

# National Institute of Medical Statistics

## Annual Report

2015-16



1. Preface

2. Training/Workshops Organized

<b>1. Title: Launch ceremony of E-Module of Clinical Trials Registry- India( CTRI)</b>		
<b>Date</b> <b>24.9.2015</b>	<b>No. Of participants : 100</b>	<b>Sponsorship : WHO &amp; NIMS,ICMR</b>
<p><i>Objective: The objective of the launch of E module is to disseminate the information of registration of clinical trials being conducted in our country . To increase the awareness about the CTRI system.</i></p> <p><i>Topics Covered: Fourteen E Modules of CTRI were developed withand uploaded on the website <a href="http://www.ctri.nic.in">www.ctri.nic.in</a> to enable anyone who is interesting in conducting the clinical trial. In these modules the genesis about the registration of clinical trials , step wise step process of registration of clinical trial in CTRI, bottle necks during registration have been made available in different modules to enable registrant to register their trial smoothly.</i></p> <p><b>Picture if any</b></p>		
<p>Resource persons: Dr. Arvind Pandey, Director, Dr. Abha Rani Aggarwal, Coordinator, CTRI, Dr. Madhur Gupta, WHO representative ,Q3 IT and CTRI Team</p>		
		
<p><b>Dr Arvind Pandey addressing the august gathering</b></p>	<p><b>Secretary DHR &amp; DG, ICMR clicking the module and launch the modules</b></p>	

**Title: Training Workshop on Statistical Methods in Biomedical Research and Data Analysis Using Statistical Software (SPSS/R)**

**Date : 31 March 2016**

**No. Of participants : 23**

**Organized by: National Institute of Medical Statistics, New Delhi**

*Objective:* To enrich the knowledge and develop computational ability of researchers, scientists and biostatisticians who are working in various organizations i.e. medical research institutes, medical colleges and pharmaceutical organizations. It may help to understand the Statistical methods used in biomedical research and capacitate in application of statistical software for data analysis.

*Topics Covered :* Lectures on various topics of Statistical methods and Study design, Data management and preparation of data file for analysis, and hands on computer training for statistical computing was organized during the workshop.

Resource persons: Prof. Arvind Pandey, Dr. S. K. Benara, Dr. Abha Aggarwal, Dr. H. K. Chaturvedi, Dr. Anil Kumar, Dr. Tulsi Adhikari, Dr. Atul Juneja, Dr. Lucky Singh Dr. Sarita Nair and Mr. Jitenkumar Singh, Dr. B. K. Gulati and Mr. Gautam Kumar

**Training for Post Graduate students of Statistics:**

This training was organized by the Institute as requested by the HODs of Post Graduate Department of Statistics, Kurushetra University, Amity University, Banaras Hindu University, and Other Institutes such as TERI, PHFI etc..

*Objective:* The training programme is mainly focused on orientation of research work and practical knowledge to students and develop working skills of project work i.e. formulation of study, data collection mainly secondary sources, data analysis and preparing a short report. The programme is organized twice in a year i.e. June-July, 2015 and January, 2016.

Total Number of students: 22 in June-July, 2015 and 24 in January, 2016

### 3. Oration Lectures at NIMS

<b>First Prof. P.P. Talwar Oration Lecture by Prof. M.K. Bhan, Ex. Secretary , DBT, GOI</b>	May 12, 2015 at ICMR Conference Hall
<p>• First Prof. P.P. Talwar Oration Lecture was organized at ICMR on May 12, 2015 at ICMR Conference Hall. The lecture was delivered by Prof. M.K. Bhan, Ex. Secretary , DBT, GOI . Prof. N.K. Ganguly, Ex. DG,ICMR chaired the function.</p> <p>Dr. Arvind Pandey, Director NIMS, welcomed all the dignitaries on the dias followed by the short introduction of Dr. Talwar and Dr. Bhand.</p>  <p>Dr. Bhan is recipient of several awards: H.K. Firodia Award for Excellence in Science &amp; Technology, 2014, Padma Bhushan 2013, "Shanti Swarup Bhatnagar Award", 1990, for medical sciences, National Ranbaxy Award, 1990, for Medical Sciences, ST Achar Gold Medal of the Indian Academy of Pediatrics, 1984, for the best original research, S.S. Mishra Award of the National Academy of Medical Sciences, 1986, for the best unpublished research, Biotech Product and Process Development and Commercialization Award, 2003 and Pollins Foundation Research Award for US 100,000 (Year 2003).</p> <p>Dr. Bhan's research interests include Gut Microbiology, Nutrition-Infection Crosstalk, Diarrheal Disease, and Affordable Health Technology Development. He has over 200 publications in international peer reviewed journals. His research contributions include development of novel health technologies including, a rotavirus vaccine, low <i>osmolarity</i> ORS, zinc treatment for childhood diarrhea. He developed novel concepts for treatment of sick developing country children including IMNCI now in national program and treatment algorithms for persistent diarrhea in children. He has contributed significantly to establishing biological and clinical significance of zinc deficiency and its association with increased severity of mucosal infections.</p> <p>Dr Bhan championed the promotion of biotech sector in India, established many new institutes, organizations and clusters dedicated to medical technology and promoted innovation approaches such as biodesign. He believes in science with humanism.</p>	 <p><b>Dr. M K Bhan</b>, is currently, a National Science Professor at the Indian Institute of Technology, Delhi, Government of India and an Advisor to the World Health Organization. He is a fellow of Indian Academy of Science and the Third World Academy of Science. He is a Former Secretary to the Government of India, Department of Biotechnology, Ministry of Science &amp; Technology.</p> <p>Dr. M.K. Bhan is MBBS, MD Pediatrics, DSc. (Honorary), Fellow, Indian National Science Academy (FNA), Fellow, Academy of Sciences (F.ASc) and Fellow, Academy of Medical Sciences (F.A.M.S.)</p>

*Introduction to the Oration Lecture by Prof.P.P.Talwar*

Prof. P.P.Talwar shared his ideas on the evolution of health program in the country. He pointed out that new programs have been brought in without giving enough time for the old ones to be fully functional. No sincere effort, was made to assess and evaluate as to what



elements in the then-existing programs had been useful and what were not. The strengths and weaknesses were not analyzed adequately. Not enough have been done in the area of research in monitoring and evaluation. This was one important reason for slow progress of our health program and slow decline in the levels of our health indicators.

Existing literature supports that monitoring and evaluation could improve the output and outcome of the program by at least 25% .

*Oration by Prof. M.K.Bhan -Evaluation Research in Health, Perspective and Practice*

Dr Bhan started with an overview of the formation; implementation and redesigning of the research programmes followed by the definition and different components of the evaluation of National Health Programmes. He emphasised on the importance of programme evaluation specially in India.



After talking about definition, different components and the importance of programme evaluation, Dr. Bhan gave live examples of some of the national health programmes of India and other countries, its evaluations and the lessons learnt thereon.

Dr. Bhan also talked about various types of evaluation designs, their utility and limitations. Lastly he emphasized on the utilization of the findings of evaluation research, for Knowledge synthesis, transfer and integration requirement, for effective mechanisms to be developed for future India.

**2nd Prof. P.P. Talwar Oration Lecture by Prof. M.S. Swaminathan, UNESCO Chair in Ecotechnology**

27th November 2015 at ICMR  
Conference Hall

- *2nd Prof. P.P. Talwar Oration Lecture was organized on 27th November 2015 at ICMR Conference Hall. Prof. M.S. Swaminathan, UNESCO Chair in Ecotechnology delivered the oration lecture on Linking Agriculture with Nutrition and Health. Dr. Soumya Swaminathan, Secretary, DHR & DG, ICMR, presided over the function.*

**Oration by Prof. M.S. Swaminathan**

The programme started with the welcome of dignitaries on the dias, viz. Prof. M.S. Swaminathan, Prof. P.P. Talwar, Dr. Saumya Swaminathan, Dr. N.K. Ganguli, Dr. Padam Singh and Prof Arvind Pandey.

Prof. Pandey delivered the welcome address. Prof. P.P. Talwar addressed the august gathering and talked about oration award. He emphasized on the need of conducting research in the field of monitoring and evaluation of the health programmes going on in the country. The health indicators have started improving recently after a long wait. He emphasized that this success could have been achieved much earlier, if there was proper monitoring and evaluation of the health programmes. Prof Talwar reiterated that this is an



Prof. M.S. Swaminathan, one of the twenty most influential Asians of the 20th century, acclaimed by TIME magazine, following Mahatma Gandhi and Rabindranath Tagore from India and referred as "the Father of Economic Ecology" by the United Nations Environment Programme. According to Javier Perez de Cuellar, Secretary General of the United Nations, Prof. Swaminathan will

go into the annals of history as a world scientist of rare distinction". He held the chair of the UN Science Advisory Committee on the Vienna Plan of Action (1980), Chairman of the FAO Council (1981-85), President of the World Wide Fund for Nature (India) during 1989-96, National Academy of Agricultural Sciences (1991-96 and 2005-07) and Chairman, National Commission on Farmers (2004-06). He served as Director of the Indian Agricultural Research Institute (1961-72), Director General, ICAR and Secretary to the Government of India (1972-79), Principal Secretary, Ministry of Agriculture (1979-80), acting Deputy Chairman and Member Planning Commission (1980-82) and Director General, International Rice Research Institute, Philippines (1982-88). A plant geneticist by training, he has immensely contributed to Indian Agriculture and referred as the leader of the green revolution. He is Awardee of Padma Shri (1967), Padma Bhushan (1972), Padma Vibushan (1989), Ramon Magsaysay Award (1971), Albert Einstein World Science Award (1986), first World Food Prize (1987), Indira Gandhi Prize for Peace, Disarmament and Development (2000) and later for National Integration, the Mahatma Gandhi Prize of UNESCO (2000) and Lal Bahadur Shastri National Award (2007).

With 73 honorary doctorates, Prof. Swaminathan has been Fellow of several leading national and international scientific academies and currently holds the UNESCO Chair in Eco-technology. He was a Member of the Parliament of India (Rajya Sabha), during 2007-13. He chaired the High Level Panel of Experts World Committee on Food Security (2010-13). Conferred the Life Time Achievement Award at the 9<sup>th</sup> Nutra Summit in Bangalore. Bestowed with honour of Living Legend at number of forums.

an opportunity to promote such type of activities so that the programmes and its various components work at its optimum level.

Dr. Saumya Swaminathan presided over the function.

Prof. M.S. Swaminathan while giving his oration talk, remembered the time, when he was directly associated with ICMR, being the members of three committees of ICMR, viz, the National Population Policy Committee, The Preventable blindness committee and the Eradication of Leprosy by 2000. From each of the three committees, he highlighted the key points of reports of these committees.

From leprosy committee report, he pointed out that Kusht was declining during the period of Late Smt Indira Gandhi, and She was interested to eliminate the leprosy by the end of 2000. The committee emphasized to spread education and social empowerment of the kusht patients. Regarding the preventable blindness the mandate of the committee was to eradicate the preventable blindness by the year 2000.




*Prof. M.S. Swaminathan, UNESCO Chair in Ecotechnology delivered the oration lecture on Linking Agriculture with Nutrition and Health. Dr. Soumya Swaminathan, Secretary, DHR & DG, ICM, Prof.P.P Talwar, Dr. N.K.Ganguli Ex-DG ICMR, Dr. Padam Sing. Addl DG ICMR, Dr. Arvind Pandey, Director, NIMS were present on the dias.*

#### 4. Awards

Date	Award
<b>Dr. Lucky Singh</b>	
<b>Date:</b> May 11, 2015	<b>PhD Degree</b> <b>At:</b> International Institute for Population Sciences (IIPS), Mumbai
<b>Date:</b> October 19-30, 2015	<b>Full scholarship for attending workshop on “A stochastic process approach to agent-based modelling and simulation”.</b> <b>At:</b> Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany
<b>Date:</b> October 28-30, 2015	<b>Full scholarship for attending workshop on “The science of choice – How to model the decision making process”.</b> <b>At:</b> Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany



## 5. Foreign Visits

<b>Dr Arvind Pandey</b>	
March 14-16, 2016	Participation in the WHO Reference Group Meeting on Global Health Statistics and Verbal Autopsy Working Group <b>at Geneva, Switzerland</b>
<b>Dr. Tulsi Adhikari</b>	
24-26 Nov. 2015	<p>“12th SEA Regional Scientific Meeting of the International Epidemiological Association 2015 (IEA-SEACON 2015)”, Bangkok, Thailand</p> <p>Presented a paper on “Undernutrition among children under-two years in southern states of India: An examination of prevalence and risk factors”.</p> <p>The conference theme was “Ensuring Child and Maternal Health- Key to Universal Health Coverage”</p>
<b>Dr. Atul Juneja</b>	
27-30 July 2015	<p>3<sup>rd</sup> Asian Population Association Conference organized by University of Malaya held at Kuala Lumpur Malaysia. Visit supported by National Organising Committee of 3<sup>rd</sup> APA Conference and Scientific and Engineering Research Board, Department of Science and Technology Government of India.</p>  <p><i>With Organising chairman of APA conference Prof Awang Bulgiba Awang Mahmud, Deputy Vice-Chancellor (Academic &amp; International) / Provost, University of Malaya</i></p>
<b>Dr. Lucky Singh</b>	
Oct 19-30, 2015	workshop on “A stochastic process approach to agent-based modelling and simulation” at Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany
Oct 28-30, 2015	workshop on “The science of choice – How to model the decision making process” at Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany

## 6. Completed Studies

### C1: India HIV Estimation 2015

**Date of Initiation:**

**Date of Completion:**

**Funding Agency :**

**Introduction :**

**Findings :**

### C2: National IBBS

**Date of Initiation:**

**Date of Completion:**

**Funding Agency :**

**Introduction :**

**Findings :**

## 7. Ongoing Studies

### O1. Clinical Trials Registry - India( CTRI) [www.ctri.nic.in](http://www.ctri.nic.in)

Date of initiation: April 2006

Funding Agency: Intramural activity of NIMS

Background and objectives: The Clinical Trials Registry – India (CTRI) is a web based system ([www.ctri.nic.in](http://www.ctri.nic.in)) for registering clinical trials in India and its neighboring countries which are not having their own registry. It was launched on 20<sup>th</sup> July 2007 by DG ICMR and is housed at National Institute of Medical Statistics, Indian Council of Medical Research. It was a landmark event in the medical history of India, as it was first of its kind in the country. It was established with the **objectives**

- To establish a search portal which will also serve as a public record system by registering all clinical trials on health products that are drugs, devices, vaccines, herbal drugs and made available to both public and healthcare professionals in an unbiased, scientific and timely manner.
- To create a more complete, authentic, and readily available data of all ongoing and completed clinical trials
- To provide a corrective system against “positive results bias” and “selective reporting” of research results to peer review publication.
- Increase awareness and accountability of all the participants of the clinical trials and also for public access.
- To promote training, assistance and advocacy for clinical trials by creating database and modules of study for various aspects of clinical trials and its registration

Since its launch, more than 6000 trials have been registered, and details of these trials are freely viewable in the public domain.

