

## Pattern of Cancer Among the Older Cancer Patients Attending at Different Hospital of Dhaka City

Md. Nazir Uddin Mollah<sup>1\*</sup>, Sarwar Alam<sup>2</sup>, Sadia Sharmin<sup>1</sup>, Syed Md Akram Hussain<sup>3</sup>,  
Md. Mamun Or Rasheed<sup>4</sup>, Rokaya Sultana<sup>4</sup>, Hasan Nazir Uddin<sup>5</sup>

<sup>1</sup>Associate Professor, <sup>2</sup>Professor, <sup>4</sup>Assistant Professor,  
Department of Oncology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh.

<sup>3</sup>Professor, Department of Clinical Oncology & Radiotherapy, Square Hospital Ltd. Dhaka, Bangladesh.

<sup>5</sup>MBBS, FCPS (Plastic and Reconstructive Surgery), Consultant, Al Manar Hospital, Dhaka, Bangladesh.

### ABSTRACT

**Background:** Advancing age is a high-risk factor for cancer, with persons over 65 accounting for 60% of newly diagnosed malignancies and 70% of all cancer deaths.

**Objectives:** The study's objective was to find out the pattern of cancer in older patients.

**Methods:** This cross-sectional study was conducted at Bangabandhu Sheikh Mujib Medical University, National Institute of Cancer and Research hospital, Dhaka, from February 2010 to January 2011. Histopathologically confirmed 120 cancer patients were included.

**Results:** The mean age of study patients was 65.97(±5.3223) years. There was male predominance (57% versus 43%). Most of the patients were illiterate or primary education only and were from low socioeconomic status. Intake of betel nut was present in 54 % patients. The most common malignancy was breast and cervix in females, whereas lung and oral cavity in males. Most prevalent histopathology was adenocarcinoma (45.8%), followed by squamous cell carcinoma 43 (35.8%), duct cell carcinoma 8(6.7%), Transitional cell carcinoma 7(5.8%), non-Hodgkin's lymphoma 5(4.2%).

**Conclusions:** Cancer was more common in the male patient.

Most of the patients were illiterate and had low Socioeconomic condition. Breast & cervical cancer in female, and lung & oral cavity in male were the most common patients. The predominant histological type was adenocarcinoma, and stage was III.

**Keywords:** Elderly, Pattern of Cancer.

### \*Correspondence to:

**Dr. Md. Nazir Uddin Mollah,**  
Associate Professor,  
Department of Oncology,  
Bangabandhu Sheikh Mujib Medical University,  
Dhaka, Bangladesh.

### Article History:

Received: 24-03-2021, Revised: 19-04-2021, Accepted: 12-05-2021

Access this article online	
Website: <a href="http://www.ijmrp.com">www.ijmrp.com</a>	Quick Response code 
DOI: 10.21276/ijmrp.2021.7.3.003	

### INTRODUCTION

Most developed countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person, but this does not adapt well to Bangladesh's situation. The UN agreed cutoff is 60+ years to refer to the older population, and WHO has defined 'elderly' as being 60-74 years and the aged as over 75 years of age.<sup>1</sup> The general increase in cancer frequency with age makes the relationship between aging and cancer biology somewhat intuitive, but not cancers increase in incidence with age. The incidence of breast, colon, and prostate cancers increases with age, whereas cervical cancer does not.<sup>2</sup> Some appear more aggressive in advanced age, such as acute myelogenous leukemia, Hodgkin's lymphoma, non-Hodgkin lymphoma, whereas other cancers such as breast and prostate cancer may become more indolent with advancing age.<sup>3</sup> Further, Older age also is associated with other age-related problems that can have adverse

consequences on independent living, rates of disability, and ultimately the quality of life, which affect the cancer treatment and prognosis.

While facing a cancer diagnosis at any age is difficult, older people may face more challenges related to physical health, support systems, financial status, and access to health care. As the population ages, the larger number of older adults will develop cancer. Old adults may have limited access to medical care because of health, social, or income restrictions. A coexisting health condition or co morbidities create special clinical challenges. However, the evidence is growing that effective treatment strategies leading to improved clinical outcomes in older adults with cancer are possible. Cancer patients aged 60 years and older merit special attention as a group for research efforts in cancer prevention, screening, diagnosis, and treatment. This

study will enrich our knowledge about the malignant disease in older adults among the Bangladeshi population aged 60 years and older.

