

Brief Commentary

## Myths in oncology

Klein Dantis<sup>1</sup>, Yashwant Kashyap<sup>2</sup>, Melisha Rolita Pinto<sup>3</sup>, Neelam Chandra<sup>4</sup>

Departments of <sup>1</sup>Cardiothoracic Surgery, <sup>2</sup>Medical Oncology, All India Institute of Medical Sciences, Raipur, <sup>3</sup>Department of Oral Medicine and Radiology, Triveni Institute of Dental Science and Research Centre, Bilaspur, <sup>4</sup>Department of Obstetrics and Gynecology, Dr. L H Hiranandani Hospital, Raipur, Chhattisgarh, India.



**\*Corresponding author:**

Dr. Klein Dantis,  
Department of Cardiothoracic  
Surgery, All India Institute  
of Medical Sciences, Raipur,  
Chhattisgarh, India.

[drkleindantis86@gmail.com](mailto:drkleindantis86@gmail.com)

Received : 30 December 2020

Accepted : 18 January 2021

Published : 29 May 2021

**DOI**

10.25259/IJMIO\_37\_2020

**Quick Response Code:**



### ABSTRACT

According to the International Agency for Research on Cancer Globocan 2020 updated on December 14, the incidence of cancer is 19.3 million cases worldwide with over 10 million cancer death in 2020. Since the etiology of cancer is multifactorial and has varied presentations, a lot of myths and misconceptions are invariably associated with it. In view of this, the present article focuses on the commonly encountered myths and misconceptions related to cancer.

**Keywords:** Myths, Cancer, Globocan

### MYTHS IN ONCOLOGY

According to the International Agency for Research on Cancer (IARC) Globocan 2020 updated on December 14, the incidence of cancer is 19.3 million cases worldwide with over 10 million cancer death in 2020. It is estimated that every 1 in 5 people develop cancer during their lifetime. While, cancer of breast, colorectum, lung, cervical, and thyroid cancers are common in women, lung and prostate cancer are common in men.<sup>[1]</sup> In the National Cancer Registry Program Report 2020, released by the Indian Council of Medical Research, it is believed that by 2025 incidence of cancer may likely rise to 15.7 lakh cases in India.<sup>[2]</sup> Genetic predisposition, exposure to tobacco, chemicals and radiation, infections, and inappropriate lifestyle are few of many risk factors causing cancer.<sup>[2]</sup> Since the etiology of cancer is multifactorial and has varied presentations, a lot of myths and misconceptions are invariably associated with it. Although a myth may seem uncanny; a simple belief may endanger a person's life. Therefore, it is essential to emphasize debunking myths. In view of this, the present article focuses on the commonly encountered myths and misconceptions related to cancer.

### EATING SUGAR CAUSES CANCER TO GROW

Although research suggests that cancer cells feed on glucose and excess intake of sugar can lead to obesity thereby increasing the risk of cancer; however, eating sugar neither worsen cancer nor does it shrink the tumor cells.<sup>[3]</sup>

### GETTING A BIOPSY MAKES CANCER SPREAD

Biopsy is a basic investigating tool with which the exact pathology of the disease can be determined. No evidence suggests the spread of cancer following a biopsy procedure; on the

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2021 Published by Scientific Scholar on behalf of International Journal of Molecular and Immuno Oncology

other hand, avoiding biopsies may lead to delayed diagnosis and poor prognosis of the disease.

### **CHEMOTHERAPY HAS LOT OF SIDE EFFECTS**

With the advances in medical field, the incidence of adverse effects of chemotherapeutic drugs is significantly low as compared to the initial chemotherapeutic era. Needless to say, chemotherapy prolongs the 5-year survival and reduces mortality.

### **A LUMP IN THE BREAST IS A BREAST CANCER**

A lump in the breast is not always a cancer; however, evaluation of the same is must to rule out cancer. In addition, changes in size of the lesion and breast tissue should not be ignored.

