatric illness in the individual.

World Health Organization Quality of Life BREF: - It is a short version of WHO Quality of Life 100 (WHO, 2004). It is used to assess Quality of life on four domains- Physical health, Psychological, Social relationships and Environmental. In present study we assessed all four domains of the scale separately. It is including subjective evaluations of both positive and negative perspective of life.

**Hamilton Anxiety Rating Scale (HARS):** - It is 14-items scale to assess anxiety. It is developed to rate the severity of anxiety symptoms.

# Procedure

In the present cross-sectional study, samples were taken from diagnosed patients with cervical cancer from the radiotherapy department of J.N. Medical College & Hospital and from Aligarh city for normal population as per the inclusion and exclusion. Initially normal population was assessed on general health questionnaire; people who score less than 3 were included in present study and were assess on WHO-Quality of Life Bref & Hamilton Anxiety Rating Scale (HARS).

# Statistical Analysis

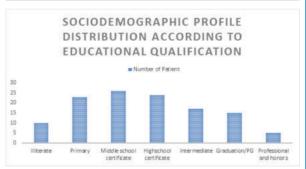
Statistical analysis was done through SPSS 25. t-test was applied to compare mean between cervical cancer and normal people (on p value 0.05 level of significance) and percentage to find the sociodemographic trends in the study.

#### RESULTS

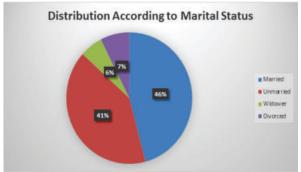
Table 1 indicated the sociodemographic profile of the elderly male and female who participated in the study. There are 60 cervical cancer and 60 normal people in the study. Socioeconomic Status Scale of Kuppuswamy (1976) is used for classification of education and socioeconomic status. Most of the population included in the study are educated up to middle school 26 (21.7%), married 55 (45.5%), living in joint family type 62 (51.2%), and belonging to upper lower socioeconomic status 41 (34.2%).

Table1-Sociodemographic Profile

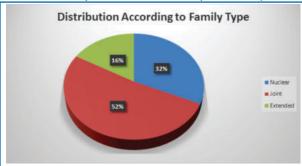
Variable		Frequency	Percentage	
		(n=120)	(%)	
Group	Cervical cancer	60	50	
<u> </u>	Normal	60	50	
Education	Illiterate	10	8.3	
	Primary	23	19.2	
	Middle school certificate	26	21.7*	
	Highschool certificate	24	20	
	Intermediate	17	14.2	
	Graduation/PG	15	12.5	
	Professional and honors	5	4.2	
Marital status	Married	55	45.5*	
	Unmarried	49	40.5	
	Widower	7	5.8	
	Divorced	9	7.4	
Family type	Nuclear	38	31.4	
	Joint	62	51.2*	
	Extended	20	16.5	
Area of residing	Urban	31	25.8	
	Sub-urban	59	49.2*	
	Rural	30	25	
Socioecon	Lower	18	15	
omic	Upper Lower	41	34.2*	
status	Lower middle	34	28.3	
	Upper middle	18	15	
	Upper class	9	7.5	



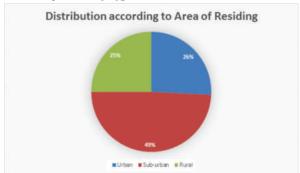
Graph 1. Sociodemographic profile distribution according to Educational Qualification:



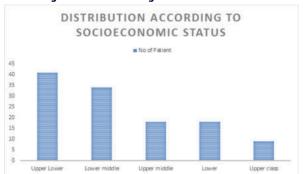
Graph 2. Sociodemographic profile distribution according to Marital Status:



Graph 3. Sociodemographic profile distribution according to Family Type:



Graph 4. Sociodemographic profile distribution according to Area of Residing:



Graph 5. Sociodemographic profile distribution according to Socioeconomic Status:

Table 2- Comparative results of cervical cancer and normal people on Quality of Life (Physical health, Psychological Health, Social relationships and Environment) & on anxiety.

