AN EXPLORATORY STUDY ON LIFESTYLE CHANGES AND DISABILITY IN HEAD AND NECK CANCER PATIENTS AT A SELECTED ONCOLOGY HOSPITAL, CHHATTISGARH

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Abstract

Head and neck cancer significantly impacts patients' quality of life, leading to lifestyle changes and disability. This exploratory study aims to investigate the extent and nature of lifestyle changes and disability in head and neck cancer patients undergoing treatment at a selected oncology hospital in Chhattisgarh. The study will employ a mixed-methods approach, combining quantitative and qualitative data collection and analysis methods. Quantitative data will be collected using standardized assessment tools, while qualitative data will be gathered through in-depth interviews. The study's findings will provide insights into the specific challenges faced by head and neck cancer patients, informing the development of targeted interventions to support patients' rehabilitation and improve their overall quality of life. This research will contribute to the existing body of knowledge on head and neck cancer, highlighting the need for comprehensive care and support services to address the unique needs of patients in this region.

Keywords: *Head and neck cancer, lifestyle changes, disability, quality of life, oncology hospital, Chhattisgarh.*

Introduction

Cancer which symbolizes a group of disease involves abnormal multiplication of cell which progression to invade the adjoining parts of the body in future. Although there are 200 different type of cancer, but differences do exist in the occurrence of type and site among the human population. Cancer arising in the oral cavity oropharynx hypopharynx, nasopharynx, larynx nasal fossa, para nasal sinuses, thyroid salivary glands and vermilion surface. Head and neck cancer is the 7th most common type of cancer worldwide and comprise of a diverse group of tumor affecting the upper aero digestive tract. Worldwide incidence estimated 562,328 people where diagnosed with head and neck cancer in 2020 it is estimated that 15,400 death's (11, 210 men and 4,190 women) from head and neck cancer will occur in the United States in 2023. In 2020 an estimated 277,597 people worldwide diet from the disease. head and neck cancers are common in India and account for about 30% of cancers in males and about 13% in female's oral cavity cancers are most common in the India. In Chhattisgarh epidemiological trend study done by Dr. Ashish K.S and others (2018) revealed that one of 16,395 patients during the 5-year period from 2011 to 2015 registered in RCC Dr. Bhim Rao Ambedkar memorial hospital, Raipur Chhattisgarh 2271 (32.30%) where in age group 45 - 59 years oral cancer being the commonest type of cancer followed by stomach and lung cancer in male. Top six most commonly repeated cancer among female patients

where cervical breast, oral cavity ovary, stomach and colorectal cancer.

Need for the study

The overall incident of head and neck cancer contains to rise and is estimated to increase annually by 30% by the year 2030 the increasing rates in USA and Europe can be attributed to rice in oropharyngeal Cancer linked to human papillomavirus infection. In 2018 there where 4078 death's attributable to head and cancer in UK accounting for approximately 2% of all cancer death annually. Globally five years survival for HNC average 50% of cases with head and neck having the poor survival ratio. Tobacco, smoking and alcohol drinking behaviours, separately and in combination are major Rick factor for head and a cancer, if you accounting for 72% of cases where used in combination. Tobacco smoking and alcohol drinking behaviours, separately and in combination are major risk factors for head and neck cancer, accounting for 72% of cases where used in combination.

Objectives

1. To identify the adjusted lifestyle of patients with head and neck cancer
2. To associate the disability adjusted lifestyle score with selected social demographic variables.

Exploratory Study

Exploratory study investigates research questions have not been studied in depth. In the present study it refers to the first research of it's kind with the current subject disability adjusted lifestyle.

Patient With Head and Neck Cancer

Are a group of cancer that form the tissue of the upper aero digestive tract (lips, mouth, tongue, throat and larynx or voice box be the sinuses and nasal cavity. In the present study it refers to individuals who are diagnosed with cancer of head and neck attending OPD and admitted in ward of selected hospital of Raipur (c.g.)

Literature Review

Mu- Hising et al. (2024) to summarize the incidence of post-operative delirium among cancer patients undergoing head & neck Surgery & determine the differential incidence rules among patients undergoing different types of head & neck surgery. The Databases of PubMed, Cochrane library, web of Science, EMBASE, & CINAHL were searched from inception till February. Keywords based on the condition delirium content (postoperative) & population (head & neck cancer) were used as search teams The PRISMA & Moose reporting guidelines were followed for review. The Joanna Briggs institute Critical appraisal checklists for Cohort studies case studies & randomized controlled trial were used to Evaluate the methodology quality.