### **Methodology**

A registry for clinical trials, Clinical Trials Registry –India (CTRI) is an online system for registering clinical trials conducted in our country. A web application was developed using open source technology i.e. PHP and MYSQL on LINUX platform. Web application is hosted at National Informatics Center (Shastri Nagar Data Center) and managed by National Institute of Medical Statistics. The Registry

is in production since 2007, anybody who wishes to conduct a clinical trial in the country would have to declare all items of the CTRI Trial Registration Data Set. The Registry collects information on all prospective clinical trials to be undertaken in India and make this processed information available to the public.

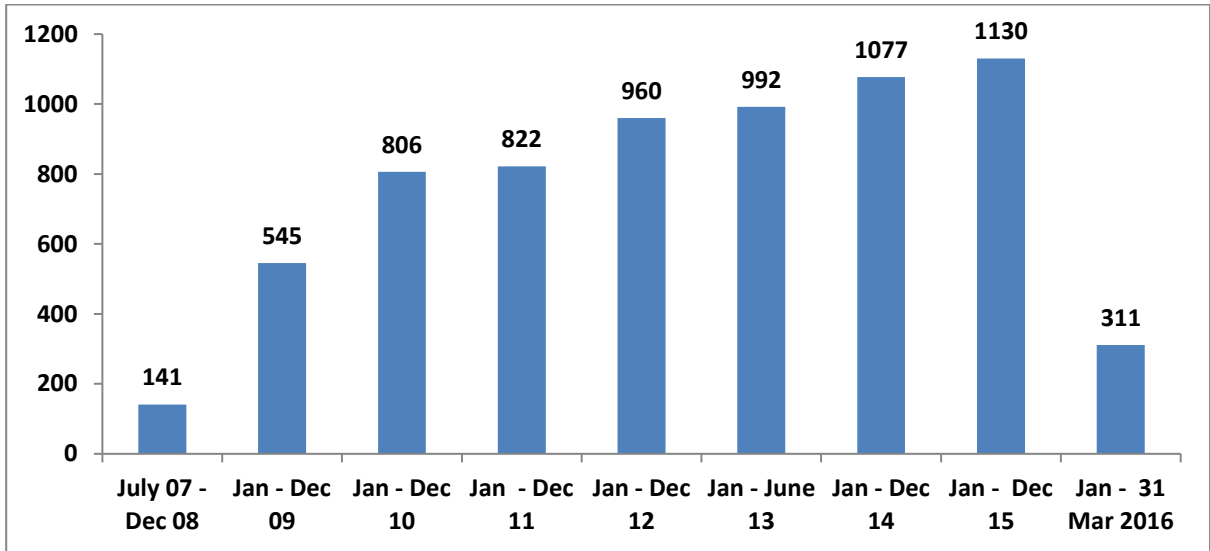
**Progress of the study :**

During the year under report **1124** trials have been registered from 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016 as compared to 1146 trials during 1<sup>st</sup> April 14 to 31<sup>st</sup> March 15. In addition every three months reminders are being sent to all registrants for updating the registered trials by them. Prior to the launch of new version of the software (during March 2011) about 1649 trials were registered. Of which about 90% of the registered trials have been updated as per the new version of the software.

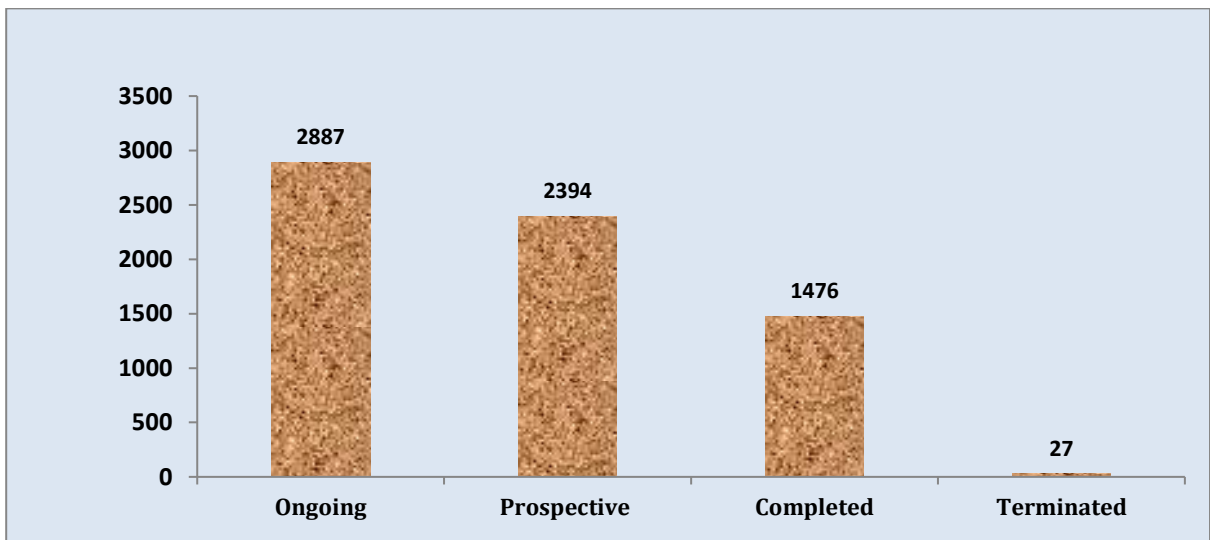
**Comparative status of CTRI till 31/3/ 2016 vs. till 31/3/2015**

	Till 31.3.2015	Till 31.3.2016
Number of Hits	>1033031	>12,30,000
Number of Registered Users	>10213	>12,360
Total Number of Trials Received	8859	11,078
Total Number of Trials Registered	5660	6,784
Number of Prospective Trials	1955	2394
Number of Ongoing Trials	2518	2887
Number of Completed Trials	1172	1476
Number of Terminated Trials	15	27
Number of Trials under review/awaiting approvals	1438	2,348
Number of Trials sent back for modifications after review	1761	1,946

Year wise trend of trial registration till 31<sup>st</sup> March 2016



Current Status of Registered Trials



## O2. NACO's HIV Sentinel Surveillance

**Date of Initiation:**

**Funding Agency :**

**Introduction :**

**Progress :**

## O3. Baseline Household Malaria Survey

**Date of Initiation:** 2014

**Funding Agency : MoHFW, New Delhi**

**Introduction :** Baseline household malaria survey is a collaborative project of the Institute with National Institute of Malaria Research, New Delhi. The Institute is involved to provide technical support for conducting the study in Phase II states namely Gujarat, Karnataka, Maharashtra & W. Bengal. The objective the study is **to assess the intervention coverage of National Malaria Control Programme started with the support of World Bank in some selected high endemic districts of these States.**

**Progress:**

The survey methodology, sample size and selection of PSUs for survey was finalized and presented in TAG meetings conducted in different dates during the project. The training of Trainers' and training to field staff was also conducted jointly with NIMR. The field work activities and guideline of survey including survey instruments were presented and discussed during the training. All the field staff were given class room as well as field training to orient them with all the step wise approach of conducting the survey i.e. Identification of location, mapping of village, house listing, procedure of segmentation, if needed, random selection procedure of households etc. including the skill of interview.

The survey in the selected PSUs was conducted by the trained field workers in the supervision of State survey agency and NIMR. After completion of data collection, all the filled survey instruments was checked and edited by the field supervisors and finally entered in the computer. The data analysis was carried out using the statistical software viz. SPSS ver. 20 and STATA ver.13.

The total coverage in the survey was 1739, 1602, 1738 and 1562 household with response rate 92.9%, 94.3%, 98%, and 97.6% in Gujarat, Maharashtra, Karnataka and West Bengal, respectively. Two week fever cases interviewed was 112 in Gujarat, 183 in Maharashtra, 289 in Karnataka and 196 in West Bengal. Statistical analysis of data completed and estimates of all the key indicators with tables are communicated to NIMR for finalization and preparation the project report. The same will be presented in TRG Meeting.

## O4: End Line Household Malaria Survey

**Date of Initiation:** 2014

**Funding Agency : MoHFW, New Delhi**

**Introduction :** The End line survey is conducted in five states viz Andhra Pradesh, Odisha, Jharkhand, Chhattisgarh and Madhya Pradesh. This is also a collaborative project of the Institute with NIMR, New Delhi to provide the technical support in conducting the survey and statistical analysis of data. The objective of study is to asses

**Progress:**

The Survey methodology including the sampling plan, selection of PSUs from the selected districts and PHCs of the state based on information related to sampling frame provided by NVBDCP. The plan of survey and survey instruments such as Household Schedule, Fever Two Weeks Survey Schedule, Today fever Schedule, ASHA Schedule, Death Schedule, Village Schedule was finalized after deliberation in several meetings with NVBDCP and World Bank. The field staff recruited for survey in each state was also given three days survey training including the field work for their better understanding before conducting the survey. The survey/field work was conducted in the supervision of senior Scientists of the respective state partner research institutes such as NIRTH, Jabalpur; RMRC, Bhubaneswar and NIMR field Unit, Ranchi as per the study protocol.

In each state, the 10 of PHCs was selected randomly using the Sampling frame of PHCs of selected districts under high endemic area and included for malaria control programme of world Bank. Further, 8 PSUs (villages/wards) was selected randomly from the each selected PHCs using the sampling frame of villages/wards. In total, 80 villages were selected for conducting the household malaria survey. After completion of data collection and field work, the data has been finally checked and edited before data entry in the computer.

Total household survey records included for analysis was 1745 in Chhattisgarh ,1698 in Madhya Pradesh,1543 in Jharkhand ,1701 in Odisha and 1716 in Andhra Pradesh. However, total today fever cases interviewed was 331 in Chhattisgarh,688 in Madhya Pradesh ,153 in Jharkhand, 490 in Odisha and 65 in Andhra Pradesh and two week fever cases was 822 in Chhattisgarh, ,1030 in Madhya Pradesh, 228 in Jharkhand, 418 in Odisha and 95 in Andhra Pradesh respectively. Statistical analysis of data completed and estimates of all the key indicators with tables are communicated to NIMR for Compilation and preparation the project report. The same will be presented in TRG Meeting for finalization.

## O5. Disease Burden due to Malaria

**Date of Initiation:** November 2014

**Funding Agency :** MoHFW, New Delhi

**Introduction :** The project on “Estimation of malaria burden in India: a prospective national study and validation of methodologies of burden estimation is a collaborative project of the Institute with NIMR. The Institute is involved right from the beginning to develop the project protocol and methodology with NIMR closely and presented the detail study design in the TRG meetings at different dates. Before initiation of the project, the methodology of the study was presented in the high level experts committee meeting especially constituted for final approval of methodology.

Progress:

Accordingly, all the districts of states was categorized three groups based on annual parasite incidence (API) of last three years i.e. API (2011, 2012, and 2013) districts. The district wise API data of last three years (2011 to 2013) of entire country was provided by NVBDCP. The three categories has been prepared i.e. High ( $API \geq 5$ ), Medium ( $2 \leq API < 5$ ), and Low ( $API < 2$ ) and two districts from each category has been selected as per the approved methodology. Further, in each selected districts, three PHCs are selected randomly and the population of each selected PHCs was kept about 65000 to 70000. In case the population of selected PHC was less than the required size, the adjacent PHC or Sub-center(s) was added to get the required size. On the contrary, if the population was more, the PHC was divided taking the Sub-centers and contiguous group of Sub-centers were selected randomly to form the required size of PHC. In total, about two lakhs sample was targeted as study population for the malaria surveillance. However, the death cases was also enumerated in the selected malaria surveillance study population as well as in the other adjoining PHCs not included for malaria surveillance with more or less same target population.

