

# HOSPITAL BASED CANCER REGISTRY

## PT. J.N.M. Medical College, Raipur, Chhattisgarh

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Regional Cancer Centre, Raipur is the only comprehensive, tertiary care centre in Chhattisgarh state. It was started in 1979 and declared as RCC in 2001. It caters population of whole Chhattisgarh and some patients from U.P., Jharkhand, Orissa and Maharashtra.

It was started with one Co-60, one HDR Brachytherapy unit and 10 bedded ward in the year 2003. It has grown up in last 10-15 years with 60 bedded ward, 10 bedded well equipped day care unit, 2 bedded hemodialysis unit, 2 bedded ICU with ventilator.

For radiation therapy it is having one dual energy Linear Accelerator with 3DCRT, IMRT, IGRT and Rapid Arc (VMAT), another Single Energy Linear Accelerator with SRS & SRT, one Co-60 unit, one HDR Brachytherapy unit and one wide bore 16 slice CT Simulator.

We have started our surgical oncology, pain palliative care units from Feb. 2014. We are also developing in house oncopathology with facilities for histopathology, tumour markers and frozen section. For cytogenetics, IHC, FISH, PCR etc we have collaboration with department of biochemistry & molecular biology at medical college.

Medical oncology facility is also provided by us. We have 90% of drugs available including MABS and TKIS like trastuzumab, cetuximab, nimmtuzumab, erotinib, gefitinib, crizotinib, sorafenib, sunitinib. These are given free to all BPL/RSBY/MSBY holders. Radiation facilities are also free to these patients and provided at very nominal charges to others.

We have started our Hospital Based Cancer Registry in August 2011, with basic offline HBCR DM software. Online data entry has been started on 2013. In year 2014, we have been approved for POCSS and financial & technical assistance have been provided by ICMR for smooth functioning and other necessary supports are provided by RCC.

The staff for POCSS have been recruited at the end of 2014 and now they are well trained for collection of data. They assist the patient for registration; thoroughly interview them for abstraction of data as much as possible. They also counsel and guide them for necessary investigations, treatment modalities, their possible side effects and importance of follow-ups.

### Staff of Registry

|                              |   |   |
|------------------------------|---|---|
| Professor Radiation Oncology | : | <b>Dr S.K. Azad M.D.</b>  |
| Associate Professor          | : | <b>Dr Manjula Kerketta M.D.</b>   |
| Assistant Professors         | : | <b>Dr Rajeev Ratan Jain</b><br><b>Dr Chandrahas Dhruw</b><br><b>Dr Madhu Verma,</b> |
| Social Workers               | : | <b>Madhuri Shukla</b><br><b>Megha Rani Tamrakar</b><br><b>Chandrabhan Maravi</b>    |
| Data Entry Operators         | : | <b>C.H. Dharam Raju</b><br><b>Sanjay Lal</b>  |

Table F.1 gives the total number of new cancers registered in hospital during the period of three years from 1<sup>st</sup> January 2012 to 31<sup>st</sup> December 2014. Accordingly, there were 3053 new cancers registered (1307 males and 1746 females).

Table F.2 indicates the number and proportion of specific sites of cancer associated with use of tobacco relative to all cancers.

The basis of diagnosis of cancers registered is shown in Table F.3. The proportion of microscopic confirmation was around 96% in both sexes.

Table F.4 shows the details of microscopically verified cancers. The proportion of patients who were diagnosed by primary histology was around 95% in males and around 97% in females.

Table F.5 gives the number and relative proportion of cancer patients in diverse clinical extent of disease before treatment at the time of registering at the RI.

Table F.6 gives the number and relative proportion of cancer patients according to different treatment modality.

