

## Magnitude of cancer patients in a teaching hospital

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### Abstract

*This was an observational study carried out among all cancer patients attended at radiotherapy department of Khulna medical college hospital between January 2010 and December 2010. The study aimed to develop a primary data source for further research and improvement of patient care. Data were collected by a questionnaire. Total study population was 321 and out of them 158 were male and 163 were female. Top five organs involved with malignancies of both sexes are breast (14.64%), non-Hodgkin's Lymphoma (10.59%), lung (7.79%), mouth and oral cavity (7.48%), and stomach (7.48%). This hospital-based cancer registry should be maintained to improve the treatment facilities and follow-up system.*

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### Introduction

A cancer registry can be defined as an organization for the collection, storage, analysis, and interpretation of data on persons with a continuing basis.<sup>1</sup> When it is done in a hospital, it is called hospital based cancer registry. In Khulna Medical college hospital the radiotherapy department started recording data on cancer cases from 1st January, 2008. This is the 3rd annual cancer report.

There are some observations which were the highlight of the hospital based cancer registry in Khulna medical college hospital- a) There is almost 90% confirmation by histopathology or cytopathology of the patients attending the hospital: b) Carcinoma of breast in females and Non-Hodgkin's Lymphoma in males was the leading cause of cancer. c) Female attending patients were a bit higher than male. d) Maximum patients were above 20 years. Only 3 patients attended below 10 years and they had been suffering from lymphoma. e) More than 95% came from a poor and middle class family. f) One fourth of cancer patients before attending the hospital were taking homeopathy and all of them came with advanced stage.

The purpose of hospital based cancer registry is to produce an annual report to the hospital administration on the cancer activities that have taken place during the year and to document things such as the cancer burden borne by the hospital. The aims and objectives of this study are to improve patient care by

### Patients and Methods

All patients those were attended in radiotherapy department were included in this study irrespective of age, sex, type of cancer, pre-treated and post-treated. A questionnaire was made for collection of information that includes- (1) Name and address. (2) Age. (3) Sex. (4) Hospital registration number. (5) Diagnosis (FNAC / Histopathology / Others). (6) Type of cancer. (7) Habit (Smoking / Chewing tobacco and bettlenut). (8) Taking traditional medicine (Homeopathy, kobirazi etc.). (9) Socioeconomic condition. (10) Previous treatment history. (11) Plan of treatment. (12) Follow up.

At the end of the study the relevant data were compiled on a master table. Then by using calculator they were organized in different tables & figures.

### Results

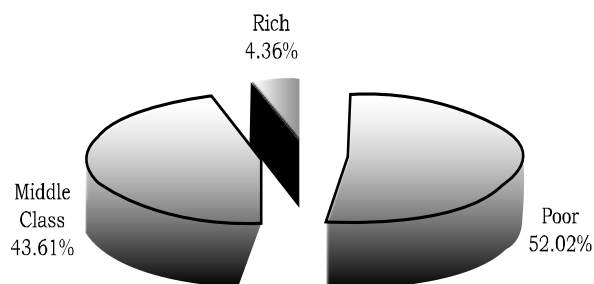
The study population was 321 out of them 158 were male and 163 were female. The male female ratio was 1: 1.03. Most of the patients were above 20 years. Only 18 patients were below 20 years. Below 10 we had got only 03 patients and they were suffering from lymphoma ( Table-1 ). Age has an important influence on the likelihood of being afflicted with cancer. Most carcinomas occur in the later years of life (>55 year). Among female we have seen that breast ( 28.83% ) was the topmost and in male Non-Hodgkin's Lymphoma ( 21.52% ). Most of the patients came from poor and middle class family (Fig. 1). About one fourth of cancer patients ( 24.61% ) were taking homeopathy before they attended the hospital and all of them were in advanced stage.

**Table- I**  
Number of cancers by site and age group (yrs).

	5-14	15-29	30-49	50-69	70+	Total	%
Head & Neck		6	9	19	12	46	14.33
Gastrointestinal		2	27	19	6	54	16.82
Breast	-	3	19	21	4	47	14.64
Female genital Tract	-	4	10	15	1	30	9.35
Lymphoma	7	7	9	11	5	39	12.15
Bronchus and Lung	-	1	5	11	8	25	7.79
Hepatobiliary organs	-	2	7	6	3	18	5.61
Urological Cancer			1	2	5	8	2.49
Leukemia	3	1	3	2		9	2.80
Unknown Primary	-	3	3	8	3	17	5.29
Others	5	2	10	9	2	28	8.72
Total						321	100

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**Figure 1** : Socio economic condition

In the study population 165 (51.40%) patients came to this hospital with confirmed histopathological diagnosis, 114 (35.51%) patients had cytopathological report with them, 42 (13.08 %) patients had diagnosis based on X-ray, other imaging techniques and clinically (Table-II).

