

## **Original Article**

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# **Demographic Distribution of Head-Neck Carcinoma of ENT Oncology Department of NICRH in 2020**

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### **Abstract:**

**Background:** Head and neck cancer (HNC) comprises a diverse group of oncological entities, originating from various tissue types and organ localizations, situated in the topographical regions of the head and neck (H&N). This single institution retrospective study was aimed at establishing the HNC patient geographic & demographics and categorizing the individual incidence of H&N malignancies, regarding their organ of origin.

**Objectives:** To identify the age Distribution, Occupation, Disease Specific Gender Distribution, Disease Incidence of different types of Head-Neck Cancer according to geography of Bangladesh.

**Methods:** This retrospective data analysis to assess age, occupation, Disease Specific Gender Distribution, Disease Incidence of different types of Head-Neck Cancer diagnosis, using medical records data of 3047 Head & Neck Cancer patients from National Institute of Cancer Research & Hospital designated cancer center in Bangladesh in 2020. All new cases of Head-Neck Cancer patients attend in ENT Oncology Department included in this study. Old cases, who were attend for follow up excluded from study.

**Results:** Total 3047 new patients were included. Thyroid Carcinoma 365(12%), Sinonasal 212(7%), Salivary gland Carcinoma 121(4%), Oral Cavity 303(9.9%), Oropharyngeal Carcinoma 243(8%), Hypopharynx 457(15%), Larynx 761(25%), Nasopharyngeal Carcinoma 91 (3%), Carcinoma Unknown Primary 304(10%), Lymphoma 154(5.1%), Others 36(3.2%). Male: Female 3:2.

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**Conclusion:** *Head & Neck Cancer (HNC) is common cancer in Bangladesh. Functional & cosmetic deformities occur in head & neck cancer. The reported single institution results appear representative of the national incidence and characteristics of HNC.*

**Keywords:** Head-Neck Carcinoma · Geographic · Demographic Distribution

### Introduction:

Head and neck cancer (HNC) comprise a diverse group of oncological entities, originating from various tissue types and organ localizations all situated in the topographical region of the head and neck (H&N) that develop in or around the throat, larynx, nose, sinuses, and mouth, salivary gland, thyroid.<sup>1-4</sup> The H&N region is the 6<sup>th</sup> most often site for malignancies.<sup>5-6</sup> Head and neck cancer (HNC) is one of the common malignancies affecting people worldwide. Approximately 650,000 HNC cases and 380,000 HNC-related deaths are reported annually worldwide.<sup>7-8</sup> Males are more likely to be affected by HNC compared with females, with a male-to-female HNC patient ratio of 3:1.<sup>9</sup>

However, over the past couple of decades, there is evidence of a decline in the incidence of Tobacco and Alcohol associated HNC's, such as cancers of the Oral Cavity, Hypopharynx, and Larynx in men; and an increase in the incidence of Human Papilloma Virus (HPV) associated Oropharyngeal Cancer (OPC) and Epstein Barr virus (EBV) associated Nasopharyngeal Cancer.<sup>5-6</sup> HNC malignancies, previously thought of as a disease affecting mostly white males in their 6<sup>th</sup> / 7<sup>th</sup> decades of life, are now on the rise among young patients of both genders.<sup>10-11</sup> The design of this retrospective, single institution study was aimed at establishing the HNC patient demographics and categorizing the individual incidence of H&N

malignancies in a descriptive manner, with regard to their organ of origin.

### Methods:

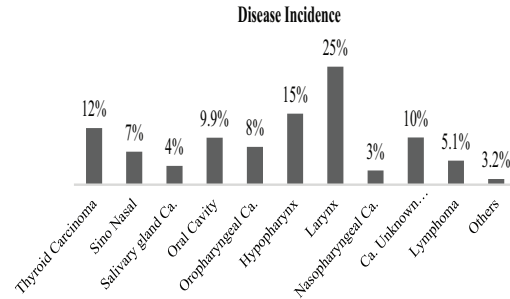
For this retrospective study, 3047 patients diagnosed or presenting with incident HNC at the ENT Oncology Department in NICRH between January 2020 and December 2020 were included. Patients were identified from the NICRH medical records. Analysis carried out using SPSS version 23. Categorical data was grouped as Percentage and numbers. continuous data categorized as mean with standard deviation (SD). Independent T-test, one-way analysis of variance (ANOVA) and chi-square test used to extract *p*-value.

