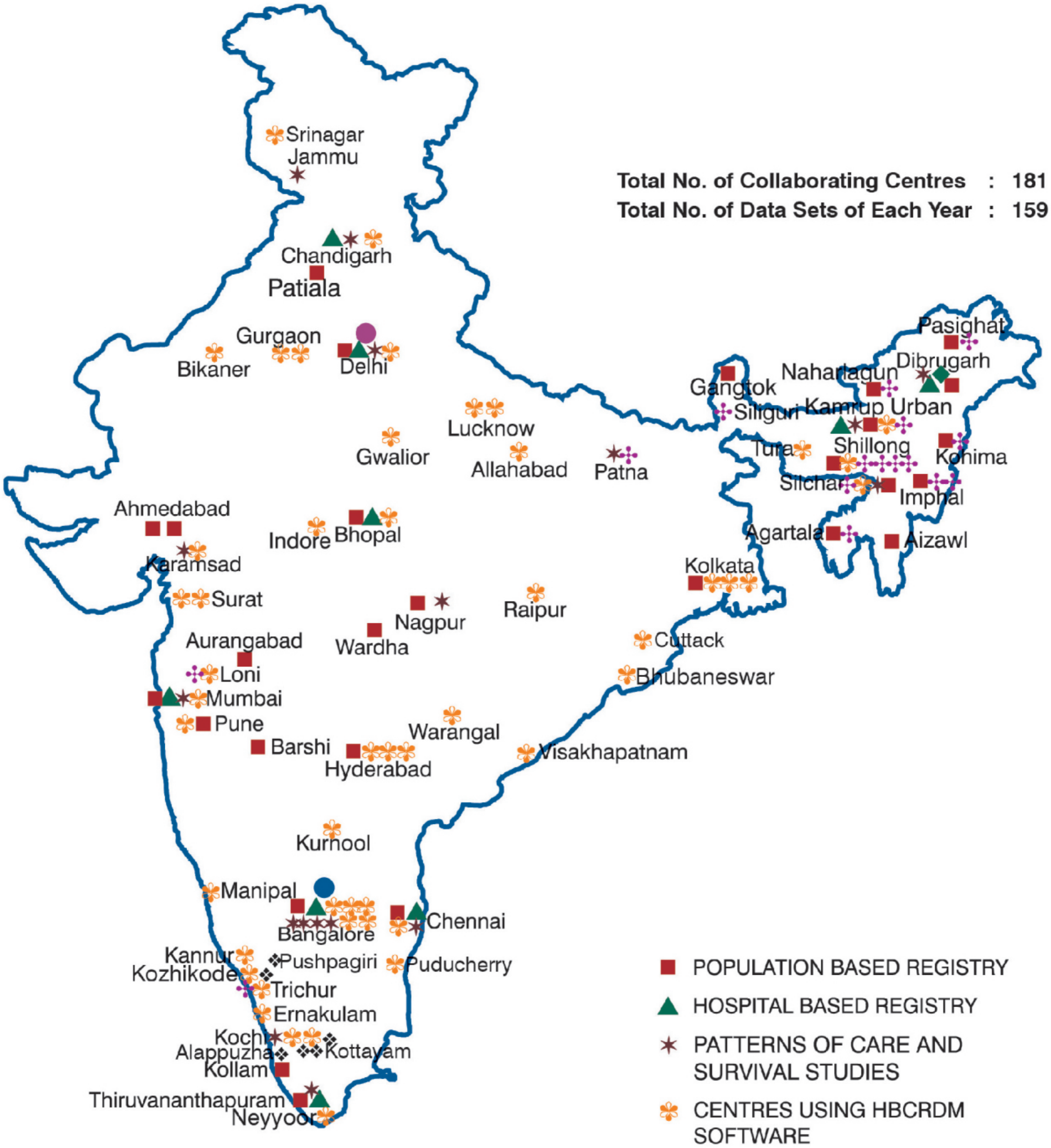
Cancer Registry ABSTRACT

CRAB

The Newsletter of NCRP

Volume XVII Number 1
November 2012



Total No. of Collaborating Centres : 181
Total No. of Data Sets of Each Year : 159

■ POPULATION BASED REGISTRY
▲ HOSPITAL BASED REGISTRY
✶ PATTERNS OF CARE AND SURVIVAL STUDIES
✾ CENTRES USING HBCRDM SOFTWARE
✠ CANCER ATLAS - PUNJAB STATE
✣ CANCER ATLAS NORTH EAST
❖ CANCER ATLAS - KERALA STATE

● ICMR HEADQUARTERS
● NCDIR – NCRP COORDINATING UNIT
◆ MONITORING UNIT, N.E. PBCRs

IN THIS ISSUE

NCDIR-ICMR-NCRP DESK

EDITORIAL

ARTICLES

ADVISORY BOARD

EDITORIAL OFFICE

CRAB is the newsletter of the National Cancer Registry Program of Indian Council of Medical Research. Government of India. This issue is published by the Department of Biostatistics & Cancer Registry, Cancer Institute (WIA), Chennai, India.

CRAB features articles on cancer registration, issues of current interest and news items on events in registries and conferences ahead.

Editor : Dr. R. Swaminathan
Department of Biostatistics & Cancer Registry,
Cancer Institute (WIA)
38, Sardar Patel Road, Chennai - 600 036.
Tel : 91-44-2235 0131 / 22350241
Ext 135, Fax : 91-44-2235 4508
E-mail : ncrp.crab@gmail.com

All are welcome to submit articles, news, comments to CRAB

HIGHLIGHTS FOR THE YEAR 2012

NCRP COU Team

Commencement /Collaboration of New Population and Hospital Based Cancer Registries / Cancer Atlas

Population Based Cancer Registries (PBCRs)

The twenty seventh Population Based Cancer Registry was commenced at Government Medical College, Patiala and the seventh Hospital Based Cancer Registry was commenced at PGIMER, Chandigarh. A project on “Development of an Atlas of Cancer in Punjab' was also commenced. So far data on about 5000 cases has been received.

With the development of software modules (details given below), 31 centres have started using the Hospital Based Cancer Registry Data Management Programme. These centres have contributed data on 16,000 cancers.

The number of collaborating centres with the NCRP network as of September 2012 is given in Table 1 and in the form of a map (see cover page) which includes the cancer atlas of Punjab.

The progress report/data for the years 2009-10 was presented at the XXVII Annual Review Meeting held at Dr B.B. Barooah Cancer Institute, Guwahati from 1-4 November 2011. Besides the information provided by the data itself discussions were held on the completeness of coverage and the quality of data including collection of mortality data.

Hospital Based Cancer Registries and Patterns of Care and Survival Studies

Hospital Based Cancer Registries have a major role to assess cancer patient care and contribute to the PBCR. Follow-up of patients has always been a challenge in the Indian setting as also getting correct information on clinical stage and details of cancer directed treatment. Though all of this information would be available in a limited number of cases that are of interest to an individual clinician for the HBCR as a whole that accounts for all the cases registered in a given hospital such information is far from complete. Only the latter would provide a true picture of cancer patient care in the given hospital. Against this limitation the POCCS was commenced for three sites of cancer viz., cancer breast, cancer cervix and head & neck cancers. A detailed three day workshop with one day for each site of cancer was held from 7-9 February 2012. Some of the salient points are summarized below. In Cancer Breast of the 9,270 patients, 471 or 5.1% were in stage 1. The waiting time for diagnosis was less than one month in 90.4% of patients. The time taken between the diagnosis and date of commencement of treatment was less than one month in 66% of patients. Multi modality treatment (surgery, radiotherapy, chemotherapy, hormone therapy) was given in over 60% of patients and 12 month follow up was 84%. The 12 month survival varied from 91.6% in stage I to 68.6% in stage IV. Breast conservative surgery was practiced in 39% of patients in stage 1 disease. In cancer cervix microscopic confirmation of diagnosis was seen in 98%, Stage I disease in 15.8%, waiting time for commencement of treatment less than one month in 61.5 and radiotherapy with or without chemotherapy in 88% of patients. In Head and Neck cancers the major sites were tongue, mouth, pharynx, nasopharynx and larynx. Surgery followed by radiotherapy and/or chemotherapy was the predominant type of treatment.

Translational Research including Software Development

The highlights of the software development during the past year are listed below:

A. PBCRs

Enhanced mechanisms of duplicate checking/matching through phonetics;

- Names in any order (first, middle, last)
- Registry defined checks
- Filtration of duplicate sets to eliminate repetition of same sets at succeeding checks (Dictionary 1.9 lakh cases; 4 zones)

  Statistical Quality parameters as defined by Cancer Incidence in Five Continents (CIV) – IARC including variation in cases from various sources of registration (both off-line and on-line);

  Sub-site specific Annexures

  Export Programmes

B. HBCRs and POCSS

- Quality checks and generation of reports
- SMS Alert to both patient and physician
- Appointment Scheduler
- Waiting time
- Demographic and Clinical Follow-ups
- Kaplan Meir Survival Analysis
- Comparative tables/analysis only for Coordinating Unit
- On-line generation sub-site annexures;
- Split up of Head and Neck Cancers by individual sites

C. Cancer atlas

- Punjab Cancer Atlas (Both Off-line and On-line) with Pathology and Radiotherapy forms (both off-line and on-line)

		CENTRES	DATA SETS
1.	PBCRs:	27+1(Hyd)	27
2.	HBCRs	09	09
3.	POCSS (incl. 5 HBCRs):	17	45
4.	Cancer atlas NE:	50(36	17
5.	HBCR-DM-SW:	96	23
6.	Punjab Cancer Atlas:	(8)	38
7.	Kerala Cancer Atlas:		0
	TOTAL	**181**	**159**

A NATIONAL LEVEL POPULATION-BASED CANCER SURVIVAL STUDY IN INDIA – THE ROLE OF NCRP

R. Swaminathan

For describing completely, the experience of cancer in India, it is necessary to know not only its incidence and mortality, but also the survival of cancer patients. PBCRs under NCRP, are some of the main sources of information on survival and population-based survival estimates offer an important benchmark for measuring a health care system's overall effectiveness in the fight against cancer by reflecting a broader range of cancer control activities including screening and organization of treatment services. While this type of information on cancer survival is readily available from most high-resource countries, it is not so in India, for now.

One of the fundamental reasons for this lacuna is the deficient cancer mortality statistics. Many PBCRs in India are doing their best to optimize the availability of mortality information of all registered incident cancers by matching incident cancer database with all-cause mortality database. However, there are limitations owing to lack of unique data linkage possibilities and therefore mortality ascertainment is often incomplete. It has been proven that lack of active follow up of cancer cases in the presence of sub-optimal mortality data introduces a systematic bias in survival estimation. Hence, PBCRs devise innovative active methods for acquiring complete follow up data, including mortality.

