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A Study on the Prevalence of Depression and Anxiety and its Association with Quality of Life in Patients with Head and Neck Cancer

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ABSTRACT
Head and Neck Cancers are one of the commonest Cancers in the world. It comes with a unique set of problems of disfigurement, eating, swallowing and breathing difficulties. The problems faced by the Cancer sufferer is not only due to Cancer and its spread but also due to the adverse effects of the treatment. The Cancer diagnosis is fatal blow to the individual and his family. To study the Prevalence of Depression and Anxiety in Head and Neck Cancer patients. To find out the Quality of Life in Head and Neck Cancer patients. To study the association between Depression and Anxiety and Quality of Life. Patients admitted in a Tertiary Care Hospital diagnosed with Head and Neck Cancer were enrolled in the study after obtaining the Informed Consent. Clinical Interview was done and Anxiety and Depression was evaluated. The Severity of Psychiatric Morbidity assessed by giving Rating scales, HAM-A, HAM-D, WHOQOL-BREF. The Psychiatric Morbidity in Head and Neck Cancer patients in the study sample was 37%. Among them 31% were having Depression and 6% were having anxiety disorders. Depression was common in males. Anxiety was common in females. The Quality of life scores were poorer in cancer patients having Psychiatric Morbidity. Psychiatric Morbidity is high in Head and Neck Cancer patients. The Sociodemographic variables and Cancer related variables correlated well with Depression. Quality Of Life scores were reduced in the presence of Psychiatric Morbidity. The scope of Psychiatric Intervention offers a glimmer of hope in the Head and Neck Cancer patients besieged by the disease and its complication.

INTRODUCTION

The burden of cancer worldwide varies according to differences in risk factors, detection practices, treatment availability, age structure and completeness of reporting. The world population is exposed to increased risk of development of cancer, as the life expectancy has improved over the years. The diagnosis of cancer is a life-altering experience for anyone. The nature of the patient's response to the cancer diagnosis, will affect the person's mood, adherence to treatment and the quality of social support available. Recent studies in adults treated in the outpatient cancer clinics demonstrate a 40-50% clinically relevant level of distress. The physical symptoms of the cancer and its treatments, overlap with the somatic symptoms that are a part of many of the psychiatric problems. It is noticed that even skilled clinicians are at times, not able to determine the extent to which, fatigue, decreased appetite or sleep problems are due to cancer itself or its targeted therapies or is it due to the development of depression and anxiety[1]. Although there are many psychiatric conditions that occur in cancer patients, the more commonly diagnosed are depression, anxiety, adjustment disorders and delirium. Often cancer patients exhibit mixed states or combinations of symptoms, as those of both depression and anxiety. Regular, ongoing evaluation of emotional distress affects the trajectory of management of psychiatric issues and this in turn translates into to better treatment outcomes, patient satisfaction, doctor-patient communication and overall improved oncologic care. The Head and Neck Cancers are a heterogeneous group of malignant tumors arising in all structures cephalad to the clavicles, except for the brain, spinal cord, base of the skull. Head and Neck Cancers constitute nearly 3% of all newly diagnosed cancers in humans[2]. Alcohol consumption and cigarette smoking, Smokeless tobacco such as snuff and chewable tobacco are implicated in causation of Head and Neck Cancers. Human papilloma virus, Epstein Barr virus and occupational exposure to hazardous chemicals also promote cancer formation. Most of the Cancers of the Head and Neck are of squamous cell origin[3]. The cancers of the Head and Neck spread by invasion of adjacent tissues and metastasises to regional lymph nodes. Surgery has long been a mainstay of the treatment of patients with Cancers of the Head and Neck, along with adjuvant Radiotherapy and Chemotherapy[4]. The diagnosis of cancer is a process marred with high psychic costs for both the patient and the family. The unconscious mechanisms of defense against anguish and cognitive behavioral style of stress management is mobilized. It has been observed that the impact of the diagnosis creates a true existential crisis that manifests itself during the first 3 months in 70% of patients[5]. The fear of disfigurement from growing cancer or it's surgical sequalae, is a common existential threat (13). The challenge for patients is that they must proceed with prompt medical evaluation and make critically important treatment decisions about their own distress level[6].