Variables		Group	Mean	SD	t-value	Sig.
Quality of life	Physical health	Cervical	1.18	0.39	16.07	0.01*
		Normal	2.0	0.41		
	Psychological	Cervical	1.15	0.36	11.04	0.01*
	health	Normal	1.86	0.34		
	Social	Cervical	1.13	0.34	12.19	0.02*
	Relationship	Normal	1.88	0.36		
	Environment	Cervical	1.16	0.37	10.05	0.03*
		Normal	1.84	0.36		
Anxiety		Cervical	2.55	0.50	14.98	0.00*
		Normal	1.25	0.43		

<sup>\*</sup>Significant at 0.05 level

Table 2 shows that there is significant difference between cervical cancer patients & normal people on each domain of quality of life and anxiety.

#### DISCUSSION

The quality of life of cervical cancer patients significantly reduced as they reached to advanced stages, study done by Jyani, G, et al., 2020 also found the similar results to our finding

that quality of life of cervical cancer patients is significantly poor but they have assessed health related quality of life only while in our study we assessed all four domains of quality of life. Further in their study those also clinical interventions should be well focused on reducing anxiety and controlling pain as an integral part of effectiveness of intervention. Our study also supports the findings of Shajahan Ahamed, M., & Degu, A.,2022 who also found that overall patients with cc have poor quality of life while it is also associated with early and advanced stages as patients in advanced stage of this disease has scored worse on quality of life as they have higher number of co morbidities.

Study done by Herzog, T. J., & Wright, J. D. 2007, found that panic, self-blame, grief, and anxiety in CC patients are common which might be due to positive human papillomavirus DNA tests. These factors automatically decreased self-esteem, creates sexual and reproductive issues which leads to overall poor quality of life which is supported by the findings of our study (Table 2) while patients who are survivors of cervical cancer good mental health (reduced anxiety and depression) as compared to normal healthy controls (Kim, S. H el al., 2010). Another study done in Indian scenario state that measures of stress and death anxiety is higher among cervical cancer patients while they do not assess anxiety as core symptoms in this study (Sharma, Y. et al., 2003) and they also further elaborated that different profile of cancer patients have different level of stress, distress and coping.

Mawardika, T., Afiyanti, Y., & Rahmah, H. (2019) found that gynecological cancer patients are more prone to have psychiatric issues such as depression, anxiety, and nervousness that can be cause with the diagnosis of cancer and treatments so they need more supportive nursing units. They also further elaborated that patients who are diagnosed with cc usually incident anxiety and believe that they are going to pass away in a distressing condition due to which they remain anxious most of the time and their quality of life automatically decreases which is supported by our findings that cervical cancer patients have low quality of life on every  $domain \, and \, have \, high \, level \, of \, anxiety. \, Distefano, M \, et \, al., 2008$ found that locally advanced cervical cancer patients have a greater number of co morbidities present in them that is the reason for low quality of life on each subscale and low level of education and being unemployment were the cause for negative association with low quality of life. Adding it to further that locally advanced cervical cancer high levels of anxiety in Hamilton anxiety rating scale than early-stage disease (ECC) patient.

#### CONCLUSION

The overall quality of life of cervical cancer patients are poor and they have increased levels of anxiety as compared to normal population.

# **Future Directions**

Further study can be done by taking under consideration of other psychosocial variables like depression, life satisfaction, stigma etc. Study can be planned to provide psychological interventions to these patients for enhancing their quality of life. Association of these psychosocial factors with the early and advanced stages can also be done in future studies.

# REFERENCES

- Shin, D. W., Ahn, E., Kim, Y. M., Kang, S., Kim, B. G., Seong, S. J., ... & Yun, Y. H. (2009)
- Cross-cultural application of the Korean version of the European Organization for Research and Treatment of Cancer quality of life questionnaire cervical cancer module. Oncology, 76(3), 190-198.
- Rahman, Z., Singh, U., Qureshi, S., Srivastav, K., & Nishchal, A. (2017).
   Assessment of quality of life in treated patients of cancer cervix. Journal of Mid-Life Health, 8(4), 183.
- Endarti, D., Riewpaiboon, A., Thavorncharoensap, M., Praditsithikorn, N., Hutubessy, R., & Kristina, S. A. (2015). Evaluation of health-related quality of life among patients with cervical cancer in Indonesia. Asian Pacific Journal of Cancer Prevention, 16(8), 3345-3350.

