The Indian Council of Medical Research initiated a network of cancer registries under the National Cancer Registry Programme (NCRP) in 1981 and data collection commenced in these registries from January 1982. The results on incidence rates provided by the Population Based Cancer Registries (PBCRs) have shown the variation in patterns of cancer in general and that of cancer cervix in particular. Cancer of the cervix has been the most important cancer in women in India, over past two decades. All the urban Population Based Cancer Registries at Bangalore, Bhopal, Chennai, Delhi and Mumbai have shown a statistically significant decrease in incidence rates of this site of cancer. Since over 70 per cent of the Indian population resides in the rural areas, cancer cervix still constitutes the number one cancer in either sex. Based on the data of the PBCRs, the estimated number of new cancers during 2007 in India was 90,708. The relative five year survival reported some time earlier averaged 48.7 per cent.

Key words Cancer cervix - incidence - trend

The Indian Council of Medical Research initiated a network of cancer registries under the National Cancer Registry Programme (NCRP) in 1981 and data collection commenced in these registries from January 1982. Since then, the registries have provided information on incidence and patterns of cancer that in terms of quality and validity meet international standards. In India, the cancer registry perhaps is the only programme for reliable incidence and mortality rates. The NCRP data help in undertaking cancer research whether it is epidemiological, basic or clinical and for planning cancer control. However, India being a vast country, setting up of new registries throughout the country involves enormous cost in establishing and maintaining the same. Therefore ‘Development of an Atlas of Cancer in India’ with a cost-effective design and plan using advances in modern electronic information technology was conceived, to collate and process relevant data on cancer. This Atlas gave an overview of patterns of cancer in different parts of India besides calculating estimates of cancer incidence, wherever feasible.

Population based cancer registries

Cancer incidence is generally expressed as Age Adjusted or Age Standardised Incidence Rates (AAR) per 100,000 persons according to world standard population. Among females, the most common sites of cancers are breast and cervix. In older population based cancer registries (PBCR) Barshi and Chennai PBCRs have always recorded the highest incidence of cervix cancer (Table). The report of the North Eastern PBCRs indicates an AAR of 25.4 per 100,000 in Aizawl district of Mizoram state followed by AARs in Imphal West district (20.5) and Kamrup Urban district (17.3).
Cancer of the cervix has been the most important cancer in women in India over the past two decades. All the urban population based cancer registries (PBCR) at Bangalore, Bhopal, Chennai, Delhi and Mumbai have shown a statistically significant decrease in the AARs of this site of cancer. This decline is despite the absence of any organised screening programme. The decline in the AAR varies from 42.3 (in 1982-83) to 22.3 (in 2004-05) per 100,000 in Chennai to a marginal decline in Barshi from 23.5 (in 1988-89) to 22.8 (in 2004-05). Cancer of the cervix accounted for 16 per cent of all cancers in women in the urban registries in 2005. However, it constitutes 37 per cent of the cancers in females in Barshi. The highest age specific incidence rate of 98.2 per 100,000 for cancer cervix was seen in the 60-64 yr age group. Since over 70 per cent of the Indian population resides in the rural areas, cancer cervix still constitutes the number one cancer in either sex. Based on the data of the PBCRs, the estimated number of new cancers during 2007 in India was 90,708. The relative five year survival reported some time earlier averaged 48.7 per cent.

**Hospital based cancer registries**

In the hospital based cancer registries (HBCRs), cancer of the cervix is the leading site of cancer in Bangalore and Chennai, the second leading site in Mumbai and Thrivananthapuram and the third leading site in Dibrugarh. This site of cancer constitutes between 11.4 (Thrivananthapuram) to 30.7 per cent (Chennai) of all cancers in women in these five HBCRs. The rise in the occurrence of cancer was at the later age in Thrivananthapuram as compared to the other four HBCRs. Over 63 to 89 per cent of all cervical cancers had regional disease at the time of presentation. Around 40 per cent of all cervical cancer patients in Bangalore, Chennai and Mumbai did not receive treatment at the Reporting Institution despite having had a diagnosis of cervical cancer.

**Cancer atlas**

At least five districts have even higher incidence rates than that recorded at Chennai (Table). Four of these five districts are concentrated in the north eastern region of Tamil Nadu state and Puducherry. The Atlas has further revealed that this area has also some of the highest incidence rates of penile cancer. This part of Tamil Nadu state has also a high prevalence of human immunodeficiency virus. We thus have enough descriptive epidemiology pointers on a region of the country to undertake several research studies and control measures in cancer cervix, including population based typing of HPV infection.

**References**


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