The objective of the study was to determine the types and histological pattern of cancer among the older patients.

**METHODS**

A Cross sectional study was done in Department of radiotherapy BSMMU (Banga Bandhu Sheikh Mujib Medical University), Department of Oncology (National Institute of Cancer Research and Hospital), Dhaka from February 2010 to January 2011. Histopathologically confirmed cancer patient were enrolled after taking informed consent and satisfying the eligibility and ineligibility criteria.

**Study Procedure:** All older (60 years or above) with histopathologically confirmed cancer attending at the department concerned for the study fulfilling inclusion criteria was included in this study. A predesigned data collection sheet was used for each subject and information regarding history, clinical examination and investigation will be recorded.

predominance. 69 (57%) were male and 51(43%) were female (fig: I). Most of the patients were illiterate or primary education only. Only 2 (1.7%) patient's educations were graduate and above. Most of the patients were from low socioeconomic condition. Majority of them were Retired service person 54 (45%) followed by housewife 44 (37.5%), businessman (6.7%), cultivator (1.7%), unemployed (3.3%) and others (4.2%).

Multiple risk factors were analyzed among them 36.7 % were smoker and 54 % were betel nut chewer. Few patients 24.2% had neither of the risk factor (fig: II).

Regarding the primary site of the cancer. Cancer in breast and cervix was common in female patient and cancer in lung and oral cavity was common in male patient. The pattern of the cancer is shown in the table: I. Various histological types of the cancer were identified depending on the primary site of the cancer. Most common type was adenocarcinoma, 55(45.8%). Other type was duct cell carcinoma 8(6.7%), squamous cell carcinoma 43 (35.8%), Transitional cell carcinoma 7(5.8%), non-Hodgkin's lymphoma 5(4.2%), others 2(1.7%) (fig: III) Majority of the patient attended at stage III 70 (58.3%) few in stage II (34.2%) and IV 09 (7.5%) patient. None of the patient presented at stage I.