**Table II**  
Methods of diagnosis.

Methods	Male	Female	Total	Percent
Histopathology	92	73	165	51.40
FNAC	46	68	114	35.51
Others	20	22	42	13.08
Total	158	163	321	100

About 90% of male patients were smoker in their habit and 58.60% were in habit with chewing tobacco and bettle-nut. In female only 05 patients were smoker and 76.43% were in habit with chewing tobacco and bettle-nut. (Table- IV)

**Table III**  
Top ten malignancies among both sexes.

Site	Male	Female	Frequency	Percent
Breast	01	46	47	14.64
NHL	27	07	34	10.59
Lungs	17	08	25	7.79
Mouth and Oral cavity	15	09	24	7.48
Stomach	21	03	24	7.48
Colorectal	10	11	21	6.54
Hepatobilliary	08	10	18	5.61
Cervix	0	15	15	4.67
Unknown Primary	06	06	12	3.7
Larynx	10	01	11	3.45
Total	115	116	321	100

**Table IV**  
Habit of cancer patients.

Sex	Smoker No (%)	Chewing tobacco and Bettle-nut
Male	131 (89.73)	92(58.60)
Female	05(03.18)	120 (76.43 )
Total	136	212

## Discussion

In the present study the number of female patients were slightly higher than the male patients. Top five malignancies were Breast (14.64% ), NHL (10.59% ), Lung cancer (7.79% ), Mouth and oral cavity (7.48% ), Stomach (7.48%) and colorectal (6.54% ). Out of 47 breast cancer only 01 was male. Now we discuss five leading cancers.

In this study the age of breast cancer patients was from 25 to 78 years. Only one male patient was suffering from breast cancer. Highest numbers of patients were diagnosed by FNAC primarily and after surgery by histopathology. About 98% patients were morphologically duct cell carcinoma. The majority of patients were with locally advanced disease.<sup>2</sup>

34 (10.59%) patients of Non-Hodgkin's Lymphoma (NHL) attended in the hospital. Among them 27 (79.41% ) were male and 07 (20.59%) were female. Among the sufferer the lowest age were 05 and the highest age were 82 years. All of them were treated by chemotherapy.

In mouth and oral cavity among 24 patients 15 (62.50% ) were male and 09 (37.50%) were female. Most of the patients (18) were in between 40-69 years.

Lung cancer is the most common cancer in the world and accounts for nearly 13% of all new cancer diagnosis in both sexes combined.<sup>4,5</sup> In Europe lung cancer was responsible for a 5th of the total number of deaths from cancer.<sup>6</sup> Smoking is the primary risk factor in the development of lung cancer accounting of 90% of cases in men and 70% in women.<sup>7</sup> In this study the male female ratio is 2.13 : 1.00 among them male were 17 and female 08. The percentage of lung cancer in both sexes of all cancers is 07.79%. About 80% of the male patients were habituated with smoking and the highest histological variety was squamous cell carcinoma.<sup>14</sup>

Total number of gastric cancer attended in the hospital were 24 (07.48%). Male and female ratio was 07: 01. Male were 21 ( 87.50 ) and female were 03 (12.50% ). All of them came with confirmed diagnosis. Most of them were diagnosed by endoscopic biopsy. Endoscopic ultrasonography is the most accurate method of diagnosis of gastric cancer specially of exophytic lesion<sup>8</sup> but is less accurate in detecting regional nodal metastasis.<sup>9</sup>

The number of cancer patients attended in the radiotherapy department of Khulna medical college were not the exact figure. As there are no facilities to treat the patient by radiotherapy and as there are no separate indoor services so many patients were referred from different wards directly to Dhaka.

## Conclusion

The patients informations were collected from the cancer registry of Radiotherapy department of Khulna medical college hospital. Complete informations of patients regarding treatment, follow-up and some other informations will be improved when treatment and follow-up facilities will be improved.

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