### Results:

Total 3047 new patients of 2020 were enrolled in this study. The disease specific occurrence was Thyroid Carcinoma 365 (12%), Sino Nasal 212 (7%), Salivary gland Carcinoma 121 (4%), Oral Cavity 303 (9.9%), Oropharyngeal Carcinoma 243 (8%), Hypopharynx 457 (15%), Larynx 761 (25%), Nasopharyngeal Carcinoma 91 (3%), Carcinoma Unknown Primary 304 (10%), Lymphoma 154 (5.1%), Others 36 (3.2%) where highest occurrence observed in Laryngeal Carcinoma [Figure 1 and Table 1]

Mean age of study subjects were 53 years with a standard deviation of 15 years. Male were significantly (*p*; <0.001) older than female

in occurrence of head and neck carcinoma. Gender distribution were Male: 2107 (69.1%), Female: 940 (30.9%), High incidence of head neck carcinoma observed in Housewife 756 (24.8%) and Farmer 2205 (72.4%) and farmers were significantly older than other occupational groups except teachers. No significant difference observed in age among different head neck carcinoma ( $p=0.227$ ) [Table 1]



**Figure 1: Disease Specific Incidence (n=3047)**

**Table I:**  
*Age distribution according to gender, occupation and specific disease. (n:3047)*

		n (%)	Mean	±SD	P-value
<b>Gender</b>	Total	3047 (100)	53	±15	
	Female	940 (30.9)	49	±15	<0.001
	Male	2107 (69.1)	55	±14	
<b>According to Occupation</b>	Children	2 (0.1)	7	±0	<0.001
	Student	45 (1.5)	18	±8	
	Housewife	756 (24.8)	48	±15	
	Farmer	2205 (72.4)	56	±13	
	Service	19 (0.6)	48	±16	
	Teacher	3 (0.1)	62	±6	
	Worker	5 (0.2)	41	±13	
	Businessman	10 (0.3)	56	±11	
	<b>According to Disease</b>	Thyroid Carcinoma	365 (12.0)	53	
Sino Nasal		212 (7.0)	54	±15	
Salivary gland Ca.		121 (4.0)	51	±16	
Oral Cavity		303 (9.9)	54	±15	
Oropharyngeal Ca.		243 (8.0)	53	±15	
Hypopharynx		457 (15.0)	53	±15	
Ca. Larynx		761 (25.0)	53	±14	
Nasopharyngeal Ca.		91 (3.0)	51	±14	
Ca. Unknown Primary		304 (10.0)	55	±14	
Lymphoma		154 (5.1)	52	±15	
Others		36 (1.2)	53	±17	

**Table II:**  
*Disease specific gender distribution. (n= 3047)*

Diseases	Gender (%)		Total	P-value
	Female	Male		
Thyroid Carcinoma	259 (8.5)	106 (3.5)	365 (12.0)	<0.001
Sino Nasal ca.	49 (1.6)	163 (5.3)	212 (7.0)	
Salivary gland Ca.	35 (1.1)	86 (2.8)	121 (4.0)	
Oral Cavity ca.	71 (2.3)	232 (7.6)	303 (9.9)	
Oropharyngeal Ca.	66 (2.2)	177 (5.8)	243 (8.0)	
Hypopharynx	102 (3.3)	355 (11.7)	457 (15.0)	
Larynx	216 (7.1)	545 (17.9)	761 (25.0)	
Nasopharyngeal Ca.	30 (1.0)	61 (2.0)	91 (3.0)	
Ca. Unknown Primary	70 (2.3)	234 (7.7)	304 (10.0)	
Lymphoma	37 (1.2)	117 (3.8)	154 (5.1)	
Others	5 (0.2)	31 (1.0)	36 (1.2)	
<b>Total</b>	<b>940 (30.9)</b>	<b>2107 (69.1)</b>	<b>3047 (100.0)</b>	

