

Evaluation of Current Status of Cancer Disease at Chattagram in Bangladesh.

ABSTRACT

Cancer one of the furthermost pervasive diseases, thus far frequently in affluent countries - is fast raising its horrible head in the developing world. This is a survey work on cancer due to current increasing of the number of cancer patients in Bangladesh. This study was carried out in Chittagong Medical College Hospital, Bangladesh, from 10th November 2019 to 25th February 2020. A total of 31 patients were enrolled in the study. Of them 13 were male & 18 were female patients. The female patients were greater in number than male patient. In this study the cancer incidence was much higher at the age 41-50 years (30%), followed by middle age 31-40 (20%) whereas cancer was least prevalent in pediatric and teenage patients that was only 5.0% in both cases. Most of the female are bearing Ovary cancer (26%) & Breast cancer (29%) and also male are affected by Thyroid cancer (26%). We found that 60% of patients were being treated with chemotherapy alone. Doctors were commonly prescribed of chemo drugs Cisplatin (21%) & Folic acid (29%).

Keywords: Cancer patients, Treatment patterns, Prices of anticancer drugs, Cost of cancer treatment, Bangladesh.

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INTRODUCTION

Cancer is a generic term for a group of more than 100 diseases that can affect any part of the body. Other terms used are malignant tumors and neoplasms. One defining feature of cancer is the rapid creation of abnormal cells which grow beyond their usual boundaries and which can invade adjoining parts of the body and spread to other organs, a process referred to as metastasis (1). Metastases are the major cause of death from cancer (2). Cancer - one of the most pervasive diseases, thus far mostly in affluent countries - is fast raising its ugly head in the developing world (3). The dreaded disease is now placing its heaviest burden on poor and disadvantaged populations; thanks largely to factors like demographic growth, population aging, the spread of unhealthy lifestyles (including tobacco use), as well as lack of control of cancer associated infections (4). Going by the statistics, more than half of the cancer deaths every year - 4.8 million out of a total of 7.6 million, occur in the developing countries, where lifestyle changes are taking place at such a fast pace (5). It is being speculated that if timely action is not taken to tackle the growing, global public-health problem, the number of cancer deaths in the developing world may reach up to a monstrous 5.9 million in 2015 and 9.1 million in 2030 (6). Cancer has been appearing as an important public health problem in Bangladesh. Due to the lack of reporting system and under-diagnosis of cancer, the real situation is unknown yet. There are many external factors either cause or facilitate the development of cancers (7). Tobacco use is the single most important cause of large variety of cancers such as lung, larynx, oesophagus (food pipe), stomach, bladder, oral cavity and others. Dietary factors such as inadequate fruit and

vegetables, intake play important role in causing cancer (8). Excessive alcohol causes several types of cancer such as oesophagus, pharynx, larynx, liver, breast, and others. Tobacco, through its various forms of exposure, constitutes the main cause of cancer-related deaths worldwide among men, and increasingly among women. Forms of exposure include active smoking, breathing second hand tobacco smoke (passive or involuntary smoking) and smokeless tobacco (9).

METHODS AND MATERIALS:

Type of study: It was descriptive type of cross sectional study with one step satisfaction.

Place of study: The present study was carried out in the Radiotherapy Department, of Chittagong Medical College.

Data collection Period: From 10th November 2019 to 25th February 2020.

Sample and Sampling Technique: Data of cancer patient and test report were collected from Chittagong Medical College. A Questionnaire was designed to collect the men and women of their characteristics of cancer and its prevention. Collecting the filled up questionnaire and the data are filled up in the paper.

Procedure of the data collection:

Survey result of the cancer Patient: Data of 50 patients regarding cancer were collected from Chittagong Medical College Hospital. The Data shows the sex, age, types of cancer, treatment & anticancer drugs.

Data complication and Processing : After complication of raw data ,we stoned out and prepared a master table manually, keeping in view the objectives and variables.

Data analysis and Report writing: Data were processed with the help of MS Excel and MS Word.

Results and Discussion:

Table 1: Total count of the gender of the patients

Gender	Patients	Percentages
Male	13	42%
Female	18	58%
Total	31	100%

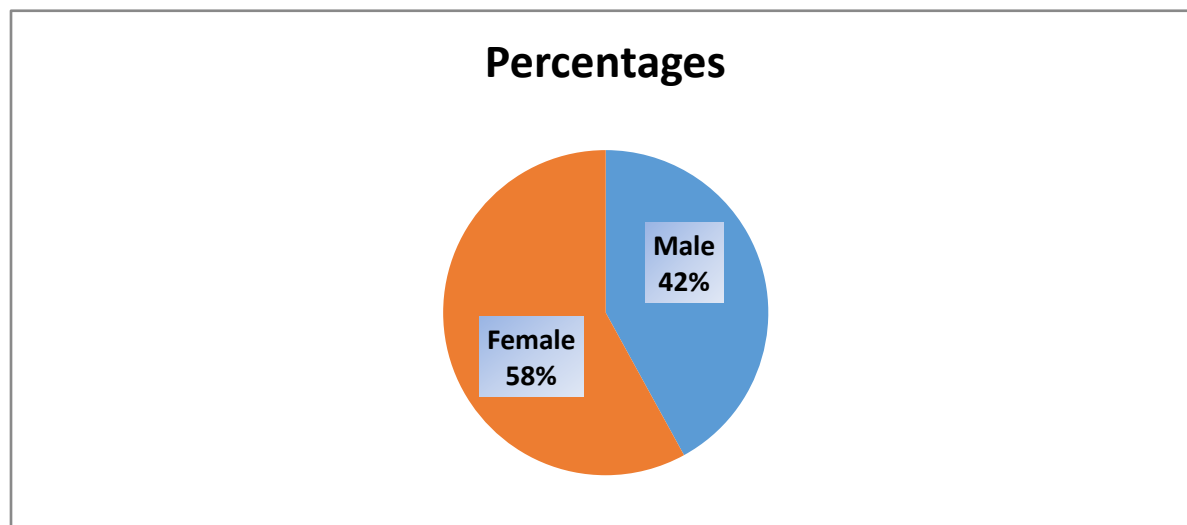


Figure 1: Percentages of gender

Comment:

Out of 31 cancer patients in study, 13(42%) were male and female were 18 (58%). Male & female ratio was 1:1.3

AGE RANGE

Table 2: Age variation of the patients

Age	Percentages
0--10	2%
11--20	3%
21--30	7%
31--40	20%
41--50	30%
51--60	22%
61--70	13%
71--80	3%

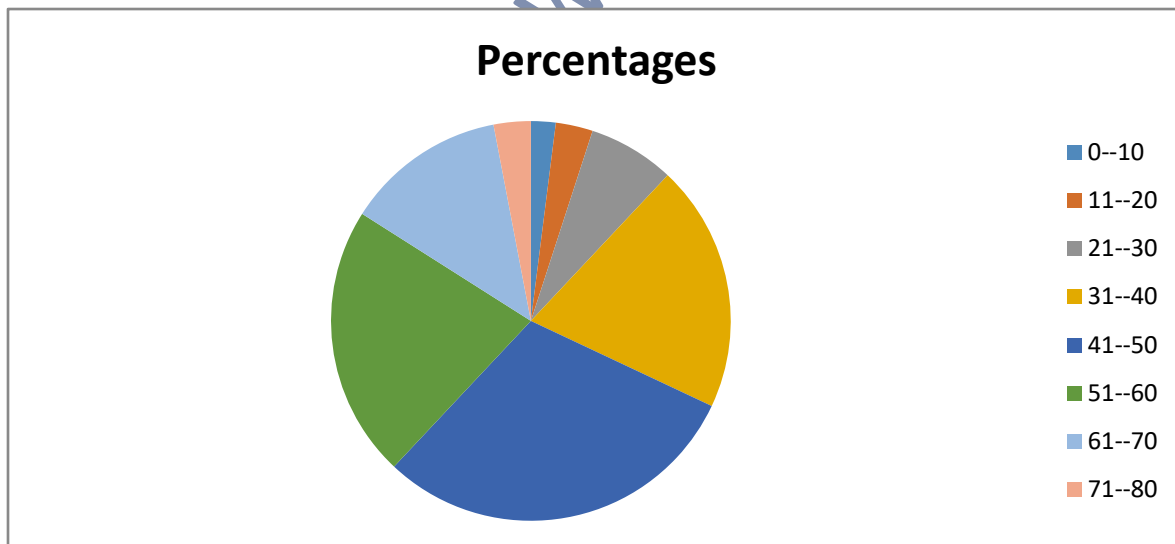


Figure2 : Percentage of age range

Comment:

In this study the cancer incidence was much higher at the age 41-50 years (30%), followed by middle age 31-40 (20%) whereas cancer was least prevalent in pediatric and teenage patients that was only 5.0% in both cases.

