(e) ISSN Online: 2321-9599

(p) ISSN Print: 2348-6805

ORIGINAL ARTICLE

Assessment of sociodemographic parameters of Oesophageal cancer

Sandeep Rai

Assistant Professor, Department of Community Medicine, TSM Medical College and Hospital Amausi, Lucknow, Uttar Pradesh, India

ABSTRACT:

Background: Oesophageal cancer (EC) is the eight most common cancer worldwide. The present study was conducted to assess sociodemographic parameters ofOesophageal cancer. **Materials & Methods:** 56 patients of Oesophageal cancer of both genders were enrolled and the sociodemographic parameters such as socioeconomic status, education, occupation, site, histology and risk factors were recorded. **Results:** Out of 56 patients, males were 42 and females were 14. The site was upper oesophagus in 32, middle oesophagus in 14 and lower oesophagus in 10 cases. SES was upper in 12, middle in 26 and lower in 18. Education was illiterate in 38 and literate in 18 cases. Occupation was farmerin 12, house work in 14, labourer in 16 and self- employed in 14 cases. Histology was SCC in 43, adenocarcinoma in 7 and undifferentiated in 6 cases. The difference was significant (P< 0.05). Common risk factors were cigarette seen in 14, Bidi in 12, Hookah in 10, alcohol in 8 and combination in 12 cases. The difference was significant (P< 0.05). **Conclusion:** Common risk factors for oesophageal cancer were cigarette, Bidi, Hookah, alcohol and combination of all.

Key words: Bidi, cigarette,oesophageal cancer

Corresponding Author: Sandeep Rai, Assistant Professor, Department of Community Medicine, TSM Medical College and Hospital Amausi, Lucknow, Uttar Pradesh, India

This article may be cited as: Rai S. Assessment of sociodemographic parameters of Oesophageal cancer**.** J Adv Med Dent Scie Res 2016;4(6):398-400.

INTRODUCTION

Oesophageal cancer (EC) is the eight most common cancer worldwide, accounting for 3.2% of total new cases in 2012. About 80% cases of EC worldwide occur in less developed regions.[1]Oesophageal cancer is the sixth most common cancer among men and ninth most common among women. Tobacco and alcohol use are well recognized as the main risk factors for Oesophageal cancer in western countries.[2]

The leading sites of cancer vary from country to country. About 10 million people are diagnosed with cancer, and more than 60% die of this disease every year.[3] Despite recent advances in cancer therapy, oesophageal cancer remains one of the least treatment-responsive malignancies.[4] Even in developed countries, more than 85% of patients die within two years of diagnosis, making it the sixth most common cause of cancer-related deaths in the world.[5]

Despite various advances in the treatment of EC, it is one of the least responsive tumors to cancer therapy, and the overall prognosis remains poor.[6] The ratio between mortality to incidence is about 0.88, more than 80% of the cases die within 2 years of diagnosis even in developed nations. It is the nation's most common malignancy involving the gastrointestinal tract.[7]The present study was conducted to assess sociodemographic parameters ofoesophageal cancer.

MATERIALS & METHODS

The present study comprised of 56 patients of oesophageal cancer of both genders. The consent was obtained from all enrolled patients.

The sociodemographic parameters including age, gender, locality, socioeconomic status, religion, education, occupation, and the addiction patterns. Other parameters such as site, histology and risk factors were also recorded. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 56		
Gender	**Males**	**Females**
Number	42	14

Table I shows that out of 56 patients, males were 42 and females were 14.

Table II Sociodemographic parameters

Parameters	Variables	Number	P value
Site	Upper oesophagus	32	0.02
	Middle oesophagus	14	

	Lower oesophagus	10	
SES	Upper	12	0.05
	Middle	26	
	lower	18	
Education	Illiterate	38	0.01
	Literate	18	
Occupation	Farmer	12	0.82
	House work	14	
	labourer	16	
	Self- employed	14	
Histology	SCC	43	0.01
	Adenocarcinoma	7	
	undifferentiated	6	

Table II, graph I shows that site was upper oesophagus in 32, middle oesophagus in 14 and lower oesophagus in 10 cases. SES was upper in 12, middle in 26 and lower in 18. Education was illiterate in 38 and literate in 18 cases. Occupation was farmerin 12, house work in 14, labourer in 16 and self- employed in 14 cases. Histology was SCC in 43, adenocarcinoma in 7 and undifferentiated in 6 cases. The difference was significant (P< 0.05).

