



RESEARCH ARTICLE

EVALUATION OF CURRENT SCENARIO OF CANCER DISEASE AT CHATTAGRAM IN BANGLADESH

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Abstract



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Objective: Now a day Cancer is the furthestmost dangerous diseases. It can develop almost anywhere in the body. Cancer is a disease whose treatment process takes too long time and also too costly.

Methods: This is a survey work on cancer due to current increasing of the number of cancer patients in Bangladesh. This evaluation was conceded in Chittagong Medical College Hospital, Bangladesh, from 10th November 2019 to 25th February 2020. Here, 31 cancer patients were evaluated.

Results: In this work, it is observed that most of the cancer patients were female. In this study, it was also observed the cancer was occurred highly at the age of 41-50 years (30%), then age limit 31-40 (20%). Most of the female are bearing ovary cancer (26%) and Breast cancer (29%) and also male are affected by Thyroid cancer (26%). It was found that 60% of patients were being treated with chemotherapy alone. Doctors were commonly prescribed of chemo drugs Cisplatin (21%), and Folinic acid (29%).

Conclusions: Government should highlight on the expansion of specific cancer center. Such types of centers can also deliver rehabilitation as well as relaxing care for dangerous cancer patients to release their high distress.

Keywords: Cancer, Chittagong Medical College Hospital, treatment ways, used drugs.

INTRODUCTION

Cancer is produced by accrued destruction to genes. Such changes can be due to casual or to disclosure to a cancer producing matter. The materials that cause cancer are entitled carcinogens. Cancer sources cells to division uncontrollably. This can effect in tumors, destruction to the immune scheme, and other damage that can be deadly. One important chin of cancer is the quick creation of irregular cells which produce beyond their normal borders and which can enter adjoining portions of the body and blowout to other tissues, a process denoted to as a metastasis¹. All kinds of cancer flinch in cells. Our bodies are completed up of tons of cells assembled together to procedure tissues as well as organs for example muscles, bones, liver, lungs and also the liver. Genes privileged individually cell state it once to produce, work, division and die. Usually, our cells monitor these directions and we stay fit. But occasionally the instructions become mixed up, beginning our cells to produce and division out of control or not expire once they should. When these irregular cells produce and division, they can produce a lump in our body named a tumor. Metastases are main cause of death commencing cancer². Cancer is a

disease which is occurred in the emerging countries³. The disease is now employing its heaviest load on poor and under privileged populations; thanks mostly to features like demographic development, people aging, the extent of unwholesome lifestyles in addition to lack of resistor of cancer related infections⁴. Successfully by the measurements, half of the cancer expiries each year 4.8 million out of an entire of 7.6 million occur in the developing countries, where lifestyle changes are taking place at such a fast pace⁵. 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 2030⁶. Cancer has been appearing as an imperative 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 exterior factors either cause or assist the progress of cancers⁷. Tobacco practice is the only most vital cause of great diversity of cancers for example lung, larynx, stomach, bladder, oral cavity as well as others. Dietary factors such as inadequate fruit and vegetables, intake play important role in causing cancer⁸.

Excessive alcohol causes several types of cancer such as pharynx, liver, breast, and others. Tobacco, finished its various procedures of exposure, establishes the main reason of cancer-correlated deaths universal among men, and progressively among women. Forms of revelation include dynamic smoking, inhalation second hand tobacco burn and smokeless tobacco⁹. Recently the World Health Organization stated that the cancer illness accounting for 8.2 million expiries in 2012¹⁰ as well as also forecast that 12 million of the all expiries by 2030 universal will be owing to cancer (10). In main belongings principally breast cancer, colorectal cancer, lung and stomach cancer as well as liver cancers reason the utmost cancer expiries each year¹¹. Though, the maximum common sorts of cancer fluctuate between male as well as female, lung cancer in male in addition to cervical and also breast cancer in females establish about 38% of all cancer in Bangladesh¹² as well as in utmost belongings cervical cancer holders come for analysis as well as treatment at night time¹³. It is reported that in European Union, the assessed numbers of fresh belongings of cancer were almost 1.4 million in men as well as 1.2 million in women, and about 707,000 males as well as 555,000 females expired from cancer in the similar year¹⁴. Around 30% of cancer expiries were because of the five important behavioral as well as dietary hazards which were high body weight index, very little fruit as well as vegetable consumption, deficiency of somatic activity, tobacco habit and alcohol habit¹⁵. Smoking only was assessed to have instigated 21% of worldwide cancer expiries and around 70% of universal lung cancer expiries¹⁶.

