

Chapter 8

INTERNATIONAL COMPARISON OF SELECTED SITES OF CANCER

This chapter compares the Age Adjusted Rates (AARs) of Indian PBCRs (2012-2014) with the AARs of International PBCRs from five different continents viz., Africa, Asia, Oceania, Europe, North America and South America mentioned in *Cancer Incidence in Five Continents (CI 5 Vol-X)* based on data from 2003-2007. Two registries from each continent demonstrating the highest AARs have been taken for comparison with the top five highest AARs of Indian PBCRs for all sites and selected sites of cancer. All the AARs are expressed as per 1,00,000 population.

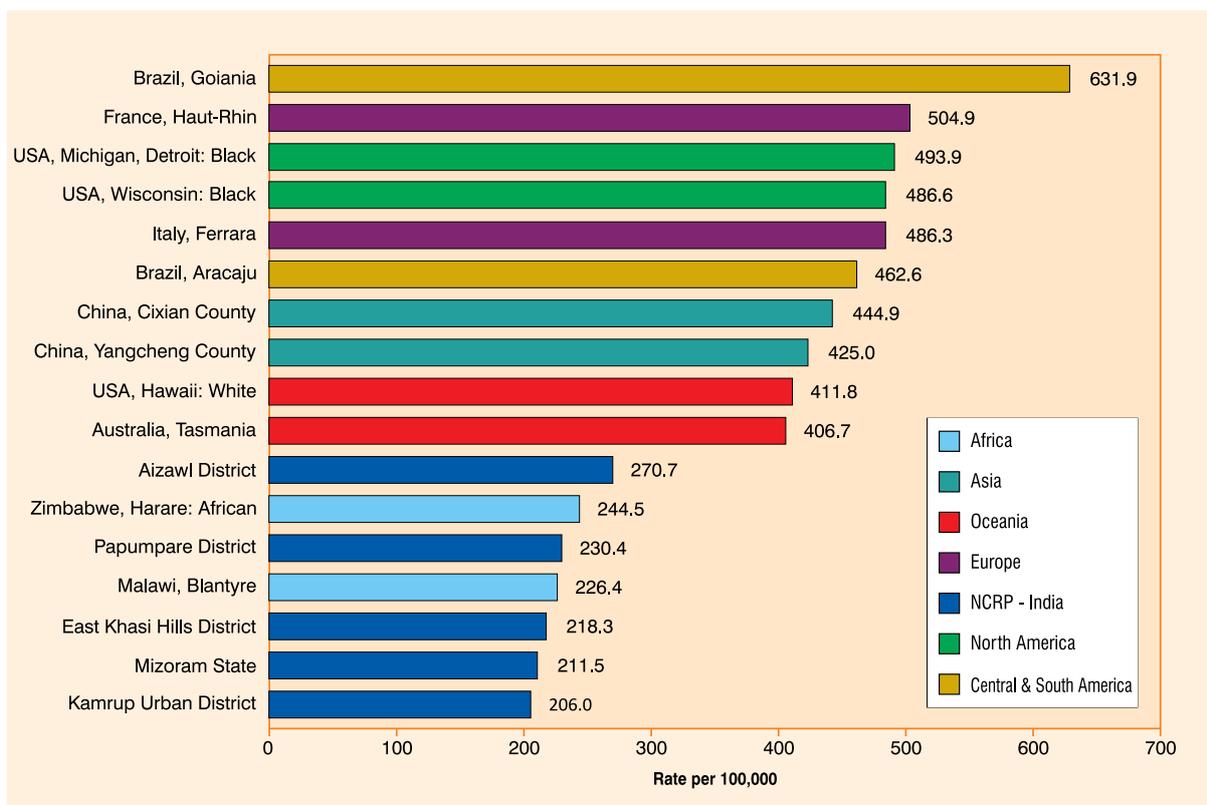
Figure 8.1 shows the highest AAR for all sites of cancer (ICD-10: C00-C97) in males and females. Brazil Goiania had the highest AAR in both males (631.9) and females (474.6). Aizawl District among the Indian PBCRs had highest AAR in males (270.7) and Papumpare District had the highest AAR in females (249.0).

Figures 8.2 to 8.10 give the AAR comparison for selected sites of cancer.

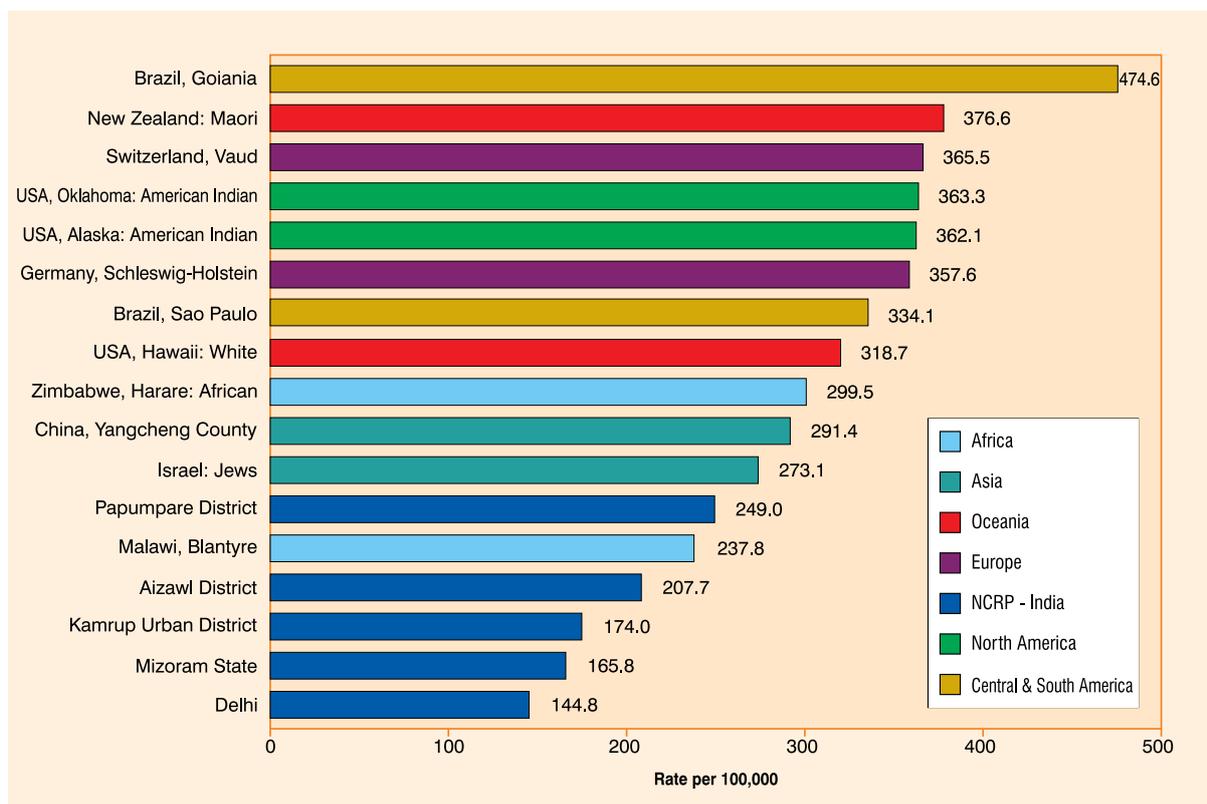
Indian PBCRs based on the 2012-2014 data, had the highest AARs (given in parentheses) in cancers of the Tongue [Males: East Khasi Hills District (11.7), Ahmedabad Urban (10.4), Delhi (9.3), Meghalaya (9.2) and Bhopal (8.4); Females: Bhopal (3.7), Ahmedabad Urban (3.4), Nagpur (3.2), Kamrup Urban District (3.2) and Delhi (3.0)] and Hypopharynx [Males: East Khasi Hills District (22.2), Kamrup Urban District (17.5), Aizawl District (17.2), Meghalaya (15.1), Cachar District (11.1); Females: Kamrup Urban District (3.2), Cachar District (2.2), Meghalaya (2.2), Dibrugarh District (2.2) and East Khasi Hills District (2.2)].

