

REGISTRY & CANCER CONTROL

The Bombay Cancer Registry was established 1964.

NCRP started in 1982

6 PBCR

5 HCR

Outside NCRP – 8 PBCR

- Burden of cancer
- Site distribution
- Stage of presentation

Karunagappally Cancer Registry is a unique registry organized in an area where no cancer diagnostic and dedicated cancer treatment facilities are available.

Age Adjusted Cancer Incidence Rates – Indian Registries

Registries	Age Adjusted Incidence Rate/100,000	
	Male	Female
Bangalore 1997-98	91.9	114.8
Barshi 1997-98	43.9	51.7
Bhopal 1997-98	116.7	108.7
Chennai 1997-98	111.3	125.2
Delhi 1997-98	120.9	134.8
Mumbai 2000	117.2	127.4
Ahmedabad 1998	126.6	96.0
Kolkatta 1997 *	68.4	82.0
Pune 1996-2000	99.3	112.2
Aurangabad 1994	61.7	56.8
Nagpur 1995-99	105.7	107.8
Trivandrum Urban 1998-99	93.8	90.8
Trivandrum Rural 1998-99	85.5	70.2
Ambilikkai Rural 1996-98	83.3	122.3
Karunagappally 1998-2000	105.5	71.8

* Cancer Deaths (DCO) is not included in this.

N.B.R.R.

Cancer in India

Annual New Cancer Cases ~ 800,000

Prevalent ~ 25,00,000

Leading Cancers (Varies between centres)

Men	Women
Lung	Cervix
Oral Cavity	Breast
Oesophagus	Oral Cavity

Regional Cancer Centres & Cancer Registries



Regional Cancer Centres – 22

1st attendance – 70 to 80% in more than localized stage

Therapy

Tele therapy - 178 centres

Units - 290

Brachy therapy - 113 centres

Units - 184

Cancer Registry System – Organizational Problems

- ❑ Cancer is not a notifiable disease in India.
- ❑ Active Registration Method has to be adopted in.
 - ★ Case finding - through Hospitals, Oncologists, Laboratories & Death Registers.

- ⇒ Inadequate record keeping in Hospitals.
- ⇒ Medical Certification of deaths not mandatory. Cause of deaths reported inadequately.
- ⇒ Autopsy only for Medico Legal Cases.

★★★ Cancer Registries are very few.

5 Leading Sites of Cancer (AAR) in Different Registries in India - Males

BANGALORE	AAR	CHENNAI	AAR
Stomach	8.92	Stomach	13.16
Oesophagus	6.95	Lung	11.41
Lung	7.05	Oesophagus	9.30
Hypopharynx	5.40	Tongue	5.90
Prostate	4.88	Oral Cavity	5.92
BHOPAL	AAR	BARSHI	AAR
Lung	15.55	Liver	4.62
Oral Cavity	10.19	Hypopharynx	4.55
Oesophagus	10.39	Oesophagus	3.92
Tongue	10.29	Rectum	3.01
Hypopharynx	7.39	Oral Cavity	2.96

5 Leading Sites of Cancer (AAR) in Different Registries in India – Males Cont.

DELHI	AAR	KOLKATTA	AAR
Lung	13.34	Lung	10.10
Larynx	8.31	Larynx	4.60
Prostate	8.53	Oral Cavity	3.30
Brain	4.33	Oesophagus	3.10
NHL	4.75	Tongue	2.90
MUMBAI	AAR	AHMEDABAD	AAR
Lung	11.88	Lung	11.50
Oesophagus	8.51	Oesophagus	9.20
Larynx	7.04	Pyriiform	8.70
Oral Cavity	5.64	Base of Tongue	7.30
Prostate	8.19	Larynx	6.20