Taking cognizance to such complexities, IARC took concerted and special efforts to generate cancer survival information from several low or medium resource countries, including India, through separately funded studies in the last two decades and succeeded. Six PBCRs under NCRP network had participated in these studies and provided valuable data on cancer survival. There were striking inequalities in cancer survival within PBCRs in India but convincing answers were elusive. The differences could only be interpreted as largely related to the differences in general awareness, availability of early detection practices, trained human resources, diagnosis and treatment and the development and accessibility to cancer services. It is noteworthy that the survival differences between PBCRs in India were least related to issues of data quality or reliability indices and NCRP can rightfully take credit for this along with the individual PBCRs.

NCRP has already shown the initiative to generate survival statistics and more from hospital series of selected cancer patients through POC project. The time is now ripe for NCRP to take the leadership for generating the latest population-based cancer survival information in India that is reliable, representative, updated and capable of providing meaningful insights for future planning and investment by governments in primary prevention activities, early detection initiatives and tertiary care to achieve meaningful cancer control. NCRP needs to formulate a wholesome project on cancer survival that has scientific acumen, scope for training of personnel and adequate funding to establish a collaborative research agreement with individual PBCRs. A little hand-holding must be assured to newer PBCRs so that they will come forward to participate. This national study on cancer survival will truly form a significant component of translational research by NCRP and greatly aid in cancer control.

NEWER CHECKS AND OUTPUTS OF PBCRDM SOFTWARE

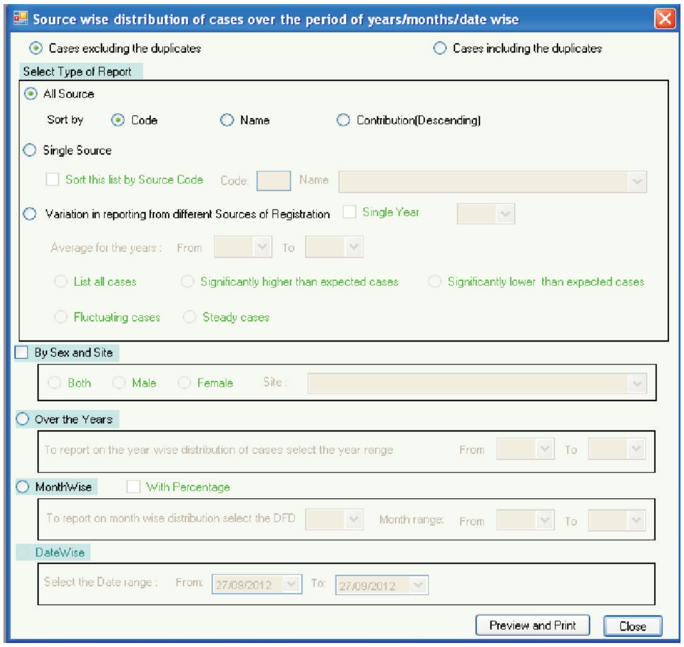
Priyanka Das, Vinay Urs K.S, Anish John, Akanksha Tiwari, A Nandakumar

Indices of completeness of coverage

Cancer Registration in India faces many challenges in collection of incidence cases from the hospitals/diagnostic centres. There are several reasons for registries missing cases from different sources. This could vary from logistics to administrative issues. Keeping track of cases expected and the actual numbers received so far, using IT tools is a way to address the issue.

The challenge was to device standardized technique that could be used as a test to detect the sources of registration which contribute to these missing cases. This test should be available to the PBCRs so that they could keep a tab on the number of cases received from the sources responsible for lower contributions. At NCRP, we developed a software module for the contributions made by the sources of registration.

This offline software module provides with three types of reports on contribution-


Source wise distribution of cases over the period of years/months/date wise

● Cases excluding the duplicates ○ Cases including the duplicates

Select Type of Report

● All Source

Sort by ● Code ○ Name ○ Contribution(Descending)

○ Single Source

☐ Sort this list by Source Code Code: Name

○ Variation in reporting from different Sources of Registration ☐ Single Year

Average for the years : From To

○ List all cases ○ Significantly higher than expected cases ○ Significantly lower than expected cases

○ Fluctuating cases ○ Steady cases

☐ By Sex and Site

○ Both ○ Male ○ Female Site :

○ Over the Years

To report on the year wise distribution of cases select the year range From To

○ MonthWise ☐ With Percentage

To report on month wise distribution select the DFD Month range: From To

DateWise

Select the Date range : From: 27/09/2012 To: 27/09/2012

Fig 1: The Source of Registration Module

i) **All Source** – The contributions made by all sources can be viewed (Fig 1)

  a. Over the range of years chosen (max 5 yrs)
  b. Over the range of months (max 5 months) for
  a. Chosen year from the Date of 1^{st} diagnosis
  c. Listing is available in ascending and descending order of contribution based on first year

ii) **Single Source** – The user can select a source to view contributions

  a. Over the years
  b. Over a range of months(12 months) for a chosen year from the Date of 1^{st} diagnosis
  c. Sex wise and Site wise listing for the above two is available
  d. Over a range of date chosen based on the Date of First Diagnosis of a chosen year

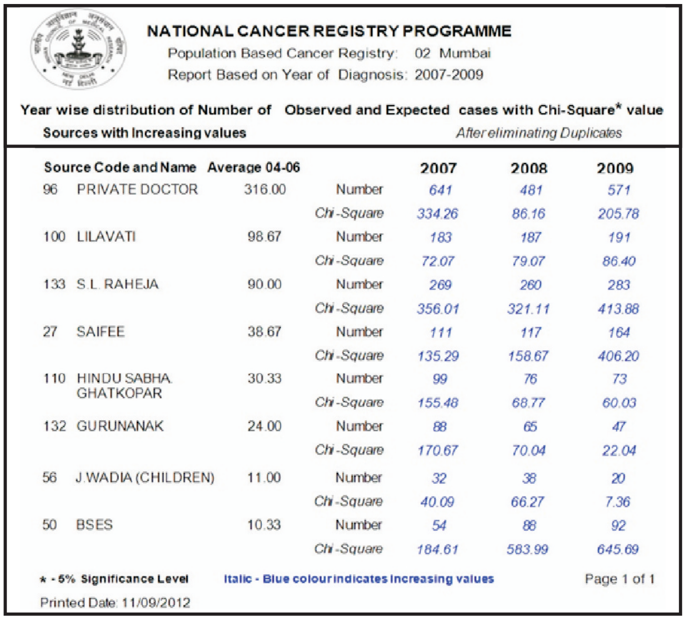
The user can choose the options from the screen and generate the above reports.

iii) **Variation in reporting from different sources of registration** – The contributions made by the sources for a chosen range of years can be categorised under different heads.

  a. Significantly higher than expected cases Increased contribution
  b. Significantly lower than expected cases decreased contribution
  c. Fluctuating contribution
  d. Steady contribution
  e. List of all cases i.e., a combination of all the four types of contribution

The user has to choose a range of 3 years for calculation of the expected value. There may be insufficient data for some registries wherein the expected value cannot be calculated for 3 years. In such cases, we have given an option of a check box to use single year only. The range of years for which the pattern of contribution is required can be chosen next. Following this the "Preview and Print" button can be used to load the report. The reports can be printed as well as saved in .doc/.xls and .pdf formats.

Some samples of the reports on variation in reporting from different sources of registration from the offline module are provided below.



NATIONAL CANCER REGISTRY PROGRAMME
Population Based Cancer Registry: 02 Mumbai
Report Based on Year of Diagnosis: 2007-2009

Year wise distribution of Number of Observed and Expected cases with Chi-Square* value
Sources with Increasing values *After eliminating Duplicates*

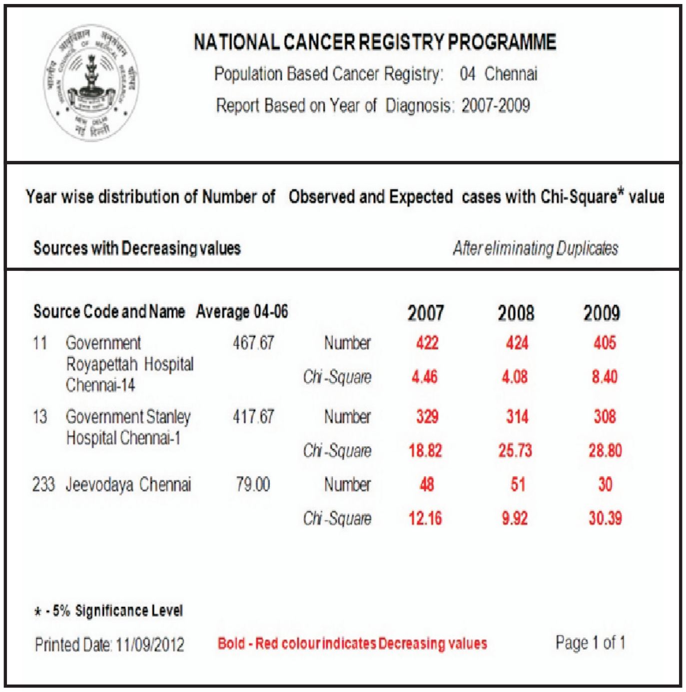
Source Code and Name	Average 04-06		2007	2008	2009
96 PRIVATE DOCTOR	316.00	Number	*641*	*481*	*571*
		Chi-Square	*334.26*	*86.16*	*205.78*
100 LILAVATI	98.67	Number	*183*	*187*	*191*
		Chi-Square	*72.07*	*79.07*	*86.40*
133 S.L. RAHEJA	90.00	Number	*269*	*260*	*283*
		Chi-Square	*356.01*	*321.11*	*413.88*
27 SAIFEE	38.67	Number	*111*	*117*	*164*
		Chi-Square	*135.29*	*158.67*	*406.20*
110 HINDU SABHA. GHATKOPAR	30.33	Number	*99*	*76*	*73*
		Chi-Square	*155.48*	*68.77*	*60.03*
132 GURUNANAK	24.00	Number	*88*	*65*	*47*
		Chi-Square	*170.67*	*70.04*	*22.04*
56 J.WADIA (CHILDREN)	11.00	Number	*32*	*38*	*20*
		Chi-Square	*40.09*	*66.27*	*7.36*
50 BSES	10.33	Number	*54*	*88*	*92*
		Chi-Square	*184.61*	*583.99*	*645.69*

*** - 5% Significance Level** **Italic - Blue colour indicates Increasing values** Page 1 of 1
Printed Date: 11/09/2012

Fig 2: Sample report- Sources that have made increased contribution from 2007-2009

Fig 2 lists all those sources that have made increased contribution (observed values) from 2007 till 2009 based on the average contribution (Expected value) for 3 years (2004-2006). The blue conveyed that the contribution was positively significant. The contribution in each year is more than the expected value thus demonstrating better collection of cases.

