

## ABSTRACT

Several reports account that cancer is alarmingly spreading in Punjab. To determine whether there are indeed significant statistical differences in cancer incidence and prevalence, data was recorded for five major types of cancer (Breast, Oral, colon, cervical and prostate cancer) in Punjab, Pakistan during the recent years of 2010 to 2016. Cancer cases were collected and formulated from various cancer registries and cancer treatment hospitals of Punjab like GINUM (Gujranwala institute of nuclear medicine), CINUM (Cancer institute of nuclear medicine), PINUM (Punjab institute of nuclear medicine) and SKCH (Shaukat khanum cancer hospital). The data was analyzed for age and gender parameters. The prevalence, incidence rate and age standardized disease rate for the given time period was also determined. The results depicted that cancer is increasing every year. In colon cancer females were less affected as compared to male and the prevalence of this cancer was more common in male population, its value was 0.9 %. Similarly prostate cancer was more prevalent in males as this disease is gender specific, prevalence ratio was 0.9%. As cervical cancer is the disease of women so this type of cancer is more prevalent in females its prevalence ratio was 0.6%. Breast cancer is the most common cancer and is highly prevalent among females as compared to males of the population prevalence ratio was found out to be 0.9%. In head and neck/Oral Cancer it was observed that females were less affected as compared to males and the prevalence of this head and neck/oral cancer were more common in males and found out to be 0.8%. The most common age of diagnosis for colon cancer was between age group of 46-55 years and increase with the increase of age, age standardized ratio was 3.690731 per 1 million population, prostate cancer was more prevalent in age groups of 66-75 years its age standardized ration (ASR) was found to be 15.7939 this shows that this is the disease of elder age people, cervical cancer is more prevalent in age limit of 36-45 its ASR was 11.79191, cervical cancer ratio was low in Pakistan. Large number of breast cancers were diagnosed in females of 36-45 age groups, their ASR ratio was 282.8041 and Head and Neck/Oral cancer were in age range of 45 to 65 years their ASR was turned out to be 58.24848. Incidence rates of colon, prostate, cervical, breast, Head and neck/Oral cancer was found out to be  $1.81847E-06$ ,  $4.51317E-06$ ,  $1.8223E-05$ ,  $1.88E-04$  and  $5.33E-05$ . In conclusion, this study provides the detailed information about the burden of five major types of cancer in Punjab Pakistan. The incidence rate of cancer depicts an alarming situation and there is a dire need to spread the word of awareness among population. Moreover, a proper national cancer registry system should be developed to conduct cancer control programs.