Richo Chauhan et al. (2022) head and neck cancer is very common in India, accounting for 30%. Of all cancers, due to widespread tobacco use across India. Studies have reported that the male to Female Ratio varies worldwide and also by anatomical sub site. This is a retrospective analysis of 500 consecutive biopsy proven HNC patients from a Jorge comprehensive Cancer Hospital from Bihar during the period of January 2019 to June 2019. This study was done with an aim to determine the difference in pattern and prevalence of tobacco use in male and female patients with head and neck cancer and compare them with different sub sites. The study revealed that the male-to-female ratio is 8.43:1and 84.40% of the patients have tobacco addiction. Smokeless tobacco is used by 52.20%. Combustible from by 12.80%. and both by 19.40% of the patients.

Laura W. J.Boijens Et Al Eur Arch Otorhinolaryngol (2021) head and neck cancer can result in significant changes in swallowing speech and voice. Many head and neck cancer patients experience some degree of OD. The Nature and degree of OD depend on the site and size of tumor. In a prospective study of 649 population with head and neck cancer. The aim after oncological treatment is often to return to oral feeding with the help of an allied health Professional and early speech therapy intervention to that optimize swallowing outcome the study revealed approximately 52 % of patients who received Radiation Therapy and 69 7. Who received (RT suffered from long term OD after treatment Results 24 sections on head and neck cancer specific OD topics.

Sandael J.A. Bye As (2020) year of 2015 and march 2016 from the ethnic head and neck cancer. Observational studies have reported HRQOL the rough out treatment and recovery in patient and with head and neck cancer demonstrating that symptoms such as pain, dry mouth and sticky saliva increase steadily during the course of radiotherapy while physical functioning and global health status /QOL decrease. In that a pilot study 41 patient where randomized resistant raining and oral nutritional supplement during (EN-DUR, n-20) or after (EN-AF, n-21) ratio therapy. Personal health status /QOL (GHS) and physical functioning (PF) where measured by the Asia organization for Research and treatment of cancer (EORTIC) quality of life questionnaire at baseline week 6 and week 14 difference between the group were assessed by analysis of carriance.

METHODOLOGY

Methodology of research is a system of models, procedures and techniques used to find the result of research problems. The methodology studies address the development, validation and evaluation of tools designed for the research.

Research Approach

Research approach helps to decide about the presence or absence of randomization as well as manipulation and control over variables and also identifies the presence or absence of control group.

Research Design

A research design provides outlines of how the research will be carried out and the methods that will be used. It is the master plan specifying the methods and procedures for collecting and analysis the needed information in research study i.e., description of research approach, study setting, sample size, sampling techniques, tools and methods of data collection and analysis to answer specific research questions or for testing research hypothesis.

Sample

According to Suresh K. Sharma, Sample may be defined as representative units of target population which is worked upon by the researcher during their study. In the present study samples of patients with head and neck cancer were 30 from Dr. Bhimrao Ambedkar Memorial Hospital Raipur.

Sampling Technique

According to POLIT and HUNGLER, Sampling technique refers to the process of selecting proportional to represent the entire population. In the present study purposive sampling is used to select the samples for the study.

Selection And Development of Tools

Based on the problem statement and objectives of the study following steps were taken to select and develop the data collection tool

Selection of the Tools– selection of the tools used closed format self-structured checklist to assess disability adjusted

lifestyle regarding head and neck cancer and to associate the disability adjusted lifestyle score and with selected social demographic variables.

Data tabulation.

Frequency and percentage distribution were used to study the socio- demographic variables of patients such as age, gender, area of residence, type of family, educational qualification, occupation, history of cancer in family, history of any illness, history of head and neck cancer therapy any other alternative treatment taken along with chemotherapy or radiotherapy, specify the present disabilities after cancer therapy.

Disability adjusted lifestyle of patient with head and neck cancer is calculated as per the frequency and percentage criteria under different categories-

(a) Mild disability adjusted lifestyle.

(b) Moderate disability lifestyle.

(c) Maximum disability adjusted lifestyle.

Table: Association between Disability adjusted lifestyle of patient with head and neck cancer with according to their age.

Age	Minimum	Moderate	Maximum	Total	∑X2	Df	Table value	Level of significant	Total sample size	Inference
20-30	0	1	0	1	143	8	15.51	0.05		Significant
31-40	2	4	1	7					30	
41-50	1	8	3	12						
51-60	0	2	3	5						
61-65	0	3	2	5						
Total	3	18	9	30						

