Letter to Editor

Change in the ranking and increasing trend of the prostate cancer from the population-based cancer registries in India

Dear Editor,

Globally, prostate cancer is the second most frequently diagnosed cancer and the fifth most common cause of cancer death among men with an estimated 1.1 million new cases (15% of all cancer in men) and 0.3 million cancer deaths (7% of all cancer deaths) in men in 2012.[1] In India, there were 19,095 incidences and 12,231 death cases in 2012.[2] The population-based cancer incidence data from cancer registries in the five continents is regularly published by the International Agency for Research on Cancer, Lyon, France (CI5).[3] We evaluated data from the Mumbai, Chennai, Barshi, and Bengaluru registries, published in the CI5, to determine the ranking of prostate cancer in the period of 1988–1992 and in the recent data of the year 2008–2012.[3,4]

In the period of 1988–1992, prostate cancer age-adjusted incidence rate was reported as 7.9, 3.6, 1.4, and 4.7 per 100,000 and the rank among the leading cancer site was at number 5, 10, 11, and 6, respectively, in Mumbai, Chennai, Barshi, and Bengaluru registries. There was a shift in the ranking of the prostate cancer from number 5 to 2, 10 to 6, 11 to 9, and 6 to 3 in these registries in the period of 2008–2012. There is an increasing trend in the incidence rate of prostate cancer in the age group of ≥65 years. The incidence rate for the age group of ≥65 years in the period of 1988–1992 was 92.0, 38.8, 9.2, and 49.0 per 100,000, respectively, in Mumbai, Chennai, Barshi, and Bengaluru registries; however, in the period of 2008–2012, it was 100.3, 69.7, 20.8, and 92.1, respectively. The detail of this data is presented in Table 1.

There was a change in the incidence rate of age group of ≥65 years by 11.9%, 80%, 126.1%, and 88%, respectively, in Mumbai, Chennai, Barshi, and Bengaluru registries in the period of 2008–2012 as compared to the period of 1988–1992. As per the recent report published by the National Cancer Registry Programme, an increasing trend in the prostate cancer in Mumbai, Chennai, Delhi, Bhopal, and Bengaluru registries has been reported.[5]

Most of the prostate cancer cases get diagnosed at the age of ≥65 years. The change in the ranking of the prostate cancer is due to the increase in the older population and improvement in the diagnosis. For the prevention of prostate cancer, it would be prudent to explore the possibility of early detection to prevent the complications due to disease. We have to focus on the population which is likely to suffer from such complications with good life expectancy. The risk factor for the disease which can be used as a public health intervention tool for prostate cancer prevention needs to be explored using well-designed large-scale population-based study.

Table 1: Prostate cancer incidence rate and leading cancer site rank in the period of 1988-1992 and 2008-2012 from Mumbai, Chennai, Barshi, and Bengaluru population-based cancer registries

Registry	1988-1992					2008-2012					Change in the incidence rate as compared to 1988-1992 (age ≥65) (%)
	Number of cases (all age group)	AAR per 100,000	Leading cancer site rank	ASR per 100,000 (age ≤64)*	ASR per 100,000 (age ≥65)*	Number of cases (all age group)	AAR per 100,000	Leading cancer site rank	ASR per 100,000 (age ≤ 64)*	ASR per 100,000 (age≥65)*	
Mumbai	764	7.9	5	1.6	92.0	2202	8.9	2	2.0	100.3	11.9
Chennai	179	3.6	10	1.0	38.8	635	6.1	6	1.3	69.7	80.0
Barshi	12	1.4	11	0.9	9.2	30	2.0	9	0.6	20.8	126.1
Bengaluru	289	4.7	6	1.4	49.0	1169	8.3	3	2.0	92.1	88.0

*Age-standardized incidence rate. AAR=Age-adjusted incidence rate per 100,000

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