

## Regional Variation of Cancer Incidence in Nepal

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**Abstract :** Introduction: Non-communicable disease, such as cancer, has spread all over the world for some last decades. However, every nation has experienced a burden from the development of technology. In the context of Nepal, 10 to 15 thousand new cancer incidences are being registered in different hospitals for treatment. Since the date of starting nuclear medicine at Bir Hospital in 1998, cancer patients have been getting treatment regularly. According to the data of the population-based cancer registry, approximately 60% of the population having a middle-class income is being affected by cancer in Nepal. Methods and Materials: The study is aimed to find out the particular place where the population density of new cancer incidence is highest in Nepal and to inform the concerned regulatory body that is working on cancer screening and early detection for the proper treatment from the beginning. In order to identify the areas with the highest population density of new cancer incidence, all the data of cancer patients were collected from five different renowned hospitals and also from the population-based cancer registry center and then analyzed the data. The history of cancer patients was studied from 2003 to 2020, but here the data are analyzed from 2015 to 2020 only to find the latest trend in cancer incidence. Results: In the five major hospitals in Nepal, the total new cancer incidence was 61783 from 2015 to 2020. Out of those, 34617 were female, and 27176 were male. This research shows that female cancer patients were more every year. In the male, lung cancer patients more than cancer of other organs, but in females, the number of breast cancer patients was greatest. The age-adjusted mortality rate for males in Kathmandu valley was 36.3, and for females was 27.0 per 100,000 population. The cancer incidence and mortality rate were slightly lesser in other districts of Nepal. This rate increased with the increase in the age of people. Over 60 years, cancer incidence and mortality rates have been found to increase rapidly. Conclusion: This research supports conducting the program of cancer screening and early detection at Kathmandu valley with high priority and then Morang, Rukum, SSDM, etc., to control cancer.

**Keywords :** cancer incidence, research scholar, Tribhuvan University, Bhaktapur Cancer Hospital, Nepal

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