Fig 3 lists all those sources that have made decreased contribution (observed values) from 2007 till 2009 based on the average contribution (Expected value) for 3 years (2004-2006). The red value infers that the contribution was negatively significant. This result indicates that the contributions in each year must be greater than the expected value to convert the reds to blues.



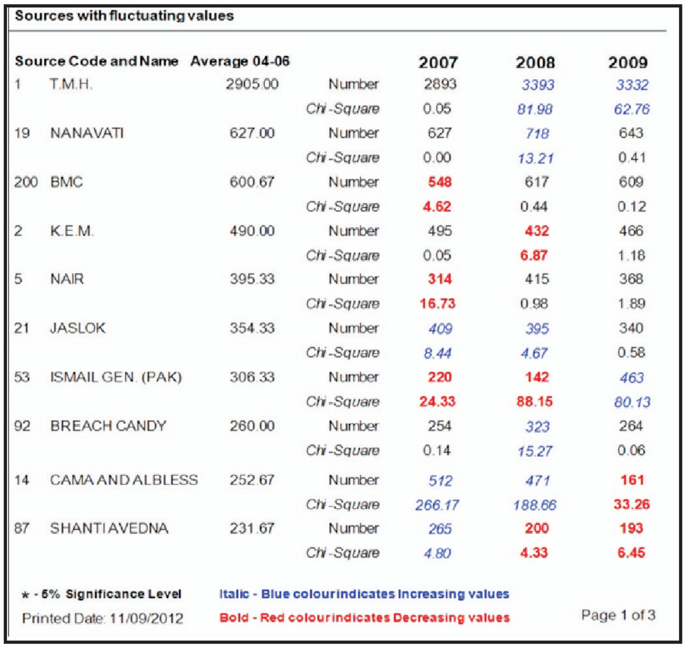
NATIONAL CANCER REGISTRY PROGRAMME
Population Based Cancer Registry: 04 Chennai
Report Based on Year of Diagnosis: 2007-2009

Year wise distribution of Number of Observed and Expected cases with Chi-Square* value
Sources with Decreasing values *After eliminating Duplicates*

Source Code and Name	Average 04-06		2007	2008	2009
11 Government Royapettah Hospital Chennai-14	467.67	Number	**422**	**424**	**405**
		Chi-Square	**4.46**	**4.08**	**8.40**
13 Government Stanley Hospital Chennai-1	417.67	Number	**329**	**314**	**308**
		Chi-Square	**18.82**	**25.73**	**28.80**
233 Jeevodaya Chennai	79.00	Number	**48**	**51**	**30**
		Chi-Square	**12.16**	**9.92**	**30.39**

*** - 5% Significance Level**
Printed Date: 11/09/2012 **Bold - Red colour indicates Decreasing values** Page 1 of 1

Fig 3: Sample report- Sources that have made decreased contribution from 2007-2009



Sources with fluctuating values

Source Code and Name	Average 04-06		2007	2008	2009
1 T.M.H.	2905.00	Number	2893	*3393*	*3332*
		Chi-Square	0.05	*81.98*	*62.76*
19 NANAVATI	627.00	Number	627	*718*	643
		Chi-Square	0.00	*13.21*	0.41
200 BMC	600.67	Number	**548**	617	609
		Chi-Square	**4.62**	0.44	0.12
2 K.E.M.	490.00	Number	495	**432**	466
		Chi-Square	0.05	**6.87**	1.18
5 NAIR	395.33	Number	**314**	415	368
		Chi-Square	**16.73**	0.98	1.89
21 JASLOK	354.33	Number	*409*	*395*	340
		Chi-Square	*8.44*	*4.67*	0.58
53 ISMAIL GEN. (PAK)	306.33	Number	**220**	**142**	*463*
		Chi-Square	**24.33**	**88.15**	*80.13*
92 BREACH CANDY	260.00	Number	254	*323*	264
		Chi-Square	0.14	*15.27*	0.06
14 CAMA AND ALBLESS	252.67	Number	*512*	*471*	**161**
		Chi-Square	*266.17*	*188.66*	**33.26**
87 SHANTI AVEDNA	231.67	Number	*265*	**200**	**193**
		Chi-Square	*4.80*	**4.33**	**6.45**

*** - 5% Significance Level** **Italic - Blue colour indicates Increasing values**
Printed Date: 11/09/2012 **Bold - Red colour indicates Decreasing values** Page 1 of 3

Fig 4: Sample report- Sources that have made fluctuating contribution from 2007-2009

Fig 4 lists all those sources that have made fluctuating contribution (observed values) from 2007 till 2009 based on the average contribution (Expected value) for 3 years (2004-2006). The numbers in red indicate decreased, blue indicates increased and black indicates steady (neither negative nor positive) contributions. Some sources have gone blue from black and red, thus showing an improvement. There are still others which have gone red from blue and black indicating a drop.

This is a good monitoring tool to assess the performance of the social investigators and co-operation from the sources when numbers are dropping. Registry can keep a track of the collection of cases and device plans to overcome the problem. Action can be taken to improve the lacunae evident in the working of the registry too thus improving the completeness of coverage. The report can be taken site wise (ICD10) so that one can easily investigate the number variations in certain sites of cancer. This is a unique indicator of the completeness of coverage of cases.

Sub Sites Specific Annexure Tabulations

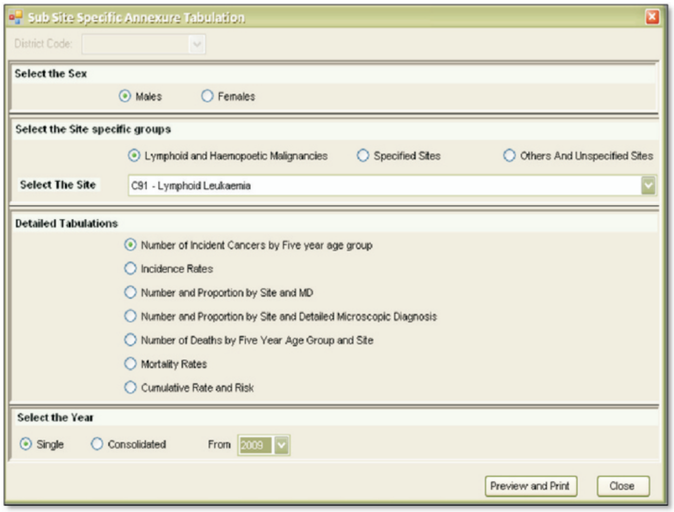
Generation of tables and graphs have been a regular activity of NCRP over the years. A software offline module to generate annexure tables for sub-sites has been developed.

The reports generated are :

1) Number of incident cancer by five year age group
2) Incidence Rates
3) Number and proportion by site and MD
4) Number and proportion by site and Detailed Microscopic Diagnosis
5) Number of deaths by five year age group and site
6) Mortality Rates
7) Cumulative Rate and Risk

All the above can be reported for the following categories of sites of cancer:

i) Lymphoid and Haemopoetic Malignancies
   a. C91 - Lymphoid Leukaemia
   b. C92-C96 - Myeloid Leukaemia
ii) Specified Sites – For all those sites which have sub sites and do not belong to category (i) or (iii) in this list. Eg., C50 - Breast
iii) Other and Unspecified sites
   The sites included in this are C26,C39, C48,C75,C76,C77,C78,C79,C80,C97



Select the Sex
● Males ○ Females

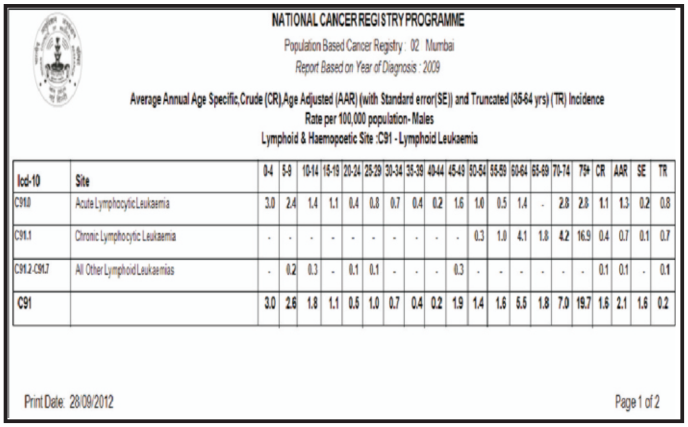
Select the Site specific groups
● Lymphoid and Haemopoetic Malignancies ○ Specified Sites ○ Others And Unspecified Sites
Select The Site: C91 - Lymphoid Leukaemia

Detailed Tabulations
● Number of Incident Cancers by Five year age group
○ Incidence Rates
○ Number and Proportion by Site and MD
○ Number and Proportion by Site and Detailed Microscopic Diagnosis
○ Number of Deaths by Five Year Age Group and Site
○ Mortality Rates
○ Cumulative Rate and Risk

Select the Year
● Single ○ Consolidated From 2009

Fig 5: Sub Sites Specific Annexure tabulation Module

The reporting of cases can be done for males/females and for single/consolidated years. On click of the "Preview and Print" button, the report will load. The reports can be printed as well as saved in .doc/.xls and .pdf formats.



