

A Report on Present Status of Cardio Oncology in Japan

Henry Callus*

Department of Oncology, University of Dhaka, Dhaka, Bangladesh

Introduction

The two main causes of death in Japan are cancer and cardiovascular disease (CVD), respectively. Cancer and cardiovascular disease (CVD) have risen to the top of the list of the leading causes of mortality and disease burden as a result of long-term lifestyle behaviours like Western-style food and sedentary lifestyle. The old population is growing quickly in the twenty-first century, and we are adjusting to the unprecedented ageing of society. Age-related increases in the prevalence of both cancer and cardiovascular disease are significant clinical concerns, as are the co-morbidities of these diseases in senior patients. Additionally, there has been an increase in the number of cancer survivors as a result of recent advancements in cancer treatment. Consequently, CV adverse events caused by cancer treatment have a greater impact on cancer patients' and survivors' clinical outcomes and quality of life.

Description

The two main causes of death in Japan are cancer and cardiovascular disease (CVD), respectively. Cancer and cardiovascular disease (CVD) have risen to the top of the list of the leading causes of mortality and disease burden as a result of long-term lifestyle behaviours like Western-style food and sedentary lifestyle. The old population is growing quickly in the twenty-first century, and we are adjusting to the unprecedented ageing of society. Age-related increases in the prevalence of both cancer and cardiovascular disease are significant clinical concerns, as are the co-morbidities of these diseases in senior patients. Additionally, there has been an increase in the number of cancer survivors as a result of recent advancements in cancer treatment. Consequently, CV adverse events caused by cancer treatment have a greater impact on cancer patients' and survivors' clinical outcomes and quality of life. Additionally, there is an inherited predisposition. Approximately 374,000 people in Japan died from cancer, according to the National Cancer Center Japan's Center for Cancer Control and Information Services. Lung (24.0%), stomach (13.2%), colon/rectum (12.4%), pancreas (8.2%), and liver (7.8%) were the most common cancer death sites for males. For females, the most common cancer death sites were colon/rectum (15.2%), lung (14.2%), pancreas (11.3%), stomach (9.9%), and breast (9.5%). However, the 5-year relative survival rate for all cancer patients was 64.1%, indicating that cancer survival is consistently improving in Japan. According to these epidemiological data, one in two Japanese will be diagnosed with cancer in their lifetime, and one in four and one in seven Japanese women will die from the disease. The majority of cancers and cardiovascular diseases occur more frequently in older people, and elderly cancer patients are more likely to have CV comorbidities.

It was accounted for that 8.16% of Japanese malignant growth patients had CV comorbidities like atrial fibrillation, ischemic coronary illness, cardiovascular breakdown, and venous thromboembolism, and that the

**Address for Correspondence: Henry Callus, Department of Oncology, University of Dhaka, Dhaka, Bangladesh, E-mail: callus341@edu.in*

Copyright: © 2022 Callus H. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 05 August, 2022, Manuscript No. jio-22-84780; **Editor assigned:** 06 August, 2022, PreQC No. P-84780; **Reviewed:** 18 August, 2022, QC No. Q-84780; **Revised:** 22 August, 2022, Manuscript No. R-84780; **Published:** 29 August, 2022, DOI: 10.37421/2329-6771.2022.11.396

proportion of malignant growth patients with CV comorbidities is projected to additional increment, arriving at a top in 2030 to 2034. Even though it certainly extends progression-free survival, intensive and multimodal cancer therapy can also increase the number of cancer patients at risk for CV complications and predispose patients to CV toxicities. Therefore, it is becoming more and more important to manage the CV comorbidities and complications that are associated with both cancer and adverse effects of cancer therapy. The national government has taken action to lessen the burden of cancer and increase healthy life expectancy ever since the Cancer Control Act was passed in 2007. The government of Japan has established 402 designated cancer care hospitals throughout the country to guarantee high-quality medical care for all cancer patients. However, cardio-oncology's significance was not even acknowledged until 2010 in these Designated Cancer Care Hospitals.