The manpower used for the malaria surveillance was about 10 to 12 Voluntary Surveillance Monitor(VSM) (i.e. one for each 5 to 6 thousand population) and one field worker for each PHCs and one Enumerator (death) and one Technician in each district i.e. Six Technicians, six Enumerators, 18 Field workers and about 200 VSM. All the project staff was given training by the PIs & Co-PIs for conducting the surveillance work and collection of information in the formats. The VSMS were trained to collect blood slide and RDT test.

The field work of malaria surveillance has been initiated in all the six districts simultaneously in the month of July-August, 2015 and all the fever cases were captured by VSMS at village/ward level of PHCs. They are also maintaining the village wise record of all the households of respective villages/area. However, the fever cases reported to public and private hospitals/clinics/pathological Labs was collected monthly by field worker.

The data of malaria surveillance at village/ward level has been collected by VSMS fortnightly and compiled monthly. The month wise record of all the active and passive surveillance data was checked and compiled by Technician and reported to the Central Unit(NIMS) for final checking and creating a database. The information related to death cases of the death study areas and surveillance areas are being captured separately using the verbal autopsy forms.

The first lot of six months (July,2015 to December, 2015) data has been received and compiled. The progress of data collection and reporting is monitored regularly by the PIs and Co-PIs.

## **O6. Project: Survey for Monitoring the National Non-communicable Diseases Targets 2015-16**

This is collaborative project of ICMR to monitor the national level Non-communicable disease related indicators. The main objective of the study is to provide national level estimates of target NCD indicators for monitoring and control of NCD diseases in India. The National Institute of Medical Statistics has been identified as the nodal agency for developing the sampling methodology and list of rural and urban Primary Sampling Units (PSUs) for conducting the survey including the field manual and data management plan.

The Institute has received the fund from WHO through ICMR to prepare and finalize the sampling document. The sampling methodology, field manual and list of PSUs has been prepared and presented in the Sampling Expert Committee for approval. A document on sampling design, field manual and list of Rural and Urban PSUs are prepared and submitted to ICMR.

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## **O6. Burden of Disease due to Cancer**

**Study Initiated: November 2014**

**Study Completed: March 2016**

**Funding: Intramural**

### **Objective**

To study the disease burden due to cancer in Indian population based on the data generated through National Cancer Registry Program of Indian Council of Medical Research in terms various approaches life time risk, premature mortality, magnitude, absolute cases.

### **Background**

With the demographic transition non communicable diseases like cancer have become a major cause for concern with the planners of health delivery system in midst of already existing communicable diseases. Non communicable diseases were estimated to claim more than 36 million lives worldwide in 2008. Major contributors to this burden were cardiovascular disease, cancer, chronic respiratory diseases, and diabetes. Cancer needs a policy with specificity as compared to other diseases because of heterogeneity. Cancer varies in its geographical distribution, etiology, and pathology. With the coming up challenges cancer could be considered as public health issue now.



In view of the increasing load it would be worth looking at the disease burden in terms of life time risk, persons years of life lost due to cancer (premature) mortality, It would also provide an idea about on an average how many years a person is dying prematurely as a result of the disease which otherwise would have averagely lived to the life expectancy. The change could be seen over the years.

### **Data Source**

Morbidity and mortality data as available through National Cancer registry Program of India of ICMR. Population projections and other vital events from reports available through Registrar General of India Sample registration scheme are used to carry out various computations.

### **Life time Risk**

Various conventional approaches such as crude age adjusted age specific incidence rates are being employed to measure the occurrence of disease in a population. There is a need to have a single index to describe or summarise the experience of the population. The cumulative incidence is one of the very easy and convenient approach to estimate the risk of the diseases an individual runs during the life time. This approach does not account weights as a result of age specific population under the risk of disease. Since cancer has been considered as the a low incidence the summing of age specific incidence without considering the population weight gives a good idea about life time risk of disease like cancer. An improved measure to study the risk was suggested by Brselow and Dey which is known as Cumulative risk which is simply computed by taking exponential of cumulative incidence rate. These risks can be computed between any two time periods or life time without taking into account the competing risk due to other diseases.

It was felt that the risk of development of disease can be more precisely defined through the concept of probability. This can be done by combining age specific incidence of the disease in question (cancer in this case) and mortality data from the life table data.

In this exercise the published data of selected population based cancer registries of National Cancer Registry Program of Indian Council of Medical research for the year 2009-10 has been combined with abridged life table data as generated by sample registration scheme related to urban areas of the corresponding states to which cancer registry is located to estimate the life time risk by considering competing risk or better known as probability approach have been worked out.

### **Results**

The data collection is based on international accepted norms and is abstracted in Cancer Incidence in Five Continents a report of International Agency for Research in Cancer. This has been combined with life table experiences of the population of the respective states where registry is located. The life table

data of the urban population is available from Sample registration scheme, Registrar General of India for the states Karnataka, Maharashtra, Tamil Nadu, MP, Punjab for the registries located in Bangalore, Mumbai, Chennai, Delhi respectively. The registry at Barshi is rural based. The disease free population at age group is worked out the overall mortality as available from SRS data and estimating expected number of cancer cases and cancer deaths to estimate life time risk of development of cancer. This has been compared with Cumulative incidence rates and cumulative risk.

It was observed that life time risk of development of cancer ranged from 9% to 10% in males where as it was 10% to 12% in females. While comparing the estimates with cumulative incidence the risks observed due to malignancy is marginally lower as computed through other indices. It was observed that life time risk of development of malignancy as seen through the probability approach was highest based on Delhi data (8.9%) followed by Chennai (8.7). The lowest was observed through the Mumbai data which was 6.5%. The estimates for rural registry of Barshi located in Maharashtra were 4%. The other estimates Cumulative Incidence rate and cumulative risk ranged from 7.6% to 11 % for the reported cancer registries-the estimates without competing risk.

While observing the individual sites it was observed that life time risk of development of stomach cancer ranged from 0.2% in Bhopal to 0.3% in Chennai. The risk observed for Delhi and Mumbai was of the order of 0.3%. The estimates of risk for oesophageal cancer ranged from 0.3 to 0.6%. The risk due to lung cancer was observed to be order of 1% in Delhi and Chennai. The mouth cancer which is predominantly a tobacco related cancer was seen highest based on Bhopal data (1%). The risk based on Bengalure data was observed to be 0.4%. The risk of getting prostate cancer was almost same around 0.5% for all the reported registries. It was observed that estimates of Cumulative Risk in case of individual sites were similar to the ones when computed considering the competing risk. The change could be significantly seen while considering all sites. Hence when risk is low the cumulative risk could be safely used to get an idea about the life time risk an individual runs in of getting cancer of any given site.

While observing the risk pattern in females based on the above reported cancer registries. It was observed that life time risk of development of cancer of any site was highest for Bengalure data (11.4%) followed by Chennai and Delhi with the risk estimates of 10.6% and 9.7% respectively. This indicates that one in 10 women would get cancer of any site during the life time. The other risk estimates without competing risk ranges from 12% to 9% which is an overestimate from the actual position. While observing the individual sites it was studied that higher risk of getting the disease in females which was observed through this data was mainly due to high risk of development of Breast and cervical cancer in females. The life time risk of development of breast cancer was seen as high as

3.2 % in Bangalore followed by Chennai and Delhi with 3.2% and 2.8% respectively. The lowest estimates were seen from the Bhopal data (2.3%). The risk of cervical cancer ranged from 1.7% in Bangalore to 0.9% in Mumbai. The risk of mouth and lung cancer which are tobacco related cancer is much lower in females as compared to males, the life time risk ranges from 0.3 to 0.5%.

### **Premature Mortality due to Cancer**

The impact or the burden of disease is conventionally measured by morbidity and mortality indicators which are initially essential to plan any control programme. The above computations on risk of getting the disease provides an idea about the risk a person runs during specific age of life time. It is important to understand the burden due to cancer so that appropriate control measures can be adopted.

It would be worth while to study the magnitude of premature mortality as a result of cancer. The premature mortality of a person has a tremendous effect on family and society. Person years of life lost has been suggested as one of the measure of the premature death. Premature period could be regarded as any fixed age or life expectancy at that age for which an individual is expected to survive otherwise.

The present exercise attempts to estimates total person years of life lost as a result of cancer mortality due to cancer of any site upto 75 years. The life expectancy at the age of death has been considered to be the age for which a person was expected to live to compute period of premature death. Effort has also been made to study the average years of life lost per pre mature death.

The published data on age specific death rates from reports of the National Cancer Registry Program of Indian Council of Medical Research for the year 2009-10 served as the basic material. The life expectancies for the have been utilized for the urban population of the respective states based on SRS data for the corresponding period.

The impact of disease in a population is generally measured by its impact on morbidity and mortality indicator. Potential years of life lost (PYLL) is an estimate of premature mortality. It represents that number of years a person would have lived if he or she had not died before a predetermined age. The expected years of life lost (YLL) measure a valid standalone measure for identifying and ranking the underlying causes of premature death. PYLL inherently incorporated age at death, and its calculation mathematically weights the total deaths by applying values of each death at each age. The method of calculating YPLL varies from author to author, each producing different rankings of leading cause of premature death.

The computations of pre mature mortality in terms of person years of life lost were carried out based on the cancer mortality figures from the report of National Cancer Registry Programme of ICMR for the selected registries. The corresponding general mortality estimates were extracted from the SRS reports generated by Registrar General of India for the respective states in which the registries were located. For instance general mortality estimates of Karnataka Urban were used for combining with cancer mortality rates of data from Bangalore registry data. It was observed that person years of life lost per 100,000 population due to cancer of any site among males ranged from 220 in Delhi to 518 in Mumbai. On an average a person dying due to cancer loses 25 to 31 years of life considering the prevailing life expectancy. Looking at the individual sites, the person years of life lost per lakh population for **mouth cancer** ranged from 11.3 in Delhi to 46 in Mumbai. The stomach cancer was more common in southern India. The estimates of PYLL per 100000 population was 50.4 in Chennai followed by 38 in Bangalore. The average years of life lost ranged between 22 to 26 years for the reported registries. The lung cancer is another leading malignancy seen in men, The PYLL/100000 ranged from 60 in Bhopal followed by 58.3 Chennai. The average loss of years per for all the registries was around 23-24 years. Prostate cancer is another leading malignancy seen in men. On an average pre mature mortality in terms of average years of life lost was observed to be 20-21 years. It was less as compared to other sites as the disease is mostly seen in later ages.

While observing the estimates in females about premature mortality, the person years of life lost per lakh population ranges from 234 in Delhi to 740 in Mumbai. On an average a female loses about 28 years of life as observed from Bangalore data and 33 years as seen from Delhi registry data. When individual sites are considered in females it is known that breast and cervical cancer are the commonest malignancies seen in Indian women. It was observed that person years of life lost due to breast cancer based on Mumbai registry was 176 per lakh population which is about 20% of estimate as result of loss due to all cancers. The estimate as computed from Chennai data showed 129 person years per one lakh population. The cervical cancer is another leading malignancy which results in pre mature mortality in India . It was observed that 55 person years were lost per one lak population based on Mumbai data followed by 56 as revealed from Bangalore data. The average loss of life due to cervical cancer ranged from 27 years to 31 years. Ovarian Cancer is another cancer of reproductive tract leading to pre mature mortality. It contributes about 10% of share of total cancers as regards pre mature mortality is concerned.

The person years of life lost per one lakh population 2 in Delhi to 19 in Mumbai followed by 16.8 and 16.5 in Chennai and Bangalore respectively.

These estimates would help in policy towards the cancer control activities.

## **O7. Exploratory Geospatial Analysis**

**Date of Initiation:**

**Funding Agency :**

**Introduction :**

**Progress :**

## **O8. Development of Data Hub**

**Date of Initiation:** April 2015

**Funding Agency : Intramural**

**Introduction :** There are large amount of data available freely and updated timely but are not been analysed and utilized properly. Through data hub the large scale health survey data would be analysed on regular basis and research articles could be written by the scientist of the institute with the help of processed data in the data hub.

**Progress : One article is in ongoing**

**Title of the article :** Trend In Utilization of Selected RCH Indicators In Larger States Of India using NFHS data.

## **O9. Factors associated with U5MR in ST & Other Social Groups**

**Date of Initiation:**

**Funding Agency :**

**Introduction :**

**Progress :**

## **O10. Application of Bongaarts Model**

**Date of initiation : April 2015**

**Funding Agency : ICMR**

**Objectives :** Application of the Bongaarts model to study the proximate (behavioural) determinants of human reproduction process in India and major states . It aims to remove the assumption that every couple is fecund, i.e. susceptible to conceive, in the model.

**Progress :** In the SAC 2015 extensive review of literature has been undertaken an estimated Total Fecundity(TF) Rate and it was suggested to estimated contraception proportion changes in TFR over time. It is under process.

## **O11: Comparing Methods of Assigning Causes of Death**

**Date of Initiation :**

**Funding Agency : WHO**

**Introduction :**

National Institute of Medical Statistics has been participating in WHO's Reference Group on Health Statistics and the member of Working Group for the development of Harmonized Verbal Autopsy Tool. Ministry of Health & Family Welfare and the WHO have commissioned the study "Comparing Methods of Assigning Causes of Death". The activity involves feasibility of implementation of WHO harmonised international standard VA questionnaires in the Indian context; to assess and compare the validity of different techniques (PCVA and CCVA) for assigning causes of death from WHO harmonised VA questionnaires, using the medical record based diagnoses for the select hospital deaths as reference values for validation of VA diagnoses for the same deaths from each of the different techniques; and conduct VA and assign COD in select rural areas with the help of existing health infrastructure and recommend the suitable methodology required for a routine national VA program to ascertain causes of death in India.

