

## Editorial

---

Geographical variations in the cancer patterns are noted not only throughout the world but also between various regions within the same country. Most of the information on cancer incidence in India is available from the cancer registries under the National Cancer Registry Programme (NCRP). Even though the geographic area and population covered by these registries are quite small, yet they give a fair idea of the cancer problem in the country. Based on the data from the population based cancer registries, overall among males, cancer of the lung is the number one cancer<sup>1-2</sup>. It is the leading site in Delhi, Mumbai and Bhopal. In the southern registries of Chennai and Bangalore, cancer of the stomach, however, continues to be the leading site of cancer. In women, cancers of the cervix and breast, together account for over 40-45% of cancers in urban women and over 57% in the rural registry of Barshi. The cancer of gallbladder is a leading site of cancer especially among women in Delhi and Bhopal, but is hardly seen in Bangalore and Chennai.

Sambasivaiah et al<sup>3</sup> in this issue of journal provide information on cancer patterns from the Rayalaseema region of Andhra Pradesh. The data was prospectively collected from the medical records of the cancer patients registered at S.V. Institute of Medical Sciences, Tirupati over 3.5 years from July 2000 to December 2003. Even though this data is not from hospital or population based cancer registry, yet it would largely reflect the cancer types prevalent in the region. It was found that about 80% of patients presented with advanced stage, and hence had low survival rates. While lung and stomach were the two most common cancers amongst males, cervix and breast were ranked first and second common sites amongst females. If we compare this data with the data available from the adja-

cent southern hospital-based registries under NCRP (between 1994-1998) certain differences are noted<sup>4</sup>. For instance, among males the first and second sites of cancers are: hypopharynx and esophagus in Bangalore, oral cavity and stomach in Chennai, and lung and oral cavity in Thiruvananthapuram. In females, however, breast and cervix cancer continue to be the two leading sites in most of the hospital-based registries as well.

The reasons for the differences in the distribution patterns of various malignancies are not entirely clear. Apart from referral bias which may happen in any hospital based data, probably the differences in the genetics of different ethnic groups, differences in exposure of various populations to carcinogens in the environment and diet, and differences in the lifestyle and food habits hold explanation to some of the facts. Well-designed epidemiological studies looking at these aspects are required, which would lead to increase in our understanding of the disease and in our ability to improve results.

### REFERENCES

- 1 National Cancer Registry Programme. Consolidated report of the population based cancer registries 1990-1996, Indian Council of Medical Research, New Delhi, 2001
- 2 National Cancer Registry Programme. Two-year report of the population based cancer registries 1997-1998. Indian Council of Medical Research, New Delhi, 2002
- 3 Sambasivaiah K, Kumarswamy Reddy, Venkatramanappa P, Lakshmi AY, & Sarma KVS. Cancer Patterns in the Rayalaseema region of Andhra Pradesh. *Ind Jn Med & Paed Oncol* 2004; 25: 9-15.
- 4 National Cancer Registry Programme. Five year consolidated report of the hospital based cancer registries 1994-1998. Indian Council of Medical Research, New Delhi, 2002

**Manisha Bhutani,**  
Department of Medical Oncology,  
Institute Rotary Cancer Hospital  
AIIMS, New Delhi -110029