Fig. 8.1: International Comparison of AAR with that of PBCRs in India
ALL SITES (ICD-10: C00-C97)

Males

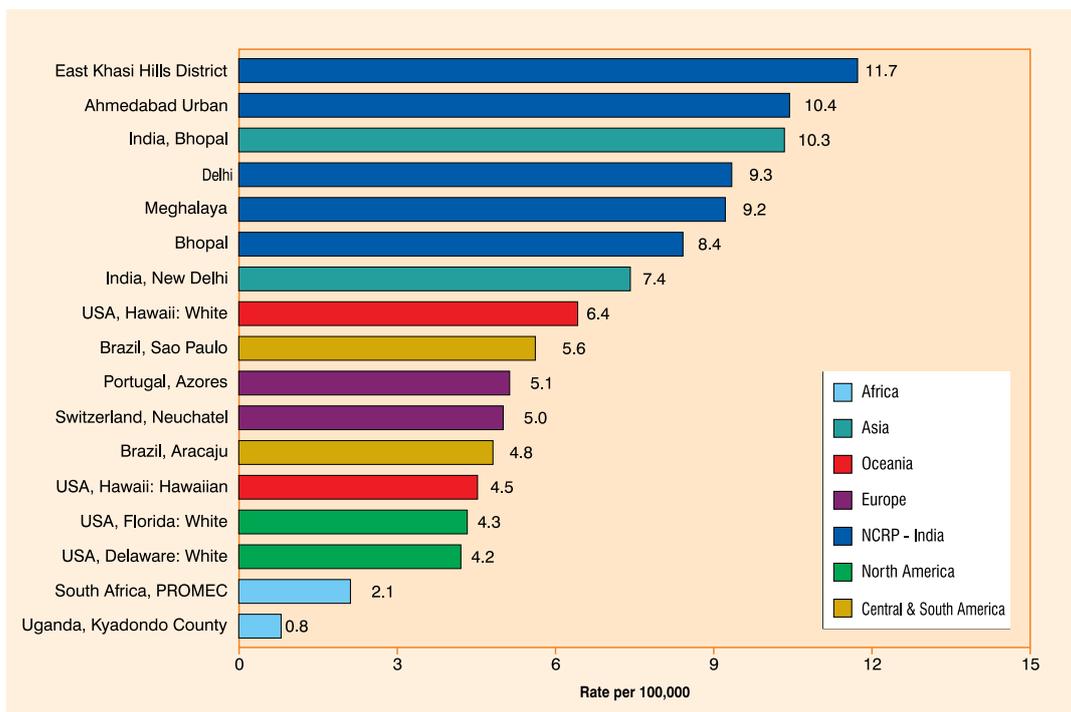


Females

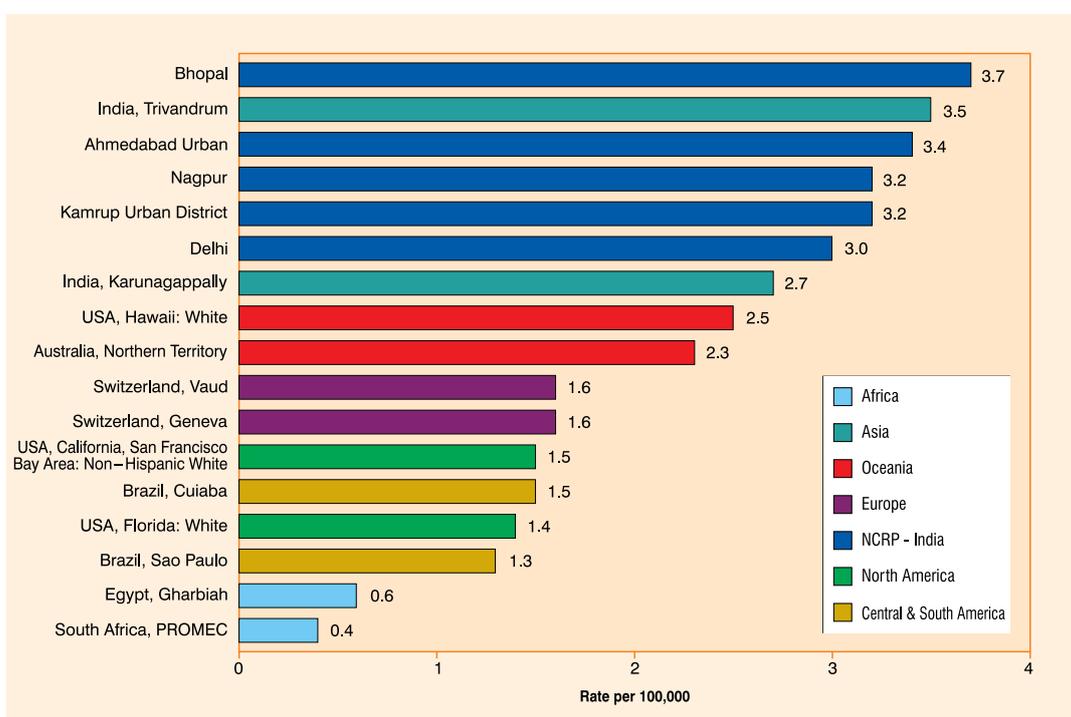


**Fig. 8.2: International Comparison of AAR with that of PBCRs in India
TONGUE (ICD-10: C01-C02)**

Males



Females