The study has so far carried out the following activities:

1. Finalisation of study protocols and obtaining WHO Verbal Autopsy tools;
2. Provided orientation and training to NIMS technical staff on VA tools;
3. The VA tools (Adult, children and neonatal) for field testing have been translated;
4. VA interviewer manual for Adult and Infant questionnaires have been prepared;
5. Pilot study to test the WHO VA tools is being planned;
6. Data on deaths in the past one year to understand the patterns of death in select hospitals has been obtained from Safdarjung hospital. Partial information has been obtained from AIIMS, Kalawati Saran Hospital;
7. The hospitals selected for the study are visited and information on the study are provided. We have received letters from two hospitals and a verbal assurance from one hospital.

**Progress:**

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1. Finalisation of study protocols and obtaining WHO Verbal Autopsy tools;
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## 8. Invited Talks/Lecture Delivered

<b>Dr. Arvind Pandey</b>	
September 9, 2015	Lecture on 'Combat HIV/AIDS, Malaria and other diseases' at Star Foundation's National Seminar on "MDGs in India: Achievements and The Way Forward" at PHD House, New Delhi.
October 8, 2015	Lecture on "Demographic Health Survey" in the Training Course on Monitoring under NHM at NIHFW, New Delhi.
December 24, 2015	Lecture on "Dietary Intake, Anthropometry and Physical Activity Pattern of Indians: What the Data Tell Us" in the Workshop entitled on National Food Consumption, Anthropometry and Physical Activity Survey in India at Hotel Le-Meridian.
January 7, 2016	Lecture on "National Population Policy 2000 & NHP-2002 in the training Course on Demographic data analysis for health Personnel at NIHFW, New Delhi
Feb.16-17, 2016	Lecture in the Workshop on Life Contingency Table for Estimating Psychiatric Morbidity, Mortality of Patients Suffering from Mental diseases" organized by the Psychology Research Unit of the Indian Statistical Institute, Kolkata.
February 25-26, 2016	Guest of Honor for inaugural session and invited lecture on estimation of level and trends of infant and child mortality in India in the International Conference on Current Scenario and Prospects of Nanotechnology and Bio-Statistics at the UP Rajarshi Tandon Open University, Allahabad.
<b>Dr. Abha Aggarwal</b>	
April 10-12 <sup>th</sup> , 2015	Invited as a resource person by Dr. Kamal Narayan Arya, Chairman Scientific Committee of The 52 <sup>nd</sup> Annual National Conference of All India Occupational Therapists Association, to deliver a lecture on "How to develop Research Proposal/ Protocol" at All India Institute of Medical Sciences, New Delhi.
6 <sup>th</sup> August 2015	Invited as a resource person by VMMC, Safdarjung hospital to deliver a lecture on "Sampling Techniques and sample size to PG students of hospital under Protocol Writing Workshop.
26 <sup>th</sup> June 2015	Deliver a lecture on Study Design in a training program organized by NIMS.
<b>Dr. H. K. Chaturvedi</b>	
25 <sup>th</sup> July, 2015	Topic: Success Story in Health: "Eradication Polio in India - A Case Study" Invited as Speaker in PSU Summit 2015 at IIM Rohtak.
20 <sup>th</sup> November, 2015	Topic: "Report Writing (Evaluation of a Programme)" Orientation course for functionaries of voluntary organizations on Monitoring and Evaluation of Developmental Programmes for women and children (16-20 November, 2015) at National Institute of Public Cooperation and Child Development (NIPCCD), New Delhi.
Date: 3 <sup>rd</sup> March, 2016	Topic: "Hypothesis and Parametric Tests" Workshop on Medical Research and Statistical Methods at RML Post Graduate Institute of Medical Education and Research, Dr. RML Hospital, New Delhi
Date: 30 <sup>th</sup> March, 2016	Topic: "Data Analysis and Fallacies – Study Report" Workshop on "Methodology in Biosocial Research" organized by Amity University, NOIDA
Date: 31 <sup>st</sup> March,	Topic: "Probability distribution and Statistical Tests"

2016	Workshop on Statistical Methods in Biomedical Research and Data Analysis using Statistical Software (SPSS/R), organized by National Institute of Medical Statistics, New Delhi.
<b>Dr. D. Sahu</b>	
22 June - 3 July, 2015	Resource person for the Summer inter-ship programme for Postgraduate student in Statistics & Health Statistics ( Kurukhetra & BHU students) at NIMS during Two Weeks Training Programme two batches.
4-20 January 2016	Resource person for the Summer inter-ship programme for Postgraduate student in Statistics & OR ( Kurukhetra University) at NIMS Training Programme.
July 30-August 1, 2015	Lectures on Mortality and Life Table in two weeks training Programme on Basic Demographic Technique to the Officials of DCO North Zone India, July 27-August 8, 2015 at Dept of Economics, Kashmir University Srinagar
September 15, 2015	Lectures on Introduction to inferential Statistics & Hypothesis testing Parametric tests in training course on data analysis using SPSS for health and Demographic Research during September 14-18, 2015 at NIHFWS, New Delhi
December 10, 2015	Lecture on "Concept of Population Dynamics, Demographic Dividend" at NSSTA , CSO in the training programme on "Demography & Population Studies" for state statistical officer organized by NASSTA, CSO, Govt. of India, Greater Noida.
February 11-13, 2016	Resource person on National Workshop on use of data in Strategic planning jointly organized by NACO, WHO India, CDC India and Deptt. of health and human studies, USA at Hotel Four points, Delhi.
<b>Dr. Tulsi Adhikari</b>	
30 June 2015	Delivered lecture on Formulation of Hypothesis and Statistical Tests to the M.Sc. students of BHU during their visit to Institute for Summer Training, 22 June – 3 July 2015.
31 March- 3 April 2016	Delivered lecture on Descriptive Statistics and Graphical representation of Data in the workshop on research methodology organized by National Institute of Medical Statistics New Delhi
<b>Dr. Atul Juneja</b>	
23-25 March 2015	Delivered lectures on ANOVA and Correlation, Regression to Ph.D. students registered in Punjab and Harayana during the ICSSR workshop organized at Centre for Rural and Industrial Development Chandigarh
19 May 2015	Delivered Lectures on documentation of research addressing statistical issues to functionaries of NGOs at NIPCCD, New Delhi
7 July 2015	Delivered lecture study designs in Medical Research to the M.Sc. students of BHU during their visit to Institute for Summer Training
9 July 2015	Delivered talks on Pitfalls of Statistics during the workshop on Statistical Computing organized by ICPO (ICMR) NOIDA
9-10 September 2015	Delivered lecture on Statistics and Medical writing during a workshop conducted by CCRAS Deptt of AYUSH at National Institute of Drug Development, Kolkata
9 October 2015	Delivered a lectures on Study Design and Sample Size estimation during the CME conducted by Department of AYUSH at Tibbia College New Delhi
18 November 2015	Delivered lecture on Sample designs to the functionaries of NGO during the workshop conducted by NIPCCD New Delhi
4 January 2016	Delivered a lecture Design to M.Sc. students of Kurukshetra University during their educational visit to the Institute as a part of Applied Training.



2 March 2016	Delivered lecture on Sampling and Sample size determination during a workshop on Statistical methods and Research conducted by Dr RML Hospital, New Delhi
16 March 2016	Delivered talks on Design of Studies during a workshop on Statistical Computing conducted by ICPO (ICMR) NOIDA.
31 March- 3April 2016	Delivered lecture on Design of Studies during the workshop on research methodology organized by National Institute of Medical Statistics New Delhi
<b>Dr. Lucky Singh</b>	
October 28-30, 2015	“Examining the association between social network and mental health among older adults: Evidence from a rural Indian setting”. International Union for Scientific Study of Population (IUSSP) Scientific Panel on Microsimulation and Agent-based modelling in Demography and Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany.
04-16 January, 2016	Taken classes on Hypothesis Testing and Multivariate Analysis for Two Weeks Winter Training Workshop: 04-16 January, 2016 for M.Sc. (Statistics) Students of Dept. of Statistics & O.R., Kurukshetra University, Kurukshetra.
May- June, 2015	Taken classes on Hypothesis Testing and Multivariate Analysis for Two months summer Training Workshop: May- June, 2015 for M.Sc. Students of Banaras Hindu University (BHU), Varanasi.

## 9. Scientific Meetings /Conferences/Training/Workshops attended

Date	Scientific Meetings /Conferences/Training/Workshops attended
<b>Dr. Arvind Pandey</b>	
<b>Scientific Meetings of Expert Group / Technical Advisory Group</b>	
April 1-2, 2015	Field visit to Meghalaya as the member of the Task Force Project on ICMR-India Diabetes (INDIAB) Study - North East Region.
April 15, 2015	Meeting of Technical Advisory Group (TAG) Comprehensive National Nutrition Survey (CNNS), Nirman Bhawan, New Delhi
April 16, 2015	Meeting of Technical Advisory Committee (TAC) of National Family Health Survey, 2015-16 (NFHS-4), Nirman Bhawan, New Delhi.
May 8, 2015	2 <sup>nd</sup> Meeting of Technical Advisory Group (TAG) of Global Adult Tobacco Survey, India (GATS-2), Nirman Bhawan, New Delhi.
May 20, 2015	Meeting of TRG on HIV Surveillance & Estimation, National AIDS Control Organization (NACO), MOHFW, Chanderlok Building, Janpath, New Delhi 110 001
May 27, 2015	Project Proposal Meeting on the HIV allocative efficiency study using Optima software at NACO, MOHFW, Chanderlok Building, New Delhi (with the World Bank Officials viz. Dr. David Wilson and Dr. Amit Nagraj).
May 27, 2015	Meeting of the Expert Committee for the “National Award for Outstanding and Meritorious Research Work in Statistics” in the Honour of Prof. C.R. Rao for the year 2015 under the Chairmanship of Secretary (Statistics & Programme Implementation), Sardar Patel Bhavan, New Delhi.
July 10, 2015	5 <sup>th</sup> Meeting of the Scientific Advisory Board (SAB) of Central Council of Research in Ayurveda Sciences (CCRAS), Ministry of AYUSH, Office of CCRAS, Janakpuri, New Delhi.
July 11, 2015	National Workshop on Population Stabilization, Vigyan Bhawan, New Delhi.
September 3, 2015	Meeting of the PMC of NFHS-4 in Committee Room, Nirman Bhawan, New Delhi.
September 8-9, 2015	Sub-group meeting of NWG to finalize the HIV estimates, NACO, MOHFW, Chanderlok Building, Janpath, New Delhi.
September 10, 2015	First meeting of the Steering Committee of CBHI with DGHS on Chair, MOHFW, Nirman Bhawan, New Delhi.
September 11, 2015	Expert Consultative Meeting to brainstorm the approach and suitable methodology for the study entitled “Poverty linked to Population” of UNFPA at India Habitat Centre, New Delhi.

September 14, 2015	Meeting of the Expert Group to review the progress of “ICMR’s Registry of People with Diabetes with Young Age at the Onset-Phase II, ICMR, New Delhi.
September 30, 2015	National Data Analysis Plan (NDAP) Workshop of NACO at India Habitat Centre, New Delhi.
October 12, 2015	Launch of State-Level Disease Burden Initiative to improve health at the local levels in India, the ICMR, PHFI & Institute for Health Metrics and Evaluation (IHME), Washington at PHD House, August Kranti Marg, New Delhi.
October 27, 2015	Project planning Meeting on the HIV allocative efficiency study using Optima software in the states of Punjab and Karnataka at NACO, MOHFW, Chanderlok Building, New Delhi.
October 28, 2015	Attended the “Kamal Puri Sabharwal Memorial Lecture” by Dr. Sheila Chandra Vir (Director, Public Health Nutrition & Development Centre, New Delhi) on Improving Women and Child Nutrition in India: Past Efforts, Current Focus & Future Challenges (with Dr. Prema Ramachandran, Director, National Foundation of India on chair) at Lady Irvin College, New Delhi.
December 17	Meeting of Technical Evaluation Committee (TEC) to review the proposals under the “Grant-in-aid Scheme for Inter-Sectoral Convergence & Coordination for Promotion and Guidance on Health Research” at Ministry of Health & Family Welfare, Ministry of Health Research, New Delhi.
January 4-5, 2016	Meeting of the Technical Expert Committee for Blood Transfusion Services (with Dr. Neelarm Marwaha, HOD, Dept. of Transfusion Medicine, PGIMER, Chandigarh on chair), Chanderlok Building, New Delhi.
January 6, 2016	Meeting of the PMC of NFHS-4 with Add. D.G. on chair to discuss the issues relating implementation of the survey in the States/Regions covered in the second phase.
January 19-20, 2016	Screening Committee Meeting for selection of Faculty Positions (Professor, Associate Professor and Assistant Professor) in Mathematical Sciences under UGC-Faculty Recharge Programme at UGC Office at JNU Campus, New Delhi.
January 20, 2016	ICRW’s 40 <sup>th</sup> Anniversary Celebration with the event on Women Empowerment and Gender Equity at the Embassy of Belgium, Chankyapuri.
January 29, 2016	Briefing Meeting with Governor of Maharashtra for Search Committee for appointment of the Vice-Chancellor of Sant Baba Gadge (SBG) Amravati University, Amravati at Raj Bhavan, Mumbai.
February 2, 2016	Seventh Advisory Council Meeting – Indian Institute of Public Health, Delhi (IIPH-D) at Indian Institute of Public Health-Delhi, Gurgaon.
February 9, 2016	Release of National IBBS Report by the Secretary, Health & Family Welfare (with the presence of Country Director, UNAIDS, CDC, Director-NIMS & Prof. DCS Reddy, Ex-HOD Community Medicine, IMS, BHU) at India Habitat Centre, New Delhi
	81 <sup>st</sup> National Statistical Commission Meeting to discuss the Comprehensive National Nutrition Survey (CNNS) at Sardar Patel Bhawan, New Delhi.
February 19, 2016	Meeting of TAC of NFHS-4 to discuss the tabulation plan of NFHS-4 State Report at MOHFW, Nirman Bhawan, New Delhi.
March 2, 2016	Co-chair the Technical Advisory Group Meeting (TAG) of the Comprehensive National Nutrition Survey (CNNS) at the UNICEF India Country Office, Lodhi Estate, New Delhi.