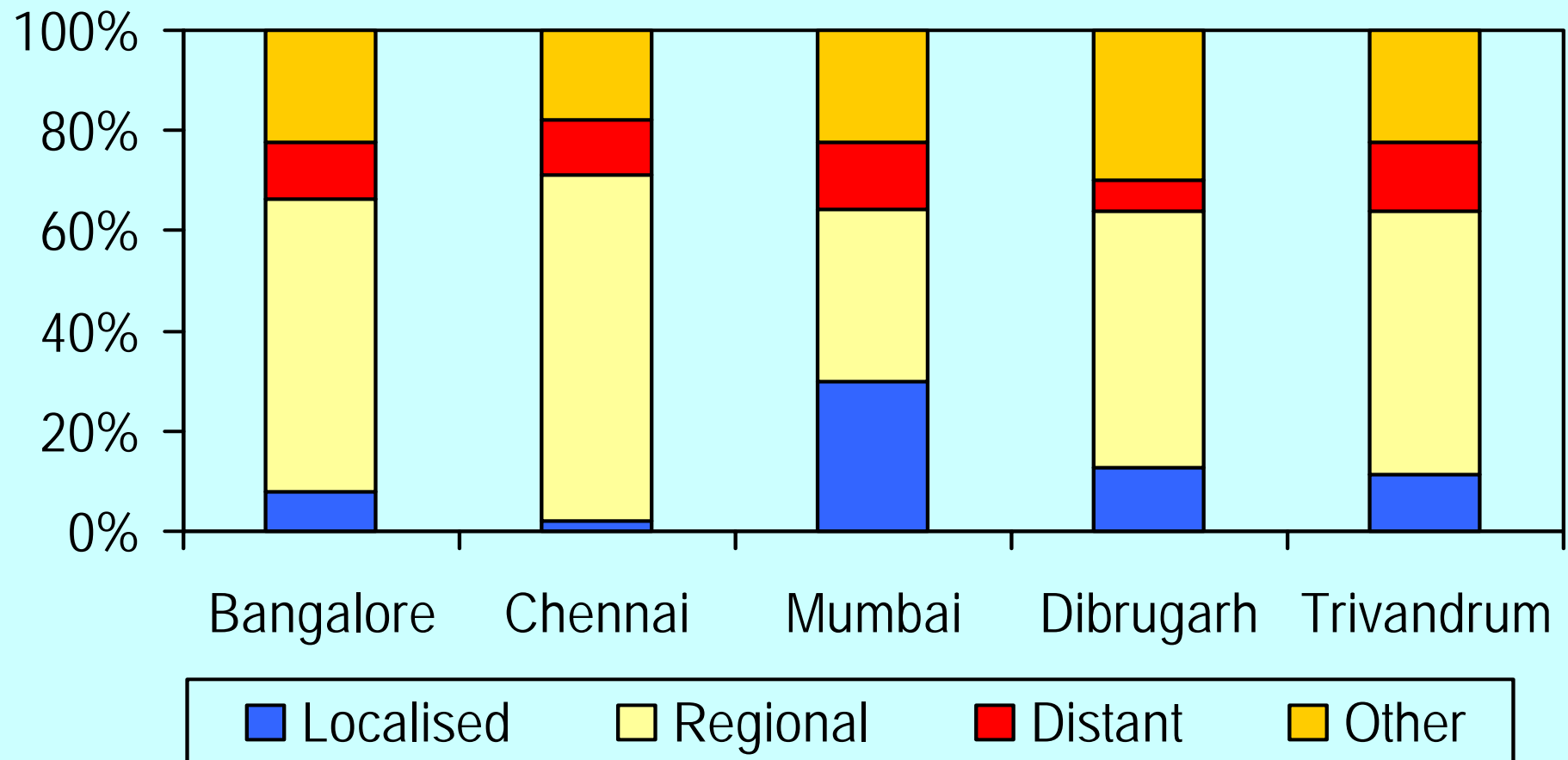
5 Leading Sites of Cancer (AAR) in Different Registries in India - Females

BANGALORE	AAR	CHENNAI	AAR
Breast	25.16	Cervix	30.35
Cervix	21.93	Breast	26.66
Oral Cavity	7.08	Stomach	7.01
Oesophagus	6.78	Ovary	6.14
Ovary	5.06	Oesophagus	6.30
BHOPAL	AAR	BARSHI	AAR
Breast	24.51	Cervix	21.92
Cervix	24.06	Breast	8.10
Oral Cavity	7.28	Oesophagus	2.66
Ovary	5.74	Ovary	2.09
Oesophagus	4.80	Oral Cavity	1.81