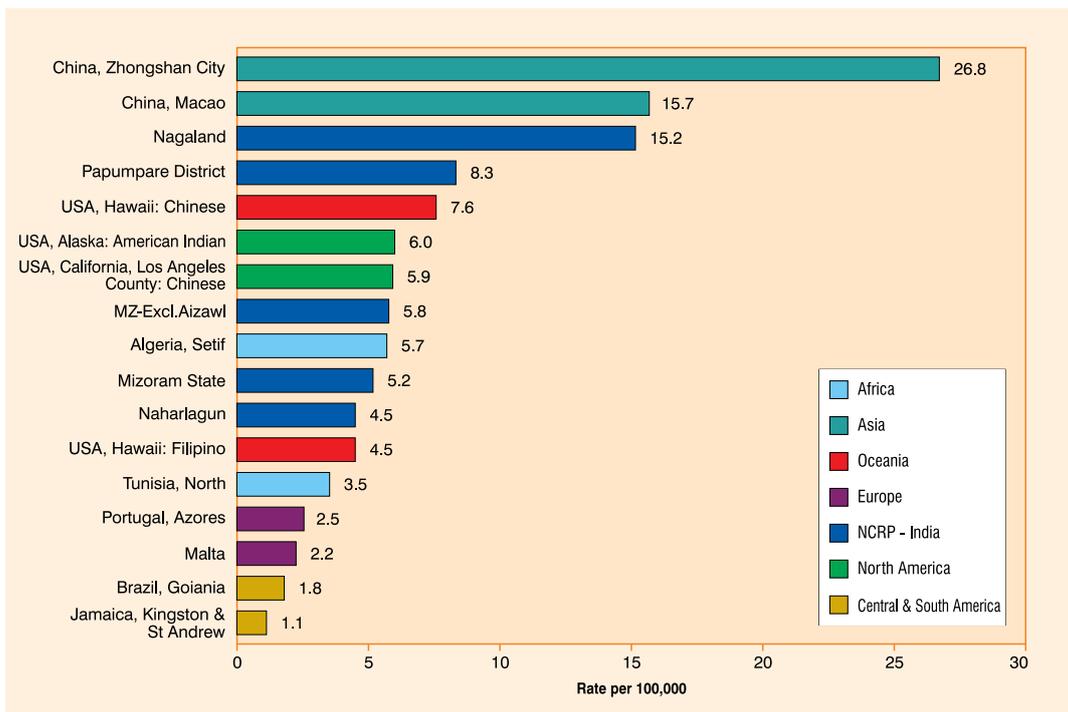


Males: East Khasi Hills District from India had the highest AAR (11.7) among all the PBCRs. The top five positions were occupied by five Indian PBCRs.

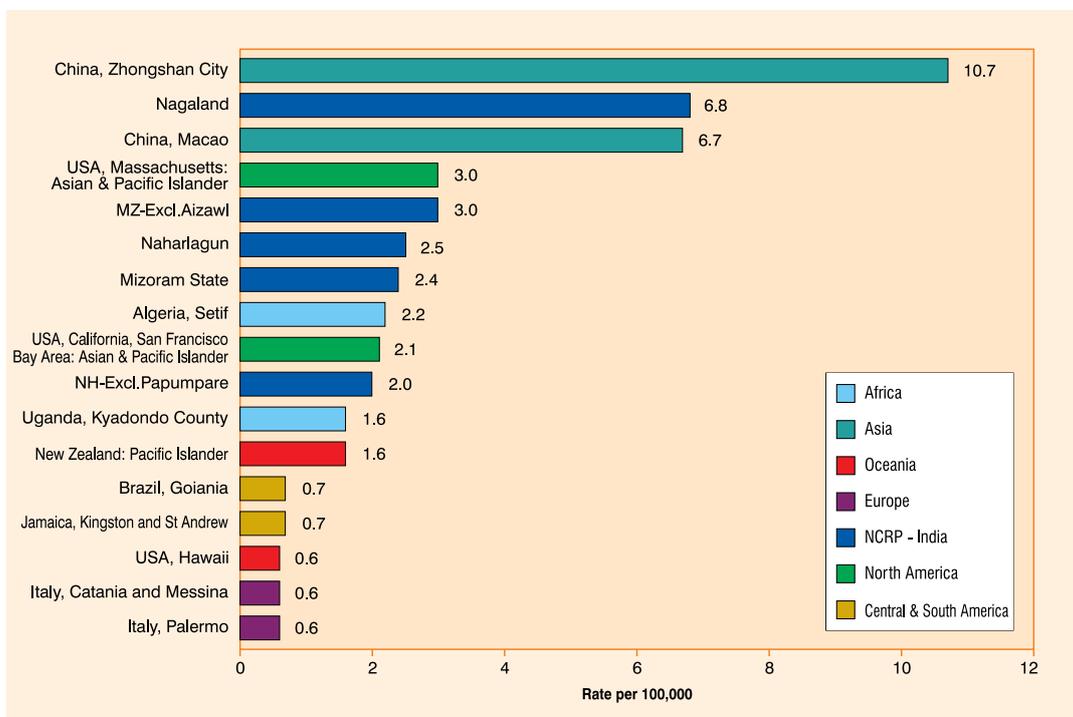
Females: Bhopal PBCR had the highest AAR (3.7). Seven Indian PBCRs were at the top occupying the top seven positions.

