

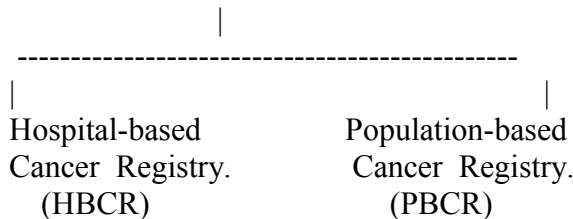
## Cancer Registry

It is an organization which performs cancer registration by systematic collection, storage, analysis, interpretation & reporting of data on subjects with cancer.

### Main objectives:

- To collect & classify information on all cancer cases, in order to produce statistics on the occurrence of cancer in a defined population.
- To provide a framework for assessing & controlling the impact of cancer on the community.

Cancer Registry



### **Hospital-based Cancer Registry (HBCR):**

- ▶ It is located in a hospital & is concerned only with the recording of information on the patients with cancer seen in the hospital.
- ▶ It serves the needs of hospital administration / its cancer programme & of the individual cancer patient.
- ▶ Its main purpose is to contribute to patient care by providing readily accessible information on the patients with cancer / the treatment which they received & its results.
- ▶ The data are used for administrative purpose & for clinical performance.

### **Population-based Cancer Registry (PBCR):**

The main sources of information include:

- a) Information from treatment facilities (Cancer centres, major hospitals, private clinics, hospices, home for elderly & general practitioner).
- b) Information from diagnostic services – specially pathology laboratories, but also from hematological / biochemical / immunological laboratories, X-ray & imaging clinics.
- c) Death certificates from the death registration system are also a very important source of information.

### **Information Collection:**

- ▶ Active collection involves registry personnel actually visiting the different sources & abstracting the data on special forms. This is the usual method in registries in developing countries.
- ▶ Passive reporting involves health care workers completing the notification forms – developed & distributed by the registry or sending copies of discharge certificates.
- ▶ A mixture of both procedures, with the emphasis on the latter, is followed in most western registries.

### **Sample data items:**

- ▶ Registration no: If a patient has more than one primary tumour, the same number is given to each tumour.
- ▶ Incidence date: Date of first consultation or admission to a hospital / clinic for cancer. If this information is not available, use the date of first diagnosis by a physician or the first pathology report.
- ▶ Most valid basis of diagnosis: The minimum requirement is differentiation between microscopic & non-microscopic confirmation – to assess the reliability of incidence rates.
- ▶ Topography (Site of Primary tumour) & morphology (Histologic type) is described by ICD-O (International code of disease-oncology).
- ▶ Clinical extent of disease before treatment.
- ▶ Details of initial treatment.
- ▶ Outcome in terms of follow-up

### **Uses of cancer registry data:**

- ▶ Epidemiology:
  - Descriptive.                      Analytical.
  - Incidence rate.                      Cohort studies.
  - Personal characteristics.      Case-control studies.
  - Place of residence.                      Correlation (ecological) studies.
  - Time trend.
  - Migrant studies.
- ▶ Planning of Cancer Control programmes.
- ▶ Evaluation of Cancer Control programmes:
  - a) Primary prevention.
  - b) Screening & early detection – Lead time, Length & Selection or volunteer – 3 biases associated.
  - c) Treatment.

### **Cancer Registry: World scenario:**

- ▶ The International Association of Cancer Registries ( IACR), a non-government organization, in collaboration with WHO, has been providing a link between cancer registries situated in different countries since 1979.
- ▶ IACR is being presently supported by International Agency for Research on Cancer (IARC), situated in Lyon, France.

### **Cancer Registry: Indian scenario:**

- ▶ The impetus for cancer registration in India was provided in 1982, through the initiation of National Cancer Registry Programme (NCRP) by Indian Council of Medical Research (ICMR).
- ▶ The Principal objectives of NCRP:
  1. To generate authentic data on the magnitude of cancer problem.
  2. To undertake epidemiological investigation.
  3. To advice control measures.
  4. To promote human resource development in cancer epidemiology.
- ▶ Started in 1982 with 3 PBCRs (Bombay, Bangalore & Madras) & 3 HBCRs (Chandigarh, Dibrugarh & Trivandrum).
- ▶ First rural based PBCR started at Barshi (Maharashtra) in 1987 & then at Panchmahal (Gujarat) in 1994.

### **Cancer Registry: Bengal scenario:**

CNCI ( partially supported by IARC, Lyon) in collaboration with CCWH, Thakurpukur started PBCR for Kolkata in 1997.

### **Epidemiology of cancer in India:**

Among urban males, the commonest cancer is Ca.Lung (around 12-14%) followed by Ca.Head and Neck (around 9-10%), except Chennai and Bangalore, where the commonest cancer is Ca. Stomach followed by Ca. Lung and Ca. Head & Neck.

Among urban females, the commonest cancer is Ca.Breast (around 30%) followed by Ca.Cervix ( around 20%) and Ca.Ovary (around 10%) except in Chennai, where the commonest cancer is Ca. Cervix followed by Ca. Breast and Ca.Ovary.

Among rural males (Barshi PBCR), the 3 commonest cancers are Ca.Hypopharynx, Ca. Liver and Ca. Oesophagus.

Among rural females (Barshi PBCR), the 3 commonest cancers are Ca.Cervix, Ca. Breast and Ca.Oesophagus.

### **Epidemiology of cancer in Kolkata:**

In Kolkata, the commonest cancers in males are Ca. Lung (19%) and Ca.Head & Neck (20%) and in females are Ca.Breast (25%), Ca. Cervix (20%) and Ca.GB (8%).