

Preface

It is my pleasure to present before you the annual report of the National Institute of Medical Statistics (NIMS) for the year 2012-13. Having continued its activities in the thrust areas, the Institute brought out a report on Infant and Child Mortality in India: Trends and Determinants. The report was released on the occasion of children's' day, i.e., 14 November 2012 at a special function in ICMR New Delhi. It was released by Dr M.K. Bhan, Secretary Department of Bio Technology in the presence of Dr V.M. Katoch, Director General, ICMR and Secretary DHR, and Louis George Arsenault, UNICEF India Representative and other dignitaries. Dr Katoch in his opening remarks appreciated the efforts put into the analyses of the time series data from Sample Registration System (SRS) and three rounds of the National Family Health Survey (NFHS) and bringing out the realistic situation for the program people and thanked UNICEF India Country Office, New Delhi, for sponsoring the study.

The Institute has been participating in the NACO's HIV Sentinel Surveillance (HSS) since 2002 as the nodal Institute for the modelling, estimation and projection. During the year under report, the Institute carried out the epidemiological analysis of HSS 2010-11 and provided the official estimate of HIV burden in the country. In another study, the Institute worked on the Estimation of Maternal Mortality Ratio (MMR) in Orissa and Rajasthan. The Clinical Trial registry – India (CTRI) is one of the major ongoing activities of the Institute. In addition, there were five other research projects ongoing in the Institute during the year. The Institute conducted a number of training programs as a part of human resource development. It included summer training of students of M.Sc. Statistics / Biostatistics from different Universities on the application of statistics in different areas of health research. The Institute also conducted a workshop on the evaluation of diagnostic kits for health researchers. Being the nodal Institute, the Institute organized a series of training workshops on HIV estimations to the regional teams on the process of HIV estimation using various modules of Spectrum. The scientists of the Institute also participated, as resource person, in the capacity building programs in research methodologies of various Institutions in the country. The Institute provides technical support to various health surveys evaluating national programmes including National Family Health Survey (NFHS), District Level Household Survey (DLHS), NRHM Concurrent Evaluation Survey, Annual Health Survey (AHS) etc. Technical support is also provided on the monitoring and evaluation of National Vector Born Disease Control Programme at the Ministry of Health & Family Welfare.

The scientists of the Institute have been attending the National and International Conferences disseminating the research carried out by them at the Institute and have published 20 research papers in journals of national and international repute.

I take this opportunity to express my sincere thanks to scientists, staff, various funding agencies and members of different technical committees for their untiring support.

(Arvind Pandey)

Director

1. Training/Workshops Organized

1. Summer Training on Application of Statistics in Health Research to PG Students of Statistics
Date: May-June 2012
Number of trainees: 20
Objectives : <ul style="list-style-type: none">• The main aim of the training is impart applied knowledge for better understanding of formulation of research studies, preparation of protocol and Statistical methodology. Also, get the student acquainted with the techniques of data management and usage of statistical software for analysis and presentation of results to prepare report.
Topics Covered : <ul style="list-style-type: none">• Developing Project proposal and management• Methods of project evaluation• Data Management• Application of statistical software for data analysis• Research exposure - The students were exposed to various research activities of the Institute and given opportunity to do some work i.e. data entry and analysis.• Project work - They were also involved in group project work and helped in preparing short report on some topics.
Resource persons: Dr. H.K. Chaturvedi, Dr. Abha Aggarwal, Dr. Anil Kumar, Dr. D. Sahu, Dr. Tulsi Adhkari, Dr. Atul Juneja, Mr. Kh. Jitenkumar Singh

2. Statistical Methods in Evaluation of Diagnostic Kits
Date: 15-17 November 2012
No. of participants: 22

Objective:

- The main aim of the workshop is to provide training to the medical researchers/scientists working in the fields related to diagnostic kit evaluation. The training was design to cover various topics related to Statistical methodology used in evaluation of diagnostic kits and application of analytical tools being used for data analysis and to test the efficacy of new kits.

Topics Covered

- The subject covered during the training on clinical trial was Probability and statistics, Method of randomization, Testing of Hypothesis, Determination of sample size, Diagnostic Kit Evaluation Methods (Sensitivity and specificity, False positive and False negative etc.), SQC for Evaluation of Diagnostic Kits, ROC Curve, Data management and Statistical analysis using SPSS software.

The participants who attended the training were the researchers from different Medical Institutes such as JIPMER and local medical colleges/Institutes (give name of all the Institutions) of New Delhi.

Resource persons: Professor S.K. Neogy, Indian Statistical Institute, New Delhi, Dr. Arvind Pandey, Dr. Anil Kumar, Dr. Abha Aggarwal, Dr. H.K. Chaturvedi Dr. Atul Juneja, Mr. Jitenkumar.

3. Launch of the report entitled “Infant and Child Mortality in India: Levels, Trends & Determinants”, Nov 14, 2012



On the auspicious occasion of Children Day on 14th November, 2012 the report “Infant and Child Mortality in India: Levels, Trends & Determinants” was launched at Indian Council of Medical Research (ICMR), New Delhi by Dr. M.K. Bhan, Secretary, Department of Biotechnology in the august presence of Dr. V.M. Katoch, Secretary, Department of Health Research and Director General, ICMR; Louis George Arsenault, UNICEF India Representative and many other dignitaries. Speaking on the occasion, Dr.Bhan stressed on the need of girls’ education and improving quality of perinatal care for accelerating declines in child mortality.

Accelerating child survival calls for new approaches to child mortality that goes beyond disease-programme and sector-specific approaches,” said Dr. Katoch. He also pointed out that findings of the report should be deliberated upon and brings out realistic recommendations and thanked UNICEF India Country Office, New Delhi for sponsoring the study. Dr. Pavitra Mohan from UNICEF gave a brief introduction of the objectives of the study.