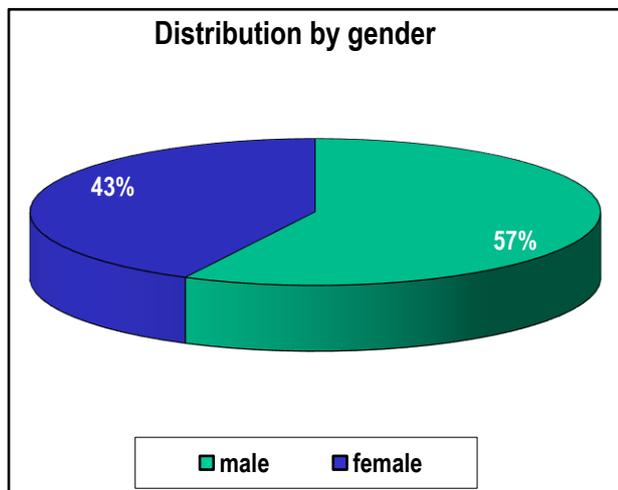


Figure I: Distribution of population according to sex

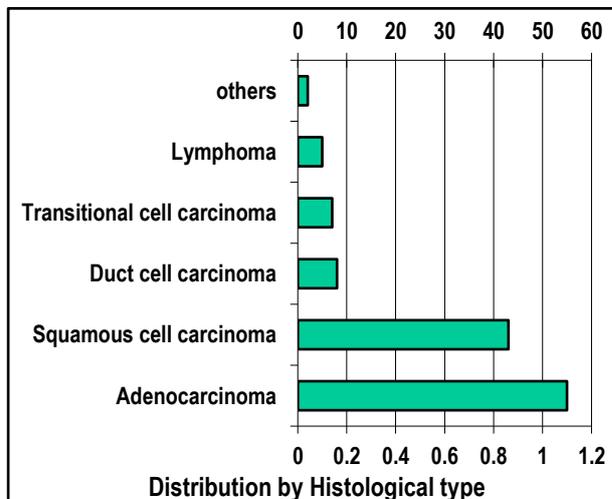


Figure III: Histological type of cancer

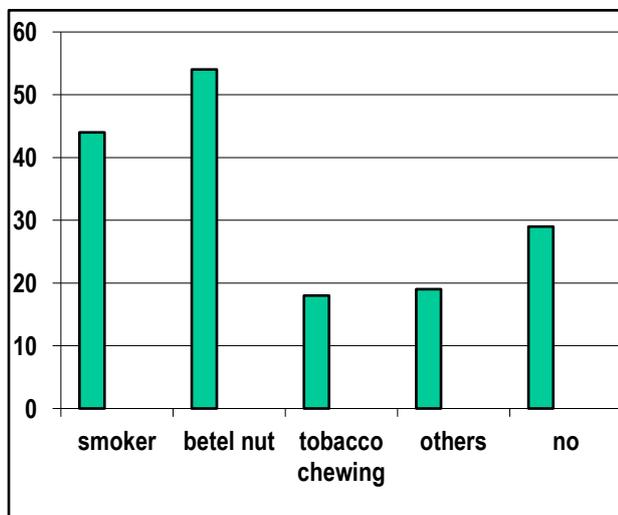


Figure II: Smoking and other habits

**RESULTS**

During study period 120 cancer patients were included in this study among them mean age was 65.97 (±5.3223) years, mean weight was 50.37 (±4.52) kg and mean height was 158.54 (±7.96) cm. Among the 120 cancer patients there was male

CANCER SITE	Male (n=69) N (%)	Female (n=51) N (%)	Total N (%)
Breast	0 (0.0)	08 (15.7)	08 (06.7)
Cervix	0 (0.0)	11 (21.6)	11 (09.2)
Urinary Bladder	07 (10.1)	0 (0.0)	07 (5.8)
Colorectal	05 (07.2)	01 (02.0)	06 (05.0)
Gall Bladder	04 (05.8)	05 (09.8)	09 (07.5)
Head Neck	04 (05.8)	01 (02.0)	05 (04.2)
Kidney	01 (01.4)	02 (03.9)	03 (02.5)
Liver	03 (04.3)	01 (02.0)	04 (03.3)
Lung	10 (14.5)	04 (07.8)	14 (11.7)
Lymphoma	04 (05.8)	01 (02.0)	05 (04.2)
Oesophagus	04 (05.8)	02 (03.9)	06 (05.0)
Oral cavity	09 (13.0)	05 (09.8)	14(11.7)
Others	01 (01.4)	0 (0.0)	01 (0.8)
Ovary	0 (0.0)	05 (09.8)	05 (04.2)
Pancreas	02 (02.9)	02 (03.9)	04 (03.3)
Prostate	07 (10.1)	0 (0.0)	07 (05.8)
Skin	01 (01.4)	01 (02.0)	02 (1.7)
Stomach	07 (10.1)	02 (03.9)	09 (7.5)

## DISCUSSION

Cancer is frequently a disease of older individuals and is the second leading cause of death. More than 55% of the patients newly diagnosed with cancer are 65 years or older.<sup>4</sup> This study was done to find out pattern of cancer among the older cancer patients attending at hospital of Dhaka city.