Facing a life-threatening disease creates the possibility of a reorganization of one's essential priorities, as well as the opportunity for change and for personal growth[7]. Mood changes and other psychological issues surface in the initial period of turmoil and mulling around the diagnosis, with signs and symptoms of anxiety, fear and depressed or dysphoric mood[8]. The ability of an individual to manage and cope with discovery of cancer depends on the interplay of biological, psychological, spiritual and social factors[9]. There is little evidence of personality traits playing a major role in coping skills[8]. Shorter survival indices are seen in cancer patients who are depressed[10]. Prevalence rates for major depression in studies of cancer patients have ranged up to 38%, whereas rates for depression spectrum disorders have been as high as 58%, compared with rates of 6.6% for 12 month prevalence and 16.6% for lifetime prevalence in general community[6]. The cancer patients commonly experience anxiety symptomatology as feeling of persistent tension in their lives, with a lot of worrying to do, with inter spread panic attacks and awareness of palpitation[11]. Abnormal illness behaviour and somatic symptoms reduce the Quality of Life of cancer patients, thereby reducing the feeling of well-being perceived by the patient[11]. There was good co relation of positive symptom scale in depressed patients and negative correlation of the global health and functioning status. Their net conclusion was that depressed Head and Neck Cancer patients had poorer Health Related Quality of Life scores[12].

MATERIALS AND METHODS

Study Centre: The participants for the study were recruited from the Inpatients of Department of Radiation Oncology, Rajiv Gandhi Government General Hospital, Chennai. All the study participants were diagnosed with Head and Neck Cancer and were undergoing treatment in the cancer ward.

Inclusion Criteria: Adult patients with Head and Neck Cancer, admitted in Rajiv Gandhi Government General Hospital. Patients satisfying the Eastern Co-operative Oncology Group performance status criteria. 0-3.

Exclusion Criteria: Patients with previous History of Psychiatric illness. Patients not willing to participate in the study.

Aims and Objectives:
- To study the Prevalence of Depression and Anxiety in Head and Neck Cancer patients.
- To find out the Quality of Life in Head and Neck Cancer patients.
- To study the association between Depression and Anxiety and Quality of Life.
- The association between Cancer Related Variables, Socio-Demographic Variables and the Psychiatric Morbidity, its impact on Quality of Life scores was explored.

Duration of Study: The data was collected over a period of 3 months.

Methodology: Approval was obtained from the institutional ethical committee. Selection of cases was done from the patients with Head and Neck Cancer admitted in the Department of Radiation Oncology, Rajiv Gandhi Government General Hospital, Chennai. Sample size consisted of 100 Head and Neck Cancer patients, who satisfied the inclusion and exclusion criteria. After getting their informed consent, patients were interviewed and details collected as per the Proforma. Thorough Clinical psychiatric evaluation was done, Depression and Anxiety was identified using ICD 10 diagnostic criteria and Rating scales were applied to assess the Severity of the Psychiatric illness.

Patients were Administered the Following Scales:
- Hamilton Depression Rating scale.
- Hamilton Anxiety Rating scale.
- World Health Organization Quality of Life BREF scale.
- Kuppuswamy's scale for Socioeconomic Status.

ICD 10-Guidelines:
Anxiety Disorders: Elements of Apprehension (worries about future misfortune, feeling on the edge, difficulty in concentrating), Motor tension (restless fidgeting, tension headaches, trembling, inability to relax) and Autonomic Over activity (light headed ness, sweating, tachycardia or tachypnoea, epigastric discomfort, dizziness, dry mouth).

Depressive Disorders: Reduced concentration and attention, reduced self-esteem and self-confidence, ideas of guilt and unworthiness, bleak and pessimistic views of future, ideas or acts of self-harm or suicide, disturbed sleep, diminished appetite[13].

Hamilton Anxiety Rating Scale (HAM-A): The scale measures both psychological and somatic symptoms of anxiety. The total score ranges from 0-56. Score of (0-17) indicates mild anxiety, (18-25) moderate anxiety, (26-30) severe anxiety.

Hamilton Depression Rating Scale (HAM-D): The severity of depression is rated based on the prevailing mood, guilt feelings, ideas of suicide, sleep disturbances, agitation or retardation, weight loss and other somatic symptoms. Scoring pattern: (0-7) normal, (8-13) mild, (14-18) moderate, (19-22) severe, (>23) very severe depression[14].