NATIONAL CANCER REGISTRY PROGRAMME
Population Based Cancer Registry : 02 Mumbai
Report Based on Year of Diagnosis : 2009

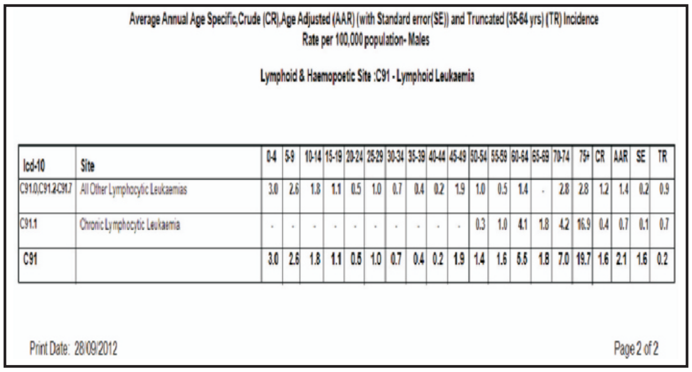
Average Annual Age Specific,Crude (CR),Age Adjusted (AAR) (with Standard error(SE)) and Truncated (35-64 yrs) (TR) Incidence
Rate per 100,000 population- Males
Lymphoid & Haemopoetic Site :C91 - Lymphoid Leukaemia

Icd-10	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	CR	AAR	SE	TR
C91.0	Acute Lymphocytic Leukaemia	3.0	2.4	1.4	1.1	0.4	0.8	0.7	0.4	0.2	1.6	1.0	0.5	1.4	-	2.8	2.8	1.1	1.3	0.2	0.8
C91.1	Chronic Lymphocytic Leukaemia	-	-	-	-	-	-	-	-	-	-	0.3	1.0	4.1	1.8	4.2	16.9	0.4	0.7	0.1	0.7
C91.2-C91.7	All Other Lymphoid Leukaemias	-	0.2	0.3	-	0.1	0.1	-	-	-	0.3	-	-	-	-	-	-	0.1	0.1	-	0.1
C91		3.0	2.6	1.8	1.1	0.5	1.0	0.7	0.4	0.2	1.9	1.4	1.6	5.5	1.8	7.0	19.7	1.6	2.1	1.6	0.2

Print Date: 28/09/2012

Page 1 of 2

Fig 6(a): Incidence Rates for Lymphoid and Heamopoetic Site: C91-Lymphoid Leukaemia



Average Annual Age Specific,Crude (CR),Age Adjusted (AAR) (with Standard error(SE)) and Truncated (35-64 yrs) (TR) Incidence
Rate per 100,000 population- Males

Lymphoid & Haemopoetic Site :C91 - Lymphoid Leukaemia

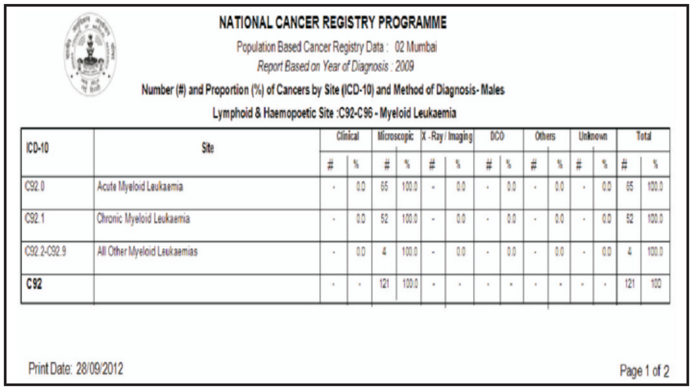
Icd-10	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	CR	AAR	SE	TR
C91.0,C91.2-C91.7	All Other Lymphocytic Leukaemias	3.0	2.6	1.8	1.1	0.5	1.0	0.7	0.4	0.2	1.9	1.0	0.5	1.4	-	2.8	2.8	1.2	1.4	0.2	0.9
C91.1	Chronic Lymphocytic Leukaemia	-	-	-	-	-	-	-	-	-	-	0.3	1.0	4.1	1.8	4.2	16.9	0.4	0.7	0.1	0.7
C91		3.0	2.6	1.8	1.1	0.5	1.0	0.7	0.4	0.2	1.9	1.4	1.6	5.5	1.8	7.0	19.7	1.6	2.1	1.6	0.2

Print Date: 28/09/2012

Page 2 of 2

Fig 6(b):Incidence Rates for Lymphoid and Heamopoetic Site: C91-Lymphoid Leukaemia

The reports generate two tables. The sub sites have been grouped in different combinations within the main cancer site to generate two tables (Fig 6a & 6b).



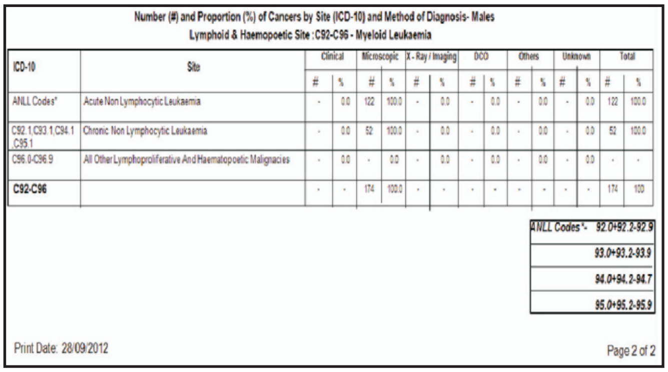
NATIONAL CANCER REGISTRY PROGRAMME
Population Based Cancer Registry Data : 02 Mumbai
Report Based on Year of Diagnosis : 2009
Number (#) and Proportion (%) of Cancers by Site (ICD-10) and Method of Diagnosis- Males
Lymphoid & Haemopoetic Site :C92-C96 - Myeloid Leukaemia

ICD-10	Site	Clinical		Microscopic		X -Ray / Imaging		DCO		Others		Unknown		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
C92.0	Acute Myeloid Leukaemia	-	0.0	65	100.0	-	0.0	-	0.0	-	0.0	-	0.0	65	100.0
C92.1	Chronic Myeloid Leukaemia	-	0.0	52	100.0	-	0.0	-	0.0	-	0.0	-	0.0	52	100.0
C92.2-C92.9	All Other Myeloid Leukaemias	-	0.0	4	100.0	-	0.0	-	0.0	-	0.0	-	0.0	4	100.0
C92		-	-	121	100.0	-	-	-	-	-	-	-	-	121	100

Print Date: 28/09/2012

Page 1 of 2

Fig 7(a): Number and proportion by site and Detailed Microscopic Diagnosis for Lymphoid and Heamopoetic Site: C92-Myeloid Leukaemia



Number (#) and Proportion (%) of Cancers by Site (ICD-10) and Method of Diagnosis- Males
Lymphoid & Haemopoetic Site :C92-C96 - Myeloid Leukaemia

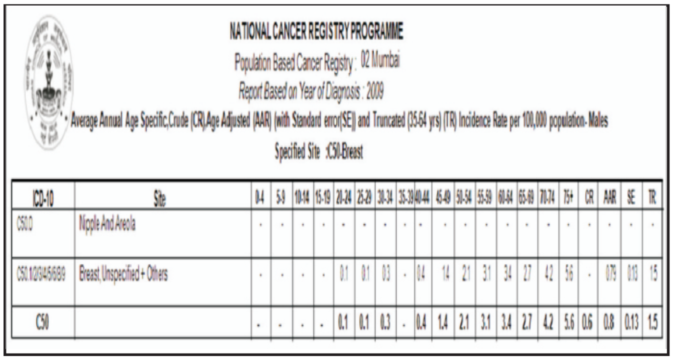
ICD-10	Site	Clinical		Microscopic		X - Ray / Imaging		DCO		Others		Unknown		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
ANLL Codes*	Acute Non Lymphocytic Leukaemia	-	0.0	122	100.0	-	0.0	-	0.0	-	0.0	-	0.0	122	100.0
C92.1,C93.1,C94.1,C95.1	Chronic Non Lymphocytic Leukaemia	-	0.0	52	100.0	-	0.0	-	0.0	-	0.0	-	0.0	52	100.0
C96.0-C96.9	All Other Lymphoproliferative And Haematopoetic Malignacies	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	-
C92-C96		-	-	174	100.0	-	-	-	-	-	-	-	-	174	100

ANLL Codes- 92.0+92.2-92.9*
93.0+93.2-93.9
94.0+94.2-94.7
95.0+95.2-95.9

Print Date: 28/09/2012

Page 2 of 2

Fig 7(b): Number and proportion by site and Detailed Microscopic Diagnosis for Lymphoid and Heamopoetic Site: C92-Myeloid Leukaemia (Table 2)



NATIONAL CANCER REGISTRY PROGRAMME
Population Based Cancer Registry : 02 Mumbai
Report Based on Year of Diagnosis : 2009
Average Annual Age Specific,Crude (CR),Age Adjusted (AAR) (with Standard error(SE)) and Truncated (35-64 yrs) (TR) Incidence Rate per 100,000 population- Males
Specified Site :C50-Breast

ICD-10	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	CR	AAR	SE	TR
C50.0	Nipple And Areola	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C50.1/2/3/4/5/6/8/9	Breast, Unspecified + Others	-	-	-	-	0.1	0.1	0.3	-	0.4	1.4	2.1	3.1	3.4	2.7	4.2	5.6	-	0.79	0.13	1.5
C50		-	-	-	-	0.1	0.1	0.3	-	0.4	1.4	2.1	3.1	3.4	2.7	4.2	5.6	0.6	0.8	0.13	1.5

Fig 8 : Incidence Rates for Specified Site : C50

Similarly, report can be generated for the Other and Unspecified Sites of cancer. These offline modules have been tested at NCRP and the reports can be furnished to the registries. We may provide the same online on *www.pbcrindia.org* at a later date.

A SYNOPSIS OF ACTIVITIES CARRIED OUT TOWARDS MAKING CANCER, A NOTIFIABLE DISEASE IN INDIA

P. Gangadharan

Notifiable Disease – A Definition

A disease that, by statutory requirements, must be reported to the public health authority in the pertinent jurisdiction, when the diagnosis is made.

A disease deemed of sufficient importance to the public health to require that its occurrence be reported to health authorities.

The reporting to public health authorities of communicable diseases is, unfortunately, very incomplete. The reasons for this include diagnostic inexactitude; the desire of patients and physicians to conceal the occurrence of conditions carrying a social stigma, e.g., sexually transmitted diseases; and the indifference of physicians to the usefulness of information about such diseases as hepatitis, influenza, and measles. Yet, notifications are extremely important. They provide the starting point for investigations into the failure of preventive measures such as immunizations, for tracing sources of infection, for finding common vehicles of infection, for describing the geographic clustering of infection, and for various other purposes, depending upon the particular disease. *Reference: A Dictionary of Epidemiology Second Edition, Edited By... JOHN M. LAST for the International Epidemiological Association, 1988, Oxford University Press.*

The above definition and the problems in reporting process and deficiencies as experienced for communicable diseases for implementing it as a notifiable disease are quite eloquent and immensely applicable to non communicable diseases, especially cancer also.

