

# DISTRIBUTION PATTERN OF MALIGNANCY IN THE ONCOLOGY DEPARTMENT OF BANGABANDHU SHEIKH MUJIB MEDICAL UNIVERSITY 2005

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## Abstract:

This study was carried out in the Department of Oncology of Bangabandhu Sheikh Mujib Medical University from 1<sup>st</sup> January 2005 to 31<sup>st</sup> December 2005. A total number of 1107 cancer patients were included, of them 72% were smoker, 500 were male and 607 were female. So the male to female ratio was 1: 1.21. Highest incidence of malignancy was observed in the age of 46 to 60. Top five malignancies in female like- Breast, Cervix, Ovary, Gall Bladder, Stomach. Top five malignancies in male like- Lung, Stomach, Liver, Lymphoma, and Colon.

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## Introduction:

Cancer is a major disease burden worldwide but there are marked geographical variations in incidence overall and at specific organ sites. Reliable estimation of the number of new cases (incidence) requires population-based cancer registration. Complication of worldwide age-

standardized cancer rates allows the identification of countries and regions where particular tumor types are most common. Such differences usually reflect exposure to distinct causative environmental factors. In addition to providing data on the distribution of neoplastic disease, descriptive epidemiology provides the basis for prevention, health service planning and resource allocation<sup>1</sup>.

## Results:

Distribution of malignancies according to sex:

Table-II Showing top five malignancies in female like- Breast, Cervix, Ovary, Gall Bladder, Stomach.

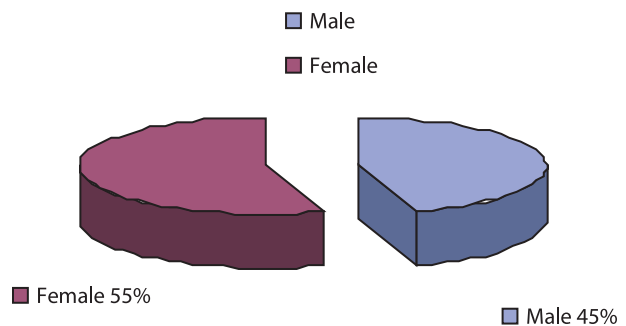
Table-III Showing top five malignancies in male like- Lung, Stomach, Liver, Lymphoma, and Colon.

Table-IV Showing top five malignancies in female like- Breast, Cervix, Stomach, Ovary and Lung.

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## Sex distribution



**Fig.-1** shows sex distributions, 500 were male and 607 were female.

**Table - I**  
*Distribution of Cancer by site and sex*

Disease	Male		Female		Total	
	No	Percentage	No	Percentage	No	Percentage
Lip	2	0.40%	1	0.16%	3	0.27%
Salivary Gland	16	3.20%	2	0.32%	18	1.62%
Gum	20	4.00%	15	2.47%	35	3.16%
Floor of Mouth	21	4.20%	21	3.45%	42	3.79%
Other Mouth	18	3.60%	9	1.48%	27	2.43%
Oro-pharynx	8	1.60%	-	-	8	0.72%
Naso-pharynx	16	3.20	1	0.16	17	1.53
Esophagus	20	4.00	5	0.82	25	2.25
Stomach	50	10%	35	5.76	85	7.67
Colon	31	6.20	30	4.94	61	5.51
Rectum	20	4.00	11	1.81	31	2.80
Liver	45	9.00	9	1.48	54	4.87
Gall Bladder	13	2.60	39	6.42	52	4.69
Pancreas	10	2.00	7	1.15	17	1.53
Other Digestive Organ	9	1.80	3	0.49	12	1.08
Nose	17	3.40	-	-	17	1.53
Larynx	19	3.80	2	0.32	21	1.89
Lung	56	11.20	6	0.98	62	5.60
Bone	2	0.40	5	0.82	7	0.63
Connective Tissue	-	-	3	0.49	3	0.27
Skin (Melanoma)	6	1.20	-	-	6	0.54
Skin (Squamous)	14	2.80	-	-	14	1.26
Breast	3	0.60	180	29.65	183	16.53
Cervix	-	-	136	22.40	136	12.28
Other Genital Organ (Ovary)	-	-	68	11.20	68	6.14
Prostate	9	1.80	-	-	9	0.81
Penis	5	1.00	-	-	5	0.45
Testis	3	0.60	-	-	3	0.27
Urinary Bladder	16	3.20	3	0.49	19	1.71
Kidney	14	2.80	6	0.98	20	1.80
Eye	2	0.40	-	-	2	0.18
Lymphoma	35	7.00	10	1.64	45	4.06