Dr. Arvind Pandey, Director, National Institute of Medical Statistics, ICMR gave a background of the methodology adopted in time series analysis of data from Sample Registration System (1978-2010) and three rounds of National Family Health Surveys conducted in the years 1992-93, 1998-99 and 2005-06. He stated that six states, namely Kerala, Tamil Nadu, Maharashtra, Punjab, Himachal Pradesh and West Bengal are likely to achieve the Millennium Development Goal (MDG)-4, i.e., reduction of the U5MR below 39 by 2015.

“A renewed focus on empowering women and promoting equity in access to health services will help guide actions for accelerating child survival in India, as we move towards the year 2015 and beyond. We require a comprehensive approach that includes not only increasing coverage of key child survival interventions, but also improving quality of perinatal care, promoting education of girls beyond primary, delaying the age at marriage and childbirth and ensuring adequate spacing between births”, stated Louis-Georges Arsenault.



In respect of environmental determinants, the study suggests that children living in households with access to unsafe source of drinking water were at greater risk of death. Neonatal, post-neonatal and child mortality is also higher for children in households that do not have access to a flush or pit toilet.

“The results of this study underscore the need for addressing wider determinants of child mortality to achieve MDG-4 and not restrict to addressing only the direct causes”,

stated Dr. Pandey.

(To read the full report, visit: <http://www.unicef.org/india/Report.pdf>)

5. Training Workshop on National HIV Estimations & Projections, 1–5 May, 2012

The first national training workshop for the regional working groups was conducted at New Delhi from 1–5 May 2012.

The objective of this workshop was to introduce the regional teams to the process of HIV estimation using Spectrum model, orient them to all the steps involved in the process, take them through a step-by-step practice of working on Spectrum and plan for the follow up work by the regional teams.



Inauguration of the Training Workshop on National HIV Estimations and Projections (May 1-5, 2012)

Sitting on the dais (from left) Dr. S. Venkatesh (DDG, NACO), Dr. Paulin CDC (?), Dr. Prema Ramachandran (Executive Director, Nutrition Foundation of India, Dr. Arvind Pandey (Director, NIMS), Dr. John Stover, Futures Institute and Dr. Taoufik Bakkali (Sr. M&E, Advisor, UNAIDS Indian Country Office).



The training was facilitated by international experts from WHO/UNAIDS Global Reference Group on Estimations, Projections and Modelling, East-West Center, Hawaii and CDC Atlanta, in addition to the members of NWG from NIMS-ICMR, NACO and UNAIDS.



Participants of the Training Workshop on National HIV Estimations and Projections (May 1-5, 2012)

The training was conducted for five days. The first day focussed on understanding the overall HIV estimation and statistical modeling process, get familiar with Spectrum package and its modules, reviewing and entering demographic and programme data into Spectrum. Second day addressed the steps of configuring the epidemic structure, careful review of epidemiological data on prevalence trends, conducting quality checks and making adjustments, and entering the data into Spectrum. Third day focused on understanding the curve fitting, identifying and fixing issues with curve fitting, calibration and examining initial results from curve fitting. Fourth day covered the advanced options of statistical modeling and uncertainty analysis, besides continuing with the hands-on-practice. Last day elaborated the steps in generating and examining the Spectrum outputs and discussions were held to plan the follow-up work by the regional teams. The teams were asked to consult with the respective programme managers at SACS to finalize the programmatic inputs such as ART coverage in adults and children, PPTCT coverage and size of high risk groups (FSW, MSM, IDU & Migrants).

6. Interim Workshop on National HIV Estimations and Projections, 28-30, May 2012

The interim workshop was conducted with the objectives of finalizing the input data (Demographic, ART, PPTCT, HRG), prepare checklists and enter the data into Spectrum, reviewing and cleaning of HSS data, finalizing and entering the data into EPP and working on curve fitting for each state. Regional working groups made presentations on the data inputs that they have collected in consultation with programme officers at their respective State AIDS Control Societies. Technical and other practical challenges encountered by states/ Union Territories were identified and steps were suggested to address them. State-specific scenarios and options to customize the model for each state were discussed. Regional teams were advised to work on their respective state models, refine the curve fits and generate final estimates for discussion and review during the final workshop.



7. Final Workshop on HIV Estimations and Projections, 25-26 and 28-29 September 2012

A final workshop was conducted in two batches to finalise the epidemic projections and examine the results for each state. Work done by states was critically reviewed by the National Working Group. The objective was to once again review the epidemiological and demographic data inputted to Spectrum, review initial state results and ensure the validity of any adjustments made by the states. State-specific issues and recommendations were listed down and corrections were carried out by the teams during the next two weeks following the workshop. Projection files worked by the regional teams were shared with the national working group for final review and consolidation.



Dissemination with pictures to be added

Nov 30, 2012	Dissemination workshop for HIV estimation 2012 by Chief Guest Hon'ble minister Sri Ghulam Nabi Azad at Auditorium, PGIMER. Dr. RML Hospital, Delhi organized by NACO & NIMS, ICMR, New Delhi – Book cover page	Dr. Sahu
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2. Scientific Programmes

Completed Studies

1. INDIA'S HIV SENTINEL SURVEILLANCE AND EPIDEMIOLOGICAL ANALYSIS

HIV Estimations 2012

National Institute of Medical Statistics (ICMR), New Delhi is the nodal agency for developing national estimates of HIV prevalence and burden in India using the data from all the rounds of HIV Sentinel Surveillance (HSS) among high risk groups and general population. The first HIV estimation in India was done in 1994 based on data from 52 sites. Since then, the process of HIV estimation in the country has evolved to a very great extent. As the data from HIV Sentinel Surveillance is not representative of the general population, certain assumptions are used to generate estimates of prevalence, incidence and mortality for the general population. Over the years, these assumptions have been gradually refined with the help of other available data sources and by customizing the models more and more using inputs based on Indian data.

OBJECTIVES OF HIV ESTIMATIONS

The latest round of HIV Estimations have been undertaken with an overarching aim of generating HIV Estimates for India and states, using updated information from HSS 2010-11, Census 2011 and other recent global evidence, through a process that adopts high standards of scientific analysis and methodological rigour.