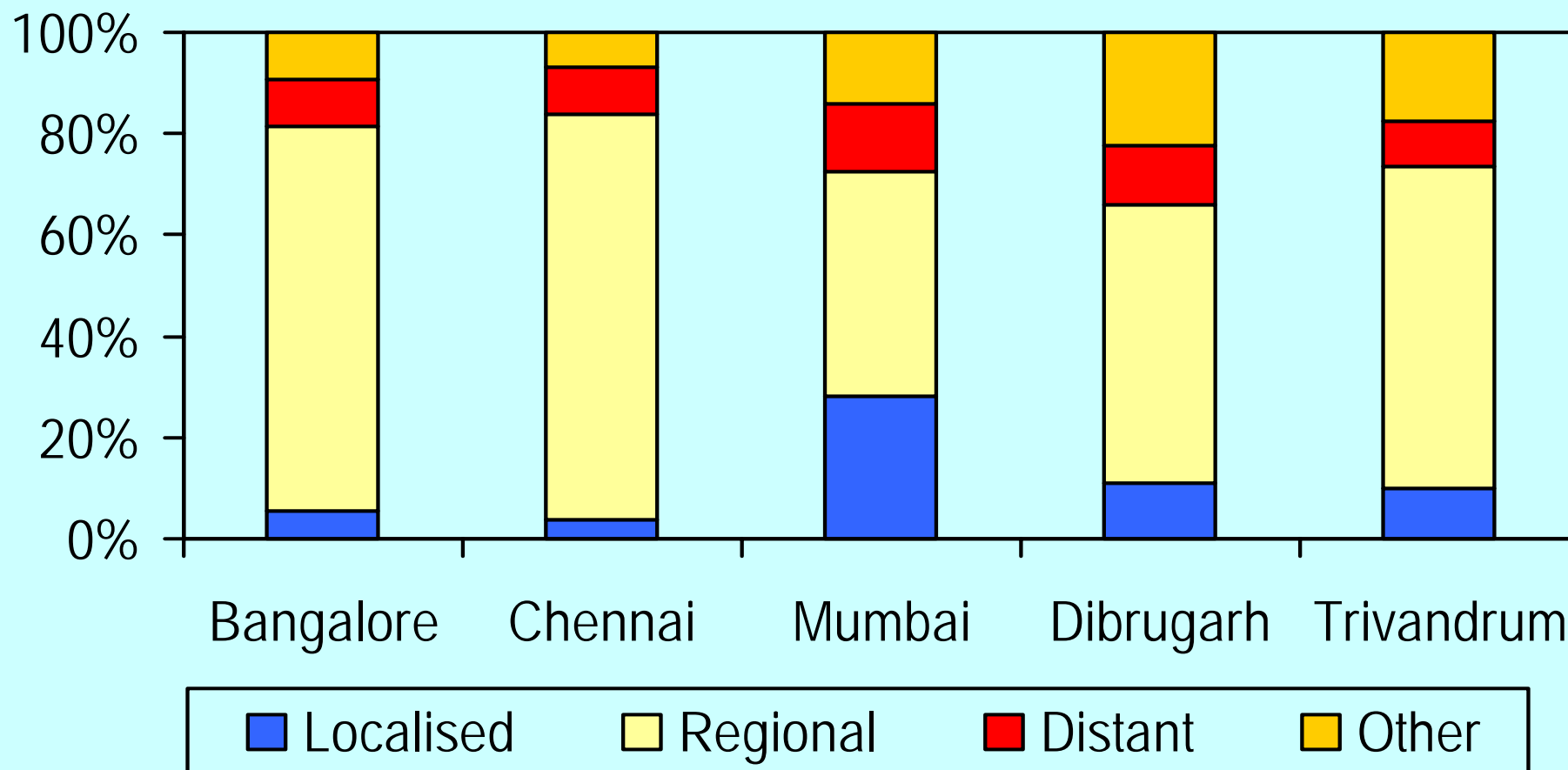
5 Leading Sites of Cancer (AAR) in Different Registries in India - Females Cont.