**Fig. 8.3: International Comparison of AAR with that of PBCRs in India
NASOPHARYNX (ICD-10: C11)**

Males



Females

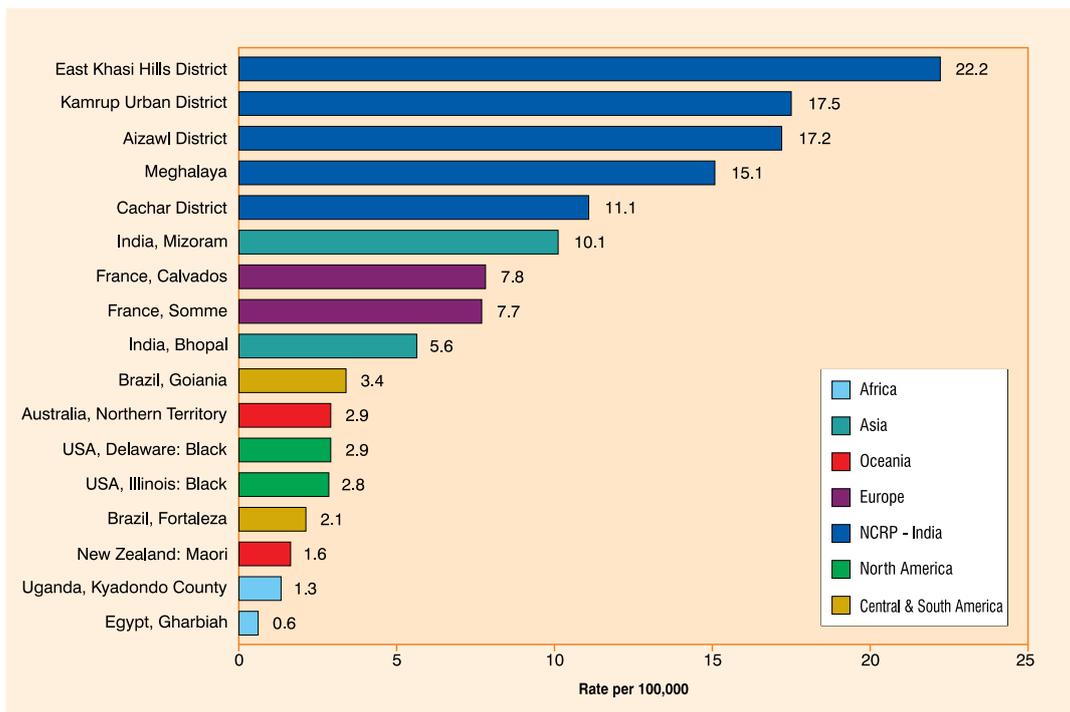


Males: Zhongshan City in China had the highest AAR (26.8).

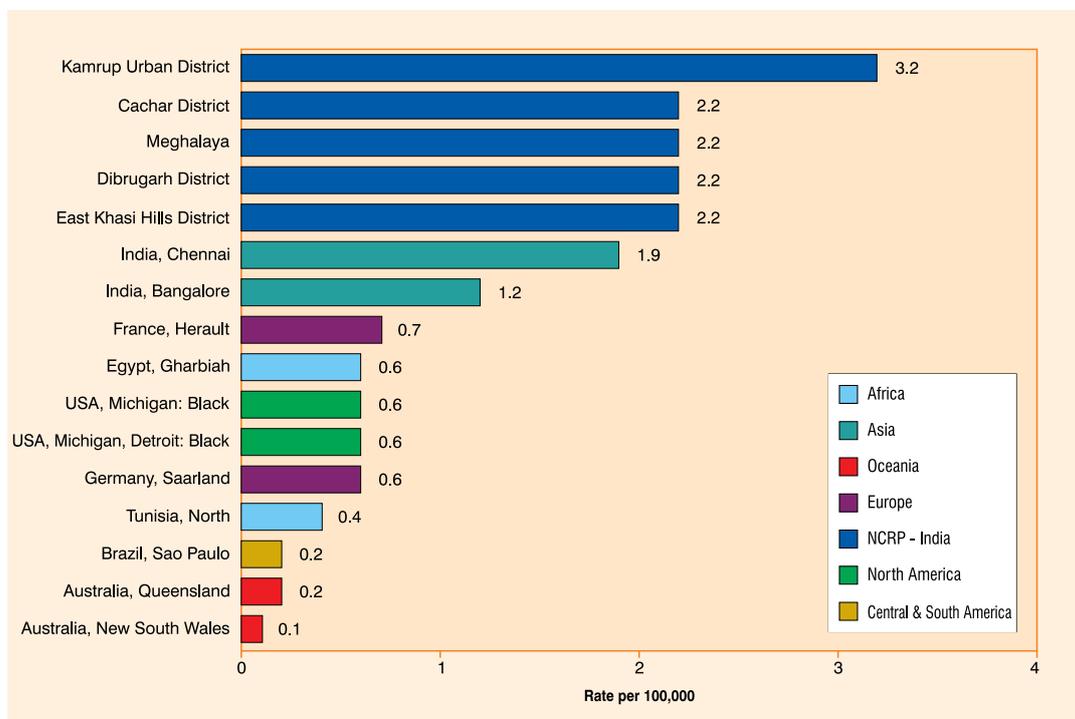
Females: Zhongshan City in China had highest AAR (10.7) and Nagaland PBCR from India had second highest AAR (6.8) internationally.