Recognition of cancer as a major non-communicable disease in India led to the formation of National Cancer Control Plan (NCCP) under which the Regional Cancer Centres(RCCs) were established in different parts of the country. These centres were started, to have updated facilities for treatment, research and community cancer control. As far as the assessment of cancer problem is concerned, the National Cancer Registry Programme (NCRP) was initiated in 1982 with three Population Based Cancer Registries in Chennai, Bangalore and Mumbai, three Hospital Cancer Registries at Dibrugarh, Chandigarh and Thiruvananthapuram. Adhering to a well chartered program and guided by National and International faculty, the program has been ongoing with the whole hearted cooperation of several scientists and institutions for the past three decades. The NCRP has grown as the focus of a major cooperating scientific activity in India encompassing almost all states, several laboratories, teaching centres and hospitals throughout the country, collecting, coordinating, collating cancer occurrence data from several parts of the country. However, many more areas have to be included in this national program.

In certain countries, there is a system of voluntary reporting of cancer cases to an administrative authority. But in India, we have to follow an active registration system. However, there are impediments for running a cancer registry in India by an active registration system. When cancer can be made a notifiable disease, it would be useful, meaningful and facilitate studies and lead to control of the disease. The following Governmental orders have been issued to make cancer a notifiable disease in Punjab, Tripura and West Bengal states. In Tamil Nadu, the government has accorded the much needed permission for statewide collection of data on cancer cases. In Kerala, the government has issued an order for the improvement of cancer registration in Thiruvananthapuram district. There could be a substantial improvement in the reporting of cancer cases over time and in our understanding of the disease in India.

Places where cancer has been made a notifiable disease

(The excerpts from the Governmental Orders are reproduced below)

1. PUNJAB

Governmentof Punjab – Dept of Health and Family welfare. Order No.2-3-011-4HB4-3226 - dated 18/10/2011 – 2/3/2011-4HB4.

……And whereas the State Govt. after due consideration of the matter has also found it expedient that a diagnosis or suspicion of cancer should be reported to the appropriate authority for early detection and treatment of the disease.

Now therefore, the Governor of Punjab is pleased to order all persons concerned in hospital (private or public), pathological, clinical, radiological labs and institutions imparting medical education and providing diagnostic, treatment and any other health care related facilities, to mandatorily report online, diagnosed or suspicious cases of cancer and send a hard copy to the Head of Pathology Department, Government Medical College Patiala (PBCR) in the online proforma appended hereto within a period not exceeding one week from the date of diagnosis or the date on which suspicion arose. All concerned shall take the remedial steps to prevent disclosure of the identity of the patient suffering from the disease.

Dated 24/9/2011 Principal Secretary to Govt of Punjab, Chandigarh, Department of Health & Family Welfare.

2. TRIPURA

(Order dated 24th September 2008(No F.3(163) – CH/MS/As/2008/2655)

……. And whereas the state government after due consideration of the matter has also found it expedient that a diagnosis or suspicion of cancer should be reported to the appropriate authority for early detection and treatment of the disease.

Now therefore, all persons concerned in hospital (Private or Public), Pathological, Clinical and Radiological Labs and Institutions imparting medical education and providing diagnosis, treatment and any other health care related facilities to report diagnosed or suspicious cases of cancer to the Medical Superintendent, Regional Cancer Centre(Cancer hospital) Agarthala in the proforma appended hereto within a period not exceeding three weeks from the date of diagnosis or the date on which the suspicion arose in the authorized representative of the Medical Superintendent, Regional Cancer Centre, Agarthala who shall visit the diagnostic centres aforesaid twice a month for collection of such informations, reports, and all concerned shall take remedial steps to prevent disclosure of the identity of patients suffering from the disease.

By order of Governor,
Principal Secretary
Health & Family Welfare Department, Government of Tripura

3. WEST BENGAL

(No. HF/O/PHP/402/5C-05/2010 Dated Kolkatta the 20th Dec, 2010)

.... The state government after due consideration of the matter has also found it expedient that the diagnosis or suspicion of cancer should be reported to the appropriate authority for early detection and treatment of disease.

Therefore, cancer disease is notified for purpose of registration and all persons concerned in hospitals (private and public) nursing homes, pathological labs, radiology centres, clinical establishments and institutions imparting medical education and providing diagnostic and or therapeutic services and any other health care related services shall report diagnosed or suspicious cases of cancer to the Director, Chittaranjan National Cancer Insitute, Kolkatta in the proforma available with Chittaranjan National Cancer Institute within a period not exceeding three weeks from the date of diagnosis or the date on which the suspicion arose.

Secretary,
Health and family welfare, Government of West Bengal.

Places where state permission to collect data on cancer has been given
(The excerpts from the Governmental Orders are reproduced below)

1. KERALA

(Principal Secretary of Health – D O No.398/HS/2011 dated 28/12/2011)

This has a reference to the meeting held on 30th Nov. 2011 at the RCC regarding improvement of caner registration in Thiruvananthapuram District. In the meeting all the District health authorities were requested to provide information on cancer cases diagnosed at their hospitals in a prescribed format. Providing the necessary data is extremely useful for improving cancer control through better information about cancer pattern. Hence I request you to co operate with the Thiruvananthapuram Cancer Registry located at the RCC. The identity of the patient will not be revealed or utilized for any other purpose except for the analysis of the data.

Principal Secretary,
Health and Family Welfare, Government of Kerala.

2. TAMIL NADU

(G.O. (Ms) No. 132 Dated 17/04/2012)

Cancer – Tamil Nadu Cancer Registry Project- Collection of data on cancer cases from hospitals both in Government and Private by Cancer Institute, Adyar. Permission granted- orders issued ORDER: The government have carefully examined the request of the Chairman, Cancer Institute. (WIA) Adyar, Chennai, based on the recommendation of the Director of Public Health and Preventive Medicine and the Director of Medical Education and they accordingly issue the following orders.

a. The project is called as the Tamil Nadu Cancer Registry Project (a Joint project of Cancer Institute. Adyar and the Department of Health and Family Welfare, Tamil Nadu)

b. The Chairman Cancer Institute (WIA) Adyar, Chennai is permitted to collect data on cancer patients in all Government Hospitals under the control of Directorate of Medical Education/ Directorate of Public Health and Preventive Medicine/ Directorate of Medical and Rural Health Services, including ESI hospitals and in all hospitals laboratories and Nursing Homes under private sector, private practitioners. Data will also be collected from cancer screening programmes/ insurance schemes under the Government/Private sectors.

c. The Private Hospitals / Laboratories / Nursing Homes / Private practitioners are also requested to disseminate the information regarding the cancer patients under their control to the Tamil Nadu Cancer Registry and

d. The collection of data is subject to the following conditions:-

I. The collection of data should not be detrimental to the normal functioning of the hospital and the data should be utilized only for research purpose.

II. There should not be any extra expenditure to the Government and no additional staff is sanctioned to this purpose.

III. The data collected should not be published in the News paper or any media without prior permission of Government and

IV. Strict confidentiality should be maintained on the identity of the patients.

By order of the Governor,
Principal Secretary to Government

A SMALL NOTE ON TOBACCO

Dr. Hughbert Dkhar, Principal Investigator Cancer Atlas in North East and
Co Investigator Meghalaya PBCR, Nazareth Hospital, Shillong, Meghalaya

It is a matter of concern that India is the second world's largest consumer of tobacco products. Consumption of tobacco in various forms (smokeless tobacco, smoke tobacco) is a major threat to public health. Tobacco related deaths globally are about 5.5 million persons each year. There is loss of human life besides, huge social, economic and environmental costs. India alone contributes one million deaths each year. This shows that tobacco related deaths are one amongst the leading causes of preventable deaths in the world as well as in India. The epidemic of tobacco use in India is spreading far and wide, affecting all strata of people, leading to an increased burden in health related issues and is harming economy. How can we stop this menace? We can tide over this crisis, if we have a will to do so.

At what age do people start smoking?

Some are daily smokers, some smoke occasionally. The age at which people start smoking varies. The mean age at initiation of smoking in India is 17.9 years. Table 1 shows the proportion of subjects by the different ages at initiation of smoking among the daily smokers.

Table 1 : Proportion (%) of subject by ages at initiation of smoking among daily smokers

Age of initiation of smoking (in years) – daily smokers	Percentage
15 years	14%
15-17 years	26%
18-19 years	21%
After 20 years	39%

Prevention is better than cure goes the saying. In spite of the well known facts and well documented legislations on tobacco sales and its usage, having banned smoking in public places, having banned tobacco advertisements etc, still we see an increasing trend of this epidemic. We are the citizens, who are good at law making but also the best in law breaking. We are a nation in a great hurry: if the assets we have, are not gainfully used, they will turn out to be colossal liabilities. Let us wake up and say NO to tobacco in any form.

Sale of different forms of an indigenous tobacco, in one of the village market in Meghalaya

A few slogans, which can be used as a warning in campaigns against tobacco use

"If you smoke or take tobacco, you will not go to hell, but you will smell as if you have been there"

" If you follow the style or fashion of tobacco consumption, Cancer will follow you soon"

" If you smoke, your life will turn into ashes"

"End this bad habit now, before it is too late. Tobacco you are not my hero"

Reference: Global Adult Tobacco Survey, India 2009-2010. Ministry of Health and Family Welfare, Government of India

FOREWORD - FIRST ANNUAL REPORT OF NCRP, 1984

Inserted on the advice of Mr. P. Gangadharan

I am delighted that the Annual Report of the National Cancer Registry Project is being published and offered to all those who have the control of cancer at heart. In order to engage in effective control operations, it is necessary to have an adequate knowledge based on the predominant types of cancer in India - their evolution, natural history, the factors associated with their genesis, the age groups that are affected, their response to various modalities of treatment and several other related matters. It is only when we have reasonable knowledge of these issues that we would be able to navigate our control efforts rather than drift along.

Registries ring a bell. Traditionally, they collect a large volume of information but such an exercise will be sterile unless it is coupled with a social purpose. There is a tendency in the institution of registries to collect a wealth of information, but it is important to be highly selective in the items of information that one is collecting. Registries are valuable in providing information on time trends with reference to a particular disease entity or a group of such entities. It is well - known for example that in so far as cancer is concerned, the incidence and the types of cancer vary over a period of time, as a result of social and conomic development. While some of the existing cancers may go down in their frequencies, new forms may appear and increase in incidence. Properly structured, it is obvious that Registries can be valuable adjacents to a control programme and help in mounting prudent programmes of prevention and early detection within the resource constraints.