Graph I Sociodemographic parameters

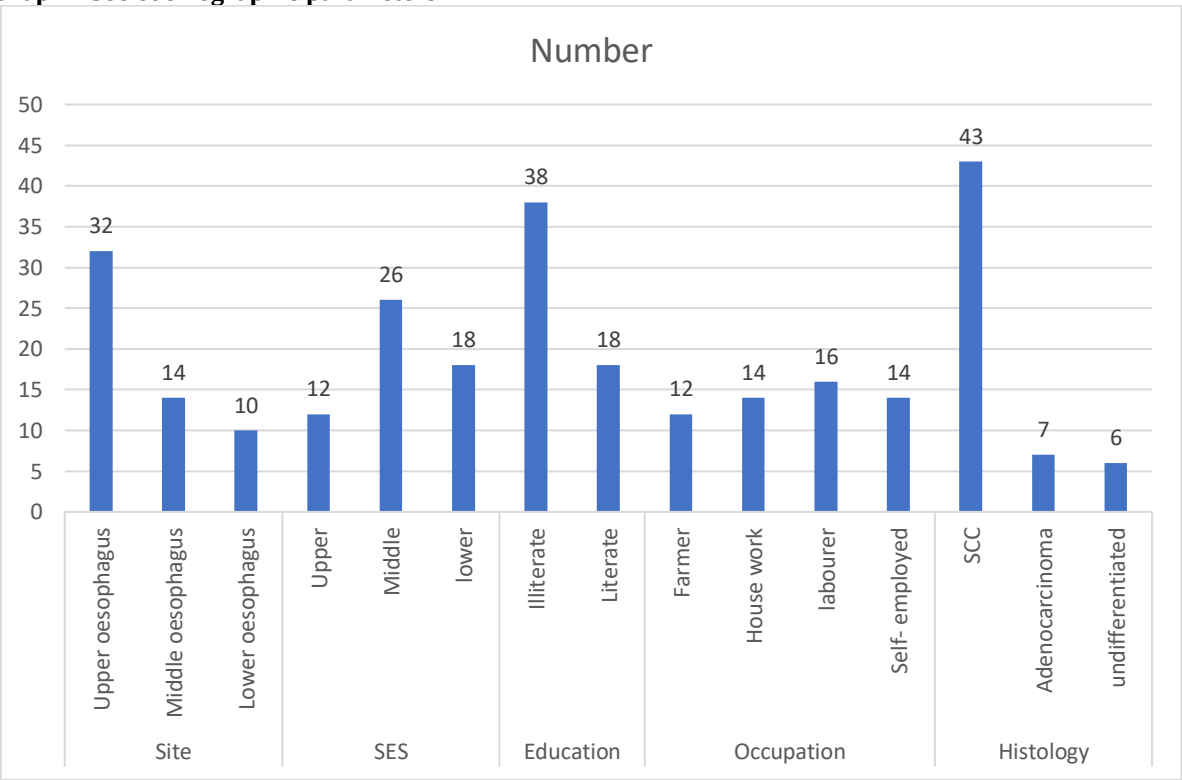

Table III Assessment of risk factors

Risk factors	Number	P value
Cigarette	14	0.12
Bidi	12	
Hookah	10	
alcohol	8	
combination	12	

Table III shows that common risk factors were cigarette seen in 14, Bidi in 12, Hookah in 10, alcohol in 8 and combination in 12 cases. The difference was significant (P< 0.05).

DISCUSSION

In India, oesophageal cancer is the most common malignancy involving the gastrointestinal tract in Karnataka, Tamil Nadu, Kerala, and Assam.[8,9] Since the prognosis in oesophageal carcinoma is extremely poor and as there seems to be little prospect for early detection or treatment, a better understanding of the etiology/ risk factors may suggest opportunity for its

primary prevention.[10]The present study was conducted to assess sociodemographic parameters ofoesophageal cancer.

We found that out of 56 patients, males were 42 and females were 14. Giri et al[11]found out the socio-demographic determinants of oesophageal cancer. A total of 5879 patients were diagnosed with cancer, of them, 207 (3.52%) patients had oesophageal cancer. Out of total 5879 patients who were diagnosed with cancer during the five studied years, 207 (3.52%) patients had oesophageal cancer, of which 121 (58.46%) were males and 86 (41.54%) were females, which show predominance of males over females. Most of the patients (28.50%) belonged to lower class, while only 9.66% were from upper class. Majority of the patients (54.14%) had a history of tobacco chewing, followed by smoking (cigarette, bidi, or both) in 36.94% and alcohol in 21.65%.