**Fig. 8.4: International Comparison of AAR with that of PBCRs in India
HYPOPHARYNX (ICD-10: C12-C13)**

Males



Females

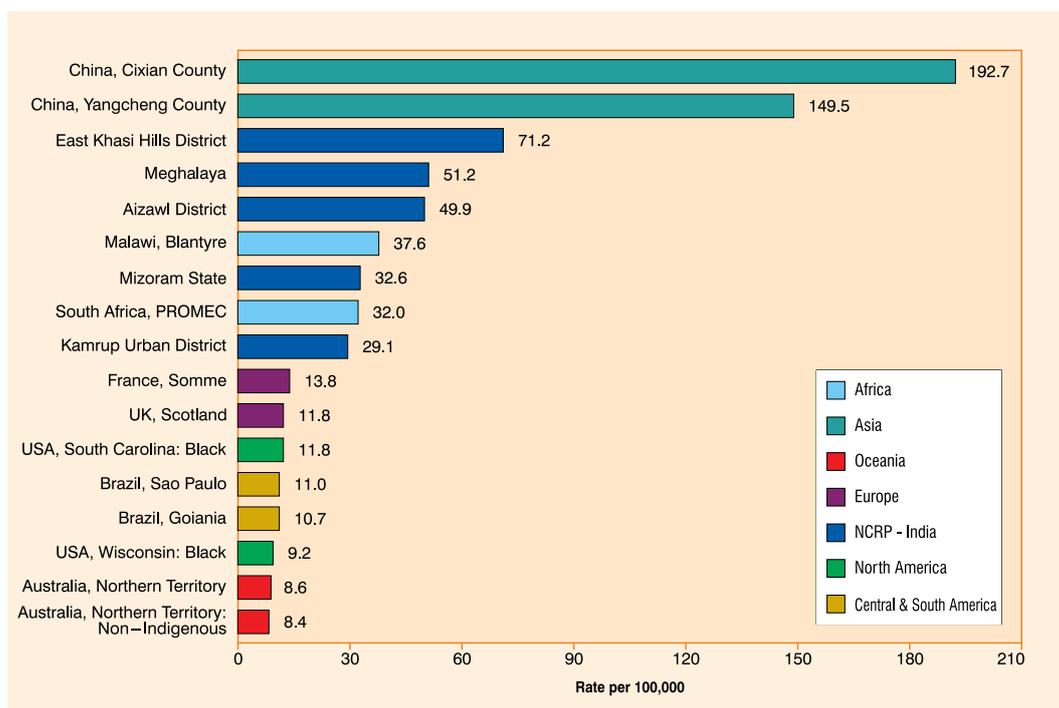


Males: East Khasi Hills District had the highest AAR (22.2) among all the PBCRs. The top six positions were occupied by six Indian PBCRs.

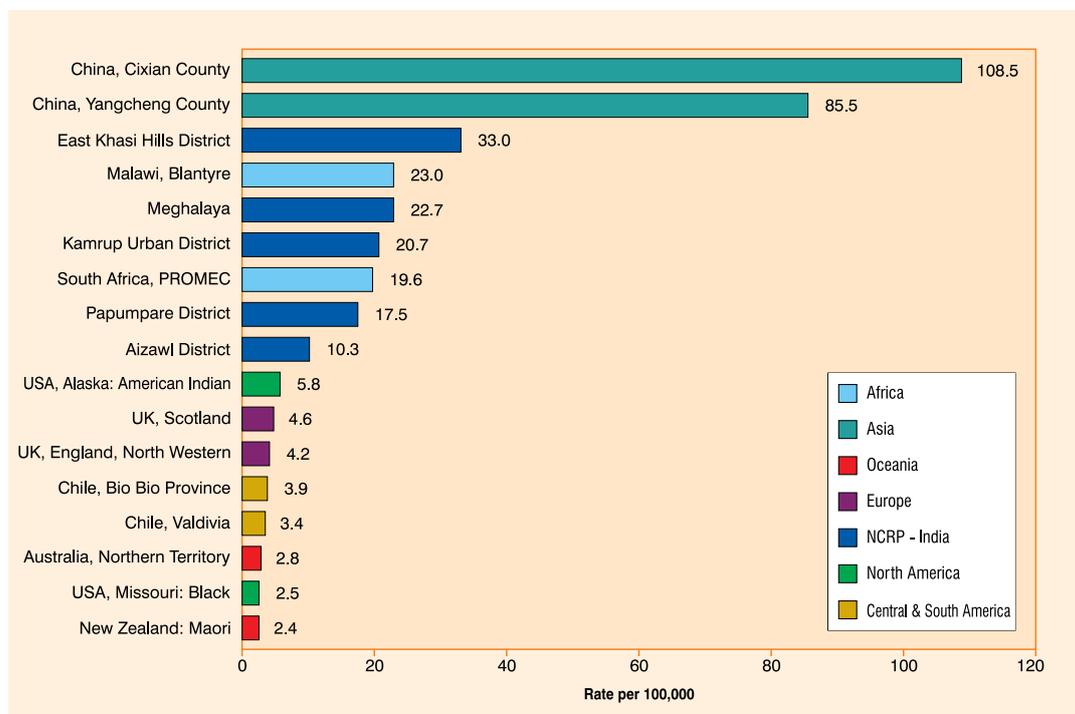
Females: Kamrup Urban District had highest AAR (3.2) followed by six more Indian PBCRs.

**Fig. 8.5: International Comparison of AAR with that of PBCRs in India
OESOPHAGUS (ICD-10: C15)**

Males



Females

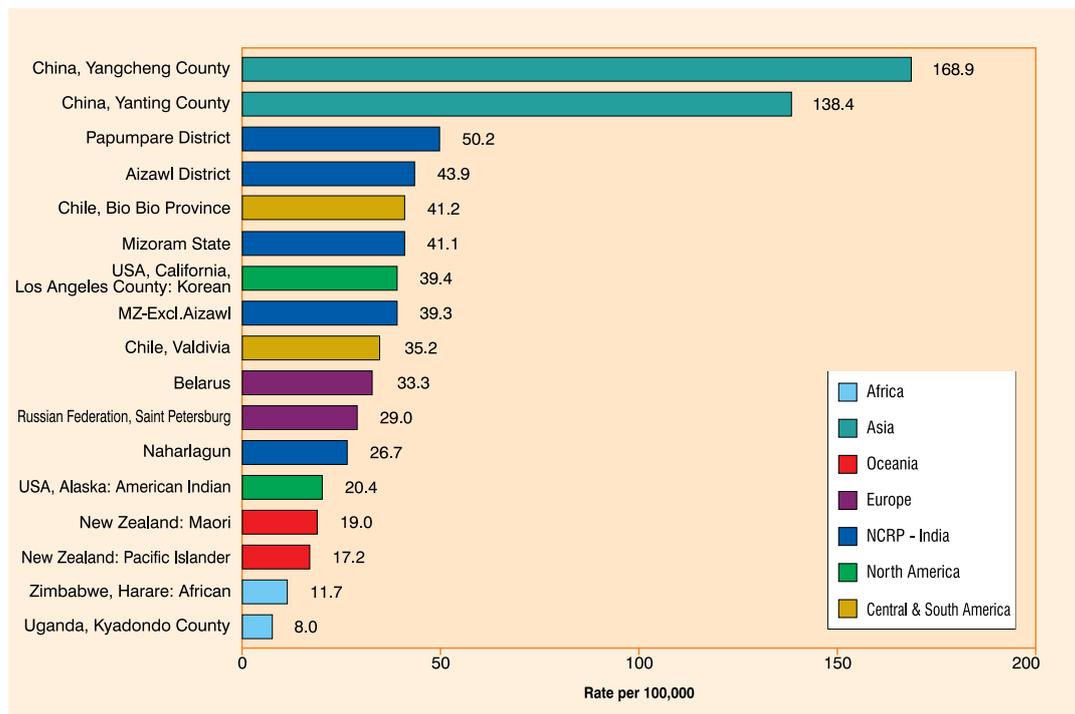


Males: Cixian County in China had the highest AAR (192.7) internationally.