In the department of ENT oncology, NICRH, patients came from different parts of Bangladesh. In this study we observe the regional distributions of total and different disease specific regional distributions. Highest occurrence of head neck carcinoma observed in Cumilla (207;6.8%). Other high occurrence of head neck carcinoma region was Mymensingh (170;5.6%), Barisal (168;5.6%), Noakhali (151;5.0%), Kishoreganj (149;4.9%) and Chandpur (144;4.8%). At least or more than 10 cases of thyroid carcinoma observed in Dhaka (37;1.2%), Cumilla (24;0.8%), Mymensingh (23;0.8%), Barisal (17;0.6%), Chandpur (15;0.5%), Kishanganj (15;0.5%), Patuakhali (13;0.4%) and Tangail (10; 0.3%). Sino-nasal carcinoma observed highest in Mymensingh (21;0.7%). Other regions of high Sino-nasal carcinoma were Chandpur (15; 0.5%), Comilla (14;0.5%), Kishanganj (12;0.4%),

Narayanganj (12;0.4%) and Noakhali (10;0.3%). High occurrence observed in Dhaka (15;0.5%) and Comilla (10;0.3%) in case of salivary gland carcinoma. More than 20 cases of oral cavity carcinoma found in Comilla (23;0.8%) and Dhaka (22; 0.7%). More than 15 cases of oropharyngeal carcinoma found in Chandpur (18;0.6%) and Noakhali (16;0.5%). Highest 34 (1.1%) cases of hypopharyngeal carcinoma found in Comilla. New cases of Laryngeal carcinoma were diagnosed more in our department (753;24.9%). Among them more than 50 cases were from Barisal (53;1.8%) and Comilla (52;1.7%). Cases of nasopharyngeal carcinoma was low in our department. Most of the cases of unknown primary carcinoma found from Dhaka (31;1.0%), Kishanganj (21;0.7%) and Comilla (20; 0.7%). Highest number of Lymphoma found from Barisal (12;0.4%) and Mymensingh (10;0.3%). [Table III]