A perusal of this report will reveal that in all regions of the country without exception a large bulk of the cancers prevalent in men and women in India are of a preventable nature. For the first time we are able to get a glimpse of the predominant forms of cancer in different parts of India, thus enabling us to move towards preparing a Cancer Atlas for the country as a whole. The material collected so for is rewarding and beyond our expectations. By locating the registries in different regions with varying life styles, much valuable information about possible causative factors has been obtained. The new information that has come to light in a very short period has already served as a substratum for control of each cancer and several expert groups are now engaged in the formulation of the Seventh Fiver Year Plan in the field of cancer control.

I would like to pay a tribute to Dr. L.D. Sanghvi, Dr. Usha K. Luthra and a number of scientists who are working in the ICMR Cancer Registry System. The manner in which this Project has taken off augurs well for the future.

(V. Ramalingaswami)
Director - General
Indian Council of Medical Research
New Delhi - 110 029

"Registries ring a bell" says Ex-DG ICMR in 1984. In return, after more than 25 years, it is expected that the write-up would ring bells in registries, especially newer ones. The registries have been collecting voluminous information. But, as the author says, "such an exercise will be sterile if not coupled with a social purpose". Registries must deem it as their social responsibility to disseminate the collected information by exploring all the avenues: scientific publications, lectures, posters, media reports, etc.

HOSPITAL BASED CANCER REGISTRY, BARSHI

Principal Investigator – Dr. B.M. Nene **Registry In-charge – Mr. N.S. Panse**

Since the year 1987, a population-based rural cancer registry (RCR) has been functioning at Barshi under the National Cancer Registry Program and financial support by Tata Memorial Hospital, Mumbai. The registry is situated at Nargis Dutt Memorial Cancer Hospital (NDMCH), Barshi, Solapur district, Maharashtra. This is the only well equipped hospital in the rural area and this institute is one of the major sources of registration for RCR.

The Hospital administration and director of NDMCH, Dr. Nene, who is Co-Principal Investigator of RCR, Barshi, decided to start a Hospital Based Cancer Registry (HBCR) for information and other research purposes. The

Table 1: Descriptive statistics on cancer cases, HBCR, NDMCH, 2008-2011

YEAR	MALE	%	FEMALE	%	TOTAL
2008	1170	46.91	1324	53.09	2494
2009	1251	46.61	1433	53.39	2684
2010	1310	47.64	1440	52.36	2750
2011	1322	48.07	1428	51.93	2750

Table 2: Common Cancers, HBCR, NDMCH, Year 2011

MALE				FEMALE			
ICD-10	Site	Number of Cases	%	ICD-10	Site	Number of Cases	%
C02	Tongue	103	7.8	C53	Cervix	481	33.7
C06	Buccal Mucosa	100	7.6	C50	Breast	259	18.1
C42	Leukemia	83	6.3	C56	Ovary	116	8.1
C34	Lung	73	5.5	C15	Oesophagus	51	3.6
C15	Oesophagus	70	5.3	C34	Lung	45	3.2
C32	Larynx	53	4.0	C02	Tongue	40	2.8
C12	Pyriform fossa	47	3.6	C16	Stomach	31	2.2
C22	Liver	46	3.5	C42	Leukemia	30	2.1
C03	Gum	45	3.4	C06	Buccal Mucosa	23	1.6
C20	Rectum	37	2.8	C20	Rectum	19	1.3
C00-C97	All remained sites	665	50.3	C00-C97	All remained sites	333	23.3
TOTAL		**1322**	**100**	**TOTAL**		**1428**	**100**

working of registry started in January 2008. The descriptive statistics on cancer cases registered is given in Table 1. The work of HBCR is going on under the supervision of RCR. Medical abstraction and coding are done by a trained medical practitioner, Dr Milind Bhujabal and the result of HBCR is published in annual report of hospital. *Now we want to link with NCRP.*

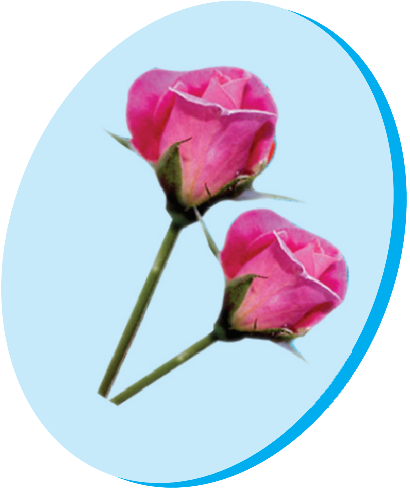
In 2011, the HBCR registered a total of 2750 cases, out of which, 1322 were males and 1428 females. Since NDMCH is a well recognized cancer hospital, patients from all parts of Maharashtra and neighboring states like Karnataka and Andhra Pradesh, attend for expert care, opinion and treatment. As per 2011 data, oral cavity was the leading site among males followed by lung, esophagus and larynx; in females, cervical cancer is the leading site followed by breast, ovary and esophagus (Table 2). The proportion of treatment completion among males was 68% and 73% among females; more than 70% cases have microscopic confirmation.

HBCR data is very useful for PBCR: RCR covers three thesils and an additional two districts are covered by expanded RCR. For both areas, NDMCH remains as the main source of data collection. HBCR is very useful for cross checking incomplete and follow up information.

OBITUARY

It is with deep regret we bring to you, the news of the untimely sad demise of **Dr. A.P. Kurkure,** Honorary Secretary and Managing Trustee, Indian Cancer Society (ICS) and Principal Investigator of Cancer Registry Division, ICS, on 14th July 2012. He was a world renowned breast and gynecological cancer surgeon. He passed away at the age of 61 after a two year bravely fought battle with colon cancer leaving his family, friends and colleagues greatly bereaved.

Internationally, **Dr.Kurkure** served for 10 years on the Board of the International Union Against Cancer (UICC), Geneva, Switzerland. He was an active member of the Executive Committee of the Global Cancer Control Institution of the United Nations. He did pioneering research work in early detection of breast cancer and collaborated with the World Health Organization in the preparation of a digital atlas and quick reference chart for breast cancer.



TAMIL NADU STATE TO SET UP CANCER REGISTRY

The State will have a cancer registry to collect details of all cancer cases in Tamil Nadu, Health Minister V.S. Vijay informed the Assembly on Thursday. *(http://www.thehindu.com/news/article3308167.ece)*

This is pursuant to the concerted efforts of Dr. V. Shanta, Chairman, Cancer Institute (WIA), Chennai and her team. An administrative order (G. O. (Ms) No. 132 of the Health and Family Welfare (G) Department dated 17.04.2012) has been issued to facilitate the commencement of the "Tamil Nadu Cancer Registry Project (TNCRP)" as a joint project of the Cancer Institute (W.I.A), Chennai and the Department of Health and Family Welfare, Government of Tamil Nadu, Chennai. TNCRP also has the unique honor of emerging as the cancer registry to cover a population of 72 million, the largest in the world.

TNCRP is aimed at generating reliable cancer incidence and burden annually based on enumeration of all new cancer cases occurring in Tamil Nadu from 2012. The state is already served by two PBCRs covering Chennai city and Dindigul district. But, cancer information from other areas of Tamil Nadu was conspicuous by its absence, till date. The advent of TNCRP is expected to usher in an era of knowledge acquisition on cancer pattern prevailing even in the remotest corners of the state. TNCRP operations are undertaken by the cancer registry department at the institute and data collection has commenced. Case finding is carried out by a mixture of active and passive methods from multiple sources dealing with cancer patients or information, situated all over Tamil Nadu and outside.

It is heartening to see that the long drawn efforts to get cancer as a notifiable disease is beginning to fructify into action and TNCRP can be seen as the first step. It is sincerely hoped that this will provide a realistic framework for evolving a comprehensive state action plan for effective cancer control in Tamil Nadu.

AHMEDABAD

Ahmedabad district (rural) and urban agglomeration

Meeting(s) organized

The registry convened its 1st advisory committee meeting attended by 8 members on October 21, 2011 at GCRI, Ahmedabad to review the progress and future plans. A representation has been made to the Principal Secretary, Health and Family Welfare department, government of Gujarat, for making cancer a notifiable disease.

Meetings attended

Dr. Parimal Jivarajani spoke on "Cancer: Local epidemiology, etiology and risk factors" in a CME on Cancer organized by the department of Medical and Paediatric Oncology, GCRI, on February 12, 2012 at Ahmedabad. He was invited to attend the review meeting on "Methodology of Cancer Registries" with special emphasis on data quality practices, held at the Cancer Institute (WIA), Chennai and funded by IARC Hub at TMH, Mumbai. He along with Mr. Himanshu V. Patel and Mr. Jayesh B. Solanki were delegates in the statistics workshop on Oncology Clinical trials organized by Lilly Oncology in Ahmedabad, on March 24, 2012. Mr. Himanshu V. Patel was a delegate in the UICC-IARC-TMH workshop on, "Cancer registration and descriptive epidemiology: principles and methods", held at Mumbai in March 2012.

BANGALORE

Welcome

Mr. C.R. Vijay, has joined as Assistant Professor in the Department of Epidemiology and Biostatistics, Kidwai Memorial Institute of Oncology (KIMIO), Bangalore, in the month of July 2012. We welcome him into the family of cancer registries.

Invited talks

Dr. C. Ramesh participated as an invited speaker delivering lectures covering topics in Epidemiology (5), Registry Operations (4) and Biostatistical Methods (3) in wokshops/ conferences conducted by various institutions / organizations.

Meetings

Dr.M.Vijayakumar, Director, KIMIO, participated in the meeting of Directors of RCCs convened by the ministry of Health and Family Welfare, GOI, at New Delhi, on September 13, 2012, that deliberated on starting of HBCRs in all RCCs in India.

Dr. M. Vijayakumar led the team comprising Dr. C. Ramesh, Mr. D.J. Jayaram and Mr. K.V. Krishna Reddy, for presenting registry findings in the NCRP workshop on "Patterns of Care and Survival Studies" held during February 7-9, 2012 at NCDIR, Bangalore.

Dr. C. Ramesh, Mr. K.V. Krishna Reddy, Mr. B.V. Gopalakrishnappa, were invited to attend the review meeting on "Methodology of Cancer Registries" with special emphasis on data quality practices, held at the Cancer Institute (WIA), Chennai and funded by IARC Hub at TMH, Mumbai.

BARSHI

International visitors

Dr. Freddie Bray, Deputy Head and Dr. Maria Stella De Sabata, Project Manager, Cancer Information Section, IARC, Lyon, France and along with other international visitors from Sri Lanka, Thailand and Indonesia, visited Rural Cancer Registry, Barshi on 2nd October 2012. They observed case-finding activity in the village, attended Gram Panchayat and Primary Health center meeting, visited cancer patients' houses for confirmation of residence status and the cause of death, as applicable. The visitors also perused the registry records and attended the health education program at different villages. They visited two major sources viz. JMH and Hiremath hospital and observed the medical record systems in these hospitals and the method of data collection. This formed a major part of training for the international visitors from newer registries.