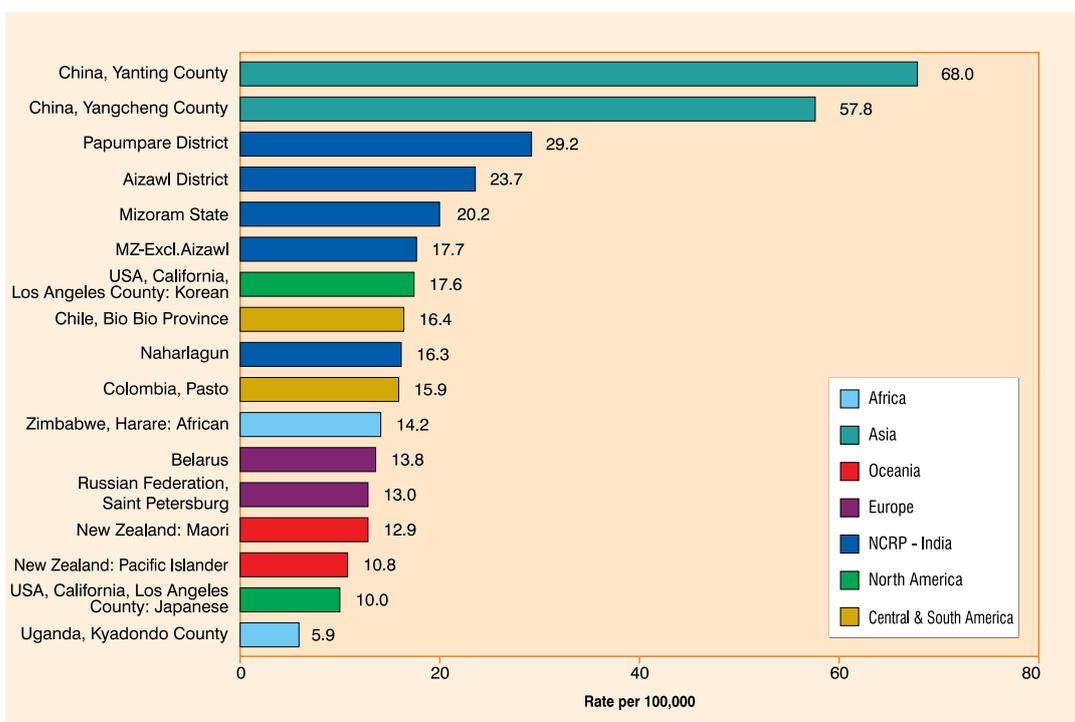
Females: Cixian County in China had the highest AAR (108.5) internationally.

**Fig. 8.6: International Comparison of AAR with that of PBCRs in India
STOMACH (ICD-10: C16)**

Males



Females



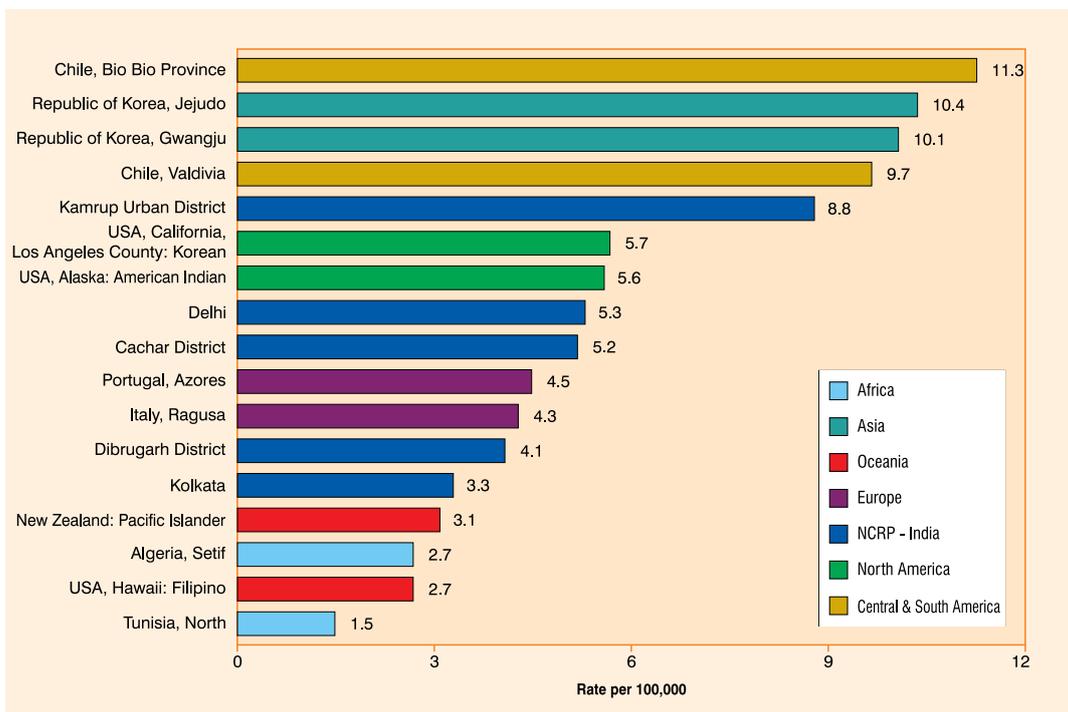
Males: Yangcheng County in China had the highest AAR (168.9) internationally.

Females: Yanting County in China had the highest AAR (68.0).