**Table III:**  
*Geographic (District) distribution of head and neck carcinomas in Bangladesh*

District; n (%)	Thyroid Carcinoma	Sino Nasal	Salivary gland Ca	Oral Cavity	Orophar- yngeal Ca.	Hypoph- arynx	Larynx	Nasopha- ryngeal Ca.	Ca. Unknown Primary	Lymph- oma	Others	Total
Barguna	5 (0.2)	3 (0.1)	3 (0.1)	1 (0.0)	1 (0.0)	1 (0.0)	5 (0.2)	2 (0.1)	2 (0.1)	1 (0.0)	0 (0.0)	24 (0.8)
Barisal	17 (0.6)	9 (0.3)	6 (0.2)	12 (0.4)	13 (0.4)	23 (0.8)	53 (1.8)	6 (0.2)	15 (0.5)	12 (0.4)	2 (0.1)	168 (5.6)
Bhola	8 (0.3)	3 (0.1)	3 (0.1)	7 (0.2)	2 (0.1)	12 (0.4)	22 (0.7)	2 (0.1)	6 (0.2)	2 (0.1)	0 (0.0)	67 (2.2)
Jhalokati	1 (0.0)	2 (0.1)	0 (0.0)	1 (0.0)	3 (0.1)	1 (0.0)	4 (0.1)	1 (0.0)	5 (0.2)	0 (0.0)	0 (0.0)	18 (0.6)
Patuakhali	13 (0.4)	4 (0.1)	5 (0.2)	9 (0.3)	3 (0.1)	11 (0.4)	12 (0.4)	1 (0.0)	3 (0.1)	4 (0.1)	0 (0.0)	65 (2.2)
Pirojpur	5 (0.2)	2 (0.1)	1 (0.0)	2 (0.1)	1 (0.0)	6 (0.2)	3 (0.1)	0 (0.0)	3 (0.1)	2 (0.1)	1 (0.0)	26 (0.9)
Bahmanbaria	8 (0.3)	9 (0.3)	3 (0.1)	8 (0.3)	2 (0.1)	14 (0.5)	27 (0.9)	1 (0.0)	9 (0.3)	2 (0.1)	1 (0.0)	84 (2.8)
Chandpur	15 (0.5)	15 (0.5)	5 (0.2)	10 (0.3)	18 (0.6)	27 (0.9)	28 (0.9)	6 (0.2)	14 (0.5)	6 (0.2)	0 (0.0)	144 (4.8)
Chattogram	2 (0.1)	2 (0.1)	0 (0.0)	1 (0.0)	1 (0.0)	1 (0.0)	3 (0.1)	0 (0.0)	1 (0.0)	0 (0.0)	2 (0.1)	13 (0.4)
Comilla	24 (0.8)	14 (0.5)	10 (0.3)	23 (0.8)	14 (0.5)	34 (1.1)	52 (1.7)	6 (0.2)	20 (0.7)	8 (0.3)	2 (0.1)	207 (6.8)
Cox's Bazar	1 (0.0)	1 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	1 (0.0)	3 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7 (0.2)
Feni	9 (0.3)	3 (0.1)	0 (0.0)	3 (0.1)	1 (0.0)	9 (0.3)	8 (0.3)	1 (0.0)	4 (0.1)	0 (0.0)	0 (0.0)	38 (1.3)
Khagrachhari	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	4 (0.1)
Lakshmipur	8 (0.3)	6 (0.2)	1 (0.0)	3 (0.1)	8 (0.3)	7 (0.2)	23 (0.8)	1 (0.0)	6 (0.2)	3 (0.1)	1 (0.0)	67 (2.2)
Noakhali	12 (0.4)	10 (0.3)	4 (0.1)	18 (0.6)	16 (0.5)	26 (0.9)	36 (1.2)	2 (0.1)	16 (0.5)	8 (0.3)	3 (0.1)	151 (5.0)
Rangamati	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.1)
Dhaka	37 (1.2)	8 (0.3)	15 (0.5)	22 (0.7)	10 (0.3)	25 (0.8)	43 (1.4)	8 (0.3)	31 (1.0)	1 (0.0)	2 (0.1)	202 (6.7)
Faridpur	10 (0.3)	4 (0.1)	6 (0.2)	5 (0.2)	1 (0.0)	8 (0.3)	17 (0.6)	1 (0.0)	7 (0.2)	2 (0.1)	1 (0.0)	62 (2.1)
Gazipur	9 (0.3)	3 (0.1)	1 (0.0)	8 (0.3)	7 (0.2)	22 (0.7)	9 (0.3)	4 (0.1)	9 (0.3)	3 (0.1)	0 (0.0)	75 (2.5)
Gopalganj	2 (0.1)	2 (0.1)	2 (0.1)	10 (0.3)	5 (0.2)	8 (0.3)	9 (0.3)	0 (0.0)	4 (0.1)	4 (0.1)	0 (0.0)	46 (1.5)
Kishoreganj	15 (0.5)	12 (0.4)	6 (0.2)	15 (0.5)	14 (0.5)	13 (0.4)	39 (1.3)	4 (0.1)	21 (0.7)	9 (0.3)	1 (0.0)	149 (4.9)
Madaripur	5 (0.2)	0 (0.0)	0 (0.0)	6 (0.2)	3 (0.1)	8 (0.3)	8 (0.3)	1 (0.0)	8 (0.3)	3 (0.1)	3 (0.1)	45 (1.5)
Manikganj	5 (0.2)	2 (0.1)	2 (0.1)	7 (0.2)	3 (0.1)	9 (0.3)	8 (0.3)	1 (0.0)	4 (0.1)	3 (0.1)	0 (0.0)	44 (1.5)