**Table-II***Female Malignancies**Top ten Cancers in order of frequency (1107).*

Organ	Number	Percentage
Breast	180	29.65
Cervix	136	22.40
Ovary	68	11.20
Gall Bladder	39	6.42
Stomach	35	5.76

**Table-III***Male Malignancies**Top ten Cancers in order of frequency (1107).*

Organ	Number	Percentage
Lung	56	11.20
Stomach	50	10
Liver	45	9
Lymphoma	35	7
Colon	31	6.20

**Table-IV***Incidence of Malignancies Irrespective of Age (1107)*

Organ	Number	Percentage
Breast	183	16.53
Cervix	136	12.28
Stomach	85	7.67
Ovary	68	6.14
Lung	62	5.60

**Discussion:**

A total number of 1107 cancer patients attended to the Department of Oncology, BSMMU over the period of one year from 1<sup>st</sup> January to 31<sup>st</sup> December 2005. Among them 607 were female and 500 were male. So the male to female ratio was 1: 1.21. According to Akhter P S et al (2003) male to female ratio was 1.39: 1<sup>2</sup>. M S Hossain et al. stated the male to female ratio 1.36: 1<sup>3</sup>.

*Highest incidence of malignancy was observed in the age of 46 to 60. Which is similar to the study conducted by M S Hossain et al<sup>3</sup>.*

Breast cancer is the most common malignancy-affecting women, with more than

one million cases occurring worldwide annually<sup>4</sup>. According to M S Hossain top malignancies in female are-Cervix, Breast, larynx, ovary, lung, lymphoma, cheek, stomach, pharynx and tongue<sup>3</sup>. Present study revealed top five malignancies in female like-Breast, Cervix, Ovary, Gall Bladder, Stomach which differs with previous one.

Latest estimates suggest that more than 1,050,000 new breast cancer cases occur worldwide annually, with nearly 580,000 cases occurring in developed countries and remainder in developing countries<sup>5</sup>. Cancer of Cervix is the second most common cancer among women worldwide, Second only to breast cancer; about 470,000 new cases are diagnosed each year. 80% of cases of cervical cancer occur in developing countries where, in many regions, it is the most common cancer of women<sup>6</sup>. Ovarian cancer is the second most common gynecologic malignancy, but the most common cause of death among women who develop gynecologic malignancies. It is the fifth leading cause of cancer death in females in the United States. Annually, approximately 21,650 new cases are diagnosed and 15,520 deaths related to ovarian cancer occur<sup>7</sup>.

Lung cancer is the most common cause of cancer mortality worldwide for both men and women, causing approximately 1.2 million deaths per year<sup>8</sup>.

In the United States in 2007, there will be an estimated 215,000 new cases of lung cancer and 162,000 deaths. In contrast, colorectal, breast, and prostate cancers combined will be responsible for only 124,000 deaths<sup>9</sup>.

Top five malignancies in male are like- Lung, Stomach, Liver, Lymphoma, and Colon. Lung cancer accounts for 15% of all cancer types in men, compared with 13% in women<sup>10</sup>.

**Conclusion:**

Our aim is to establish a Hospital Based Cancer Registry; it is part of that approach. In near future a complete hospital based cancer registry will be available for the improvement of patient care, clinical research, prevention of cancer and as a whole to reduce the cancer burden of our country.

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