Types of cancer

Table 3: Different types of cancer in both male and female patients

Types of cancer	Male	Percentages	female	Percentages
Ovary	0	0	8	26%
Breast	0	0	9	29%
Thyroid	8	26%	0	0
Lung & Stomach	4	13%	1	3%
Eye	1	3%	0	0

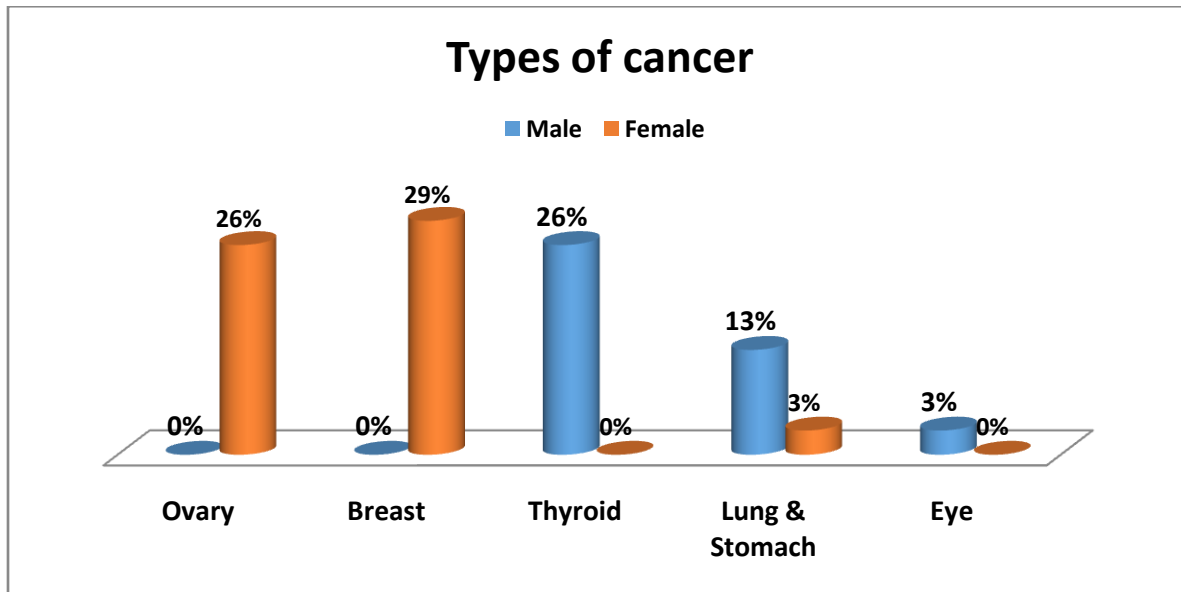


Figure 3: Types of cancer in both male and female patients

Comment :

Most of the female are bearing Ovary cancer (26%) & Breast cancer (29%) and also male are affected by Thyroid cancer (26%).

Treatment

Table 4: Strategies of cancer treatment

Strategies	Percentages
Chemotherapy	60%
Radiotherapy	8%
Both Chemo- & Radio-therapy	19%
Chemo-,radio-Therapy & surgery	13%

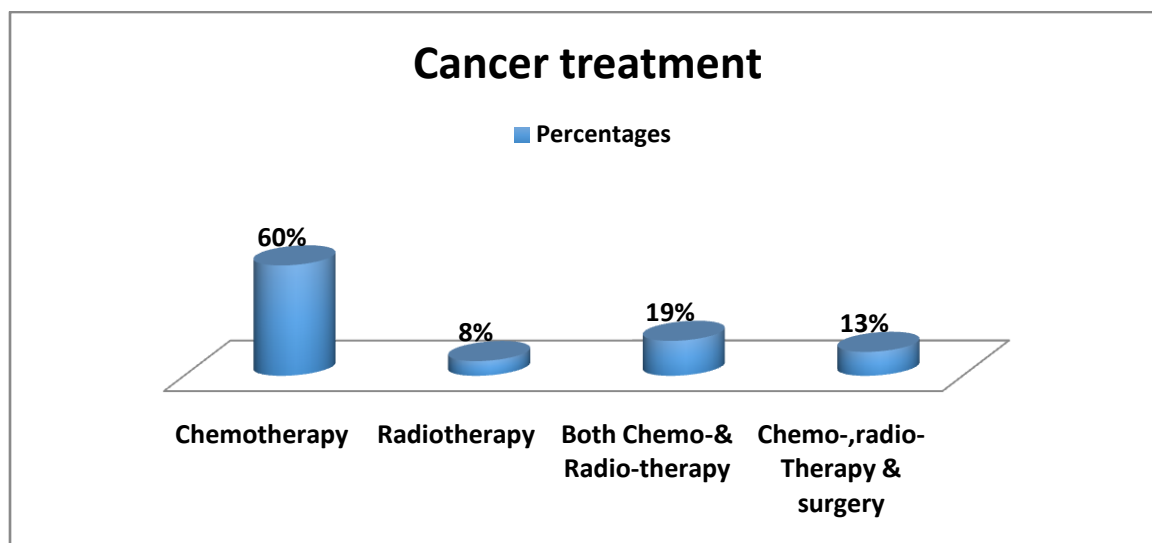


Figure 4: Strategies of cancer treatment

Comment:

The main approaches of cancer treatment were surgery, chemotherapy and /or radiotherapy, used alone or in combination. We found that 60% of patients were being treated with chemotherapy alone. In 19% of cancer cases chemotherapy was followed by radiotherapy and 13% cases were being treated with radiotherapy whether triple therapy (chemotherapy, radiotherapy & surgery) treated cancer patient were insignificant in the study.