Table III: (Cont'd)

District; n (%)	Thyroid Carcinoma	Sino Nasal	Salivary gland Ca	Oral Cavity	Orophar- yngeal Ca.	Hypoph- arynx	Larynx	Nasopha- ryngeal Ca.	Ca. Unknown Primary	Lymph- oma	Others	Total
Munshiganj	6 (0.2)	8 (0.3)	3 (0.1)	5 (0.2)	3 (0.1)	5 (0.2)	22 (0.7)	3 (0.1)	6 (0.2)	1 (0.0)	1 (0.0)	63 (2.1)
Narayanganj	12 (0.4)	12 (0.4)	5 (0.2)	9 (0.3)	4 (0.1)	17 (0.6)	24 (0.8)	4 (0.1)	6 (0.2)	4 (0.1)	0 (0.0)	97 (3.2)
Narsingdi	5 (0.2)	6 (0.2)	6 (0.2)	5 (0.2)	9 (0.3)	13 (0.4)	13 (0.4)	5 (0.2)	4 (0.1)	4 (0.1)	3 (0.1)	73 (2.4)
Rajbari	2 (0.1)	3 (0.1)	1 (0.0)	4 (0.1)	3 (0.1)	0 (0.0)	7 (0.2)	0 (0.0)	7 (0.2)	1 (0.0)	0 (0.0)	28 (0.9)
Shariatpur	2 (0.1)	1 (0.0)	3 (0.1)	1 (0.0)	2 (0.1)	8 (0.3)	16 (0.5)	0 (0.0)	5 (0.2)	1 (0.0)	0 (0.0)	39 (1.3)
Tangail	10 (0.3)	4 (0.1)	2 (0.1)	10 (0.3)	14 (0.5)	9 (0.3)	25 (0.8)	3 (0.1)	9 (0.3)	7 (0.2)	0 (0.0)	93 (3.1)
Bagerhat	4 (0.1)	1 (0.0)	0 (0.0)	6 (0.2)	2 (0.1)	4 (0.1)	4 (0.1)	0 (0.0)	1 (0.0)	4 (0.1)	1 (0.0)	27 (0.9)
Chuadanga	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	6 (0.2)
Jessore	7 (0.2)	2 (0.1)	2 (0.1)	3 (0.1)	7 (0.2)	5 (0.2)	15 (0.5)	2 (0.1)	4 (0.1)	0 (0.0)	1 (0.0)	48 (1.6)
Jhenaidah	4 (0.1)	2 (0.1)	0 (0.0)	0 (0.0)	2 (0.1)	4 (0.1)	3 (0.1)	1 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	17 (0.6)
Khulna	7 (0.2)	6 (0.2)	1 (0.0)	2 (0.1)	4 (0.1)	6 (0.2)	15 (0.5)	2 (0.1)	4 (0.1)	3 (0.1)	0 (0.0)	50 (1.7)
Kushtia	2 (0.1)	0 (0.0)	1 (0.0)	2 (0.1)	2 (0.1)	5 (0.2)	5 (0.2)	0 (0.0)	2 (0.1)	5 (0.2)	0 (0.0)	24 (0.8)
Magura	1 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	6 (0.2)
Meherpur	0 (0.0)	3 (0.1)	1 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.2)
Narail	3 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.1)	1 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	9 (0.3)
Satkhira	4 (0.1)	2 (0.1)	2 (0.1)	3 (0.1)	4 (0.1)	7 (0.2)	6 (0.2)	1 (0.0)	2 (0.1)	3 (0.1)	0 (0.0)	34 (1.1)
Jamalpur	8 (0.3)	3 (0.1)	1 (0.0)	8 (0.3)	2 (0.1)	10 (0.3)	17 (0.6)	1 (0.0)	4 (0.1)	2 (0.1)	2 (0.1)	58 (1.9)
Mymensingh	23 (0.8)	21 (0.7)	2 (0.1)	18 (0.6)	14 (0.5)	23 (0.8)	43 (1.4)	6 (0.2)	9 (0.3)	10 (0.3)	1 (0.0)	170 (5.6)
Netrokona	11 (0.4)	4 (0.1)	0 (0.0)	5 (0.2)	3 (0.1)	4 (0.1)	12 (0.4)	2 (0.1)	6 (0.2)	2 (0.1)	2 (0.1)	51 (1.7)
Sherpur	2 (0.1)	5 (0.2)	0 (0.0)	5 (0.2)	3 (0.1)	4 (0.1)	15 (0.5)	0 (0.0)	6 (0.2)	2 (0.1)	1 (0.0)	43 (1.4)
Bogura	1 (0.0)	2 (0.1)	2 (0.1)	0 (0.0)	1 (0.0)	4 (0.1)	7 (0.2)	0 (0.0)	3 (0.1)	2 (0.1)	0 (0.0)	22 (0.7)
Joypurhat	0 (0.0)	1 (0.0)	0 (0.0)	3 (0.1)	0 (0.0)	2 (0.1)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (0.3)