The specific objectives of HIV Estimations 2012 are:

1. To generate estimates of number of PLHIV, HIV prevalence, incidence, mortality and programme needs (for the years 2010 & 2011 and back calculate comparable estimates for previous years)
2. To improve the understanding of epidemic patterns in different states through a critical analysis of key HIV estimates and highlight key areas for programmatic attention and
3. To build regional and state level pools of expertise in HIV/AIDS epidemic analysis and modelling through involvement of multi-disciplinary teams from programme units and institutions

TOOLS AND METHODOLOGY

India HIV Estimates generated under the 2010-11 round is a primary source of updated information on the HIV epidemic at the national and state level. These HIV estimates are an outcome of concerted efforts for over six months by the National Working Group on Estimations and five Regional Working Groups under the leadership of National Institute of Medical Statistics (ICMR). The National Working Group comprised experts from the National AIDS Control organization (Department of AIDS Control), National Institute of Medical Statistics (Indian Council of Medical Research), National Institute of Health and Family Welfare, All India Institute of Medical Sciences, UNAIDS, WHO & CDC. The Regional Working Groups comprised national and state level M&E officers, epidemiologists and biostatisticians from State AIDS Control Societies, Regional Institutes for HIV Sentinel Surveillance and other partner organizations.

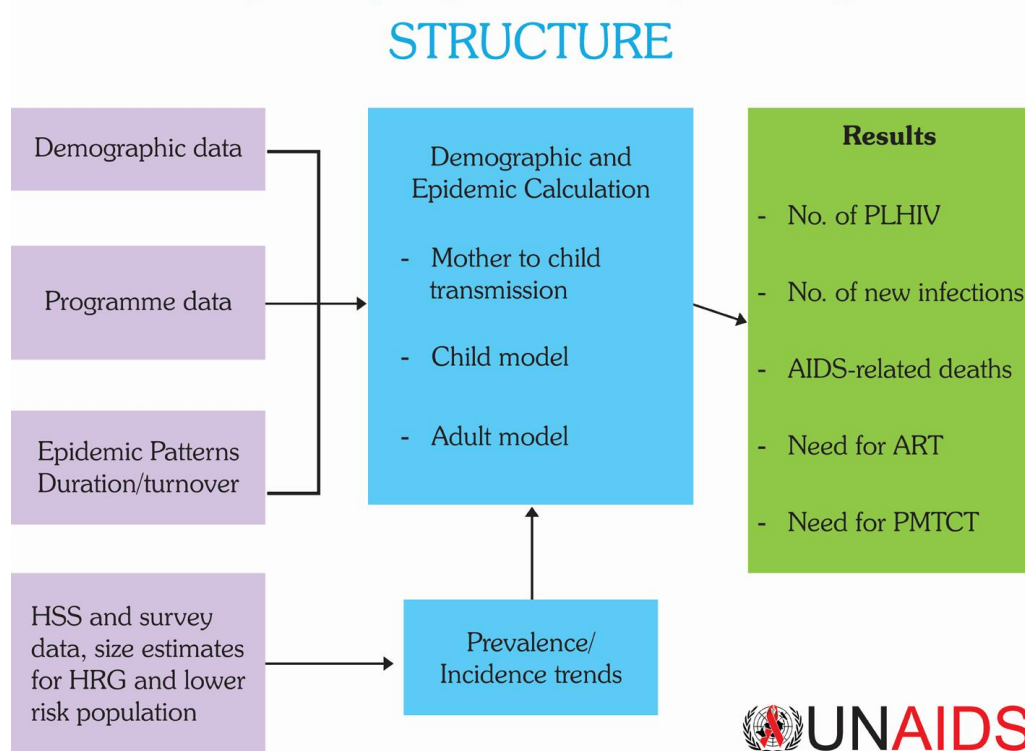


Working Session of the National Working Group for HIV Estimations 2012

As part of the initiative to consistently improve on the accuracy of estimates generated; a set of more refined tools and globally recommended methods along with updated data inputs were utilised for HIV estimations.

Spectrum 4.35 Beta19 was the tool utilized for generating HIV estimates under the current round. This version of Spectrum had an inbuilt Estimation and Projection Package for estimating HIV prevalence and incidence so that now the entire process could be done using this single tool. Spectrum includes the DemProj module, the AIDS Impact Model (AIM) and the Estimation and Projection Package inbuilt in AIM. Based on these three components (Demographic projections, estimated trend of adult HIV prevalence, and epidemiological assumptions), the **AIM module** was used to determine the number of people living with HIV/AIDS, HIV incidence, and ART need, by age and sex. The entire process was repeated separately for each state/union territory for which estimates have been provided (see below).

2011 Estimating and Projecting national AIDS epidemic using SPECTRUM



Overview of the Process for Generating India HIV Estimates 2010–11

The first step for generating the HIV estimates was updating demographic projections based on latest Census data (2011). The DemProj module of Spectrum was utilized for projecting the population for the entire country and states by age and sex based on inputs about fertility, mortality and migration. Detailed review of demographic projections and necessary adjustments were undertaken to ensure that the results matched with Census 1981, 1991, 2001 and 2011 data. Through deliberations between the TWG and the National Expert Group on Population Projections, the values for base year population, migration, mortality, fertility and sex ratio at birth were finalized. The results were validated with the help of national and international experts.

METHODS OF POPULATION PROJECTION IN SPECTRUM

Population projections were done using the standard cohort component projection method. This method projects the population in a way that duplicates the manner by which populations actually grow or decline. It consist of carrying forward each cohort (individuals in an age-group), in time subject to the age-pattern of mortality to which the cohort has been exposed. These calculations are performed by sex due to observed differentials in mortality pattern among males and females. In addition, the numbers of births that women of childbearing age will have at the assumed birth rates are estimated for each year and are, in turn, subject to infant and child mortality rates. The third and final component of change is considered to be the migration by age and sex over time, measured in terms of net-migration. More details about the cohort-component method can be found in other documents.