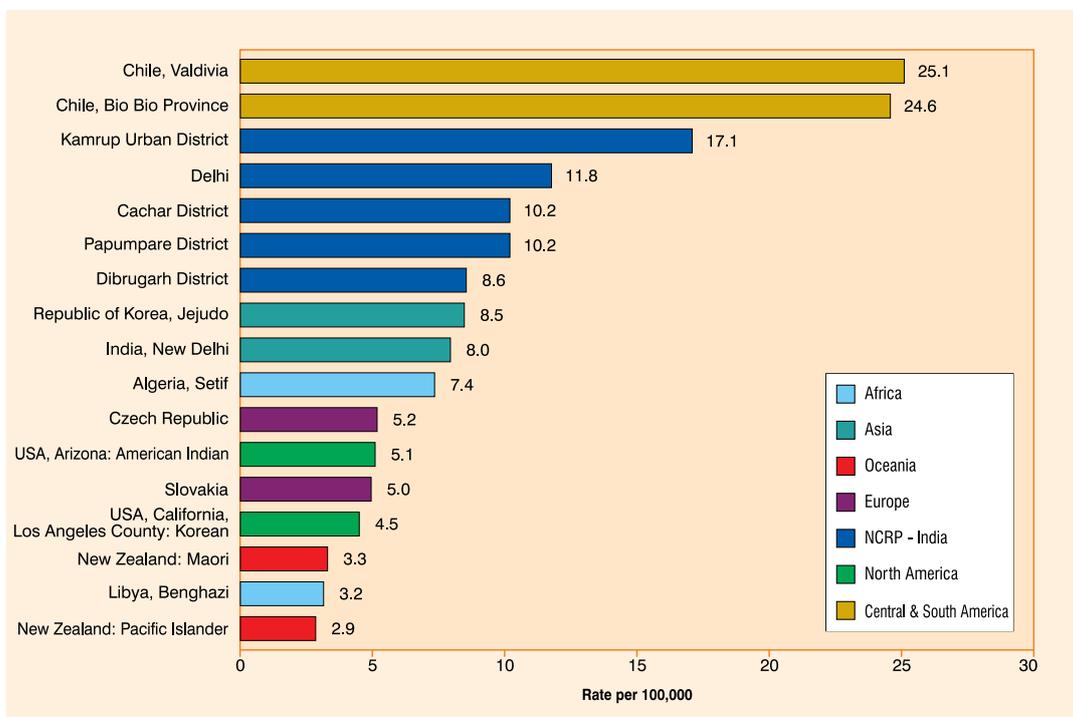
GLOBOCAN estimates of world ASR for the year 2012 give the highest AAR of 35.4 and 13.8 per 100,000 for Eastern Asia in males and females respectively.

**Fig. 8.7: International Comparison of AAR with that of PBCRs in India
GALL BLADDER (ICD-10: C23-C24)**

Males



Females

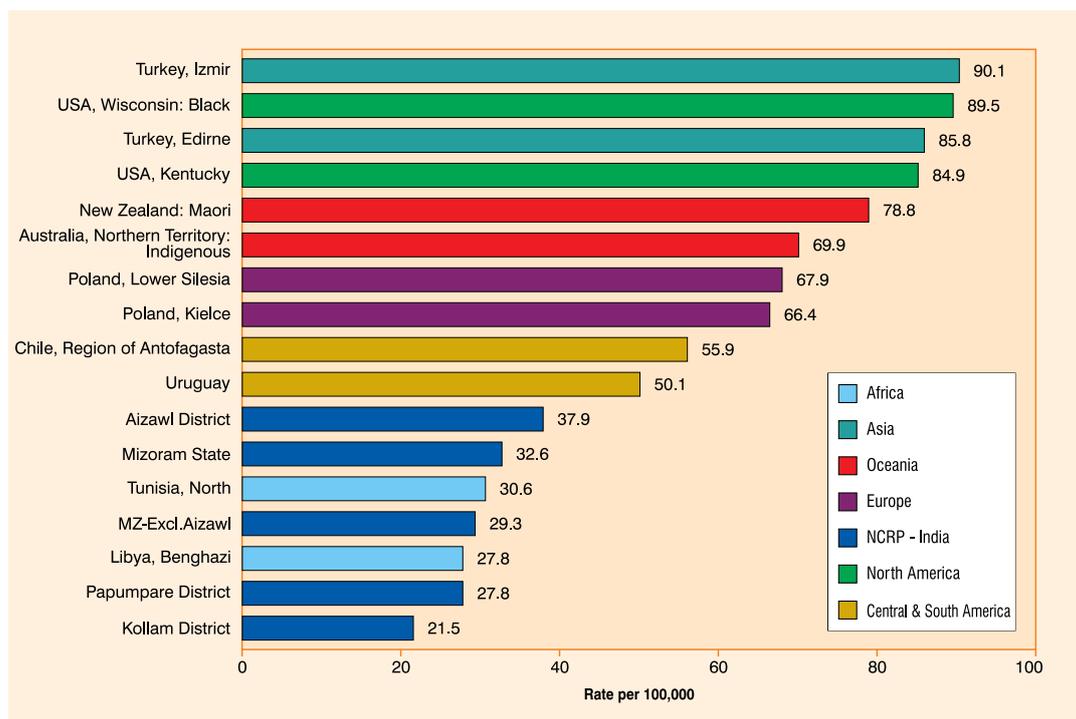


Males: Bio Bio Province in Chile had the highest AAR (11.3) internationally.

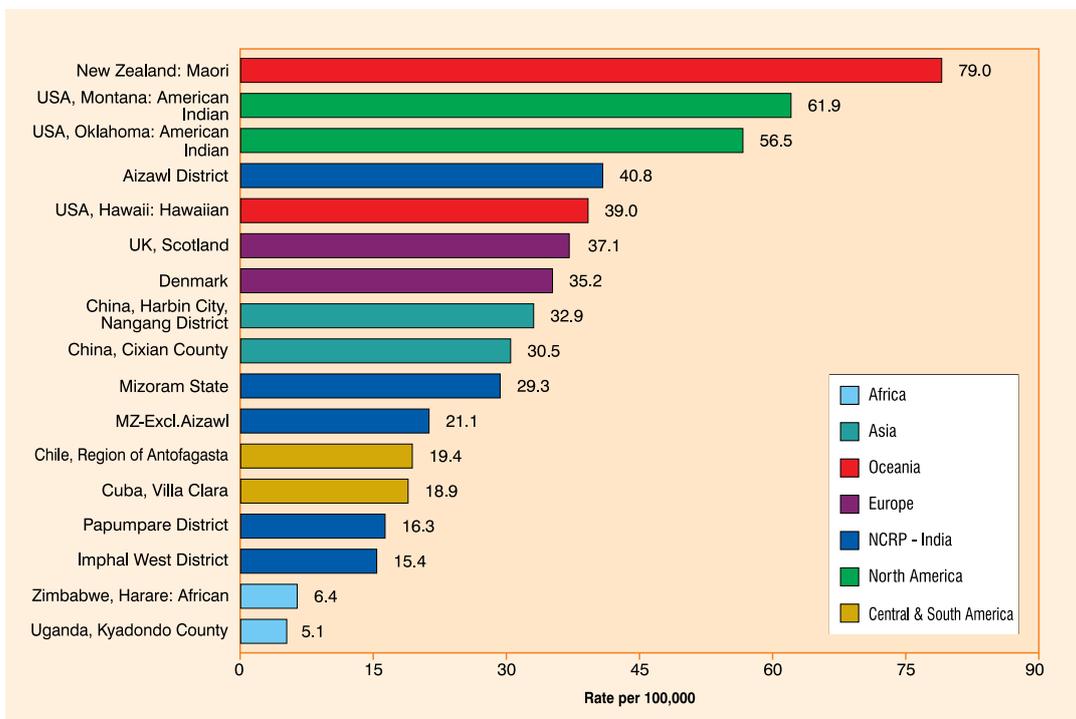
Females: Valdivia in Chile had the highest AAR (25.1) internationally.