March 4, 2016	Community Consultation Meeting with Addl. Secretary & DG, NACO on recent round of HIV estimates as well as the National IBBS of NACO, MOHFW, Chanderlok Building, New Delhi (Venue: Hotel Royal Plaza).
March 11, 2016	Meeting of Technical Evaluation Committee (Congenital malformation and genetics, Maternal Health, Child Health, Low child Sex Ratio and other Gender and Health and physically health problems related to women areas) at Department of Health Research, Conference Hall, Red Cross Road, New Delhi
March 22, 2016	Launch of Longitudinal ageing study In India (LASI) project. IIPS Mumbai in collaboration with Harvard School of Public Health (HSPH) and University of Southern California (USC), USA under the aegis of MOHFW, Government of India at Vigyan Bhawan, Maulana Azad Road, New Delhi.
March 23, 2016	ICMR Meeting between ICMR & PHFI representative & team for Burden of Diseases (BOD) Study to discuss how to take the joint collaborative work forward at PHFI, Gurgaon.
<b>International Expert Group Meetings</b>	
Nov. 25, 2015	Global Verbal Autopsy Expert Group meeting at Thai Room at the South-East Asia Regional Office (SEARO), WHO House, IP Estate, New Delhi
March 14-16, 2016	Participation in the WHO Reference Group Meeting on Global Health Statistics and Verbal Autopsy Working Group at <b>Geneva, Switzerland</b>
<b>Meeting of ICMR &amp; its Institute</b>	
May 1, 2015	Smt. Pushpa Sriramachari Foundation Day Oration at National Institute of Pathology (ICMR), New Delhi
May 11, 2015	Expert Group Meeting on ethical aspects of bio-banking and datasets under the ICMR Ethical Guidelines for Biomedical Research on Human Participants 2006 at ICMR, New Delhi.
May 18, 2015	Project Review Committee Meeting at ICMR.
May 21-22, 2015	22 <sup>nd</sup> Scientific Advisory Group Meeting, Division of ECD, ICMR, New Delhi.
May 30, 2015	Birth Anniversary of Dr. B.R. Ambedkar at ICMR.
July 10, 2015	Meeting of the Executive Council of the ICMR at MOHFW, Nirman Bhawan, New Delhi.
July 20-22, 2015	Meeting of the Scientific Advisory Committee (SAC) of NIOH at Regional Occupational Health Centre, ROHC(S) Bangalore.
	National Conference on "Emerging Issues on Environment Occupational Health & Safety-its National Scenario and Regional Needs" at Regional Occupational Health Centre, Bangaluru to commemorate the golden Jubilee of National Institute of Occupational Health, Ahmadabad.

July 24, 2015	Meeting of Scientific Advisory Group (SAG) to review the activities of the Division of Social & Behavioural Research (SBR), ICMR, New Delhi
October 13, 2015	Cancer Research in Media Workshop with Secretary DHR & Director General, ICMR for a media interaction.
October 14, 2015	Meeting of Expert Committee identifying research areas to address the declining sex ratio in the country, ICMR, New Delhi.
October 14, 2015	Meeting of the Executive Council of ICMR at ICMR HQ, New Delhi.
November 22, 2015	Meeting of Research Advisory Committee of Model Rural Health Research Unit (of DMRC, Jodhpur), Bhanpur Kallan, Jaipur.
January 19, 2016	ICMR Award Function at AIIMS Auditorium, AIIMS, New Delhi.
January 28, 2016	Meeting of the Executive Council of the ICMR at ICMR HQ, New Delhi.
February 26, 2016	Technical Group Meeting of COD among RGI, ICMR and PHFI at ICMR.
March 9, 2016	Child Mortality Working Group Planning Meeting with DG, ICMR on chair at ICMR, New Delhi as a collaborative efforts on mortality data analysis and its implication for national health policy among ICMR & Office of RGI & Center for Global Health Research.
<b>Meeting convened at NIMS</b>	
April 13, 2015	Meeting regarding P.P. Talwar Oration Award at NIMS
April 26-29	Meeting of the National Working Group on HIV Estimation 2015.
May 5-8	Meeting of the National Working Group on HIV Estimation 2015.
May 12	First Prof. P.P. Talwar Oration by Dr. M.K. Bhan at ICMR Conference Hall.
May 13	Meeting of Expert Group for the development of study proposal on comparing methods for assigning the cause of death by verbal autopsy (COD-VA) for support from the WHO.
June 19	Seminar/Workshop on International Yoga Day at NIMS.
August 12	Ethics Committee Meeting & review Committee Meeting for SAC of NIMS.
August 17-18	Meeting of the National Working Group to review and finalize the HIV estimation results based on the programme data up to 2014 and HSS up to 2015 in Spectrum 4.54 at NIMS.

September 14	Celebration of Hindi Divas at NIMS and convening the invited lecture by Prof. (Dr.) Ashutosh Biswas, AIIMS Medicine, on 'Dengue Fever: Prevention and Treatment"
September 24	Dissemination and launch of e-Learning Module for Registration of Clinical Trial in the Clinical Trial Registry – India (CTRI), organized jointly by the NIMS, ICMR & the WHO India Country Office by Secretary, DHR & DG, ICMR with the presence of DCGI, WHO Officials and other academia at ICMR, New Delhi
	First Meeting of the Review Committee of the Clinical Trials Registry – India (CTRI).
October 7	Lecture organised on Nation-wide Sanitation/Cleanliness Campaign on Hygiene & Cleanliness at NIMS.
October 8	Meeting to identify the orator for the Prof. P.P. Talwar Oration for the year 2015 (second in series).
November 4	Review Meeting and MACP at NIMS.
November 27	2 <sup>nd</sup> P.P. Talwar Oration by Prof. M.S. Swaminathan at ICMR, New Delhi.
December 12	Pre- Scientific Advisory Committee (SAC) Meeting of NIMS.
December 23	Scientific Advisory Committee (SAC) Meeting of NIMS.
<b>Dr. Abha Aggarwal</b>	
13.4.2015	Invited by Dr. Pratima Mittal, Consultant & Head, Department of Obst. & Gynae, VMMC & Safdarjung hospital as a member of PRG group for reviewing proposal submitted for approval of funds from ICMR.
1.5.2015	Invited by Maulana Azad Medical College as an Expert of Biostatistics for the selection of Statistician & Research Officer Sociology under the project "Health Care Facility Preparedness and Knowledge, Attitude and Practice among Healthcare Providers regarding gender- Based Violence in Delhi."
2.5.2015	Invited by MAMC, Deptt. Of Community Medicine for the selection of Statistician under the project on Domestic violence.
6.5.2015	Invited as a Member of Research and Scientific Committee of Jaipur Golden Hospital to review of DNB protocols of 1 <sup>st</sup> batch.
30.5.2015	Attended selection committee meeting at MAMC for selection of Statistician under the project."Health care facility preparedness, knowledge, attitude and practices among healthcare providers regarding gender based violence in Delhi"
9.6.2015	Attended a meeting as an member for finalization of questionnaire of the

	study on Domestic violence at MAMC.
16.9.2015	Participated in a meeting with Scientist of ICMR for the planning of Leprosy Sentinel Survey.
24.6.2015	Attended 17 <sup>th</sup> meeting of school research committee of university school of Medicine & Para Medical health sciences as a supervisor for presentation of Ph.D students.
26.6.2015	Attended a meeting with Dr. Kiran Kotach and Dr. Manjula Singh to discuss the development of protocol on Leprosy Sentinel Surveillance
16.7.2015	Attended a meeting with WHO & Q3 for development of E module of CTRI.
27.7.2015	Attended a meeting at MAMC for site initiation of the study on Domestic violence
11.8.2015	Attended PRG meeting of ICMR to review the proposal of RHN division.
12.8.2015	Attended a EC meeting of NIMS and presented a study on Fall for approval to initiate the study.
14.8.2015	Attended a meeting with WHO & Q3 at NIMS for E module of CTRI for its finalization.
17.8.2015	Invited as a Member of Research and Scientific Committee of Jaipur Golden Hospital to review of DNB protocols of 2 <sup>nd</sup> batch.
26.8.2015	Attended a meeting of WFC as an resource person at Bhuvnaeshwar
24.9.2015(FN)	Organized and participated actively in the launch ceremony of Emodule of CTRI at ICMR HQ.
24.9.2015(AN)	Attended a review meeting of CTRI and made presentation for the continuation of CTRI activity.
6.10.2015	Attended a debriefing session of the mission of international verification team for assessment of YAW free status at Hotel Le meridiem, New Delhi.
18.11.2015	Invited as a Member of Research and Scientific Committee of Jaipur Golden Hospital to review of DNB protocols.
3.12.2015	Attended a PRG meeting of ICMR to review the proposals.
15.12.2015	Attended 17 <sup>th</sup> meeting of school research committee of university school of Medicine & Para Medical health sciences as a supervisor for presentation of PhD students
23.12.15	Attended and presented new proposals developed in SAC, NIMS meeting.

10.3.2016	Participated in a discussion in a meeting with DG on CTIRI continuation.
29.12.2015	Attended a PRG of Jaipur Golden Hospital for review of proposal for DNB students.
31.12.2015	Attended and participated in meeting on presentation of Health Data at ICMR HQ.
14.1.2016	Attended a meeting for the presentation of DG on sustainable MDG of India at Board of Examination, new delhi.
17.3.2016	Participated in selection committee for the post of Scientist B at ICMR.
18.3.2016	Participated in selection committee for the post of Scientist B at ICMR
28.1.2016	Invited by CCRH, New Delhi for a meeting to develop web designing for registration of Homeopathy trials.
<b>Dr. H. K. Chaturvedi</b>	
1 <sup>st</sup> April, 2015	Meeting of TAMC GATS 2 held at 2nd Floor Committee Room no. 249 A, Nirman Bhawan, New Delhi.
7 to 9 April, 2015	Three Days Training Workshop for MB Study at NIMR, New Delhi
9 <sup>th</sup> April, 2015	Meeting under the chairmanship of DGHS on 09.04.2015 at 10:30 am at Nirman Bhawan to discuss issues related to End line House Hold Malaria Survey in 5 States.
14-16 May 2015	Meeting on End line Malaria Survey at RMRC, Bhubaneswar
24 <sup>th</sup> June, 2015	Selection Committee Meeting for the post of Consultant (Biostatistics) at NIMR, Dwarka, New Delhi for the project Malaria Burden
7-8 July, 2015	Selection Committee Meeting for Voluntary Health Monitor at Chatra, Ranchi, Jharkhand
26-28 August, 2015	Training of Data Entry Operator, Malaria survey AP, at Bhubaneswar
7 <sup>th</sup> September, 2015	First Expert Committee meeting for strengthening of quality control NIB, NOIDA
8 <sup>th</sup> September, 2015	Selection Committee Meeting for the post of Consultant (Biostatistics) & Statistician at NIMR, Dwarka, New Delhi for the project Malaria Burden, NIMR, Dwarka, New Delhi
10 <sup>th</sup> September, 2015	First Meeting of Steering Committee for Monitoring of Influenza Surveillance, MoHFW, Nirman Bhawan, New Delhi
28 Sept. 2015	Survey for Monitoring of NCD Target 2014-15
17 Nov. 2015	<b>Symposium on “Innovate or ©opy paste?” – A debate on innovation and intellectual property in the health sector.</b> Organized by Embassy of Switzerland
27 <sup>th</sup> Nov. 2015	<b>Expert Group Meeting for NCD Monitoring Survey at AIIMS, New Delhi</b>
7 Dec. 2015	<b>Pre-SAC Meeting at NIMS, New Delhi</b>
11 Dec. 2015	<b>Expert Group Meeting for Malaria Burden Study at NIMR, Dwarka, New Delhi.</b>
15 Dec. 2015	Second Expert Committee meeting for strengthening of quality control NIB, NOIDA
23 <sup>rd</sup> Dec. 15	SAC Meeting of NIMS
29 <sup>th</sup> Dec. 2015	NCD Meeting at NIMS