Spectrum contains a demographic projection model that projects the population by age and sex over time on the basis of the starting population by age and sex and annual rates of fertility, mortality and migration. The population by age and sex in that first year (1981) is from the census. Estimates of fertility and mortality are available from annual sample surveys and the Expert Committee projections of population as explained above. These data sources are not necessarily consistent, and as a result the projection of the population from 1981 may not exactly match the census findings for later years. The mismatch may be particularly important for children under age 5. Spectrum can adjust for these discrepancies by comparing the projected population by age and sex in each year with those contained in an external data file. The estimates in the external file were prepared by disaggregating the census population in 1981, 1991, 2001 and 2011 into single ages using the Beers' Interpolation formulas and then interpolating between census years to fill in the intervening years.

The Beers procedure uses a series of polynomial equations to divide the population in five-year age groups into single year ages while maintaining the population total and providing a smooth transition from one age to the next. More details about the Beers procedure, and its application are available in separate documents.

The survival probabilities for single year ages were calculated using the life tables which were provided for five-year age groups. The number of person years lived and number of individuals who survived to the different age-groups were used to calculate single year survival probabilities. Once the single year estimates were derived, the standard cohort-component methodology was adopted to obtain year-wise projected values of males and

females population by single year ages. At the end of the calculation cycle for each year, Spectrum calculates the ratio of the projected population to the population in the external file. Separate ratios are calculated for each age and sex. The current projection is adjusted by multiplying the population of that age and sex by the calculated ratio. Thus, small adjustments are made on annual basis to the projected population to ensure that it matches the census data in all years. At the result of this process, the demographic projection is Spectrum's Demprojmodule are exactly matching the population structure and numbers for each census year since 1981. More details about the DemProj Module are available in its manuals which are available online at the website of Future's Institute (<http://www.futuresinstitute.org/spectrum2.aspx>).

In the AIM module, several programme and epidemiological data inputs were required. The programmatic inputs related to programme coverage of adult and child on ART and PMTCT in addition to the eligibility for treatment as per national guidelines. The epidemiological inputs consisted of HIV Sentinel Surveillance data, Integrated Biological and Behavioural Assessment (IBBA) surveys and size estimates of High Risk Groups (HRG).

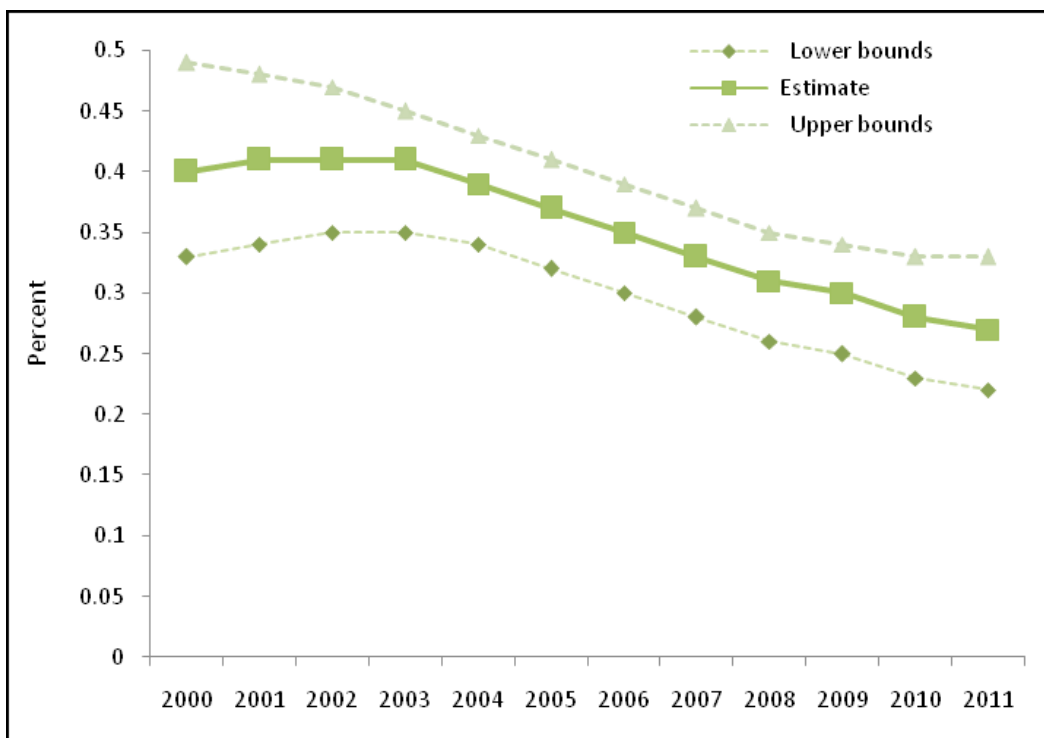
HIV prevalence curves for 34 States/Union Territories were generated for each of the identified sub-population groups. The curve for the general population for all states was calibrated with data from the National Family Health Survey. State level prevalence and incidence projections produced were used to project consequences of the epidemic in Spectrum. Finally, estimates for adult HIV prevalence, new infections, number of people living with HIV, AIDS-related deaths and treatment needs were generated. Results were validated through careful review and comparisons before finalization.

KEY RESULTS

The key results from HIV Estimations 2012 are presented below.

ADULT HIV PREVALENCE

National adult (15-49 years) HIV prevalence is estimated at 0.28% (0.23%-0.33%) in 2010 and 0.27% (0.22%-0.33%) in 2011. Adult HIV prevalence among males and females is estimated at 0.33% and 0.23% in 2010 and 0.32% and 0.22% in 2011 respectively.



Estimated Adult HIV Prevalence in India, 2000–11 with Uncertainty Bounds

In 2011, among the states, Manipur has shown the highest estimated adult HIV prevalence of 1.22%, followed by Andhra Pradesh (0.75%), Mizoram (0.74%), Nagaland (0.73%), Karnataka (0.52%), Goa (0.43%) and Maharashtra (0.42%). Besides these states, Odisha, Gujarat, Tamil Nadu, and Chandigarh have shown estimated adult HIV prevalence greater than national prevalence (0.27%), while Chhattisgarh, Jharkhand, Tripura, West Bengal, Uttarakhand, Delhi, and Bihar have shown estimated adult HIV prevalence of 0.27-0.20%.