DELHI	AAR	KOLKATTA	AAR
Breast	30.76	Cervix	21.8
Cervix	22.13	Breast	18.4
Ovary	10.18	Gall Bladder	3.7
Gall Bladder	9.80	Oesophagus	2.9
Brain	2.65	Lung	2.8
MUMBAI	AAR	AHMEDABAD	AAR
Breast	30.78	Breast	26.7
Cervix	18.19	Cervix	14.4
Ovary	8.81	Oesophagus	5.3
Oesophagus	6.17	Ovary	4.5
Oral Cavity	4.43	Brain	2.8

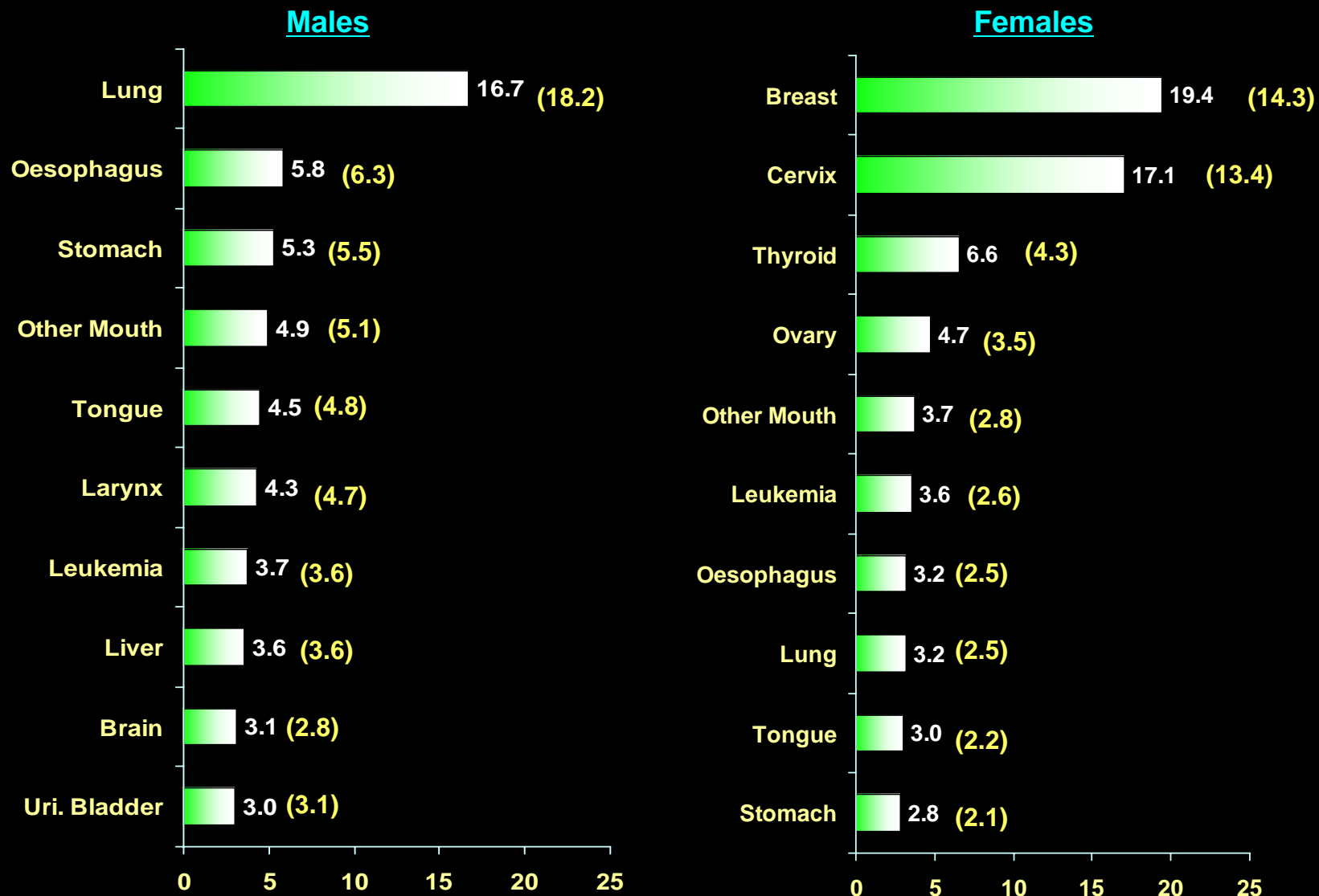
Relative Proportion of Patients according to Clinical Extent of Disease (HBCRs : 1994-1998) - Males