**Fig. 8.8: International Comparison of AAR with that of PBCRs in India
LUNG (ICD-10: C33-C34)**

Males



Females

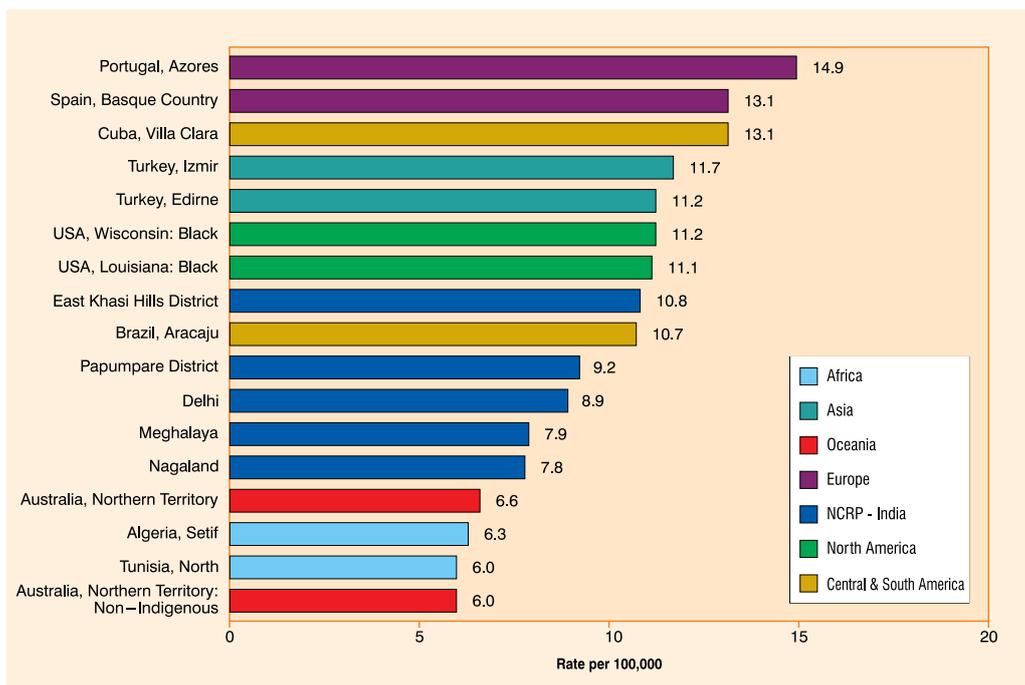


Males: Izmir city in Turkey had the highest AAR (90.1).

Females: The Maori people of New Zealand had the highest AAR (79.0).

According to GLOBOCAN estimates of world ASR for the year 2012, the highest AAR (53.5) for males was in Central and Eastern Europe whereas for females the highest AAR was 33.8 in Northern America.

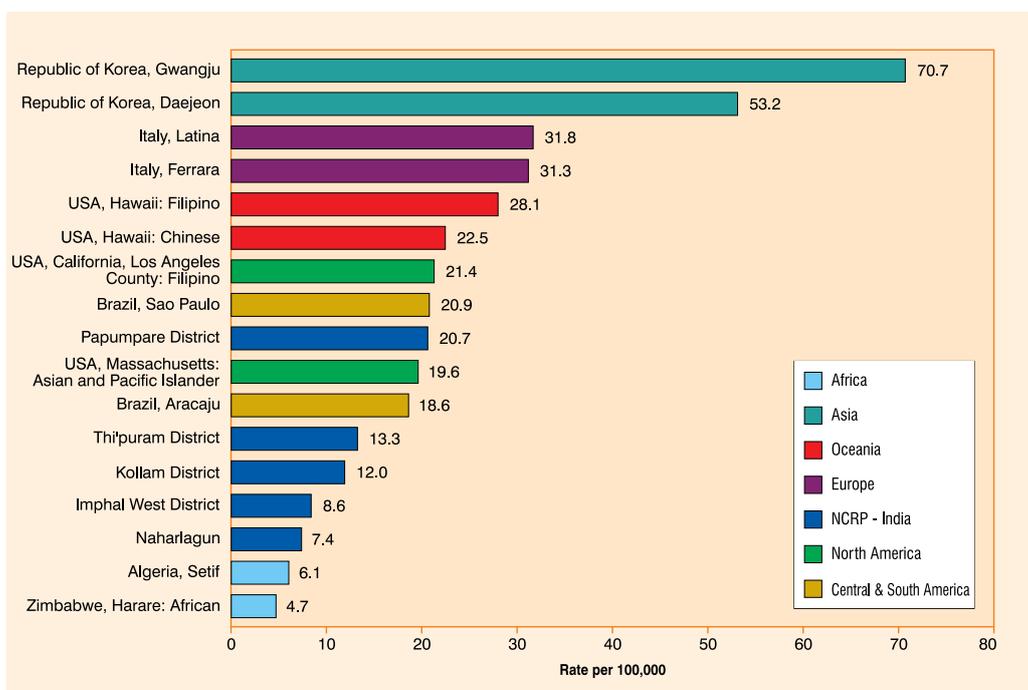
**Fig. 8.9: International Comparison of AAR with that of PBCRs in India
LARYNX (ICD-10: C32) - Males**



Males: The Azores region of Portugal was at the top with an AAR of 14.9.

GLOBOCAN estimates of world ASR for the year 2012 gives the highest AAR of 7.9 per 100,000 for Central and Eastern Europe in males.

**Fig. 8.10: International Comparison of AAR with that of PBCRs in India
THYROID (ICD-10: C73) - Females**



Females: Gwangju from the Republic of Korea had the highest AAR (70.7).

GLOBOCAN estimates of world ASR for the year 2012 gives the highest AAR of 20.0 per 100,000 for Northern America in females.