#### PARIPEX - INDIAN JOURNAL OF RESEARCH | Volume - 12 | Issue - 02 | February - 2023 | PRINT ISSN No. 2250 - 1991 | DOI: 10.36106/paripex

- Siegel, R. L., Miller, K. D., & Jemal, A. (2019). Cancer statistics, 2019. CA: a cancer journal for clinicians, 69(1), 7-34.
- 6. Ferlay, J. (2010). GLOBOCAN 2008 vl. 2, Cancer incidence and mortality world-wide: IARC Cancer Base No. 10. http://globocan.iarc
- Institute for Health Metrics and Evaluation. The Challenge Ahead: Progress in Breast and Cervical Cancer. Institute of Health Metrics and Evaluation. 2011.
- Singh, M. P., Chauhan, A. S., Rai, B., Ghoshal, S., & Prinja, S. (2020). Cost of treatment for cervical cancer in India. Asian Pacific Journal of Cancer Prevention: APICP, 21(9), 2639.
- Jyani, G., Chauhan, A. S., Rai, B., Ghoshal, S., Srinivasan, R., & Prinja, S. (2020). Health- related quality of life among cervical cancer patients in India. International Journal of Gynecologic Cancer, 30(12).
- Shajahan Ahamed, M., & Degu, A. (2022). Health-related quality of life among cervical cancer patients at Kenyatta National Hospital. Journal of Oncology Pharmacy Practice, 10781552211073886.
- 11.  $Kim, S. \, H., Kang, S., Kim, Y. \, M., Kim, B. \, G., Seong, S. \, J., Do \, Cha, S., \dots \& Yun, Y. \, H.$ (2010).
- Prevalence and predictors of anxiety and depression among cervical cancer
- survivors in Korea. International Journal of Gynecologic Cancer, 20(6). Herzog, T. J., & Wright, J. D. (2007). The impact of cervical cancer on quality of life—the components and means for management. Gynecologic oncology, 107(3),572-577.
- $Kim, S.\,H., Kang, S., Kim, Y.\,M., Kim, B.\,G., Seong, S.\,J., Do\,\,Cha, S.,\, \dots \&\, Yun, Y.\,H.$ (2010).
- Prevalence and predictors of anxiety and depression among cervical cancer survivors in Korea. International Journal of Gynecologic Cancer, 20(6)
- Sharma, Y., Mattoo, S. K., Kulhara, P., Sharma, S. C., & Sharan, P. (2003). Stress and coping in women with cervical and breast cancer in India. Ger J Psychiatry, 6,40-8.
- 17. Mawardika, T., Afiyanti, Y., & Rahmah, H. (2019). Gynecological cancer inpatients need more supportive nursing care than outpatients: a comparative study. BMC nursing, 18(1), 1-6.
- 18. Distefano, M., Riccardi, S., Capelli, G., Costantini, B., Petrillo, M., Ricci, C., ... & Ferrandina
- G. (2008). Quality of life and psychological distress in locally advanced 19. cervical cancer patients administered pre-operative chemoradiotherapy. Gynecologic oncology, 111(1), 144-150.
- 20 Kuppuswamy B. Manual of Socioeconomic Status (urban), Manasayan, Delhi; 1981
- World Health Organization. Cervical Cancer Screening in Developing Countries: Report of WHO Consultation. 2002
- Quinten, C., Coens, C., Mauer, M., Comte, S., Sprangers, M. A., Cleeland, C., ... & Bottomley, (2009). Baseline quality of life as a prognostic indicator of 22. survival: a meta-analysis of individual patient data from EORTC clinical trials. The lancet oncology, 10(9), 865-871.
- 23. Kim, M. K., Sim, J. A., Yun, Y. H., Bae, D. S., Nam, J. H., Park, C. T., ... & Park, S. Y.
- Health-related quality of life and sociodemographic characteristics as prognostic indicators of long-term survival in disease-free cervical cancer
- survivors.International Journal of Gynecologic Cancer, 26(4).

  25. https://www.jdrntruhs.org/article.asp?issn=2277-8632;year=2013; volume =2;issue=3;spage=201;epage=202;aulast=Dudala