The Osaka Medical Center for Cancer and Cardiovascular Diseases (OMCC), the predecessor of the Osaka International Cancer Institute (OICI), opened its first Onco-Cardiology unit. The idea for the onco-cardiology unit came from a special lecture on cardio oncology that gave at OMCC the year before. The term onco-cardiology was picked out of appreciation for the first onco-cardiology unit in MD Anderson Disease Center, and for the subspecialty of cardiology devoted to CV administration of malignant growth patients via cardiologists, though the term cardio-oncology is common in numerous different nations. Cardio-oncology has gained a lot of recognition in Japan over the past ten years, and symposium sessions focusing on cardio-oncology have always been included in the program of major academic societies in both cardiology and oncology. These meetings have been invited to by cardio-oncology pioneers and specialists. The Japanese Onco-Cardiology Society (JOCS) was established in October 2017 in response to the growing demands of the burgeoning field of cardio-oncology.

Its goal is to provide additional opportunities for specialists in cardiology and oncology to exchange views and share common experiences in order to integrate their activities into academic pursuits and implement quality improvement in cancer therapy. By encouraging interdisciplinary collaborations among cardiologists, oncologists, radiologists, nurses, pharmacists, allied health professionals, and researchers in the basic, translational, clinical, and drug discovery, JOCS aims to advance cardio-oncology. It is the dawn of a new era for cardio-oncology in Japan, and it is moving upward like the rapidly rising sun. Cardio-oncology has been recognized as a subspecialty with multidisciplinary integration of cardiology and oncology, and there is a growing number of cardio-oncology clinics throughout the country [1-5].

Conclusion

In addition, the definition of the molecular mechanisms that are responsible for the pathogenesis of CV toxicities caused by cancer treatment is needed to guide the creation of therapeutic strategies. In 2018, the Stroke and Cardiovascular Control Act was passed in Japan, as the legislative countermeasure against CVD and stroke for raising public awareness and prevention, improving provision systems for health, medical, and welfare services, and promoting research. In February 2020, researchers of the National Cancer Center, the National Cerebral and Cardiovascular Center, and the National Institute of Health Sciences organized the first cardiotoxicity workshop at the government-affiliated research organizations to initiate an all-Japan effort for the development of cardio-oncology. These nationwide approaches are expected to promote epidemiological, clinical, and basic research to achieve the goals of saving cancer patients and survivors from CV complications.

Acknowledgement

We thank the anonymous reviewers for their constructive criticisms of the manuscript. The support from ROMA (Research Optimization and recovery in the Manufacturing industry), of the Research Council of Norway is highly appreciated by the authors.

Conflict of Interest

The Author declares there is no conflict of interest associated with this manuscript.

References

1. Chalasani, Satvika. "Understanding wealth-based inequalities in child health in India: A decomposition approach." *Soc Sci Med* 75 (2012): 2160-2169.

2. Deng, Hongtao. "Real-Time monitoring of Athletes' training data based on wireless sensors." *Microprocess Microsyst.* 81 (2021): 103697.
3. Yang, Ju Dong, Pierre Hainaut, Gregory J. Gores and Amina Amadou, et al. "A global view of hepatocellular carcinoma: Trends, risk, prevention and management." *J Integr Oncol* 16 (2019): 589-604.
4. Singal, Amit G., Pietro Lampertico and Pierre Nahon. "Epidemiology and surveillance for hepatocellular carcinoma: New trends." *J Hepatol* 72 (2020): 250-261.
5. Biswas, Subhra K., Paola Allavena and Alberto Mantovani. "Tumor-associated macrophages: Functional diversity, clinical significance, and open questions" *Semin Immunopathol* 35 (2013) 585-600.

How to cite this article: Callus, Henry. "A Report on Present Status of Cardio Oncology in Japan." *J Integr Oncol* 11 (2022): 396.