

POPULATION BASED CANCER REGISTRY, KOLKATA

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Kolkata, being a large metropolis provides a representative sample of heterogeneous population of multicultural and socio-economic classes. Although the city has adequate diagnosis and treatment facilities for cancer, authentic data on incidence and pattern of cancer in the resident population of Kolkata remained inadequate. Population Based Cancer Registry of Kolkata (PBCR - Kolkata) in its present form was initiated under the guidance and financial support of National Cancer Registry Programme (NCRP) from January 1, 2005.

PBCR - Kolkata now covers an area of about 185 sq kms and includes 141 wards of Kolkata Municipal Corporation (KMC). The estimated population of PBCR-Kolkata, as provided by NCRP, for the year 2012 is 4.48 million (male: 2.33 million, female: 2.14 million).

For the year 2012, the overall Crude Rate (CR), Age Adjusted Rate (AAR) and Truncated Rate (TR) for the male resident population of PBCR-Kolkata were found to be 118.8, 100.9 and 158.5 respectively. The corresponding figures for resident females were 120.6, 103.4 and 205.6.

The Crude Mortality Rate (CMR), Age Adjusted Mortality Rate (AAMR) and Truncated Mortality Rate (TMR) for resident males were 46.1, 39.0 and 51.4 respectively. The corresponding figures for resident females were 42.6, 36.4 & 65.1.

In PBCR-Kolkata for the year 2012, the 5 commonest cancers in both male and female populations were calculated from the incidence data. In males, the commonest cancers, in descending order of relative frequencies (%RF) were Lung (18.9), Prostate (8.2), Mouth (6.9), Tongue (5.5) and Larynx (5.4). The 5 commonest sites of cancer in female were Breast (25.4), Cervix Uteri (10.1), Ovary (7.8), Gall bladder (7.4) and Lung (4.1).

Tobacco Related Cancers (TRC) in PBCR-Kolkata for the year 2012 was 46.3% (in males) and 16.7% (in females) respectively.

The M/I ratio of PBCR-Kolkata for the year 2012 was 37.1. This abnormally high value is contributed by three factors:

- (1) A large number of patients, often in terminal stages, are brought to Kolkata from neighboring states and countries. They quote the temporary place of residence at Kolkata as their permanent residential address. This mistaken residential identity enters into the death record of KMC
- (2) There is an estimated 5.5 million floating population of Kolkata. Death records of this nonresident floating population are also entered in the death record of KMC.

- (3) Deaths in adjoining Municipal areas and areas under various development authorities also enter KMC death record.

The death record of KMC thus significantly exceeds the expected resident mortality figures of Kolkata-PBCR. The MI ratio of PBCR-Kolkata thus errs on higher side and it is often mistakenly assumed that the registry is missing a sizeable number of incident cases.

The numbers of participating centres in PBCR-Kolkata remain 54 for quite some time. Increased personal contacts, frequent awareness drives in the newer therapeutic and diagnostic centres are thought to be the way to increase the number of cases. The proportion of cases from our existing participating centres are often found to be diminishing as new diagnostic and therapeutic centres are cropping up in and around Kolkata. Shortage of man power in the existing participating centres, missing addresses and other essential details of the patients are other important factors that leads to accrual of lesser number of incidence cases. Provision of some extra man-power and provision of some funds to the participating centres may improve the situation.

The proportion of DCO cases, as recorded in PBCR-Kolkata in 2012 was very high (24.2 %) in spite of best effort of the project staff who had also gone through follow-up of a significant number of old incident cases. We propose to undertake a sample survey including door to door survey of DCO cases to find out the possible causes. Effort to include newer centres may also help to reduce the proportion of DCO cases. These measures are however resource intensive.

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Main Sources of Registration of Incident Cases of Cancer: 2012 Kolkata

| Name of the Institution | Number | % |
|---|-------------|--------------|
| Calcutta Corporation | 1016 | 18.9 |
| CCWH | 655 | 12.2 |
| CNCI | 615 | 11.4 |
| NRS | 478 | 8.9 |
| CMC | 391 | 7.3 |
| SSKM | 320 | 6.0 |
| S.C. Bose Cancer Research Center (Park Point) | 281 | 5.2 |
| Apollo | 263 | 4.9 |
| R.G. Kar | 220 | 4.1 |
| Ruby General Hospital | 144 | 2.7 |
| B.P. Poddar Hospital & Research Inst | 109 | 2.0 |
| Woodlands | 96 | 1.8 |
| Nursing Home | 92 | 1.7 |
| T.M.H. Bombay | 78 | 1.5 |
| Subodh Mita Cancer Hospital | 75 | 1.4 |
| ESI | 66 | 1.2 |
| Wockhardt | 53 | 1.0 |
| Others | 421 | 7.8 |
| Total | 5373 | 100.0 |

1. Institutions listed have registered at least one percent of all cases in the registry for Selected Year.

2. The numbers and proportion listed are the minimum number of cases. Institutions could have registered/reported more cases, since duplicate registrations and non-resident/registry cases are not included.