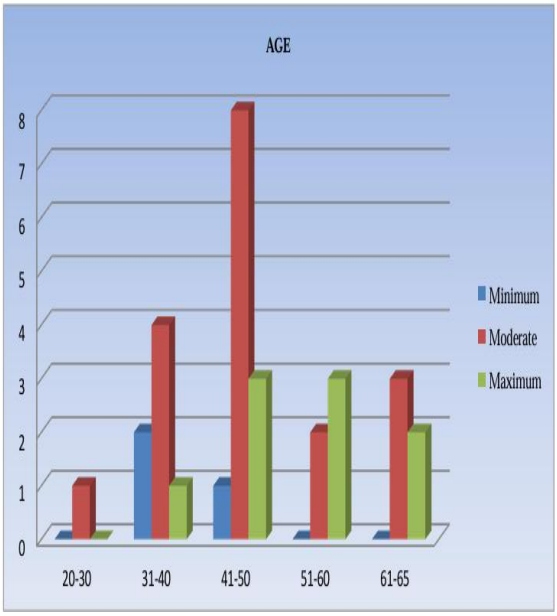

Figure 1

Table no. 2 figure 2 show that the association between disability adjusted lifestyle with age of participants was found to be143at the df 8 which is higher than the table value of 15.51hence it was significant at 0.05 level of significant.

Table 2: Association between Disability adjusted lifestyle of patients with head and neck cancer with respect to their Gender.

Gender	Minimum	Moderate	Maximum	Total	∑X2	Df	Table Value	Level of significant	Total sample size	inference
Male	2	9	5	16						
Female	3	8	3	14	842.54	2	5.99	0.05	30	significant
Total	5	17	8	30						

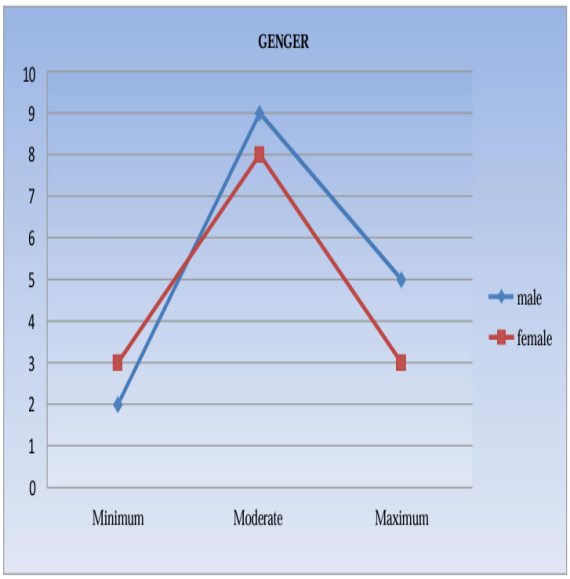

Figure 2

Table No 2 figure 2 show that the association between disability adjusted lifestyle with age of participants was found to be 342.54 at the df 2 which is higher than the table value of 5.99 hence it was significant at 0.05 level of significant.

Table 3: Association between Disability adjusted lifestyle of patient with head and neck cancer type of family.

Type of family	Minimum	Moderate	Maximum	Total	∑x2	Df	Table value	Level of significant	Total sample size	Inference
Nuclear	2	5	2	9	1062.52	2	5.99	0.05		significant
Joint	3	13	5	21						
Total	5	18	7	30						

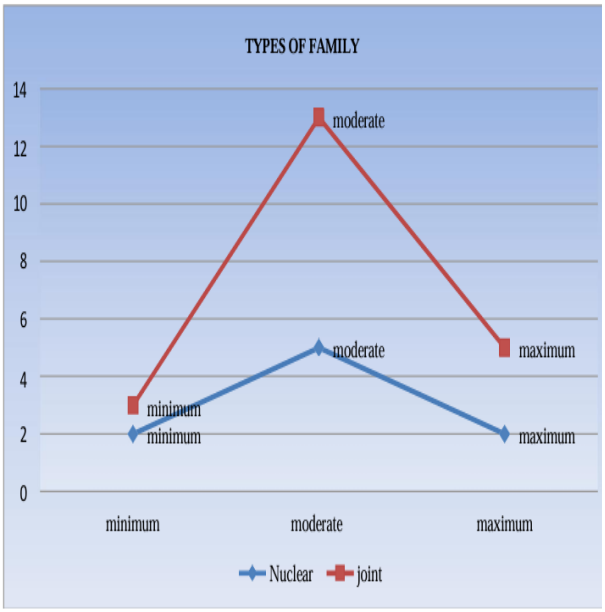

Figure 3

Table No 3 figure 3 show that the association between disability adjusted lifestyle with age of participants was found to be 1062.52 at the df 2 which is higher than the table value of 5.99 hence it was significant at 0.05 level of significant.

Table 4: Association between Disability adjusted lifestyle of patient with head and neck cancer with type of cancer.