Table III: (Cont'd)

District; n (%)	Thyroid Carcinoma	Sino Nasal	Salivary gland Ca	Oral Cavity	Orophar- yngeal Ca.	Hypoph- arynx	Larynx	Nasopha- ryngeal Ca.	Ca. Primary	Unknown	Lymph- oma	Others	Total
Naogaon	1 (0.0)	1 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	1 (0.0)	2 (0.1)	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	8 (0.3)
Natore	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	2 (0.1)	0 (0.0)	0 (0.0)	5 (0.2)
Chapai- nawabganj	2 (0.1)	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	3 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.2)
Pabna	3 (0.1)	1 (0.0)	1 (0.0)	6 (0.2)	7 (0.2)	6 (0.2)	14 (0.5)	0 (0.0)	2 (0.1)	2 (0.1)	1 (0.0)	1 (0.0)	43 (1.4)
Rajshahi	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.1)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	5 (0.2)
Sirajganj	7 (0.2)	4 (0.1)	2 (0.1)	9 (0.3)	7 (0.2)	5 (0.2)	9 (0.3)	2 (0.1)	4 (0.1)	3 (0.1)	1 (0.0)	1 (0.0)	53 (1.8)
Dinajpur	1 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	1 (0.0)	4 (0.1)	6 (0.2)	2 (0.1)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	18 (0.6)
Gaibandha	3 (0.1)	0 (0.0)	0 (0.0)	1 (0.0)	8 (0.3)	7 (0.2)	2 (0.1)	3 (0.1)	3 (0.1)	1 (0.0)	0 (0.0)	0 (0.0)	28 (0.9)
Kurigram	2 (0.1)	0 (0.0)	3 (0.1)	0 (0.0)	0 (0.0)	4 (0.1)	11 (0.4)	0 (0.0)	4 (0.1)	3 (0.1)	0 (0.0)	0 (0.0)	27 (0.9)
Lalmonirhat	1 (0.0)	1 (0.0)	2 (0.1)	0 (0.0)	1 (0.0)	1 (0.0)	3 (0.1)	0 (0.0)	3 (0.1)	1 (0.0)	0 (0.0)	0 (0.0)	13 (0.4)
Nilphamari	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	4 (0.1)	0 (0.0)	2 (0.1)	3 (0.1)	0 (0.0)	0 (0.0)	11 (0.4)
Panchagarh	2 (0.1)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	1 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (0.3)
Rangpur	5 (0.2)	1 (0.0)	2 (0.1)	2 (0.1)	3 (0.1)	5 (0.2)	10 (0.3)	1 (0.0)	6 (0.2)	3 (0.1)	0 (0.0)	0 (0.0)	38 (1.3)
Thakurgaon	2 (0.1)	1 (0.0)	2 (0.1)	1 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)	1 (0.0)	1 (0.0)	2 (0.1)	0 (0.0)	0 (0.0)	12 (0.4)
Habiganj	1 (0.0)	1 (0.0)	1 (0.0)	3 (0.1)	2 (0.1)	5 (0.2)	5 (0.2)	0 (0.0)	3 (0.1)	1 (0.0)	1 (0.0)	1 (0.0)	23 (0.8)
Moulvibazar	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.1)	2 (0.1)	4 (0.1)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)	0 (0.0)	12 (0.4)
Sunamganj	2 (0.1)	0 (0.0)	0 (0.0)	4 (0.1)	1 (0.0)	2 (0.1)	6 (0.2)	1 (0.0)	3 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	19 (0.6)
Sylhet	1 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	3 (0.1)	3 (0.1)	4 (0.1)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	13 (0.4)
Total	361 (11.9)	212 (7.0)	121 (4.0)	298 (9.9)	242 (8.0)	452 (15.0)	753 (24.9)	91 (3.0)	303 (10.0)	154 (5.1)	36 (1.2)	36 (1.2)	3023 (100.0)