Relative Proportion of Patients according to Clinical Extent of Disease (HBCRs:1994-1998) - Females



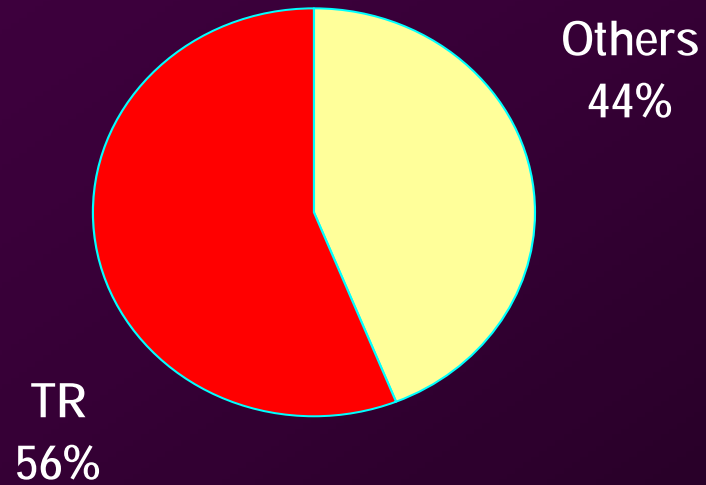
Ten Leading Sites of Cancer in Karunagappally 1990-2000



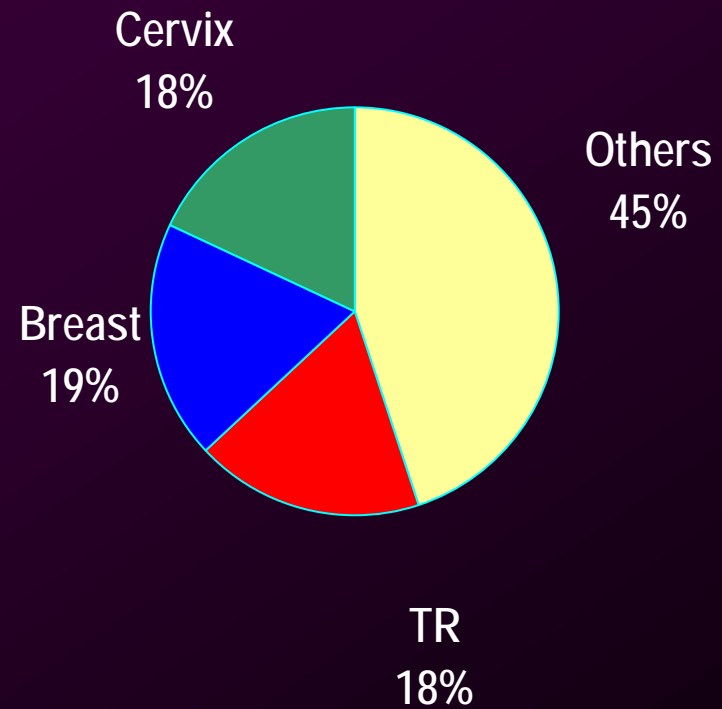
Percentage of all cancer
(Age Adjusted Rates in brackets)