Chemo drugs

Table 5: Commonly prescribed of five Chemo drugs

Drugs	Percentages
Cisplatin	21%
Etoposide	19%
Paclitaxel	14%
Cyclophosphamide	17%
Folinic acid	29%

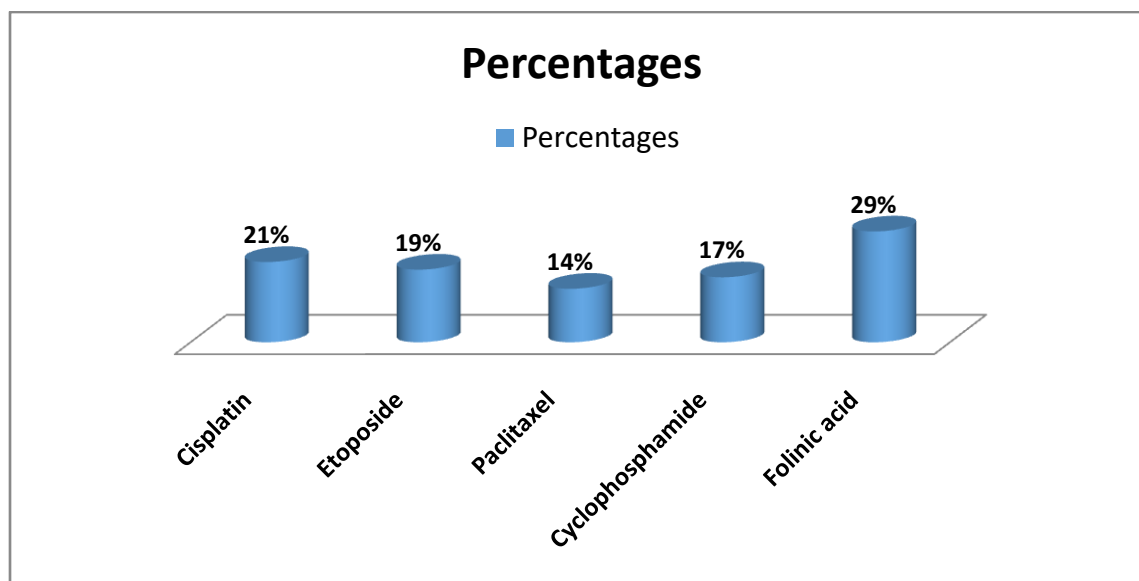


Figure 5: Percentages of chemo drugs

Comment:

Doctors were commonly prescribed of chemo drugs Cisplatin (21%) & Folinic acid (29%).

Table 6: Anticancer drugs manufactured by Bangladeshi companies

Serial No.	Generic name	Brand name	Potency	Price
1	Cisplatin	Platinex / Cigalin	10mg 50mg	250 taka 750taka
2	Carboplatin	Carboplat	150mg 450mg	2100taka 3800taka
3	Etoposide	Topoxin /Eposide	100mg	400taka
4	Vincristine sulphate	Criston/ Vincrist	1mg 2mg	350taka 550taka
5	Paclitaxel	Gelpac/ Paclitexin	30mg 100mg	1700taka 4500taka
6	Doxorubicin	Jorobin/ Doxorub	10mg 50mg	100taka 300taka
7	Cyclophosphamide	Cyclotox / Cyclomide	200mg 1gm	180taka 650taka
8	5-Fu	Fluroxen/Flurine	500mg	100taka


9	Oxaliplatin	Xaloplat /Oxalotin	50mg 100mg	3000taka 5500taka
10	Folinic acid	Folinix injection/--	50mg	500taka

Conclusion:

Cancer treatment is a long process and very much expensive. This survey reflects the overall picture of cancer and its treatment in Bangladesh which include patients' condition (age, sex), types of cancer, strategies of treatment and the cost of the treatment. We need to some step such as treatment, management, safe care, in my research work data from Chittagong medical college we found 13(42%) were male and female were 18(58%) total count of 31 patients. In the age 41-50 years (30%) patients are suffering from the cancer. Most of the female are bearing Ovary cancer (26%) & Breast cancer (29%) and also male are affected by Thyroid cancer (26%). We found that 60% of patients were being treated with chemotherapy alone. Doctors were commonly prescribed of chemo drugs Cisplatin (21%) & Folinic acid (29%).

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