**Discussion:**

Head & Neck Cancer presents an important medical problem. This anatomical region is the sixth most common localization of malignancies. Head & neck cancer occur three times more in Male than Female.<sup>12</sup> In our study Male 69.1%, Female 30.9%. In up to 90% of all these cases, the histopathological type reported is Squamous Cell Carcinoma.<sup>6,13</sup> The most pronounced risk factors are Tobacco and Alcohol consumption.<sup>14-15</sup> Squamous Cell Carcinoma, however, is only one of the many histopathological groups of cancers that can arise in the Head & Neck area, Thyroid Carcinoma. Three times more in Female than Male. This is similar to other study.<sup>16</sup> In our study Sino nasal Malignancy 7%, which is comparison to other study.<sup>17</sup> Malignant Salivary gland Tumors (MSGTs) comprise about 3% of all Head and Neck cancers.<sup>18</sup> In our study Malignant Salivary gland Tumors comprise about 4%. Oral cancer in India is high, that is, 20 per 100,000 population and accounts for over 30% of all cancers in the country.<sup>19</sup> Oral Cavity Carcinoma 9.9% in this study. Most of the Oral Cavity carcinoma attends in Maxillofacial department in our institute. Carcinoma Unknown Primary up to 5% of Head and Neck cancers.<sup>20</sup> In our study Carcinoma Unknown Primary 10%. This is due to lack of proper evaluation and lack of modern imaging (PET-CT). Oropharyngeal Carcinoma 8.0%. Hypopharynx, Corresponding to an increase of 4.1% per year in Denmark.<sup>21</sup> In our study Hypopharynx 15%. Larynx is the most common site for Primary Malignant tumor in Head and Neck region. A study in Bangladesh revealed that 35.32% of all body cancers were in Head and Neck region and the commonest one was Laryngeal Carcinoma.<sup>22</sup> In our study Larynx 25.0%. There were 3.64% (135/3706) Nasopharyngeal Carcinoma patients with family history of Nasopharyngeal

Carcinoma.<sup>23</sup> In our study Nasopharyngeal Carcinoma 3.0%. The overall Male to Female ratio was 2.74:1. Larynx was the most commonly affected site (46.76%) followed by Oral Cavity (15.9%). Squamous cell Carcinoma was the most common diagnoses (77.5%), followed by Lymphoma (9.4%).<sup>12</sup> In our study Lymphoma 5.1%. Basal cell carcinoma, Malignant melanoma, Neurofibroma, Paraganglioma, Carotid body tumor, Carcinoma breast metastasis to parotid, Carcinoma lung metastasis to neck node, all are included in Others category. 207 (6.8%) Patients attend in ENT oncology department from Cumilla & 3(0.1%) Patients from Rangamati.

**Conclusion:**

Head and Neck Cancer (HNC) is common cancer in Bangladesh. Functional and cosmetic deformities occur in head & neck cancer. The reported single institution results appear representative of the national incidence and characteristics of Head and Neck Cancer.

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