SUBJECTS AND METHODS

This study was cross sectional with one phase contentment. This survey was performed in the Radiotherapy Department, of Chittagong Medical College at Chattogram, Bangladesh from 10th November 2019 to 25th February 2020. Data of 31 cancer patients and test reports were also collected from Chittagong Medical College. Totally the cancer patients whose were admitted in the Department of Oncology were involved in the survey. So, individual inpatients were involved in the survey. 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. Data of 31 patients regarding cancer were collected from Chittagong Medical College Hospital.

The data shows the sex, age, types of cancer, treatment and anticancer drugs. After compilation of raw data, it was stoned out and prepared a master table manually, keeping in view the objectives and variables. Data were processed with the help of MS Excel and MS Word.

RESULTS AND DISCUSSION

In this work, it was observed that most of the cancer patients were female (Figure 1). In this study, it was also observed the cancer was occurred highly at the age of 41-50 years (30%), then age limit 31-40 (20%) (Figure 2).

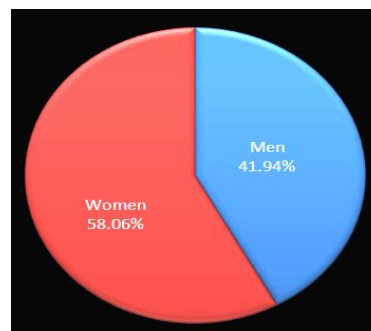


Figure 1: Percentages of gender.

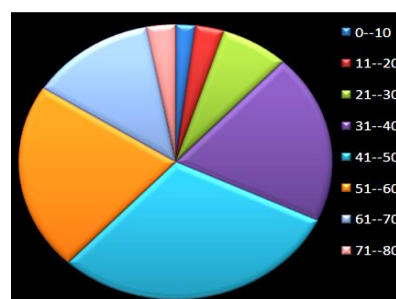


Figure 2: Percentage of age (Yrs) range.

Maximum number of woman were bearing Ovary cancer (26%) and Breast cancer (29%) and also male are affected by Thyroid cancer (26%) (Figure 3). In this study, it was observed that chemotherapy was the highest percentage for cancer treatment (Figure 4). Doctors were commonly prescribed of chemo drugs Cisplatin (21%) and Folinic acid (29%) (Figure 5).

Table 1: Anticancer drugs manufactured by Bangladeshi companies.

Generic name	Brand name	Potency (mg)	Price (Takka)
Cisplatin	Platinex/Cigalin	10	250
		50	750
Carboplatin	Carboplat	150	2100
		450	3800
Etoposide	Topoxin/Eposide	100	400
Vincristine sulphate	Criston/ Vincrist	1	350
		2	550
Paclitaxel	Gelpac/Paclitexin	30	1700
		100	4500
Doxorubicin	Jorobin/Doxorub	10	100
		50	300
Cyclo phosphamide	Cyclotox/Cyclomide	200	180
		1000	650
5-Fu	Fluroxen/Flurine	500	100
Oxaliplatin	Xaloplat /Oxalotin	50	3000
		100	5500
Folinic acid	Folinix injection	50	500

This study work was showed during the dated from 10th November 2019 to 25th February 2020 on the cancer patients in the Radiotherapy Department, of Chittagong Medical College. For this tenacity, a well questionnaire was formed to gather data from 31 cancer patients. The survey work redirected some different scenario on the cancer at Chattogram in Bangladesh. In this work the age variety of the experimented patients were 0 years to 80 years above as well as a total 30% (Figure 2) of the patients consuming cancer with the age range of 40-50 years. These statistics provisions the truths that cancer is a dangerous disease of mature and old

age person. As per to this learning, there were just 18 female cancer patients surrounded by the 31 patients, which denote 58 % of the whole patients that shows females are in the susceptible state of the entire cancer manifestation (Figure 1). It should be mentioned here that a people centered survey is significantly obligatory to enlighten the precise picture of cancer at Chattogram in Bangladesh. Maximum numbers of persons are pretentious with cancer due to illiteracy, unawareness, paucity of cancer perception, religious misconceptions, and insufficient identification availability in Bangladesh.