The World Health Organization Quality of Life (WHOQOL-BREF): This scale assesses the quality of life in four Domains, namely, Physical, Psychological, Social relationship and Environmental domains. The domain scores are scaled in a positive direction. The mean scores are then multiplied by 4 in order to make domain scores comparable with the scores used in WHOQOL-100. The first transformation method converts score to range between 4-20, comparable with the WHOQOL-100. The second transformation method converts domain scores to a 0-100 scale. Cronbach alpha values for each of the four domains demonstrated good internal consistency. Among the domains, the physical health domain is the most contributing and social relationship domain is least contributing to the overall quality of life. Thus WHOQOL-BREF is considered as a good alternative to WHOQOL-100 and it is helpful in rapid assessment of quality of life[15].

Kuppuswamy's Socioeconomic Status Scale Revised-2012: Socioeconomic scale consists of scores based on three variables, namely, education, occupation and income on the basis of ten-point scale. It consists of ten categories grouped with 5 social class namely very high, upper middle, lower middle and very low, (Sethi B.P *et al.* and Kuppuswamy, 1961) socio economic status (SES) is a recognized determinant of well being[16].

Eastern Cooperative Oncology Group (ECOG) Performance Status Scale: It is a useful parameter which, helps the clinician to decide whether the patient will benefit from treatment or will be made worse. According to the ECOG scale, 0-asymptomatic, 1-symptomatic, ambulatory, able to carry out activities of daily living, 2-symptomatic, in bed <50% of the day, occasionally needs nursing care, 3-symptomatic, in bed >50% of the day, needs nursing care, 4-bedridden, may need hospitalization[17,18].

Data Analysis and Statistics: The results were tabulated and analyzed using the statistical package SPSS software version 20. Chi-square test was the statistical test employed for the assessment.

RESULTS AND DISCUSSIONS

Profile of the Study Population: We enrolled 100 patients with head and neck cancer for our study (n=100). Majority of the study subjects, 57% were in the age group of 51-65 years, 31% were in the age group of 36-50 years and 12% were in the age group of 18-35 years. Males constituted 74% of the study subjects and rest were females, 26%. Among the study subjects 42% were Illiterate, 23% attended Primary school, 15% had middle school education, 13% had High school level education, 4% were Diploma holders and 3% were Graduates. In our study, 42% of the study subjects were unemployed, 32% were unskilled workers, 17% were semiskilled workers and 9% were skilled workers. Among the study participants, 71% were married and the remaining 29% were single. In our study 61% belonged to the Low-income group, 23% were from Upper Low-income group and 16% were from the Middle-income group. Family History of psychiatric illness was present in only 13% of the study population. Cancer of oropharynx was present in 69% of the study subjects and 31% had cancer in other regions of the Head and Neck. Advanced Stage of Cancer was present in 72% of study subjects and 28% had localized cancer. Cancer was present for >6 months in 67% of study subjects and 33% had cancer for <6 months. ECOG-3 status was present in 50% of the study population, 34% had ECOG-2 status and 16% had ECOG-1 status. Multi modality cancer Treatment was used in 63% and Single Modality Treatment was used in 37% of cancer patients. **(Table 1)**. Rating scales were used to find out the psychiatric morbidity. The scores of HAM-A anxiety rating scale showed, 5% of the study subjects to have Mild Anxiety and 1% to have Moderate Anxiety. In HAM-D rating scale scores, 8% had Mild Depression, 20% had Moderate Depression and 3% had Severe Depression. Only {37% (n=37)} of the study subjects were found to have psychiatric morbidity in our study. **(Table 1).** In our study Quality of life was found to be reduced in all 4 domains (Physical health, Psychological well being, Social relationship and the Environment) of WHOQOL-BREF scale in cancer patients with psychiatric morbidity. In anxiety (n=6), Physical health domain (Mean=46, SD=3.09839), Psychological well being domain for (Mean=43, SD=4.51664), Social relationship domain (Mean=53, SD=5.01996,) Environment domain (Mean=58.5, SD=7.76531). In depression (n=31), Physical health domain (Mean=36.9032, SD=5.92371), Psychological well being domain (Mean=22.1613, SD=7.70323), Social relationship domain (Mean= 45.5484, SD=8.86130), Environment domain (Mean= 50.0323, SD=6.98801) **(Table 2)**.