Dr. F. Bray, other international and TMH visitors with RCR and Barshi Cohort Staff

BHOPAL

Dr. Neelkamal Kapoor has supervised the dissertations of two MBBS students who attended the International Summer School of Oncology held in University of Groningen, Netherlands. She is also a for MBBS student registered in the Summer Studentship of Indian Council of Medical Research the titled of the project is "Knowledge and attitude of school girls towards female cancer".

Mr. Atul Shrivastava delivered a talk on "Trends of Cancer in Bhopal" in the CME organized by the Association of Private Medical Practitioner of Bhopal. He attended the Masters Trainer on FIC and ICD–10 conducted by the Ministry of Health and Family Welfare, Government of India at Mohali, Punjab, in February 2012 and participated as faculty in three training courses on ICD-10 organized by Central Bureau of Health Intelligence, Govt. of India at Bhopal.

Dr. Neelkamal Kapoor and Atul Shrivastava participated in two Cancer and Tobacco awareness programs for school going children in the months of July and August 2012.

CHENNAI

Award

Dr. R. Swaminathan was awarded "PhD with honours" in Epidemiology by the University of Tampere, Finland, for his dissertation titled, "An evaluation of survival of cancer patients based on registry data from low or medium resource countries" on May 4, 2012. This is his second PhD degree following his first in statistics.

Events organized/conducted

A meeting of the deans of medical colleges and heads of departments of pathology/oncology services in teaching hospitals in Tamil Nadu was convened on June 2, 2012, by the Chennai registry at the institute with active coordination and support from the Directorate of Medical Education, government of Tamil Nadu. The meeting focused on data collection mechanisms on incident cancer cases for the state cancer registry and was attended by 47 delegates from 27 medical institutions all over Tamil Nadu besides registry staff.

The registry department at the institute was entrusted with undertaking a survey of more than 5,000 employees of affiliated organizations under Department of Atomic Energy, government of India at Kalpakkam, to

estimate the prevalence of cancer and other related attributes.

Training imparted

Mr. Wael Ahmad D. Shelpai, Cancer Registry Data Analyst, King Hussein Cancer Center, Jordan, visited Chennai cancer registry for intensive training in cancer registration especially follow up methods, descriptive epidemiology and survival analysis under UICC ICRETT fellowship for one month in Jan-Feb 2012.

International visits

Dr. R. Swaminathan, as one of the editors of IARC Scientific Publication series CI5 Vol 10, participated in the editorial board meetings during March 3-5 and November 14-16, 2012 in Lyon, France. He was also invited as a plenary speaker in the session on Asian Pacific regional reports on cancer in International Cancer Control Congress, Seoul, Korea, during November 3-5, 2011.

Fellowships

M. Panneerselvam, Cancer Registrar, was awarded the Connie-Percy Travel Fellowship to present a poster titled, "Feasibility study of determining clinical tumour stage information in Chennai registry in India" and R. Selvakumaran, Senior Investigator, was awarded IACR Fellowship to present a poster titled, "Population survey for estimating completeness of cancer registration in rural Dindigul district in South India" at IACR 2012 meeting in Cork, Ireland.

Conferences/courses attended

Dr. R. Rama, Assistant Professor, was an invited speaker on "Medical records – An indispensable tool for cancer registry" at the 12th Annual National Conference on Medical Records organized by Rajiv Gandhi Cancer Institute and Research Centre in association with Health Records Association of India at Delhi during February 2-4, 2012.

Mr. P. Sampath, Statistical Assistant, Chennai PBCR, attended the 3rd international course on "Cancer registration and descriptive epidemiology: principles and methods", jointly organized by the UICC, IARC and Tata Memorial Hospital at Mumbai, India, during February 28 and March 4, 2012.

MEGHALAYA

Conferences organized

The 8th Annual Conference of Association of Radiation Oncologists of India (AROI), North Zonal Chapter, was organized at North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong, Meghalaya, during October 5-6, 2012.

MUMBAI, NAGPUR AND POONA

Course attended

Ms. Komal Rane, Office Assistant, Ms. Shweta Jadhav, Computer Assistant and Ms. Seema Shirwadkar, Computer Assistant from Mumbai Cancer Registry and Mrs. Rekha Bhagat, Social Investigator, Mrs. Rekha Patil, Social Investigator from Nagpur Cancer Registry Division, had attended the UICC-IARC-TMH course on Cancer Registration and Descriptive Epidemiology: Principles and Methods, held during 28th February – 2nd March 2012 at Mumbai.

Project

Poona Cancer Registry, a satellite registry of Mumbai Cancer Registry, is doing a collaborative Project with National AIDS Research Institute, Pune. As a progress note, an abstract titled "Spectrum of Cancers in Persons with HIV in India: Early Results from computerized HIV and Cancer Registry Match Study in Pune, India" has been sent for publication.

MUMBAI HBCR

Tata Memorial Hospital Cancer Registry

Programs (TMHCRP)

Tata Memorial Hospital has initiated setting up of population based cancer registries in different parts of India under the Tata Memorial Hospital Cancer Registry Programme (TMHCRP). This was conceived by the Director, Tata Memorial Centre as a part of the Department of Atomic Energy's initiative for Health Care.

Under this TMHCRP programme, the first population registry was setup in Ratnagiri district in Maharashtra in the year 2009. The registry is located in B.K. L.Walawalkar Hospital, Dervan, Chiplun, Ratnagiri district, who are collaborators with Tata Memorial Hospital in the Outreach Screening Programme that is operational since 2003. Subsequently, a second population registry was setup in Sindhudurg district in 2010. Reports for these PBCRs will be shortly published.

As a part of the commitment to DAE, 4 more Population registries were set up in January 2012 in the areas where nuclear power stations are located; they are Karwar registry in Uttara Kannada district, Karnataka, Rawatbhata registry in Chittorgarh district, Rajasthan, Kakkrapra registry in Surat district, Gujarat and Tarapur registry in Palghar, Maharashtra.

Demographic and Health Profile Projects

- A general health checkup project has been initiated in the Uttara Kannada district of Karnataka in March 2012. The main aim of this project is to conduct Health Check-up for the general population residing in the 16kms radius of the Kaiga Generating Station. The total target population is approximately 30,000. Special team of doctors, nurses and health workers were trained at TMH before starting the project. Till date more than 3000 people have been examined. The project is expected to be completed in 2013.

- A general health checkup project has been initiated in the Rawatbhata, Chittorgarh district of Rajasthan in September 2012. The main aim of this project is to conduct Health Check-up for the general population residing in the Rawatbhata Block. The total target population is approximately 100,000. Special team of doctors, nurses and health workers were trained at TMH before starting the project. Till date more than 1000 people have been examined. The project is expected to be completed in 2015.

SIKKIM

Mr. Saroj Deep Sapkota attended the first meeting of all collaborators at the Cancer Institute (WIA), Chennai, on February 22, 2012, to discuss the study on "Methodology of Population Based Cancer Registries in India". It was a collaborative research project of the International Agency for Research on Cancer Lyon, France (IARC) and International Association of Cancer Registries (IACR), Lyon, France.

Mr. Pranay Giri attended the UICC-IARC-TMH course on "Cancer Registration and Survival: Principles and Methods" from 28th Feb to 2nd March 2012 at Tata Memorial Hospital Mumbai.

Entries of core proforma both for Incidence and Mortality for the year 2011 has been completed and sent to coordinating unit Bangalore.

Presently we are striving towards real time entry of 2012 data.

IARC REGIONAL HUB FOR CANCER REGISTRATION, MUMBAI

The International Agency for Research on Cancer (IARC), within the framework of the Global Initiative for Cancer Registry (GICR) development in low-and middle income countries, has established its regional hub at Tata Memorial Centre (TMC), Mumbai. This hub is led by Dr. R. Dikshit (Principal Investigator) and Dr. A.M. Budukh.

Dr. C.P. Wild, Director, IARC, together with Dr. R.A. Badwe, Director, TMC and Dr. F. Bray, Deputy Head, Cancer Information Section, IARC, inaugurated the hub on October 1, 2012 at TMC, Mumbai. Other dignitaries included Dr. A. Garg, Joint Secretary, Ministry of Health and Family Welfare, government of India, New Delhi; Dr. P.K. Singh, Deputy Director, WHO Office for South-east region, New Delhi; Dr. P. Rajaraman, Director, South Asia Program, NCI Centre for Global Health, New Delhi; Dr. A. Nandakumar, Director In-charge, NCDIR (ICMR), Bangalore; Dr. R. Swaminathan, Cancer Institute (WIA), Chennai; Mrs. S. Koyande, Mumbai PBCR. The registry directors from Indonesia (Dr. Sinuraya), Mongolia (Dr. Purevsuren) and Sri Lanka (Dr. Paranagama) graced the occasion.