### **CANCER IS CONTAGIOUS**

The cellular changes observed in cancer are random and takes place within an individual and cannot be transferred to one another by contact except the virus causing cancer can spread by blood transfusion, shared needles, and unprotected sex.<sup>[4]</sup>

### **CANCER IS HEREDITARY OR RUNS IN FAMILIES**

Genetic predisposition although is an important factor in cancer development, especially in few cancers with genetic defects, majority of cancers are caused due to environmental and lifestyle factors.

### **ATTITUDE OF A PERSON DETERMINES THE OUTCOME OF A PATIENT**

Positive attitude provides a sense of hope when patient or any relatives are diagnosed with cancer, but this alone cannot treat the disease. Various modern treatments are effective and bring about positive outlook in the patients.<sup>[3]</sup>

### **SMART PHONE CAUSES CANCER**

Cell phones generate low energy photons which does not mutate genes which is the basis of cancer formation.

### **CERTAIN COSMETIC CAUSE CANCER**

No definite evidence suggests that dyeing the hair and applying deodorants and antiperspirants under arms adjacent to breast tissue can cause cancer.

### **CANCER MEDICATIONS HAVE BEEN WITHHELD BY THE GOVERNMENT AND PHARMACEUTICAL COMPANIES**

Government and medical companies are striving very hard to provide better and safe care for cancer patients. Every drug has to complete a clinical trial to ensure safety and efficacy to the cancer patients. Hence, the process is gradual to make it into the market.

### **CANCER IS FATAL**

Although there is rise in mortality due to cancer, advancement in technology and treatment has reduced the risk of cancer drastically.<sup>[4]</sup>

### **SMOKING RESULTS IN CANCER WHILE LIGHT OR MILD CIGARETTES ARE LESS INJURIOUS TO HEALTH**

Smoking is an independent risk factor of cancer; moreover, various environmental factors, genetic mutation increases the risk of cancer in smokers.<sup>[4]</sup>

Along with these myths talking about cancer is considered a taboo which has resulted in lack of knowledge in the society. Although every one in five people is affected with cancer, the person diagnosed with cancer and the close relatives are not comfortable sharing the diagnosis due to social stigma and discrimination. Misconceptions also bring about fear and at times leads to delayed diagnosis. Hence, it is necessary to banish these myths in order to provide a safe environment for patient care. In addition, it is advised to have open and frank discussions about cancer, discuss the risk factors, and management strategy to improve the outcomes not only in an individual level but also at community and policy level.

### **Declaration of patient consent**

Patient's consent not required as there are no patients in this study.

### **Financial support and sponsorship**

Nil.

### **Conflicts of interest**

There are no conflicts of interest.

### **REFERENCES**

1. GLOBOCAN 2020: New Cancer Data. Available from: <https://www.uicc.org/news/globocan-2020-new-cancer->

data#:~:text=IARC%20released%20on%2014th%20December,million%20cancer%20deaths%20in%202020. [Last accessed on 2020 Dec 25].

2. Policy Brief Report of National Cancer Registry Programme, Bengaluru; 2020. Available from: [https://www.ncdirindia.org/all\\_reports/report\\_2020/pb/policy\\_brief.pdf](https://www.ncdirindia.org/all_reports/report_2020/pb/policy_brief.pdf). [Last accessed on 2020 Dec 30].
3. National Cancer Institute. Common Cancer Myths and

Misconceptions. Available from: <https://www.cancer.gov/about-cancer/causes-prevention/risk/myths>. [Last accessed on 2020 Dec 25].

4. Biswas J. Debunk the myths: Oncologic misconceptions. Indian J Med Res 2014;139:185-7.

**How to cite this article:** Dantis K, Kashyap Y, Pinto MR, Chandra N. Myths in oncology. Int J Mol Immuno Oncol 2021;6(2):103-5.

## NEWS

Best of ASCO India 2021 Conference

25-26<sup>th</sup> June and 3-4<sup>th</sup> July 2021

Program Director – Dr M Vamshi Krishna, Director of Medical Oncology and BMT AIG

Hospital, Hyderabad [drmvkrishnaonco@gmail.com](mailto:drmvkrishnaonco@gmail.com) 995977112

Conference Managers – Kavina Creations

[kashish@kavinacreations.com](mailto:kashish@kavinacreations.com) 9819025850