Statistical Correlation: Among the Head and neck cancer patients with psychiatric morbidity(n=37), Depression was seen in 67.7% (n=21) of the subjects in the 51-65year Age Group (13.084* P=0.011). Depression was seen more in Males 74.2% (n=23) and Anxiety was seen more in Females 83.3% (n=5), (11.194*P=0.004). Persons with illiteracy suffered more depression at 51.6%(n=16), (23.627*P=0.009). Unemployed persons were more depressed 48.4% (n=15), (8.245, P=0.221). Anxiety was more in subjects who were Single 66.7% (n=4) and depression was more in subjects who were Married 77.4% (n=24), (4.760 P=0.093). Depression was more in subjects from the Low Socioeconomic Status at 74.2% (n=23), (26.822* P<0.001). Family History of Psychiatric illness was absent in 93.5% (n=29) of study subjects with depression, (3.180, P=0.204). Cancer Oropharynx was present in 74.2% (n=23) of patients with Depression, (3.980, P=0.137). Advanced stage of cancer was present in 77.4% (n=24) of the Depressed subjects, (4.934, P=0.085). Cancer was present for >6 months in 77.4% (n=24) of patients with depression, (13.749* P=0.001). Patients with depression {61.3% (n=19)} were in the ECOG status-3, (26.585* P<0.001). Multi modality Treatment was used in {74.2%(n=23)} of the depressed patients (7.225* P=0.027). **(Table 3)**.

The present study was done with the objectives of finding out the Prevalence of Depression and Anxiety, along with the Quality of Life in patients with Head and Neck Cancer. The Psychiatric Morbidity was prevalent among 37% of the participants in this study, which is similar to the studies done by[19,20,21]. The Prevalence of Anxiety was found to be 6% in the study population, which is in Concordance with an Indian study[22], where the study population had 12% Prevalence of Anxiety. On the Contrary, one study[23] quoted anxiety in 82% of the study population and another study[24] in 19-71% of the study patients. In this study when Anxiety scores were Graded according to Severity profile, it was found that 14% of the subjects had Mild Anxiety and 3% had Severe Anxiety, which is in Concordance with study by[25], 17-30% prevalence of Mild Anxiety. In the present study Anxiety was more prevalent in Females, which is in concordance with studies done by[24,26]. The Prevalence of Depression was found in 31% of the participants in the present study, in Concordance with the studies done by[27-29]. In the present study, when the Depression scores were Graded for Severity profile, 54% had Moderate Depression, 22% had Mild Depression and 8% had Severe Depression, in Concordance with[21]. On the Contrary[30], recorded Severe Depression scores in 17% of their study sample[31], found the Prevalence of Severe Depression

Table 1: Socio-Demographic and Clinical Characteristics, a Study on the Prevalence of Depression and Anxiety and its Association with Quality of Life in Patients with Head and Neck Cancer

Sociodemographic and clinical characteristics of head and neck cancer patients (n=100)

Variables			Percentage
Sex	Male		74
	Female		26
Age	18-35		12
	36-50		31
	51-65		57
Education	Graduate		3
	Diploma		4
	High School		13
	Middle School		15
	Primary School		23
	Illiterate		42
Occupation	Skilled		9
	Semiskilled		17
	Unskilled		32
	Unemployed		42
Marital status	Single		29
	Married		71
Socioeconomic status	Middle		16
	Upper-Low		23
	Low		61
Family history of psychiatric illness	Present		13
	Absent		87
Site of cancer	Oropharynx		69
	Others		31
Stage of cancer	Localised		28
	Advanced		72
Duration of cancer	<six months		33
	>six months		67
ECOG performance status	1		16
	2		34
	3		50
Treatment modality	Single		37
	Multi		63
Psychiatric morbidity	Present		37
	Absent		63
HAM-A scores	Anxiety		
		Mild	5
		Moderate	1
HAM-D scores	Depression	Mild	8
		Moderate	20
		Severe	3

Table 2: Quality of Life with WHOQOL-BREF Scale, a Study on the Prevalence of Depression and Anxiety and its Association with Quality of Life in Patients with Head and Neck Cancer