30 December, 15	NCD Meeting for Quality Assurance at NIE, Chennai
6 <sup>th</sup> January,16	Investigators meeting of MB Study at NIMR
11 Feb., 2016	Malaria Burden project meeting of PIs and Co-PIs
<b>Dr. D.Sahu</b>	
February 17-19	Workshop on improving Allocative Efficiency in responding to HIV epidemic using OPTIMA HIV at University of New South Wales (UNSW), Sydney, Australia organised by Kirby Institute, UNSW, Sydney Australia supported by World Bank through PHFI, New Delhi.
March 31- April 2, 2016	Presented the paper ""Contribution of Large-Scale HIV Prevention Programme on Condom use by Long Distance Truck Drivers in India: A Decomposition Analysis"" in the 2016 Annual Meeting of the Population Association of America Conference held at Marriott Wardman Park, Washington, D.C, USA supported by ICMR, New Delhi.
September 16-18, 2015	Training workshop on HIV Allocative Efficiency & Financial Commitment Analysis using Optima jointly organized by World Bank & NACO conducted by UNSW, Kirby Institute, Australia at Taj Hotel, New Delhi.
March 26-27, 2015	National symposium on Mortality and Causes of Death Studies in India: Requirement, Availability and Analysis during past four decades, organized by Centre for the Study of Regional Development, School of Social Sciences, JNU, New Delhi supported by ICMR, JNU & ICSSR, Delhi.
May 6-12, 2015	Participated as a member of the expert panel in the subject: Population Studies for confidential workshop organized by the Director (Academic, Research, Training and Innovation), CBSE, New Delhi at CBSE office, Sec-63, Noida
May 12, 2015	First Prof. P.P. Talwar Oration by Dr. M.K. Bhan at ICMR Conference Hall organized by NIMS, ICMR, New Delhi.
May 20, 2015	Meeting of TRG on HIV Surveillance & Estimation, National AIDS Control Organization (NACO), MOHFW, Chanderlok Building, Janpath, New Delhi 110 001
May 27, 2015	Project Proposal Meeting on the HIV allocative efficiency study using Optima software at NACO, MOHFW, Chanderlok Building, New Delhi (with the World Bank Officials viz. Dr. David Wilson and Dr. Amit Nagraj).
June 21, 2015	International Day of Yoga on 21st June 2015 at India Gate organized by Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Delhi (PM of India)
September 15, 2015	'Lunching of E-Learning Modules for Registration of Clinical Trial in India', at ICMR New Delhi organized by NIMS and WHO
September 30, 2015	Dissemination workshop of National Data Analysis Plan under NACP-IV

	organized by NACO at India Habitat Centre, New Delhi supported by Development partners.
October 16-21, 2015	Participated as a member of the expert panel in the subject: Population Studies for confidential workshop organized by the Director (Academic, Research, Training and Innovation), CBSE, New Delhi at CBSE office, Sec-63, Noida
October 26, 2006	Meeting of Technical Advisory Group (TAG) on National IBBS organized by NACO at NACO, New Delhi.
October 27, 2015	Project planning Meeting on the HIV allocative efficiency study using Optima software in the states of Punjab and Karnataka at NACO, MOHFW, Chanderlok Building, New Delhi.
October 28, 2015	Review Meeting on HIV Allocative Efficiency & Financial Commitment Analysis using Optima organized by PHFI at NACO, New Delhi
November 17, 2015	participated and present result of India HIV estimation 2015 to TAG meeting at NACO
November 27, 2015	NAMS NFI Symposium on MDG: Lessons learnt and way forward to SDGs at Kamala Raheja Auditorium, NAMS house, Ansari Nagar, New Delhi.
November 27, 2015	2 <sup>nd</sup> P.P. Talwar Oration by Prof. M.S. Swaminathan at ICMR organized by NIMS, ICMR, New Delhi.
December 1, 2015	Participated world AIDS day and release India HIV Estimation 2015 Technical report by Health Minister, Govt. of India at National Media Centre, New Delhi.
December 12	Pre- Scientific Advisory Committee (SAC) Meeting of NIMS.
December 23	Scientific Advisory Committee (SAC) Meeting of NIMS.
February 9, 2016	Dissemination workshop of release of National IBBS Report 2014-15 and HIV Sentinel Surveillance 2014-15 by the Secretary, Health & Family Welfare (with the presence of Country Director, UNAIDS, CDC, Director-NIMS & Prof. DCS Reddy, Ex-HOD Community Medicine, IMS, BHU) at India Habitat Centre, New Delhi
March 22, 2016	Launch of Longitudinal ageing study In India (LASI) project. IIPS Mumbai in collaboration with Harvard School of Public Health (HSPH) and University of Southern California (USC), USA under the aegis of MOHFW, Government of India at Vigyan Bhawan, Maulana Azad Road, New Delhi.
<b>HIV Estimation 2015 National Working Group meetings: Organized and coordinate</b>	
April 6-9, 2015	Review meeting of the National Working Group on HIV Estimation 2015 to validate spectrum inputs at NIMS conference room, NIMS, New Delhi.


April 26-29	Review meeting of the National Working Group on HIV Estimation 2015 to monitor progress of estimation process at NIMS conference room.
May 5-8, 2015	Review meeting of the National Working Group on HIV Estimation 2015 to monitor progress of estimation process at UNAIDS, New Delhi.
May 25-26, 2015	Review meeting of the National Working Group on HIV Estimation 2015 at NIMS
May 27, 2015	Meeting with World bank, WHO-India and NACO official at NIMS, Delhi
June 1-2, 2015	Meeting of the National Working Group on HIV Estimation 2015 at UNAIDS, New Delhi
June 10, 2015	Meeting of the National Working Group on HIV Estimation 2015 for presentation of estimates at NACO
June 23, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for discussion and finalization of estimates at UNAIDS
July 28, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for discussion, compare with previous round estimates and finalization of estimates at NIMS
August 6, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for discussion about the Spectrum version to be used, compare with previous round estimates and finalization at NIMS
August 17-18, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for estimates generated in two version of Spectrum and compare with previous round estimates and finalization at NIMS
September 8-9, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for estimates generated in two version of Spectrum suggested by UNAIDS, Geneva and compare with previous round estimates and finalization at NIMS
October 1, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for discussion and finalization of estimates at NIMS
October 8-10, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for discussion and finalization of estimates at NIMS
November 6, 2015	Review meeting of the National Working Group on HIV Estimation 2015 for finalization of estimates at NIMS
<b>Dr. Tulsi Adhikari</b>	
May 12, 2015	1st Prof.P.P.Talwar Oration by Pof.M.K.Bhan on "Evaluation Research in

	Health", ICMR Hqrs., New Delhi
June 19, 2015	Seminar on "Role of Yoga in Controlling Diabetes", ICMR Hqrs., New Delhi
14 September 2015	Talk by Prof Ashutosh Biswas on Dengue Prevention on the occasion of Hindi Divas
24 September 2015	Launch of E modulae of CTRI by DG ICMR in presence of WHO representatives and DCGI at ICMR New Delhi
7 October 2015	Seminar on Swatch Bharat Abhiyan by Dr Neeta Kumar at NIMS New Delhi
27 November 2015	Dr PP Talwar Oration delivered by Prof MS Swaminathan.
December 7, 2015	Meeting of the Pre-Scientific Advisory Committee of National Institute of Medical Statistics, NIMS, New Delhi
December 23, 2015	Meeting of the Scientific Advisory Committee of National Institute of Medical Statistics, NIMS, New Delhi
<b>Dr. Atul Juneja</b>	
6 May 2015	Meeting related to study on causes of Death with DGHS at Nirman Bhawan New Delhi
23 May 2015	Meeting of DNB Committee at BL Kapoor Memorial Hospital New Delhi
18 June 2015	Meeting on development of Projcet Protocol related to causes of Death Study at WHO regional Office New Delhi
23 June 2015	Meeting with DG Central Council for Research in Homoeopathy New Delhi on Analysis of some projects.
15 July 2015	Meeting on study on causes of Death on finalization of Budget with Dr C. Rao consultant from WHO on the project.
27-30 July 2015	Attended Asian Population Association Conference organized by University of Malaya held at Kuala Lumpur Malaysia and presented a paper on burden of cancer.
4 September 2015	Meeting of Hindi Committee at Institute
14 September 2015	Talk by Prof Ashutosh Biswas on Dengue Prevention on the occasion of Hindi Divas
24 September 2015	Launch of E modulae of CTRI by DG ICMR in presence of WHO representatives and DCGI at ICMR New Delhi
24 September 2015	Ist review meeting of CTRI.
6 October 2015	Presentation of study of causes of Death to DGHS at MOHFW Nirman Bhawan New Delhi
7 October 2015	Seminar on Swatch Bharat Abhiyan by Dr Neeta Kumar at NIMS New Delhi
14-16 October 2015	Presented an Overview of CTRI during a special session of 33 <sup>rd</sup> Annual Conferece of ISMS held at KLE University Belgavi (Karnataka)
10 November 2015	Meeting with DG CCRH on issues with designing of study on Dengue

25 November 2015	Working group meeting on study of causes of Death at SEARO Office WHO New Delhi
27 November 2015	Dr PP Talwar Oration delivered by Prof MS Swaminathan.
30 November 2015	Meeting of DNB Committee at BL Kapoor Memorial Hospital.
31 December 2015	Lecture by Registrar General of India Dr Chandramouli at ICMR New Delhi
16 January 2016	DNB Committee meeting at BL Kapoor Memorial Hospital New Delhi
9 February 2016	Dissemination workshop on IBBS at India Habitat Centre New Delhi
23 February 2016	Attended workshop on introduction to ICD 10 Classification organized by Registrar of Birth and Deaths at NDMC Convention Centre New Delhi
25 February 2016	PAC meeting on Evaluation of Prevalence of regional phenotypic variation and risk factors for PCOS at ICMR New Delhi
14 March 2016	Meeting to finalize the report of ICMR INDIAB study being conducted in different states of India at ICMR New Delhi
15 March 2016	Dissemination meeting on disclosure of results of ICMR INDIAB study at ICMR New Delhi
18 March 2016	Meeting with Dean Maulana Azad Medical College and MO MRD Section at Lok Nayak Hospital to discuss the issues relating to conduct of Pilot study on Causes of Death

<b>Dr. Saritha Nair</b>	
<b>Date</b>	<b>Scientific Meetings /Conferences/Training/Workshops attended</b>
9 Jul 2015	National Seminar on “Demographic Challenges in India: Current scenario and Future direction” on the occasion of World Population day, at the Institute of Economic Growth, Delhi.
20 Jul 2015	Dissemination meeting of the project entitled ‘Gender equity focused male centered family planning for rural India’ at Vivanta by Taj Ambassador, New Delhi.
16-18 Sep 2015	Training on ‘HIV Allocative Efficiency & Financial Commitment Analysis using Optima’ organized by Public Health Foundation of India and New South Wales University, Australia held at The Oberoi Hotel, New Delhi
25 Nov 2015	Meeting of Global Group on Verbal Autopsy at WHO SEARO office, New Delhi
30Nov-4 Dec 2015	Workshop on, “Economic evaluation of Health Programmes and Intervention: Role for Priority Setting in Universal Health Care Package”, Postgraduate Institute of Medical Education & Research, Chandigarh
23-24 Jan 2016	International Conference on “Universal Health Coverage in India: Policy Options and Challenges” organised by O P Jindal University in Delhi/Sonipet
23 Feb 2016	Training programme on MCCD and ICD-10 coding <sup>18</sup> at Convention Center, NDMC, Palika Kendra, New Delhi
18 March 2016	Meeting on ‘Family Planning Budget and Projections for Meeting FP 2020 Commitments by India’ at the Bill and Melinda Gates Foundation office, The Capital Court, 3rd Floor, Left Wing, Palam Marg, Munirka DDA Flats, Munirka, New Delhi,
<b>Dr. Lucky Singh</b>	

October 19-30, 2015	Winter School on “A stochastic process approach to agent-based modelling and simulation”, (IDEM-112), organized by the Max Plank Institute for Demographic Research (MPIDR)”, October 19-30, Rostock, Germany.
October 28-30, 2015	Workshop attended on “The science of choice – How to model the decision making process”, 28-30 October organized by the IUSSP Scientific Panel on Microsimulation and Agent-based modelling in Demography and the Max Planck Institute for Demographic Research, Rostock, Germany.
<b>Dr. B.K.Gulati</b>	
February 23, 2016	Training programme on Medical Certification of Cause of Death & Assigning of ICD-10 Coding, Convention Centre, NDMC, Palika Kendra, New Delhi
December 23, 2015	Meeting of the Scientific Advisory Committee of National Institute of Medical Statistics, NIMS, New Delhi
December 22, 2015	Lecture entitled “Implementation research for addressing the NCD”, by Dr.Brian Oldenburg, School of Population & Global Health, University of Melbourne, Australia, ICMR Hqrs., New Delhi
December 7, 2015	Meeting of the Pre-Scientific Advisory Committee of National Institute of Medical Statistics, NIMS, New Delhi
November 27, 2015	2nd Prof.P.P.Talwar Oration by Pof.M.S.Swaminathan on “Linking Agriculture with Nutrition and Health”, ICMR Hqrs., New Delhi
November 25, 2015	WHO Working Group on Verbal Autopsy- Session 5: India Consultations, WHO SEARO, New Delhi
November 4, 2015	Lecture entitled “Overcoming Antibiotic Resistance in Microbial Population: An Interdisciplinary Perspective”, by Dr.Karishma Kaushik, University of Texas, Austin, ICMR Hqrs., New Delhi
November 2, 2015	Lecture entitled “Expansion of Biopharmaceutical Innovation and New Vaccine Development (NVD)”, by Dr.Julie Gerberding, Executive Vice President-Global Public Policy, Merck & Co. Inc., ICMR Hqrs., New Delhi
October 6, 2015	Meeting of the Technical Group of the study entitled “Comparing Instruments of Assigning Causes of Death”, DGHS, Nirman Bhavan, New Delhi
September 24, 2015	Launch of E-Learning Modules for Registration of Clinical Trials in India, ICMR Hqrs., New Delhi,

August 12, 2015	Meeting of the Ethics Committee of NIMS, New Delhi
July 23, 2015	Meeting of the study entitled “Comparing Instruments of Assigning Causes of Death”, WHO India Country Office, New Delhi
July 15, 2015	Meeting of the study entitled “Comparing Instruments of Assigning Causes of Death”, WHO India Country Office, New Delhi
July 9, 2015	National Seminar on “Demographic Challenges in India: Current scenario and future direction”, Institute of Economic Growth, Delhi
June 21, 2015	Mass Yoga Demonstration on the occasion of International Day of Yoga, Rajpath, New Delhi
June 19, 2015	Seminar on “Role of Yoga in Controlling Diabetes”, ICMR Hqrs., New Delhi
June 18, 2015	Meeting of the study entitled “Comparing Instruments of Assigning Causes of Death”, WHO India Country Office, New Delhi
May 12, 2015	1st Prof.P.P.Talwar Oration by Pof.M.K.Bhan on “Evaluation Research in Health”, ICMR Hqrs., New Delhi
May 6, 2015	Meeting of the Technical Group of the study entitled “Comparing Instruments of Assigning Causes of Death”, DGHS, Nirman Bhavan, New Delhi
<b>Mr. Subhas Gautam</b>	
Date May 18-22, 2015	Fundamentals of Biostatistics, Principles of Epidemiology & SPSS. 
9 <sup>th</sup> July 2015	Conference: National Seminar “Demographic Challenges in India: Current Scenario and Future Direction” at University of Delhi Enclave North Campus, Delhi (India).
18-19 March , 2016	National Seminar on Population and Development: Issues and Challenges in 21 <sup>st</sup> Century Organized by the International Institute for Population (IIPS), Under the auspices of Ministry of Health and Family welfare (Government of India).