All other states/UTs have lower levels of Adult HIV prevalence.

The adult HIV prevalence at national level has continued its steady decline from estimated level of 0.41% in 2001 through 0.35% in 2006 to 0.27% in 2011. Similar consistent declines are noted among both men and women at national level. Declining trends in adult HIV prevalence are sustained in all the high prevalence states (Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu) and other states such as Mizoram and Goa. However, the low prevalence states of Assam, Arunachal Pradesh, Chandigarh, Chhattisgarh, Delhi, Jharkhand, Meghalaya, Odisha, Punjab, Tripura and Uttarakhand have shown rising trends in adult HIV prevalence.

HIV PREVALENCE AMONG YOUNG POPULATION

HIV prevalence among the young population (15-24 yrs) at national level is estimated at 0.11%. Unlike adult HIV prevalence where HIV prevalence among males is around 1.5 times that among females, in young population, HIV prevalence is equal among men and women at 0.11%.

HIV prevalence among the young population (15-24 yrs) at national level has also declined from 0.30% in 2000 and has stabilized over the last four to five years at around 0.11%. Stable to declining trends in HIV prevalence among the young population (15-24 yrs) are also noted in most of the states. However, rising trends are noted in some states including Jharkhand, Odisha, Tripura and Uttarakhand.

ANNUAL NEW HIV INFECTIONS

India is estimated to have around 1.16 lakh (0.72–1.99 lakh) annual new HIV infections among adults and around 14,500 (10,974–19,346) new HIV infections among children in 2011. Among states, Andhra Pradesh is estimated to have the highest number of new adult HIV infections in 2011 (16,603) followed by Odisha (12,703), Jharkhand (9,085), Karnataka (9,024), Bihar (7,797), Uttar Pradesh (7,745) and West Bengal (7,289). While the states of Gujarat, Maharashtra, Chhattisgarh, Rajasthan, Punjab and Uttarakhand have new adult HIV infections between 3,000 and 7,000, rest of the states have less than 3,000 new adult HIV infections in 2011.

Of the 1.16 lakh estimated new infections in 2011 among adults, the six high prevalence states account for only 31% of new infections, while the ten low prevalence states of Odisha, Jharkhand, Bihar, Uttar Pradesh, West Bengal, Gujarat, Chhattisgarh, Rajasthan, Punjab & Uttarakhand together account for 57% of new infections.

India has demonstrated an overall reduction of 57% in estimated annual new HIV infections (among adult population) during the last decade from 2.74 lakhs in 2000 to 1.16 lakhs in 2011. This is one of the most important evidence on the impact of the various interventions under National AIDS Control Programme and scaled-up prevention strategies. Major contribution to this reduction comes from the high prevalence states where a reduction of 76% has been noted during the same period.

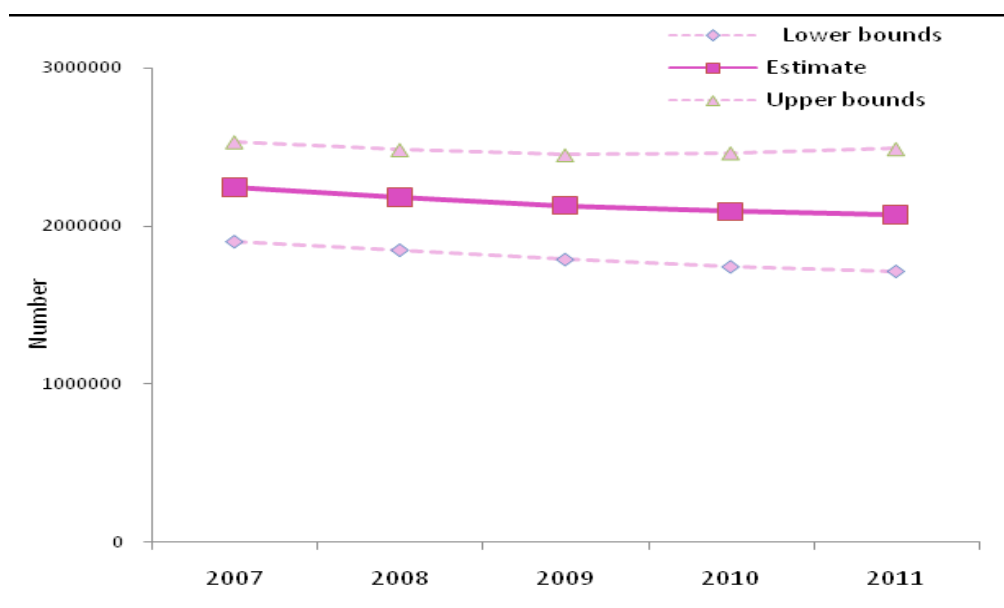
During the period of NACP-III, the new HIV infections among adults have decreased by 28% in high prevalence states between 2007 & 2011. Other states of Gujarat, West Bengal, Bihar, Rajasthan and Kerala also show declining trends in new HIV infections, though they account for a larger number as mentioned above.

However, rising trends of new infections are noted in the states of Assam, Arunachal Pradesh, Chandigarh, Chhattisgarh, Delhi, Jharkhand, Meghalaya, Odisha, Punjab, Tripura

and Uttarakhand. As a result of this, the trend of annual new infections at national level is getting stabilized towards 2011. This underscores the need for the programme to focus more on these states with low prevalence, but high vulnerability.