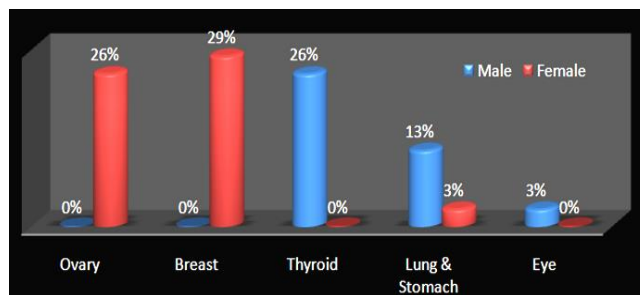


Figure 3: Different classes of cancer.

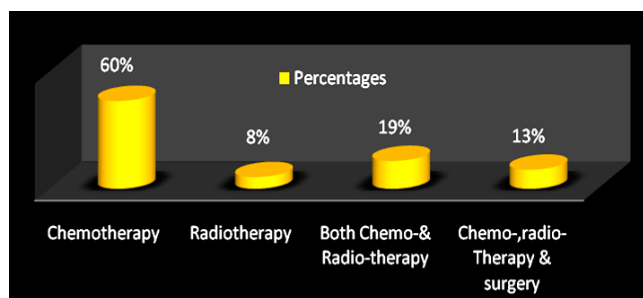


Figure 4: Strategies of cancer treatment.

In this work it is also establish that lack of education can cause cancer incidence, in current study 30% of the total patients were uneducated, and 23.33% patients passed secondary level and only 10% completed graduation. Globally the three most common cancers are lung, breast and colorectal¹⁴. In this work it is also establish that commonly happened cancer category in Bangladesh are breast cancer (29%) and ovarian cancer (26%) in female and thyroid cancer (26%), lung and

stomach (13%) in male patients (Figure 3). As per to this learning, both radio therapy and chemo therapy, surgery, chemotherapy as well as radiotherapy are the main approaches of cancer management and 60% of the whole patients are being treated through chemotherapy only (Figure 4). In this work it is also establish that doctors are commonly prescribed of chemo drugs Cisplatin (21%) and Folinic acid (29%).

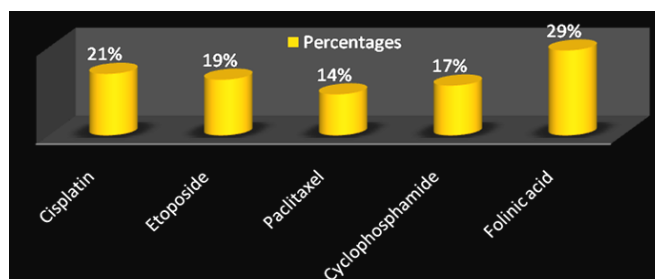


Figure 5: Percentages of chemo drugs.

Recently local pharmaceutical companies are manufacturing anticancer drugs like Doxorubicin, Cisplatin, Paclitaxel, Folinic acid etc (Table 1). Bangladesh Government ought to propose enough conveniences to conduct research work as well as intensification manufacturing opportunities of the very

important anticancer drugs in locally. Thus the local companies acquire more resources, numerous of them will arise forward to production the very important anticancer drugs, which will help to improve country's native pharmaceutical marketplace. So, the

Government needs to highlight on the expansion of dedicated very important cancer center.

CONCLUSIONS

Cancer is a disease whose treatment process takes too long time and also too costly. This study indicates the general scenario of cancer disease and also its treatment at Chattogram, Bangladesh need for some steps such as treatment, management, safe care, in current research work data was obtained from Chittagong medical college and it was found that 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%) and breast cancer (29%) and also male are affected by thyroid cancer (26%). The goal of this work is to establish the existing situation in the Radiotherapy Department, of Chittagong Medical College Based Cancer Registry. Bangladesh Government should highlight on the expansion of specific cancer center. Such types of centers can also deliver rehabilitation as well as relaxing care for dangerous cancer patients to release their high distress. Now it was monitored that the efficient as well as attired way, it was presumed that this can shrink the existing situation of very dangerous cancer diseases.

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AUTHOR'S CONTRIBUTION

Paul E: writing, review, and editing. **Islam MS:** methodology, data curation, formal analysis. All authors revised the article and approved the final version.

DATA AVAILABILITY

Data will be made available on request.

CONFLICT OF INTEREST

No conflict of interest associated with this work.

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