CANCERS AMENABLE FOR CONTROL

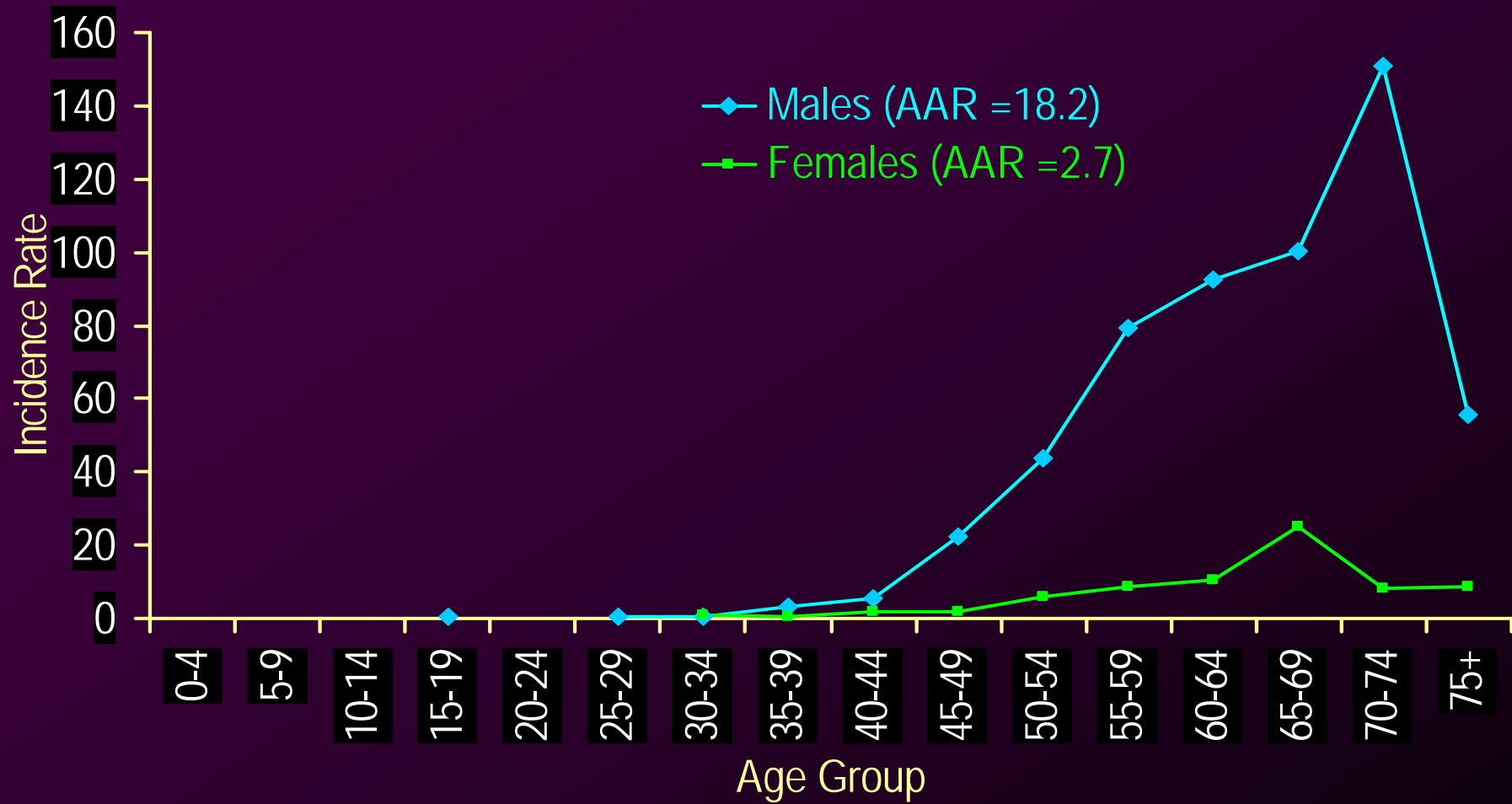
Male



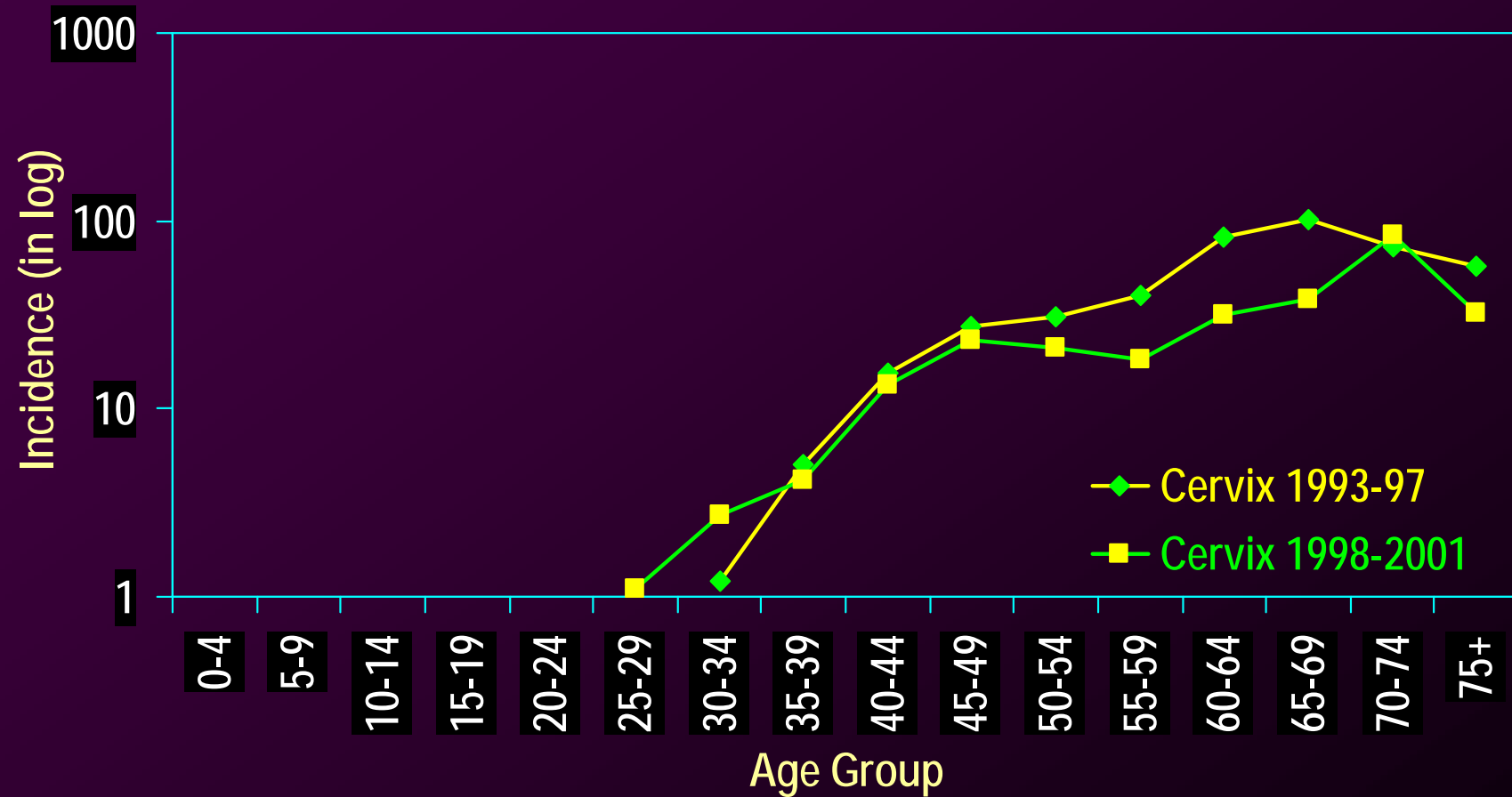
Female



Age Specific Incidence Rates of Lung Cancer in Males and Females Karunagappally Taluk 1990-2000



Age Specific Incidence – Cervix Cancer 1993-1997 & 1998-2001



Community Cancer Control Activities of NBRR

Pap Smear

- Taluk Hospital (2 days)
- Primary Health Centre (1 day)
- Government Hospital (5 days)

Cytology, FNAC services in all General Medical Camps.

Public Education: Breast, Oral self examination,
Anti tobacco.

Total Smears: 144888

[1990-2003]

1990-2003 Smear Examination

	No
CIN I	926
CIN II	67
CIN III	42
INSITU	25
INVASIVE	45
TOTAL SMEAR	14488

Ancillary support to the community:-

1. Cancer awareness programs & Field Clinics.
2. Cancer detection facilities.
3. Cancer patient follow-up clinics.
4. Pain Clinics & Palliative Care.
5. Supportive Clinics.
6. Home Care for bed ridden cancer patients.
7. Nutritional supplementation to the needy cancer patients.
8. Rehabilitation & Welfare Activities.

Registry Support

Cancer Control Programme Implementation

- A committed programme and group essential. Technical guidance, execution, coordination, evaluation & HRD programme.
- Should have evidence based programme - registry findings will identify high risk groups.
- Updating medical profession, public education.
- Programme evaluation – registry data.
- Needed technology should be identified, funds & human resource availability guaranteed.



Thank You