PEOPLE LIVING WITH HIV/AIDS (PLHIV)

The total number of people living with HIV/AIDS (PLHIV) in India is estimated at 21 lakh (17.2 lakh–25.3 Lakh) in 2011. Children (<15 yrs) account for 7% (1.45 lakh) of all infections, while 86% are in the age – group of 15-49 years. Of all HIV infections, 39% (8.16 lakh) are among women. The four high prevalence states of South India (Andhra Pradesh–4.19 lakh, Karnataka–3.15 lakh, Maharashtra–2.01 lakh, Tamil Nadu– 1.32 lakh) account for 53% of all HIV infected population in the country. West Bengal, Gujarat, Bihar, Uttar Pradesh and Odisha are estimated to have more than 1 lakh PLHIV each and together account for another 29% of HIV infections in India. The states of Rajasthan, Jharkhand, Chhattisgarh, Madhya Pradesh, Punjab, Manipur, Delhi and Kerala and have estimated HIV infections between 25,000 and 75,000 each and together account for another 15% of HIV infections.



The estimated number of people living with HIV in India maintains a steady declining trend from 23.2 lakh in 2006 to 21 lakh in 2011.

CONCLUSION

India HIV's epidemic is dynamic and rapidly evolving. With the increased amount of strategic information made available on the epidemic through HIV Sentinel Surveillance and HIV

estimations in addition to other data, there is greater understanding on the levels and trends of infection in specific areas and amongst specific population groups. Appropriate programme response based on this evidence is required for successful control of HIV epidemic in the country. Further analysis has to be undertaken to understand the epidemic at district and regional level within states, so that programme interventions can be tailored according to the local epidemic context.

2. Estimation of Maternal Mortality Ratio in Orissa and Rajasthan

Date of initiation: 1st August 2010

Date of completion: 30th September 2012

Funding Agency: ICMR, Statistics taskforce study

Introduction:

During 2003, this National Institute of Medical Statistics (NIMS) evolved the snowball approach for capturing the maternal deaths and demonstrated it to be a cost effective methodology for estimation of maternal deaths. However, snowball sampling approach could not be adopted at the national level understandably for the want of more illustrative applications. It is in this line, the taskforce in Statistics at ICMR suggested to replicate the technique in two states, namely, Orissa and Rajasthan.

The specific objectives of the study are:

- To replicate the snowball sampling technique in capturing maternal deaths in the study population;
- To estimate the maternal mortality ratio in two states Orissa and Rajasthan; and
- To study the medical as well as socio cultural causes of maternal deaths in the study states.

Methodology

Cluster sampling was adopted for the selection of primary sampling with PHC being the cluster in rural area and UFS in urban area in each State. In case of Rajasthan, 5 districts, namely, Bharatpur, Jaipur, Jodhpur, Kota, and Udaipur were selected randomly from North, South, East, West and Centre Zones. The number of PHCs was allocated proportionally in each of the selected districts. From each of the selected district, required number of PHCs was selected through systematic random sampling from the frame of PHCs. Similarly, in case of Orissa, 3 districts, namely, Koraput, Sambalpur and Puri were selected randomly from the southern, western and coastal zone. The number of PHCs was allocated proportionally in the selected districts. The required number of PHCs was selected by systematic random sampling. Two census blocks from urban area of Bhubaneswar in Orissa and Jaipur in Rajasthan were also selected. Therefore, a total of 13 PHCs and two UFS/Census blocks were covered in Orissa State and 15 PHCs and 2 wards in Rajasthan were selected.

Snowball sampling was adopted to identify the maternal deaths in the selected PHC area and the verbal autopsy was conducted to collect the detailed information on identified maternal deaths. All the maternal deaths during the last three years preceding the survey were covered for verbal autopsy. The reference period was April to March of the year. Survey was conducted during the year October 2010- June 2012. The cause of maternal deaths was assigned by Gynecologist.

Results/Findings

The study found 52 maternal deaths in Orissa and 79 maternal deaths in Rajasthan. About 17 percent more maternal deaths were captured in both the states. Maternal deaths which could not be reported were captured by snowball technique.

The overall BR for Rajasthan is estimated to be 24 per one thousand populations which also show reduction in BR as compare to AHS reported BR of 26 per thousand. The possible reason for the reduction in BR in both the state may be the period for data collection. Study includes a recent data till March

The overall MMR for Orissa is estimated at 271 (95% CI: 198-344) as against 277 (95% CI: 246-307) reported by AHS. The MMR based on the study found to be comparable with AHS findings. However the estimated standard error is higher which may be due to under reporting of the births in Orissa with higher proportion of home deliveries. Similarly the study found the overall MMR in Rajasthan as 222 (95% CI: 172- 271) as compared to reported MMR of 331(95% CI: 300-362) of AHS. The probable cause of so lower estimates of MMR found from the study may be due to increased in institutional deliveries with the implementation of JSY in the states. As per the latest special bulletin on maternal mortality of sample registration system (SRS) 2007-2009, three states have already realized the MDG target while other two Tamil Nadu and Maharashtra are the new entrants. The Millennium Development Goals report of 2011 indicates that improvement in the past two decades is also due to the proportion of deliveries attended by skilled health personnel in developing regions rising from 55 per cent in 1990 to 65 per cent in 2009. The findings of this study suggest that Rajasthan which is one of the EAG state is improving and soon will be a part of target met group.

As regard to the maternal deaths, study found the respondents of the deceased were either husband or any other relation present at the time of the survey. About 44% in Rajasthan and 81% in Orissa the respondents were husband.

Reproductive Characteristics

Study found that about 40% of the maternal deaths occurred in the age group 20-24 years in Rajasthan while about 43% maternal deaths occurred in Orissa. About 13-15% of maternal deaths were occurred to women age less than 20 years in both the states. About 62% of maternal deaths in Rajasthan and 43% of maternal deaths in Orissa were found to be from Nuclear family. This may have implication on death in younger age group. It was found that more than 96 % of maternal deaths were registered for ANC in Rajasthan while 78 % were registered in Orissa. The registration for ANC shows an increase as compared to NFHS-3 finding of about 58% in Orissa and 67% in Rajasthan. This increase may be due to the implementation of JSY scheme in both the state. About 32% deliveries were conducted at home in Rajasthan while 34 % in Orissa. Although study found 75% deliveries to be conducted at Institution however many of the PHCs in Rajasthan had 100% institutional deliveries due to JSY scheme.