WHOQOL-BREF scale scores for Head and neck cancer patients

QOL Domains		n=100	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Physical domain	No psychiatric morbidity	63	61.2063	4.69783	.59187	60.0232	62.3895	50	69
	Anxiety	6	46.0000	3.09839	1.26491	42.7484	49.2516	44	50
	Depression	31	36.9032	5.92371	1.06393	34.7304	39.0761	25	50
Psychological domain	No psychiatric morbidity	63	61.4762	5.22048	.65772	60.1614	62.7910	50	75
	Anxiety	6	43.0000	4.51664	1.84391	38.2601	47.7399	38	50
	Depression	31	22.1613	7.70323	1.38354	19.3357	24.9869	13	38
Social domain	No psychiatric morbidity	63	75.0952	4.50703	.56783	73.9602	76.2303	69	81
	Anxiety	6	53.0000	5.01996	2.04939	47.7319	58.2681	44	56
	Depression	31	45.5484	8.86130	1.59154	42.2980	48.7987	25	56
Environmental domain	No psychiatric morbidity	63	78.0476	5.43711	.68501	76.6783	79.4169	69	88
	Anxiety	6	58.5000	7.76531	3.17017	50.3508	66.6492	50	69
	Depression	31	50.0323	6.98801	1.25508	47.4690	52.5955	38	63

Table 3: Sociodemographic and Clinical Characteristics of Head and Neck Cancer Patients with Psychiatric Morbidity (n=37), a Study on the Prevalence of Depression and Anxiety and its Association with Quality of Life in Patients with Head and Neck Cancer

Sociodemographic and clinical characteristics of head and neck cancer patients with psychiatric morbidity (n=37)

Variables		Anxiety	Depression	Pearson Chi-Square	P-value
Age	18-35	3(50%)	2(6.5%)	13.084	* P=0.011
	36-50	3(50%)	8(25.8%)		
	51-65	0	21(67.7%)		
Sex	Male	1(16.7%)	23(74.2%)	11.194	* P=0.004
	Female	5(83.3%)	8(25.8%)		
Education	Graduate	0	1(3.2%)	23.627	* P=0.009
	Diploma	2(33.3%)	0()		
	High School	2(33.3%)	2(6.5%)		
	Middle School	2(33.3%)	4(12.9%)		
	Primary School	0	8(25.8%)		
	Illiterate	0	16(51.6%)		
Occupation	Skilled	2(33.3%)	2(6.5%)	8.245	P=0.221
	Semiskilled	1(16.7%)	6(19.4%)		
	Unskilled	3(50%)	8(25.8%)		
	Unemployed	0	15(48.4%)		
Marital status	Single	4(66.7%)	7(22.6%)	4.760	P=0.093
	Married	2(33.3%)	24(77.4%)		
Socioeconomic status	Middle	5(83.3%)	0	26.822	* P<0.001
	Upper-Low	1(16.7%)	8(25.8%)		
	Low	0	23(74.2%)		
Family history of psychiatric illness	Absent	6(100%)	29(93.5%)	3.180	P=0.204
	Present	0	2(6.5%)		
Site of cancer	Oropharynx	2(33.3%)	23(74.2%)	3.980	P=0.137
	Others	4(66.7%)	8(25.8%)		
Stage of cancer	Localised	4(66.7%)	7(22.6%)	4.934	P=0.085
	Advanced	2(33.3%)	24(77.4%)		
Duration of cancer	<six months	6(100%)	7(22.6%)	13.749	* P=0.001
	>six months	0	24(77.4%)		
ECOG performance status	1	5(83.3%)	0	26.585	* P<0.001
	2	1(16.7%)	12(38.7%)		
	3	0	19(61.3%)		
Treatment modality	Single	5(83.3%)	8(25.8%)	7.225	* P=0.027
	Multi	1(16.7%)	23(74.2%)		