We observed that site was upper oesophagus in 32, middle oesophagus in 14 and lower oesophagus in 10 cases. SES was upper in 12, middle in 26 and lower in 18. Education was illiterate in 38 and literate in 18 cases. Occupation was farmer in 12, house work in 14, labourer in 16 and self- employed in 14 cases. Histology was SCC in 43, adenocarcinoma in 7 and undifferentiated in 6 cases. He et al[12] in this study, 2.57, 0.20 and 0.16% of the participants had mild, moderate and severe squamous dysplasia, respectively; 0.19 and 0.08% showed squamous carcinoma in situ and invasive ESCC. Using deep well (depth 4100 meters) as water source was negatively associated with ESCC and its precursors, whereas tobacco and alcohol use were not significantly associated with ESCC.

We observed that common risk factors were cigarette seen in 14, Bidi in 12, Hookah in 10, alcohol in 8 and combination in 12 cases. Zhang et al[13]reviewed the characteristics of oesophageal carcinoma. A total of 1 520 cases of oesophageal carcinoma were reviewed. Their age, gender, position of carcinoma and histological type were analyzed.The morbidity of oesophageal carcinoma was increasing during the observation period. Compared with the 1970s (9.5%), the ratio of adenocarcinoma significantly increased after the 1980s (19.1%). The difference was significant ($P \leq 0.05$).

Kapoor et al[14] found out various schemes for primary prevention of the disease. The site of the disease and the histology were also recorded in addition to the various sociodemographic parameters. Out of 55,742 patients registered in our hospital; 3,667 were diagnosed to have EC. Male: female ratio was 1.15:1. The mean age was 54.6 ± 11.74 years; 66.15% of the patients were illiterate and 48.6% belonged to the low socioeconomic status. Smoking and alcohol consumption were identified as risk factors in 48 and 25.6% of the patients, respectively.

CONCLUSION

Authors found that common risk factors for oesophageal cancer were cigarette, Bidi, Hookah, alcohol and combination of all.

REFERENCES

1. Kamangar F, Malekzadeh R, Dawsey SM, Saidi F. Oesophageal cancer in North Eastern Iran: A review. Arch Iran Med 2007;10:70-82.
2. Chitra S, Ashok L, Anand L, Srinivasan V, Jaynath V. Risk factors for oesophageal cancer in Coimbatore; Southern India: A hospital based case control study. Indian J Gastroenterol 2004;23:19-21.
3. Schottenfeld D. Epidemiology of cancer of the oesophagus. Semin Oncol 1984;11:92-100.
4. Van Rensburg SJ. Epidemiologic and dietary evidence for a specific nutritional predisposition to esophageal cancer. J Natl Cancer Inst 1981;67:243-51.
5. Novacek G. Plummer-Vinson syndrome. Orphanet J Rare Dis 2006;1:36.
6. Kumar P. Social classification-need for constant updating. Indian J Community Med 1993;18:60-1.
7. Prabhu A, Obi KO, Rubenstein JH. Systematic review with meta-analysis: Race-specific effects of alcohol and tobacco on the risk of oesophageal squamous cell carcinoma. Aliment Pharmacol Ther 2013;38:1145-55.
8. Tramacere I, La Vecchia C, Negri E. Tobacco smoking and oesophageal and gastric cardia adenocarcinoma: A meta-analysis. Epidemiology 2011;22:344-9.
9. Bagnardi V, Rota M, Botteri E, Tramacere I, Islami F, Fedirko V, et al. Light alcohol drinking and cancer: A meta-analysis. Ann Oncol 2013;24:301-8.
10. Islami F, Fedirko V, Tramacere I, Bagnardi V, Jenab M, Scotti L, et al. Alcohol drinking and esophageal squamous cell carcinoma with focus on light-drinkers and never-smokers: A systematic review and meta-analysis. Int J Cancer 2011;129:2473-84.
11. Giri PA, Singh KK, Phalke DB. Study of socio-demographic determinants of oesophageal cancer at a tertiary care teaching hospital of Western Maharashtra, India. South Asian J Cancer 2014;3:54-6.
12. He Z, Zhao Y, Guo C, Liu Y, Sun M, Liu F, Wang X, Guo F, Chen K, Gao L, Ning T. Prevalence and risk factors for oesophageal squamous cell cancer and precursor lesions in Anyang, China: a population-based endoscopic survey. British journal of cancer. 2010 Sep;103(7):1085-8.
13. Zhang H, Chen SH, Li YM. Epidemiological investigation of oesophageal carcinoma. World Journal of Gastroenterology: WJG. 2004 Jun 15;10(12):1834.
14. Kapoor A, Kumar V, Singhal MK, Nirban RK, Beniwal SK, Kumar HS. Sociodemographic parameters of Oesophageal Cancer in northwest India: A regional cancer center experience of 10 years. Indian J Community Med 2015;40:264-7.