Gander	Minimum	Moderate	Maximum	Total	$\sum X^2$	Df	Table value	Level of significant	Total sample size	Interference
Oral	3	12	5	20	947	4	9.49	0.05	30	Significant
Neck	2	4	2	8						
Head	1	1	0	2						
Total	6	17	7	30						

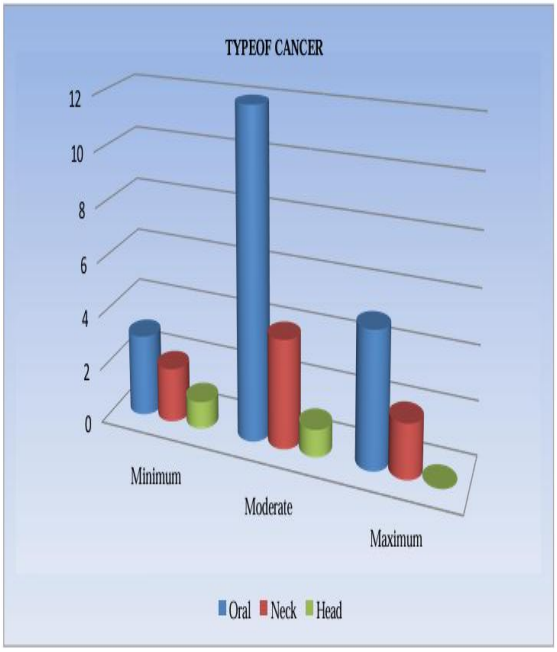

Figure 4

Table 4 figure 4 show that the association between disability adjusted lifestyle with age of participants was found to be 947atthe df 4 higher than the table value of 9.49 hence it was significant at 0.05 level of significant.

Table 5: Association between Disability adjusted lifestyle of patient with head and neck cancer and type of care giver.

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Type of care give	Minimum	Moderate	Maximum	Total	∑x2	Df	Table value	Level of Significant	Total sample size	Inference
Spouse	3	14	1	18						
Mother	2	1	1	4						
Father	0	1	1	2	357	8	15.15	0.05	30	significant
Children	1	3	1	5						
Other	0	1	0	1						
Total	6	20	4	30						

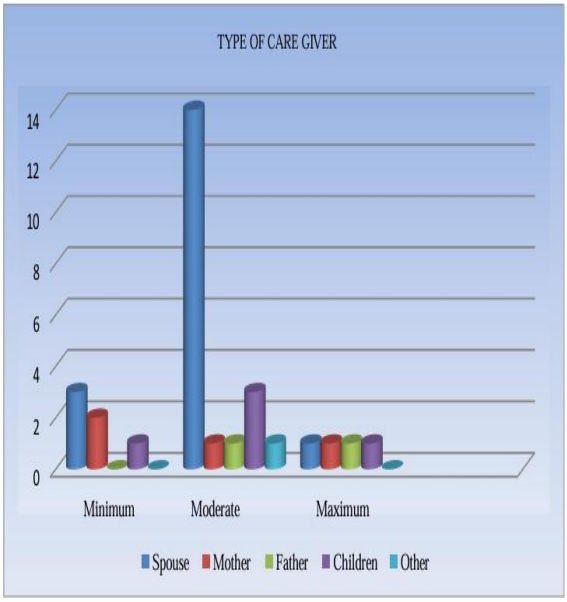

Figure 5

Table No. 5 figure 5 that the association between disability adjusted lifestyle with age of participants was found to be 357at the df 8 higher than the table value of 15.15 hence it was significant at 0.05 level of significant.

Conclusion

This study deal with analysing data collection to draw inference. Based on the objectives, data where analysed using statistical that were chi-square test, Karl pearson correlation formula test. On analysing head and neck cancer regarding disability adjusted lifestyle, we found in significantly maximum disability –8(60%) moderate disability –5(40%) and mild disability -0(100%) of the head and neck cancer patient with disability adjusted lifestyle of the sample. This study was done to identify disability adjusted lifestyle of post operative patients with head and neck cancer undergoing treatment at selected Dr. Bhim Rao Ambedkar Memorial Hospital Raipur, Chhattisgarh This was an exploratory study with a sample size of 30. We used a self- structured checklist to identify disability adjusted lifestyle. The study revealed the following findings that 50% (15) patients are living with moderate disability adjusted lifestyle, 36% (11) patients are living with maximum disability adjusted lifestyle and 14% (4) patients are living with mild disability adjusted lifestyle.

Recommendation

• For further study on the topic it is recommended to take a much larger sample size for the study when association is to be found.

• In this research we have done we take seen that cancer patients keep adjusting to many problem. So in the future research those will done research on the difficulties that they are facing in adjusting and find solution for the same.

Limitation

• The study is limited with under the 30 sample have the generalize ability of finding in small.

• The participants under data collection were variable during the limited period so the finding cannot be generalized to a large population.

• The study is limited on only post operative patients with head and neck cancer.

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