to be in the range of 15-50%. Depression was found in 67.7% of Elderly Age Group patients in the present study and this was statistically significant and in Concordance with[32,26]. Depression was found in 74.2% of the Male patients in the present study and this finding was statistically significant, and in concordance with[33,34,25]. Depression was seen in 51.6% of the Illiterate subjects in the present study and this finding was statistically significant, which is Consistent with[35,36]. Depression was seen in 74.2% of the patients from the Low Income Group in the present study and this was a statistically significant, which is Consistent with[27]. In the present study, majority of the Head and Neck cancer patients with Psychiatric Morbidity were unemployed. Most of the patients in this study were married. There was an absence of Family History of Psychiatric illness in most of the study subjects[32]. There was no statistical significance for the above-mentioned variables. Cancer Duration of More Than 6 months was found in 77.4% of the participants having depression and this finding is statistically significant, it is in concordance with[29,31,32,37]. When the Eastern Co-operative Oncology Group (ECOG) Performance status of Head and Neck Cancer patients was taken into account, there was a statistically significant correlation between the General Condition of the patient and Depression in 61.3% of the participants with ECOG-3 status, which is consistent with the studies done by[24,38,39]. In the present study, Head and Neck Cancer patients who underwent Combined Treatment Modalities with Radiotherapy and Surgery and or Chemotherapy, showed a statistically significant correlation with Depression in 74.2% of the subjects, and is in concordance with[24,26,28,31,33]. In the present study the Advanced Stage of Cancer was present in majority of the participants with Head and Neck Cancer[24,26,32,33,37]. There was no statistical significance for this variable[29,40]. Most of the study participants had Cancer in the region of oropharynx and this finding was not statistically significant[41]. In the present study Quality of Life scores were found to be lower in Head and Neck Cancer patients with Depression and Anxiety. The Quality of Life scores were seen to be reduced in all domains of the World Health Organization Quality of Life BREF (WHOQOL-BREF) scale. The functioning in Social relationship, Psychological, Physical health and Environmental Domains were affected. The Quality of Life scores in many studies have shown similar results[12,22]. Have documented poor Quality of Life scores in Head and Neck Cancer patients with Depression. Studies done by[42-44] have shown poor Quality of Life scores in Head and Neck Cancer patients who were on Multi modality Treatment, who were diagnosed at the Advanced Stage of Cancer, also the Physical problems caused hindrance in normal Physiological Functions of eating, breathing and swallowing. Few studies[26,45] emphasize that Anxiety and Depression reduces the Quality of life scores in Head and Neck cancer patients. Therefore, the need for prompt identification and treatment of psychological issues in Head and Neck cancer patients with pharmacotherapy and psychotherapy has been highlighted and is the need of the hour.

Bias: The patients and their attenders were the respondents in our study and there may be some information bias.

CONCLUSION

There is a high prevalence of Psychiatric morbidity in Head and Neck cancer patients. Depression was the most common Psychiatric morbidity found among the Head and Neck cancer patients. Male gender, Elderly Age Group, Lower Level of Literacy, Lower Socioeconomic status and Longer duration of cancer diagnosis, correlated well with higher scores of Depression in Head and Neck cancer patients. Higher scores of Eastern Co-Operative Oncology Group-performance status scale, translates into higher physical complications in the Head and Neck cancer patients, which correlated well with higher prevalence of Depression. The combined multi modality treatment adopted in Head and Neck cancer patients correlated with higher Depression scores because of the increasing adverse effects of the treatments and the increased Cancer burden. Anxiety was more common in the Female patients with Head and Neck cancer. The Quality of life scores were Inversely related to the prevalence of Depression and Anxiety in Head and Neck cancer patients. Higher scores of Psychological distress correlated with Poorer Quality of life scores. Detection and treatment of psychiatric morbidity in head and neck cancer patients leads to the improvement of Quality of Life scores leading to better treatment compliance and rehabilitation.

Limitations: This is a cross-sectional study and moreover the sample size of the population taken up for the study is small. Therefore, we cannot generalize the results of this study. There is a need for similar study on a Larger Population Sample to throw better light on the understanding of various factors affecting the prevalence of psychiatric morbidity in the Head and Neck cancer patients.

Strength of the Study: When compared to breast cancer, cervical cancer and other cancers, the number of studies conducted on the psychiatric morbidity among Head and Neck cancer patients in India is very small. The Head and Neck cancer occurs in heterogenous sites and one of the commonest cancers in the country, which is accompanied with disfigurement and disturbances in chewing, feeding

breathing and swallowing. Therefore, this study has contributed in a small way in the assessment of psychological burden of the persons affected with Head and Neck cancer.

Future Directions: More studies are needed to explore the scope of the Psycho-oncologists in improving the Psychological Health of the Head and Neck cancer patients. When the psychiatric morbidities affecting the cancer patient can be detected in the Oncology settings itself and psychological and social cum pharmacological interventions are instituted, it will go a long way in improving the Quality of life indices of the cancer patient.

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