During the study period 120 cancer patients were included in this study among them mean age was 65.97( $\pm$ 5.3223) years, mean weight was 50.37( $\pm$ 4.52) kg and mean height was 158.54( $\pm$ 7.96) cm. Among the 120 cancer patients there was male predominance. 69 (57%) were male and 51(43%) were female (figure -1) these finding are similar to the finding of International Agency for Research on Cancer (IARC) and International Association of Cancer Registries (IACR) where they also found 61% in male and 51% in female.<sup>5,6</sup> Most of the patients were illiterate or primary education only. Only 2 (1.7%) patient's education were graduate and above. Majority of the patient's monthly income was 5000-20000 taka reflecting the cancer burden is higher among the low socio-economic age group population further the tendency of the higher-class people to seek the medical attention abroad. Regarding occupation Retired service people were 54 (45%) and housewife were 44 (37.5%) and remaining were businessman (6.7%), cultivator (1.7%), unemployed (3.3%) and others (4.2%). Among the 120 patients 36.7 % were smoker. Regular intake of betel nut was present 54 % patients. Most common cancer site of the respondent were oral cavity 14 (11.7%), lung 14(11.7%), cervix 11(9.2%), stomach 09(7.5%), gall bladder 09(7.5%), breast 08(6.7%), prostate 07(5.8%), urinary bladder 07(5.8%), esophagus 06(5%) this finding are similar to the finding of GLOBOCAN 2012.<sup>7</sup> For most cancers, marked geographical variations in incidence rates are found among the elderly, reflecting socioeconomic differences as well as the life style and the exposed risk factor, particularly between the developing and the developed countries. In our context Cancer in breast and cervix was common in female patient and cancer in lung and oral cavity was common in male patient. Most common type was adenocarcinoma 55 (45.8%). Other type was duct cell carcinoma 8(6.7%), squamous cell carcinoma 43 (35.8%), Transitional cell carcinoma 7(5.8%), non-Hodgkin's lymphoma 5(4.2%) and others 2(1.7%).<sup>8</sup>

## CONCLUSIONS

Cancer was more common in male patient. Most of the patients were illiterate or completed primary education only. Socioeconomic status was poor in majority of the patient. Cancer in breast and cervix was common in female patient and cancer in lung and oral cavity was common in male patient. Common histological type of cancer was adenocarcinoma and staging were stage III. Sample size was small in this study. Large sample size and follow up study was warranted to know the actual pattern of cancer among the older patient.

## REFERENCES

- Hajime Orimo, Hideki Ito, Takao Suzuki, Atsushi Araki, Takayuki Hosoi, Motoji Sawabe. Reviewing the definition of "elderly." *Geriatrics and Gerontology International*, 2006; 6(3):149-58. <https://doi.org/10.1111/j.1447-0594.2006.00341.x>
- Walter, L., Lewis, C. and Barton, M. Screening for colorectal, breast, and cervical cancer in the elderly: A review of the evidence. *The American Journal of Medicine* 2005; 118(10): 1078-86.
- Rao, AN. and Demark-Wahnefried, W. The Older Cancer Survivor. *Critical Reviews in Oncology/ Hematology* 60: 20: 131-43.
- Ries LAG, Eisner MP, Kosary CL, Hankey BF, Miller BA, Clegg LX, Edwards, SEER cancer Statistics Review, 1973-1998. National Institute of Health 2000, NIH publication oo-2789.
- Yancik R, Holmes ME. NIA/NCI Reports of the cancer center workshop (June 13-15, 2001). Exploring the role of cancer centers for integrating Aging and Cancer Research; 2002: <http://www.nia.nih.gov/research/information/ConferencesAndmeeting/WorkshopReport>
- Hansen J. Common Cancers in the Elderly. *Drugs Aging*. 1998 Dec;13(6):467-78. doi: 10.2165/00002512-199813060-00005.
- Maria A Blasco. Telomeres and human disease: aging, cancer and beyond. *Nat Rev Genet*. 2005 Aug;6(8):611-22. doi: 10.1038/nrg1656..
- Chirk Jenn Ng, Chin Hai Teo, Nurdiana Abdullah, Wei Phin Tan & Hui Meng Tan. Relationships between cancer pattern, country income and geographical region in Asia. *BMC Cancer* volume 15, Article number: 613 (2015).

**Source of Support:** Nil.

**Conflict of Interest:** None Declared.

**Copyright:** © the author(s) and publisher. IJMRP is an official publication of Ibn Sina Academy of Medieval Medicine & Sciences, registered in 2001 under Indian Trusts Act, 1882.

This is an open access article distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Cite this article as:** Md. Nazir Uddin Mollah, Sarwar Alam, Sadia Sharmin, Syed Md Akram Hussain, Md. Mamun Or Rasheed, Rokaya Sultana, Hasan Nazir Uddin. Pattern of Cancer Among the Older Cancer Patients Attending at Different Hospital of Dhaka City. *Int J Med Res Prof*. 2021 May; 7(3): 9-11. DOI:10.21276/ijmrp.2021.7.3.003