## 10. Ph.D. Meeting of Ph.D. Students & Guide/Co-guide/ Doctoral Committee Member

Date	Topic/Institution / University/Name of Student
<b>Dr. Arvind Pandey</b>	
April 29, 2015	Ph.D. Viva-Voce Examination of Mr. Narendra K. Tiwari (Community Medicine) at BHU.
May 13, 2015	Ph.D. Viva-Voce examination of Ms. Divya Seth in r/o her thesis "On the Estimation of survival time and identification of prognostic factors of advance liver disease patients using various statistical models" at New Social Sciences Extension Building, Delhi University.
September 10, 2015	Third Doctoral Committee Meeting of Ms. Mona Pathak, Ph.D. Student at the Dept. of Biostatistics on the topic "Neo-adjuvant Chemotherapy in Treatment of Breast Cancer: Systematic Review & Meta-Analysis and Comparison of with/without Competing Risk Survival models" at Dept. of Biostatistics, AIIMS.
October 29, 2015	The Fifth Meeting of the Doctoral Committee for Mr. Bhaskar Thakur, Ph.D. Student at the Dept. of Biostatistics, AIIMS.
Dec. 15, 2015	Presentation of Yujwal Raj, Ph.D. Scholar, 2013 batch at GGS IP University, Dwarka, New Delhi
<b>Dr. Abha Aggarwal</b>	Intergenerational change in childhood anthropometry and its relation to Grandmother's age at child birth, IP University, Ms. Shikha Sinha
<b>Dr. Abha Aggarwal</b>	Topic to be decided, IP University, Ms. Parul Chugh
<b>Dr. H.K.Chaturvedi</b>	
24 Nov. 2015	<b>School Research Committee (SRC) Meeting of Kitenkumar Singh and Ram C. Bajpai at GGSIP University, Dwarka.</b>
18. Dec. 2015	Ph.D. Viva Voce Exam of <b>Ram Chandra Bajpai</b> at GGSIP University, Dwarka, New Delhi
31 December, 2015	Awarded Ph.D. to <b>Ram Chandra Bajpai</b> . Topic: <b>Estimation of Survival of HIV/AIDS Patients on Antiretroviral Therapy and Predictive Performance of Survival Models for Censored Data</b> at GGSIP University, Dwarka, New Delhi
<b>Dr. D. Sahu</b>	
Dec. 15, 2015	Presentation of Gunjika Mishra, Ph.D. Scholar, 2013 batch at GGS IP University, Dwarka, New Delhi
March 15, 2016	Conducted M.Phil Viva-voce of Mr. Rayan SK at CSRD, School of Social Science, JNU, New Delhi
February 28, 2016	Evaluated Ph.D thesis of Mr. Hiralal Nayak, Gokhale Institute of Politics and Economics, Pune
<b>Dr. Lucky Singh</b>	Examining the relationship between quality of antenatal care and neonatal mortality in India: A Quantitative analysis, Department of Policy Studies, TERI University, Richa Goel



## 11. Statistical consultancy

### **Dr Abha Aggarwal**

Provided consultancy to 29 research scholars in designing, analysis and interpretation from following medical institutions and hospitals.

VMCC and Safdarjung Hospital, World Health Organisation, ICMR HQ, Maulana Azad Medical College, USAID

### **Dr H.K. Chaturvedy**

consultancy provided to students and faculty from the following Institutions

1. Safdarjung Medical Hospital
2. Amity University, NOIDA
3. RML Hospital, New Delhi

### **Dr. Tulsi Adhikari**

Provided consultancy to students and faculty from Department of Obst & Gynae and Dept of Pulmonary Medicine, VMCC and Safdarjung Hospital, Rajkumary Amrit Kaur College of Nursing.

### **Dr. Atul Juneja**

Advised more than 10 students and faculty from RML Hospital BL Kapoor Memorial Hospital

Advised CCRAS and CCRH Department of AYUSH on statistical analysis of their projects.

## 12. Publications 2015-16 (57)

1. Achal Sablok, Aruna Batra, Karishma Thariani, Achla Batra, Rekha Bharti, Abha Aggarwal, B.C. Kabi & Harish Challani (2015): Supplementation of Vitamin D in pregnancy and its correlation with foeto-maternal outcome. *Clinical Endocrinology* 83(4)- Feb. Doi: 10.1111/cen.12751
2. Abha R. Aggarwal, Ranjana Kar, Arvind Pandey (2015) Estimates of Maternal Mortality Ratio and the associated medical causes in Orissa and Rajasthan States - A cross sectional study, *Indian Journal of Community Health*, Vol. 27(1), Jan- March, pp. 18-24.
3. Anita Raj, Mohan Ghule, Saritha Nair, Niranjana Saggurthi, Donta Balaiah and Jay G. Silverman. Age at Menarche, Education and Girl Child Marriage among Young Wives in Rural Maharashtra, India. *International Journal of Gynecology and Obstetrics*. Available online 3 July 2015. doi:10.1016/j.ijgo.2015.04.044.
4. Anil Kumar, R.K. Gupta, Arvind Pandey, BK Gulati (2015) Pregnancy related problems faced in rural areas of Delhi – A study. *Asian Academic Research Journal of Social Sciences & Humanities*. February, Vol. 1, Issue 32; 236-248.
5. Arvind Pandey, D. Sahu, B.K. Gulati & AK Shukla (2015) Examining the demographic determinants of infant mortality in India, In S. Sharma (Ed.) *Maternal and Child Health in India – Policies and Challenges*, Bookwell, Delhi, pp. 1-13.

6. Arvind Pandey, Abha Aggarwal & Jyostna Gupta (2015): *Clinical Trials Registry-India (CTRI) Short Communication; Innovations in Pharmaceutical & Pharmacotherapy ; Vol.3 Issue 2, pg. 645.*
7. Atul Juneja, Tulsi Adhikari, Arvind Pandey, Shashi Sharma, Ashok Sehgal (2015) Share of Tobacco Related Cancers: Gender and Time Gaps-Indian Scenario, *Journal of Clinical and Diagnostic Research (Community Medicine Section)*, 2015 Jan., Vol-9(1): LC01-LC03, DOI: 10.7860/JCDR/2015/9912.5422.
8. **B.K.Gulati**, Pandey A, Ubaidullah M. (2015). Potential gain in life expectancy after partial and complete elimination of specified causes of death: An analysis of Medical Certification of Causes of Death data in India and its selected states. *International Journal of Multidisciplinary Research and Development*. April, Vol. 2, Issue 4; 508-512, e-ISSN: 2349-4182.
9. **Bal Kishan Gulati**, Kumar A, Pandey A. (2015). Cause of death by verbal autopsy among women of reproductive age in Rajasthan, India. *International Journal of Scientific Reports*. May, Vol. 1, Issue 1; 56-60.
10. **Bal Kishan Gulati**, Pandey A. (2015). Understanding Epidemiological Transition in Urban Population of Maharashtra. *International Journal of Scientific Reports*. November, Vol. 1, Issue 7; 272-85.
11. Bhaskar Thakur, V. Sreenivas<sup>1</sup>, S.N. Dwivedi, Arvind Pandey (2015) Epidemiological Appraisal of Neonatal Mortality in India: Conventional vs. Hierarchical Models, *Statistics and Applications* {ISSN 2454-7395(online)} 13(1&2), 2015 (New Series), pp. 95-114.
12. Bhattacharjya, C., Sahu, D., Patel, S.K., Saggurti, N. and Pandey, A. (2015) Causes of Death among HIV-Infected Adults Registered in Selected Anti-Retroviral Therapy Centers in North-Eastern India. *World Journal of AIDS*, 5, 90-99. <http://dx.doi.org/10.4236/wja.2015.52011>
13. Begum S, Balaiah Donta, Saritha Nair, CP Prakasam. Socio demographic factors associated with domestic violence in urban slums of Mumbai. *Indian Journal of Medical Research*. Indian J Med Res 141, June 2015, pp 783-788.
14. Chiranjeev Bhattacharjya, Damodar Sahu, Sangram Kishor Patel, Niranjana Saggurti, Arvind Pandey (2015) Causes of death among HIV-infected adults registered in selected Anti-Retroviral Therapy Centres in North-Eastern India, *World Journal of AIDS*, June 2015, 5, 90-99, DOI.org/10.4236/wja.2015.52011.
15. Damodar Sahu, Sowmya Ramesh, R.M. Mishra, K. Srikanth Reddy, R. Bharadwaj, S. Niranjana, Arvind Pandey, Mandar Mainkar, Bitra George (2015): Are Truckers Being over Stigmatized as HIV Carriers in India? Evidences from Behavioural and Biological Cross-Sectional Surveys among Clients of Female Sex Workers, *Open Journal of Preventive Medicine*, Vol. 5, pp.85-91, March 2015, SciRes. <http://www.scirp.org/journal/ojpm> dx. doi.org/10.4236/ojpm.2015.53010.
16. Damodar Sahu, Nair S, Singh L, **Gulati BK**, Pandey A. (2015). Levels, trends & predictors of infant & child mortality among Scheduled Tribes in rural India. *Indian Journal of Medical Research*. May, 141; 709-719.
17. Damodar Sahu, Saritha Nair, Lucky Singh, B.K. Gulati & Arvind Pandey. Levels, trends and predictors of infant and child mortality among Scheduled Tribes in rural India. *Indian Journal of Medical Research*, 2015, 141(5):709-719.
18. Dinesh Walia, R.J. Yadav, Arvind Pandey (2015) Evaluation of adolescent friendly health services: Clients' perspectives, *International Journal of Current Research Review*, Vol. 7(16), August 2015, pp. 34-48.
19. Dinesh Walia, R.J. Yadav, Arvind Pandey (2015) Health care provider's perspectives regarding adolescent friendly health services, *International Journal of Health Sciences and Research*, Vol. 5(8), August 2015, pp. 9-18., available on [www.ijhsr.org](http://www.ijhsr.org).
20. Dinesh Walia, R.J. Yadav, Arvind Pandey (2015) Opinion of teachers regarding mentoring programme for students and adolescent health, *Scholars Journal of Applied Medical Sciences*, 3(4C), July 2015, pp. 1756-1759, [www.saspublisher.com](http://www.saspublisher.com).
21. Dinesh Walia, R.J. Yadav, Arvind Pandey, Kanav Goyal (2015) Some psychosocial problems of