**Table F.1: Number (#) and Proportion (%) according to Sex and Sex Ratio Percent**

| Males |      | Females |      | Sex Ratio | Total Cases |
|-------|------|---------|------|-----------|-------------|
| #     | %    | #       | %    |           |             |
| 1307  | 42.8 | 1746    | 57.2 | 75        | 3053        |

**Table F.2: Number (#) and Proportion (%) of Tobacco Related Cancers (TRC) Relative to All Sites of Cancer**

| Sites of Cancer  | Males       |              | Females     |              |
|------------------|-------------|--------------|-------------|--------------|
|                  | #           | %            | #           | %            |
| Lip              | 20          | 1.5          | 12          | 0.7          |
| Tongue           | 95          | 7.3          | 35          | 2.0          |
| Mouth            | 233         | 17.8         | 102         | 5.8          |
| Oropharynx       | 7           | 0.5          | -           | -            |
| Hypopharynx      | 25          | 1.9          | 15          | 0.9          |
| Pharynx          | 5           | 0.4          | 2           | 0.1          |
| Oesophagus       | 49          | 3.7          | 18          | 1.0          |
| Larynx           | 50          | 3.8          | 6           | 0.3          |
| Lung             | 76          | 5.8          | 34          | 1.9          |
| Urinary Bladder  | 7           | 0.5          | 6           | 0.3          |
| <b>TRC</b>       | <b>567</b>  | <b>43.4</b>  | <b>230</b>  | <b>13.2</b>  |
| <b>All Sites</b> | <b>1307</b> | <b>100.0</b> | <b>1746</b> | <b>100.0</b> |

**Table F.3: Number (#) and Relative Proportion (%) of Cancers Based on Different Methods of Diagnosis**

| Method of Diagnosis    | Males       |              | Females     |              |
|------------------------|-------------|--------------|-------------|--------------|
|                        | #           | %            | #           | %            |
| Microscopic            | 1249        | 95.6         | 1684        | 96.4         |
| All Imaging Techniques | -           | -            | 4           | 0.2          |
| Clinical               | 6           | 0.5          | 7           | 0.4          |
| Unknown                | 52          | 4.0          | 51          | 2.9          |
| <b>Total</b>           | <b>1307</b> | <b>100.0</b> | <b>1746</b> | <b>100.0</b> |

**Table F.4: Number (#) and Relative Proportion (%) of Cancers Based on Different Types of Microscopic Diagnosis**

| Types of Microscopic Diagnosis | Males       |              | Females     |              |
|--------------------------------|-------------|--------------|-------------|--------------|
|                                | #           | %            | #           | %            |
| Primary Histology              | 1183        | 94.7         | 1630        | 96.8         |
| Secondary Histology            | 12          | 1.0          | 12          | 0.7          |
| Primary Cytology               | 42          | 3.4          | 35          | 2.1          |
| Secondary Cytology             | 3           | 0.2          | 2           | 0.1          |
| Blood Film                     | -           | -            | -           | -            |
| Bone Marrow                    | 9           | 0.7          | 5           | 0.3          |
| <b>All Microscopic</b>         | <b>1249</b> | <b>100.0</b> | <b>1684</b> | <b>100.0</b> |

**Table F.5: Number (#) and Relative Proportion (%) of Cancer Patients according to Clinical Extent of Disease (Excluding Patients Previously Treated)**

| Clinical Extent   | Males       |              | Females     |              |
|-------------------|-------------|--------------|-------------|--------------|
|                   | #           | %            | #           | %            |
| Localised (L)     | 89          | 7.9          | 108         | 7.7          |
| Regional (R)      | 857         | 75.6         | 1072        | 76.1         |
| L+R               | 946         | 83.5         | 1180        | 83.7         |
| Distant           | 1           | 0.1          | 1           | 0.1          |
| Others            | 185         | 16.3         | 225         | 16.0         |
| Unknown           | 1           | 0.1          | 3           | 0.2          |
| <b>All Stages</b> | <b>1133</b> | <b>100.0</b> | <b>1409</b> | <b>100.0</b> |

**Table F.6: Number (#) and Relative Proportion (%) of Cancer Patients according to Any Specific Treatment relative to all Treatment Procedures (Treatment Only at RI)**

| Treatments          | Males      |              | Females    |              |
|---------------------|------------|--------------|------------|--------------|
|                     | #          | %            | #          | %            |
| Any Surgery         | 10         | 1.2          | 12         | 1.3          |
| Any Radiotherapy    | 233        | 28.7         | 445        | 47.2         |
| Any Chemotherapy    | 561        | 69.1         | 481        | 51.1         |
| Any Hormone Therapy | 1          | 0.1          | -          | -            |
| Unknown             | 7          | 0.9          | 4          | 0.4          |
| <b>Total</b>        | <b>812</b> | <b>100.0</b> | <b>942</b> | <b>100.0</b> |