Further, it was observed that about one fourth of the maternal deaths occurred during the ANC period while 4-5% maternal deaths occurred on road. Further it was observed that 45% were institutional maternal deaths in Rajasthan while it was about 30% in Orissa. This indicates the women rushed to the hospital due to complications occurred after the delivery conducted at home either by untrained dai or their relative, they are unable to handle the complication occurred at the last moment thereby results in more institutional deaths. Study also found that higher proportion of deaths (68% in Orissa and 45% in Rajasthan) occurred within 42 days of the delivery and in third trimester.

The main causes of maternal deaths in Orissa were found to be PPH (24%), anemia (14.3%) and abortion (7.1%) while in Rajasthan causes were PPH (32.7%), anemia (12.7%) and followed by Septicemia (9.1%).

The indirect or non-obstructed causes of maternal deaths were about 33% in Orissa and 27% in Rajasthan. Among the non obstetric reasons of maternal deaths, viral hepatitis, TB, suicide, road accident and heart diseases.

It was concluded that about 30% of non obstructed maternal deaths could be averted. In addition, intervention for the prevention of PPH may be planned. It was also felt that the importance of safe delivery at institutional may be advocated to women in rural population to avoid such happenings at the last stage.

Ongoing Activities / Studies

1. Clinical Trials Registry- India

Date of commencement: April 2006

Sponsored by: ICMR

Background and objectives: The Clinical Trials Registry – India (CTRI) is a web based system (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 20th 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 following 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, and
- 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 3600 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 (Laxmi Nagar Data Center) and managed by the 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 3519 trials have been registered till 31st March 2013. 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 about 1649 trials were registered. Of which about 60% of the registered trials have been updated as per the new version of the software.

Figure 1 Distribution of Registered Trials till 31st March 2013

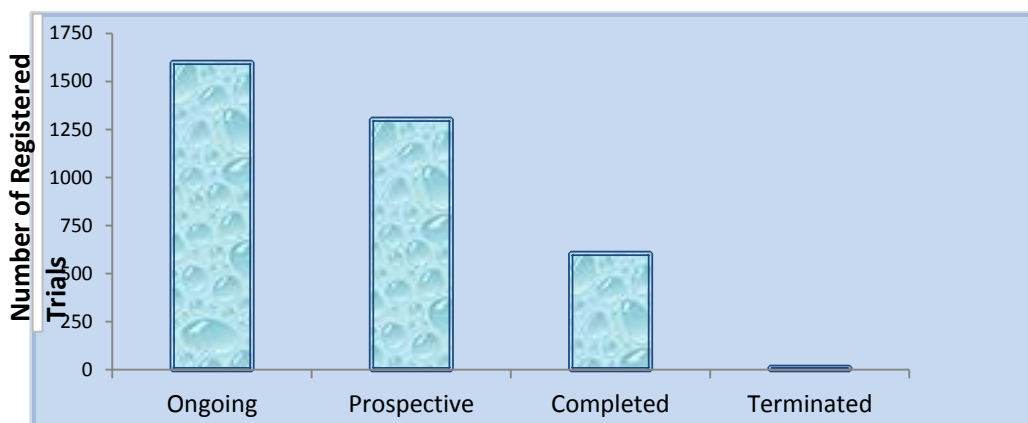


Figure 2 Year –wise trend of trial registration till 31st March 2013

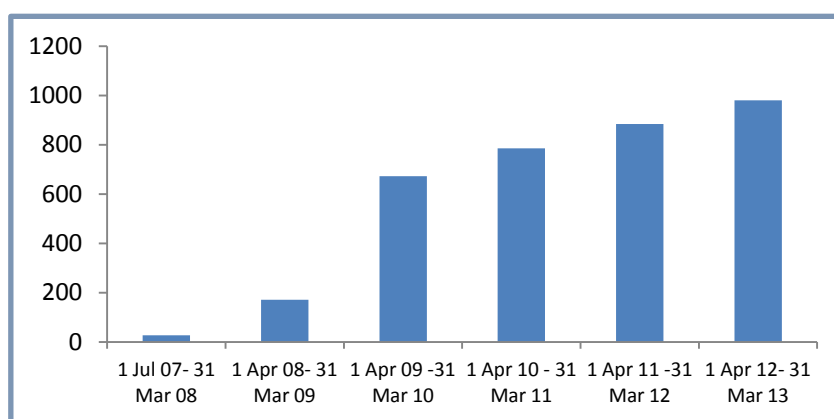


Table 1 CTRI: A Comparative status

Current Status of CTRI	31 st March 2012	31 st March 2013
Number of Hits	>3,40,000	>5,50,000
Number of Registered Users	4172	5860
Number of Trials Received	3429	4883
Number of Trials Registered	2539	3519
Number of Prospective Trials	973	1303
Number of Ongoing Trials	1168	1599
Number of Completed Trials	391	605
Number of Terminated Trials	7	12
Number of Trials Pending for Registration	231	534
Number of Trials Sent back to Registrant	659	830

2. National Sample Survey for Assessment of Disease Burden of Leprosy

Date of commencement: Jan 2010

Sponsored by: ICMR

Status: Estimation part is in progress during March 2013.

The study was designed at National level in collaboration with JALMA institute. During the year several rounds of meetings were held for development of state level as well as National estimate of leprosy. Data for all the states was validated by NIMS and distribution of sample data was compared with census 2011. Report writing work was initiated by JALMA with consultation with NIMS.

3. The Prevention of HIV / STI among married Women in Urban India

Date of commencement: July, 2008

Sponsored by: National Institute of Health (NIH), USA

Background and objectives

This project seeks to develop and evaluate a culturally appropriate, health facility-based intervention to promote primary prevention of HIV and other sexually transmitted infections (HIV/STIs) among married women, ages 18-40, living in an economically marginal community in Mumbai (Bombay), India.