- adolescent students of Chandigarh and Himachal Pradesh, India, *Journal of Medical Science & Clinical Research*, Vol. 3(6), June 2015, 6135-43, [www.jmscr.igmpublication.org](http://www.jmscr.igmpublication.org).
22. Dinesh Walia, R.J. Yadav, Arvind Pandey (2015) Reproductive and sexual health behaviour of school going students in Chandigarh and Himachal Pradesh, India, *International Journal of Current Research*, Vol. 7(7), July 2015, pp. 17856-61, available online at <http://www.journalcra.com>.
  23. Dinesh Walia, R.J. Yadav, **Arvind Pandey** (2015) Menstrual patterns among school going adolescent girls in Chandigarh and rural areas of Himachal Pradesh, India, *National Journal of Community Medicine*, Vol. 6(4), Oc. – Dec. 2015, pp. 583-86, available online at <http://www.njcm.india.org>.
  24. Ghule M, Raj A, Palaye P, Dasgupta A, Nair S, Saggurti N, Battala M, Donta B. Barriers to use Contraceptive Methods among Rural Young Married Couples in Maharashtra, India: Qualitative Findings. *Asian Journal of Research in Social Sciences and Humanities*. 2015. 5 (6):18-33.
  25. Hemraj Pal, Anurag Srivastava, S.N. Dwivedi, Arvind Pandey and Jisu Nath (2015), Prevalence of Drug Abuse in India through a National Household Survey, *International Journal of Current Science*, Vol. 15: E 103-113.
  26. Jagdish Chander Suri, Manas K. Sen, V.P. Venkatachalam, Shikha Bhoor, Rahul Sharma, Mir Elias, Tulsi Adhikari. Outcome of adenotonsillectomy for children with sleep apnea, *Sleep Medicine*, Volume 16, Issue 10, 2015, pp 1181–1186
  27. Jagdish Chander Suri, Manas Kamal Sen, Rahul Sharma, Shibdas Chakrabarti, Elias Mir, Tulsi Adhikari. Metabolic changes in normal- and underweight children with obstructive sleep-disordered breathing, *Sleep Medicine*, Volume 16, Issue 11, 2015, pp 1366–1371
  28. Jay G. Silverman, Donta Balaiah, Michele R. Decker, Sabrina C. Boyce, Julie Ritter, D. D. Naik, Saritha Nair, Niranjana Saggurti, Anita Raj. Family Violence and Maltreatment of Women During the Perinatal Period: Associations with Infant Morbidity in Indian Slum Communities. *Maternal and Child Health Journal*. 2015. 19 (11):.pp 1-9. DOI 10.1007/s10995-015-1814-y. Published online: 06 October 2015
  29. Jayachandran, V., Sahu, D., Rajaram, S., Pedersen, B. and Pandey, A. (2015) Does HIV Status Affect Utilization of Maternal Care Services among Women in India: An Analysis of NFHS 2005-2006. *World Journal of AIDS*, 5, 105-112. <http://dx.doi.org/10.4236/wja.2015.52013>
  30. **Jeetendra Yadav**, Kh Jitenkumar Singh and Subhash Gautam “Factor influencing the utilization of non skilled birth attendant in Empowered Action Group states, India *International Journal of Sciences & Applied Research IJSAR*, 2(11), 2015; 06-19.
  31. **Jeetendra Yadav**, Subhash Gautam and Kh Jitenkumar Singh “Differential in awareness and comprehensive knowledge of HIV/AIDS and its determinants among youth in India: A population based cross-sectional study” *American International Journal of Research in Humanities, Arts and Social Sciences*, 13(3), December, 2015-February, 2016, pp. 222-230
  32. **Jeetendra Yadav**, Subhash Gautam and Kh Jitenkumar Singh “Trends in child immunization in Empowered Action Group States, India (1990-2006)” *American International Journal of Research in Humanities, Arts and Social Sciences*, 12(1), September-November, 2015, pp. 80-89
  33. Jennifer A. Wagman, Donta Balaiah, Julie Ritter, D.D. Naik, Saritha Nair, Niranjana Saggurti, Anita Raj, Jay G. Silverman. Husband’s alcohol use, intimate partner violence and family maltreatment of low-income postpartum women in Mumbai, India. *Journal of Interpersonal Violence*. 1-27. 2016 DOI: 10.1177/0886260515624235
  34. Jennifer Yore, Anindita Dasgupta, Mohan Ghule, Madhusadana Battala, Saritha Nair, Jay Silverman, Niranjana Saggurti, Donta Balaiah and Anita Raj. CHARM, a gender equity and family planning intervention for men and couples in rural India: protocol for the cluster randomized controlled trial evaluation. *Reproductive Health* (2016) 13:14. DOI 10.1186/s12978-016-0122-3

35. Jha, P.K., Narayan, P., Nair, S., Ganju, D., Sahu, D. and Pandey, A. (2015) An Assessment of Comprehensive Knowledge of HIV/AIDS among Slum and Non-Slum Populations in Delhi, India. *Open Journal of Preventive, Medicine*, 5, 259-268. <http://dx.doi.org/10.4236/ojpm.2015.56029>
36. Juneja A, Anand A. Understanding statistical concepts in laboratory quality control measures in biomedical research. *Int J Res Med Sci*. 2015; 3(11): 3443-3445. doi:10.18203/2320-6012.ijrms20150919
37. Kavita Agarwal, Sunita Malik, Achla Batra, Rupali Dewan & abha Aggarwal (2015): Evaluation of awareness of abortion pills and complication of its misuse; vol.5, issue 3 pg: 148-151
38. Khatuja R, Jain G, Radhakrishnan G, Radhika A, Juneja A, Singh B. Maternal and Perinatal Outcome of Life Threatening Obstetrical Complications Requiring Multiple Transfusions. *Journal of Clinical and Diagnostic Research: JCDR*. 2015;9(11):QC01-QC03. doi:10.7860/JCDR/2015/12299.6782.
39. Kumar D, Bhutia E, Kumar P, Shankar B, Juneja A, Chandelia S. Evaluation of American Heart Association 2015 revised Jones criteria versus existing guidelines, 2016. *Heart Asia* 8(1):30-35
40. **Lucky Singh**, Prashant Kumar Singh & Perianayagam Arokiasamy. Social Network and Mental Health Among Older Adults in Rural Uttar Pradesh, India: A Cross-Sectional Study. **Journal of Cross-Cultural Gerontology** (Springer), 2016, 1-20. DOI: 10.1007/s10823-016-9286-0.
41. Madhusudana Battala, Anita Raj, Mohan Ghule, Saritha Nair, Jay Silverman, Anindita Dasgupta, Balaiah Donta, Niranjana Saggurti. Association between tribal status and spacing contraceptive use in rural Maharashtra, India. *Sexual & Reproductive Healthcare*. Available online 8 December 2015.
42. Neeta Kuma, Chesta Naval, Neeru Gupta, Tulsi Adhikari, Jiten Kh, K. K. Gangul, Meenakshi N.. Occupations and Morbidity Pattern in a North Indian Site: Need for Focused Health Services for House Wife, Pensioners and Unemployed . *Journal of Advanced Research in Medicine*, Vol 2, No 1, 2015, pp 60-64.
43. Nomita Chandhiok, Kh. Jitenkumar Singh, Damodar Sahu, **Lucky Singh** & Arvind Pandey. Changes in exclusive breastfeeding practices and its determinants in India, 1992–2006: analysis of national survey data. **International Breastfeeding Journal**, 2015, pp 10:34.
44. Nomita Chandhiok, Kh. Jitenkumar Singh, Lucky Singh & **Arvind Pandey** (2014) Transition in initiation of breastfeeding in India, 1992-2006: An analysis of NFHS data, **Jansamkhyā**, 2015, Vol.30-32: 1-11.
45. Nomita Chandhiok, Kh. Jitenkumar Singh, Damodar Sahu, Lucky Singh & **Arvind Pandey** (2015) Changes in exclusive breastfeeding practices and its determinants in India, 1992–2006: analysis of national survey data, **Int. Breastfeeding Journal**, 2015: 10-34, <http://www.internationalbreastfeedingjournal.com/content/10/1/34>:DOI10.1186/s13006-015-0059-0
46. Nomita Chandhiok, **Lucky Singh**, Kh. Jitenkumar Singh, Damodar Sahu & Arvind Pandey. Does Breastfeeding Have an Effect on Infant Mortality in India? An Analysis of National Family Health Survey Data. **Open Journal of Preventive Medicine**, 2015, 5: 359-369.
47. Nomita Chandhoik, Sahu D, **Gulati BK**, Shukla AK, Pandey A. (2016). Estimates of Infant and Child Mortality in India: A Comparison Between SRS and NFHS. *Demographic Challenges in India*. Ed. Suresh Sharma, Athena Academic, 145-157 St. John Street, London, EC1V 4PW, UK, pp. 135-160.
48. Pravin K. Jha, Padum Narayan, Saritha Nair, Deepika Ganju, Damodar Sahu and Arvind Pandey. An Assessment of Comprehensive Knowledge of HIV/AIDS among Slum and Non-Slum Populations in Delhi, India. *Open Journal of Preventive Medicine*.2015,5,259-268.
49. R.K. Sharma, M.P. Singh, K.B. Saha, P.K. Bharti, V. Jain, P.P. Singh, N. Silawat, R. Patel, M. Hussain, M. Chand, Arvind Pandey, Neeru Singh (2015) Socioeconomic and household risk factors of malaria in tribal areas of Madhya Pradesh, *Indian Journal of Medical Research*, Vol. 141, May 2015, pp. 567-75.

50. R.K. Gupta, Anil Kumar, Arvind Pandey (2015) Maternal Health Care in Rural and Urbanized Villages of Delhi - A Comparative Study, *Indian Journal of Community Health*, Vol. 27(1), Jan-March, pp. 46-51.
51. R.J. Yadav, Jeetendra Yadav, Niyamat Siddique, Arvind Pandey (2015) Knowledge and utilization of Indian system of medicine in the state of Assam, *Indian Journal of Community Health*, 27(2), April-June 2015, pp. 223-229, [www.iapsmupuk.org](http://www.iapsmupuk.org).
52. Reed, Elizabeth, Balaiah Donta, Anindita Dasgupta Mohan Ghule, Madhusudana Battala, Saritha Nair, Jay Silverman, Arun Jadhav, Prajakta Palaye, Niranjana Saggurti, Anita Raj. Household Debt Among Young Married Couples in Rural Maharashtra, India, and Its Relationship to Husbands' Attitudes Toward Gender Norms and Intimate Partner Violence Perpetration. *Public Health Reports*. Public Health Reports / November–December 2015 / Volume 130.
53. Sahu, D., Ramesh, S., Mishra, R.M., Reddy, K.S., Bharadwaj, R., Saggurti, N., Pandey, A., Mainkar, M., and George, B. (2015) Are Truckers Being over Stigmatized as HIV Carriers in India? Evidences from Behavioral and Biological Cross-Sectional Surveys among Clients of Female Sex Workers. *Open Journal of Preventive Medicine*, 5, 85-91. <http://dx.doi.org/10.4236/ojpm.2015.53010>
54. Sahu D, Nair S, Singh L, Gulati B K and Pandey A. Levels, trends and predictors of infant and child mortality among Scheduled Tribes in rural India. *Indian Journal of Medical Research*, 141, May,2015, pp 709-719.
55. Shahida Nagma, Garima Kapoor, Rekha Bharti, Achla Batra, Aruna Batra, Abha Aggarwal, and Aanchal Sablok (2015) : Evaluate the Effect of Perceived Stress on Menstrual Function Clin Diagn Res v.9(3); 2015 Mar ; QC01-QC03 PMC4413117 Published online 2015 Mar 1 doi: 10.7860/JCDR/2015/6906.5611
56. Shahina Begum, Jean J. Schensul, Saritha Nair, Balaiah Donta. Initiating Smokeless Tobacco Use across Reproductive Stages. *Asian Pacific Journal of Cancer Prevention*, 16 (17), 7547-7554. DOI:<http://dx.doi.org/10.7314/APJCP.2015.16.17.7547>
57. Sharma S, Juneja A, Adhikari T, Anand A. Significance Of Correction Of P Value In Statistical Comparisons Among Multiple Groups In Biological Research *EJBPS*, 2016, 3(1), 400-401.
58. Sheila C. Vir, T. Adhikari, Arvind Pandey, A.K. Nigam, Richa Malik. Undernutrition in India: Age-wise Trend and Risk Factors *Statistics and Application*, Volume 13, Nos. 1&2, 2015, pp 85-93.
59. Singh, Kh. Jitenkumar, **Chaturvedi, H.K.** and Pandey, Arvind (2015). Factors influencing antenatal care services utilization in empowered action group(EAG) States, India: A spatial and multilevel analysis. *Global Journal of Human-Social Science (H)*, 15(8): 57-68.
60. Sweta., Bajpai, Ram C. and **Chaturvedi, H.K.** (2015) Evaluation of Inter-Rater Agreement and Inter-Rater Reliability for Observational Data: An Overview of Concepts and Methods. *J. Indian Academy of Applied Psychology*, 41(3), **Special Issue**: 20-27.
61. Singh, Kh. Jitenkumar and **Chaturvedi, H.K.** (2015) Factor Influencing the Skilled Birth Attendant Utilization of Non-Institutional Delivery in Empowered Action Group States, India. *American International Journal of Research in Humanities, Arts and Social Sciences*, 12(1): 54-62.
62. Tulsi Adhikari, Sheila C. Vir, R.J. Yadav, Arvind Pandey. Undernutrition in Children Under-two years (U2) in India – An Analysis of Determinants, *Statistics and Application*, Volume 13, Nos. 1&2, 2015, pp. 25-36
63. V. Jayachandran, D. Sahu, S. Rajaram, Bo Pedersen, Arvind Pandey (2015) Does HIV Status Affect Utilization of Maternal Care Services among Women in India: An Analysis of NFHS 2005-2006, *World Journal of AIDS*, 5, 105-112. <http://dx.doi.org/10.4236/wja.2015.52013>
64. Yujwal Raj, Sahu D, Pandey A, Venkatesh S, Reddy DCS, Bakkali T, Das C, Singh JKh, Kant S, Bhattacharya M, Stover J, Jha UM, Kumar P, Mishra RM, Chandra N, **Gulati BK**, Mathur S,

Joshi D, Chavan L (2015). Modelling and estimation of HIV prevalence and number of people living with HIV in India, 2010-2011. *International Journal of STD & AIDS*, October 22, 1-9, doi:10.1177/0956462415612650.

### **Technical Report**

65. **India HIV Estimations - 2015, Technical Report**, National Institute of Medical Statistics, ICMR, New Delhi & National AIDS Control Organization (NACO), MOHFW, New Delhi, 2015.

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