Inauguration of the IARC Regional Hub for Cancer Registration: From left – F. Bray, R. Dikshit, C.P. Wild, R.A. Badwe, A. Garg, P.K. Singh

A key aim of the Hub is to provide the necessary local scientific and technical expertise to support and expand population based cancer registration in Central, South, East and South-East-Asia. The activities of the Hub are summarized below:

TRAINING

- Training in establishment of cancer registry, data abstraction, coding and data analysis
- Training for CanReg5 users via webinar or by site visits

SUPPORT FOR REGISTRATION

- Serving as the first point of contact for registries and to answer queries
- The registries can post their queries (tmcepi.gov.in – website development is in process)
- Support and advice on CanReg5, registration methods, coding and classification practices

COLLABORATIVE RESEARCH

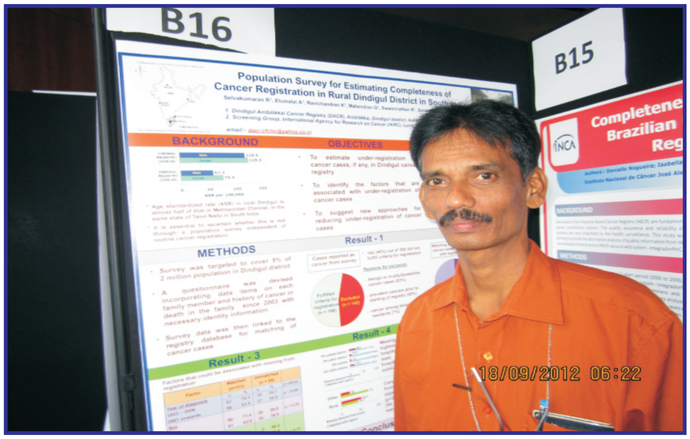
- Fostering collaboration with cancer registries in the region through descriptive and analytic studies where feasible

NETWORKING

- Strengthening of links with cancer registries in the region under IACR
- The development of roster of experts in the region who may serve as consultants for the HUB
- An active role in fostering regional networks of registries

34th IACR 2012 ANNUAL MEETING

The 34th annual meeting of the International Association of Cancer Registries (IACR) was held in Cork, Ireland, during September 17-19, 2012. Six delegates from India participated. Dr. A. Nandakumar deliberated on NCDIR activities with special emphasis on POC project while Atul Shrivastava spoke on cancer trends in Bhopal. The poster by R. Selvakumaran, Senior Investigator from Dindigul Ambilikkai Cancer Registry and titled “Population survey for estimating completeness of cancer registration in rural Dindigul district in South India” was awarded the “silver medal” among three best posters out of 229. M. Panneerselvam, Cancer Registrar, presented a poster demonstrating the feasibility of collecting stage information in Chennai PBCR. Dr. A.C. Kataki participated as an invited delegate and R. Swaminathan attended the IACR Executive Board meeting as IACR representative for Asia besides chairing a scientific session in the main meeting. For more details, please visit http://www.iacr2012.org/



The next IACR annual meeting is scheduled to be held in Buenos Aires, Argentina during October 21-23, 2013. Financial support is available for a limited number of participants to attend the meeting. For further announcements, please visit *http://www.iacr.com.fr/*

INTERNATIONAL COURSE ON CANCER REGISTRATION, MUMBAI

A course on Cancer registration and survival: principles and methods, was organized by IARC Cancer Registration Hub – Mumbai from February 28 to March 2, 2012 at Tata Memorial Centre Mumbai. The participants were from Bhutan (1), India (20), Indonesia (2), Jordan (1), Nepal (1), Philippines (2), Sri Lanka (2), Thailand (2), and Yemen (2).

The faculty included F. Bray, I. Soerjomataram and M. Ervik from International Agency for Research on Cancer, Lyon, France; R. Swaminathan from Cancer Institute (WIA), Chennai, India; R. Dikshit and A.M. Budukh from Tata Memorial Centre, Mumbai, India

Faculty and participants: Course on cancer registration, Mumbai, 2012

IARC SUMMER SCHOOL, JUNE – JULY, 2012

Traditionally, the summer school on Cancer Registration and Epidemiology, conducted by the International Agency for Research on Cancer, at Lyon, France, every year, attracts several participants from India, especially cancer registries. This year, the course was held during June 18 – July 6, 2012. Mr. A. Elumalai, Dindigul Ambilikkai Cancer Registry; Dr. Anita Gadgil, BARC hospital, Mumbai; Dr. Y.K. Sashikanth, J.N. Medical College, Belgaum, Karnataka, were the delegates from India, who attended this course.

This year, UICC and IARC are launching a joint Development Fellowship Award in cancer epidemiology. The objective of this award is to allow one of the most promising participants of the IARC Summer School to return to IARC and spend a period of up to three months in one of IARC's Research Groups to receive further training and/or to develop research collaboration.

IARC invites applications from interested candidates, especially cancer registrars from low or medium resource countries, for the course in 2013. Financial support is available for a limited number of participants. For application form and more details, contact *cor@iarc.fr* or visit *www.iarc.fr*

PUBLICATIONS

By registry personnel in journals using registry data

Datta K, Choudhuri M, Guha S, Biswas J. Breast cancer scenario in a regional cancer centre in Eastern India over eight years--still a major public health problem. Asian Pac J Cancer Prev. 2012;13(3):809-13.

Dikshit RP, Yeole BB, Nagrani R, Dhillon P, Badwe R, Bray F. Increase in breast cancer incidence among older women in Mumbai: 30-year trends and predictions to 2025. Cancer Epidemiol. 2012;36(4):215-20.

Dikshit RP, Nagrani R, Yeole B, Koyande S, Banawali S. Changing trends of chronic myeloid leukemia in greater Mumbai, India over a period of 30 years. Indian J Med Paediatr Oncol. 2011;32(2):96-100.

Manoharan N, Julka PK, Rath GK. Descriptive epidemiology of primary brain and CNS tumors in Delhi, 2003-2007. Asian Pac J Cancer Prev. 2012;13(2):637-40.

Nooyi SC, Murthy NS, Shivananjaiah S, Sreekantaiah P, Mathew A. Trends in rectal cancer incidence--Indian scenario. Asian Pac J Cancer Prev. 2011;12(8):2001-6.

Swaminathan R. An evaluation of survival of cancer patients based on registry data from low or medium resource countries. Acta Oncol 2012; 51(7): 960.

Verma Y, Pradhan PK, Gurung N, Sapkota SD, Giri P, Sundas P, Bhattarai BN, Nadayil D, Ramnath T, Nandakumar A. Population-based cancer incidence in Sikkim, India: report on ethnic variation. Br J Cancer. 2012;106(5): 962-5.

Other publications by registry personnel

Are C, Rajaram S, Are M, Raj H, Anderson BO, Chaluvarya Swamy R, Vijayakumar M, et al. A review of global cancer burden: Trends, challenges, strategies and a role for surgeons. J Surg Oncol 2012; doi: 10.1002/jso.23248. Epub ahead of print

Krishnamurthy A, Vijayalakshmi R, Gadigi V, Rama R, Sagar TG. The relevance of "Nonsmoking-associated lung cancer" in India: A single-centre experience. Indian J Cancer 2012; 49:82-8.

Nomura T, Adachi S, Ryo H, … Parida DK, Bersimbay RI. Evaluation of human risk in space environment and its protection of radiation late effects. Space Utiliz Research 2012;28:126-129.

Pallavi VR, Devi KU, Mukherjee G, Ramesh C, Bafna UD. Relationship between lymph node metastases and histopathological parameters in carcinoma cervix: a multivariate analysis. J Obstet Gynaecol. 2012; 32(1):78-80.

Parida DK, Devi P. Role of radiation therapy in the management of mycosis fungoides. Res Rev: J Oncol Hematol 2012;1:6-15.

Parida DK, Wakame K, Nomura T. Integrating complementary and alternative medicine in form of active hexose co-related compound in the management of Head and neck cancer patients. I J Clin Med 2011;2:588-592

Ramakrishnan AS, Sunil BJ, Rama R. Prognostic factors in patients with node-negative gastric cancer: an Indian experience. World J Surg Oncol. 2011;9:48.

Sankaranarayanan R, Swaminathan R. Verbal-autopsy-based projection of cancer deaths in India. Lancet 2012; 379(9828): 1770-2.

Seshadri RA, Srinivasan A, Tapkire R, Swaminathan R. Laproscopic versus open surgery for rectal cancer after neoadjuvant chemoradiation: a matched case-control study of short-term outcomes. Surg Endosc 2012: 26(1): 154061.

Swaminathan R. Doctoral Dissertation: An evaluation of survival of cancer patients based on registry data from low or medium resource countries. Acta Universitatis Tamperensis, 1724, Tampere, 2012, pp 1-99.

Thulaseedharan JV, Malila N, Hakama M, Esmy PO, Cherian M, Swaminathan R, et al. Socio demographic and reproductive risk factors for cervical cancer – a large prospective cohort study from rural India. Asian Pac J Cancer Prev 2012; 13(6): 2991-5.

Publications by others based on ncrp operations

Haroon A, Gupta S, Tyagi B, Farhat J. Estimation of denominators - a new approach for calculating of various rates in cancer registries. Asian Pac J Cancer Prev. 2012;13(7):3229-32.

Pathy S, Lambert R, Sauvaget C, Sankaranarayanan R. The incidence and survival rates of colorectal cancer in India remain low compared with rising rates in East Asia. Dis Colon Rectum. 2012;55(8):900-6.

Mattheij I, Pollock AM, Brhlikova P. Do cervical cancer data justify HPV vaccination in India? Epidemiological data sources and comprehensiveness. J R Soc Med. 2012;105(6):250-62.

Mohapatra PR, Punatar S. The battle against cancer: UID-linked cancer registry should replace existing registry in India. Natl Med J India. 2011;24(6):377.

Marwaha RK, Kulkarni KP. Childhood acute lymphoblastic leukemia: need of a national population based registry. Indian Pediatr. 2011;48(10):821.

Registry reports

Ahmedabad Rural Cancer Registry – Ahmedabad district. Report for the year 2008. Gujarat Cancer Research Institute, Ahmedabad, 2012.

Ahmedabad Rural Cancer Registry – Ahmedabad district. Report for the year 2009. Gujarat Cancer Research Institute, Ahmedabad, 2012.

Ahmedabad Population Based Cancer Registry – Ahmedabad Urban Agglomeration Area. Report for the year 2008. Gujarat Cancer Research Institute, Ahmedabad, 2012.

Ahmedabad Population Based Cancer Registry – Ahmedabad Urban Agglomeration Area. Report for the year 2009. Gujarat Cancer Research Institute, Ahmedabad, 2012.

Ahmedabad Population Based Cancer Registry – Gandhinagar district. Report for the year 2010. Gujarat Cancer Research Institute, Ahmedabad, 2012.

Ahmedabad Population Based Cancer Registry – Gandhinagar district. Report for the year 2011. Gujarat Cancer Research Institute, Ahmedabad, 2012.

Cancer Incidence and Mortality – Patan district. Report for the year 2011. Gujarat Cancer Research Institute, Ahmedabad, 2012.

Kurkure AP, Koyande SS, Thorat VR. Cancer Incidence and Mortality in Greater Mumbai, 2008. Indian Cancer Society, Mumbai, 2012.

Kurkure AP, Koyande SS, Thorat VR. Cancer Incidence and Mortality in Greater Mumbai, 2009. Indian Cancer Society, Mumbai, 2012.

Kurkure AP, Kamble KM,Koyande SS, Thorat VR. Cancer Incidence and Mortality in Nagpur City 2005-2009. Indian Cancer Society, Mumbai, 2012.

Kurkure AP, Shewalkar BK, Koyande SS, Thorat VR. Cancer Incidence and Mortality in Aurangabad City Agglomeration 2005-2009. Indian Cancer Society, Mumbai, 2012.

The Newsletter of NCRP

Volume XVII Number 1
November 2012