The great majority of women in the world are exposed to HIV/STI risk not through their own agency, but because of the behavior of their spouses. The intent of this study is to develop an approach that will reduce risk among vulnerable married women in these communities and thus serve as a model for India as well as for other vulnerable women in developing and developed countries. This project seeks to respond to the need to develop effective approaches to the global risk of husband to wife transmission of HIV and other STIs. This project utilizes an approach to HIV/STI risk reduction among married women that centers on culturally-based gynecological and related health symptoms that women feel more comfortable discussing and presenting for treatment.

In this context, ICRW is working in collaboration with Indian governments, University of Connecticut Health Centre, USA; Institute for Community Research, Connecticut, USA; University Laval, Canada; Tulane University, USA; London school of Hygiene and Tropical Medicine, UK; Population Council, New Delhi; Tata Institute of Social Science, Mumbai; CORO for Literacy, Mumbai; TN Medical College, Mumbai and National Institute of Medical Statistics, New Delhi.

This project seeks to develop and evaluate a culturally appropriate, health facility-based intervention to promote primary prevention of HIV and other sexually transmitted infections (HIV/STIs) among married women, ages 18-40, living in an economically marginal community.

1. Conduct formative qualitative research on the stakeholders and institutions involved in women's health including; women in the context of the family, women as patients, husbands and their relationship to the health of their wives, and the nature of health care for women in the community;
2. Implement, based on the formative research, the interventions of Enhanced Care and Couples' Intervention in an existing public health facility in the study community to reduce women's HIV/STI risk within marriage
3. Test the efficacy of the interventions, through a randomized clinical trial (RCT), to reduce the risk of HIV/STI transmission, to reduce STIs and women's gynecological and related symptoms and to improve women's life situation

Target population

Economically marginal community in Mumbai, India

Methodology

The project is organized into three phases namely; Phase I: formative phase, Phase 2: Implementation phase and Phase 3: Evaluation Phase :

Phase I (Year 1) involves formative data collection with health and other service providers, married women and men, and married couples; analysis of these data; and finalization of the intervention design and evaluative instruments.

Phase II (Years 2-4) involves the implementation of interventions in which married women seeking treatment at the Shivajinagar Urban Health Center (UHC) and meet the inclusion criteria will be randomly assigned to one of four conditions: Enhanced Care only; Enhanced Care plus Couples' Intervention; Standard Care only; and Standard Care plus Couples' Intervention in the governmental Urban Health Center in the study community.

Phase III (Years 2-5) evaluates the acceptability, social validity, integrity, sustainability, institutionalization and impact of the interventions on married women, using qualitative interview and observational methods and a quantitative interview at baseline with follow-up at three months and one year and STI testing at baseline and one year follow-up.

Progress of the study (with photographs)

1. Total Patients flow at WHC - 7034
2. Total New Patients -3459 (49%)
3. Eligible for RCT – 1155(33%)
4. Recruited – 644(56%)
 - IC only- 156
 - CI only- 157
 - IC+CI - 164
 - No Intervention- 167
5. Total Follow-up WSS (Women's Structured Survey)
 - Six month- 352
 - One year-148

6. Total IC (Individual Counseling) sessions – 655
7. Total CI (Couple Intervention) sessions – 194

3. Maternal Health Care in Rural and Urbanized Villages of Delhi – A Comparative Study

Date of commencement: 2012

Sponsored by: Intramural

Background and objectives:

Background

There are two types of rural population in Delhi, one which living in rural villages (non-urbanized) and the other living in urbanized villages which are notified by the government. These villages are surrounded by the urban area developed in their land. The urban population has access to a wider range of health care options, particularly in large cities like Delhi, due to the better-developed health infrastructure. Being closer to the urban area, population in urbanized villages is expected to have more access to better civic facilities and to the advanced health facilities as compared to that in rural area. Pregnancy can provide an opportunity to identify existing health risks in women and to prevent future health problems for women and their children. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system.

On reviewing the literature, it has been found that there is not even a single study which provides information as to how the two rural areas, one that is closer to urban facilities and other one that is purely rural differ in terms of status of maternal care. The present study is being undertaken to know the status of maternal care in rural and urbanized village of Delhi. The comparison of the status in the two populations would provide information whether the population in urbanized villages is benefitted by their closeness to urban facilities.

Objectives:

1. To determine the status of maternal health care in rural and urbanized villages of Delhi.
2. To identify socio-economic factors associated with maternal health care status.

Methodology:

The study will be conducted in two divisions of Delhi South and South-West Delhi and two categories of villages: non-urbanized and urbanized villages.

The desired sample size will be selected by adopting two-stage sampling. The first stage will be selection of 30 villages from each of the both categories of villages—15 villages from each of the two divisions. The second stage will be selection of 14 eligible households ((Birth in last one year and the child is living at the time of interview and also the age of the child is more than six weeks). Interview of mothers who delivered recently and not completed six weeks of period after delivery will not be interviewed.

For the selection of villages, 15 villages of each category will be randomly selected (since size of the villages is not available) from each Division.

Information from the HHs and eligible mothers will be collected using predesigned questionnaire.

Progress of the study:

After duly pre-testing the tools, survey work has been started and is in progress.

4. Knowledge Network on Avahan Project in India

The paper entitled Evaluation of HIV/AIDS prevention programme effects among Truck Drivers in India

Background: The Avahan had launched intervention programme to curtail the spread of HIV/AIDS and sexually transmitted infections (STIs) by increase safe sexual behaviours through a chain of *Khushi* clinics at 17 high-volume transshipment locations hubs among truck drives for a period 2004-2009 and covered all most 95 percent of long distance truck drives.

Objective: In order to measure effectiveness of the programme, the present paper aims to evaluate the contribution of intensive programme among Long Distance Truck Drivers in terms of safe sex practices with paid female partners.

Data and Methods: Two rounds of surveyed- conducted in 2007 (sample size 2066) and in 2009-2010 (sample size 2085) data were used for analysis. Long distance truck drivers were

interviewed about their sexual behaviors, condom use practices, exposure to different HIV prevention interventions. The key variable of this evaluation study -exposure to HIV prevention interventions was divided into three categories - less exposure, moderate exposure and intensive exposure. Data were analyzed using multiple logistic regression methods to understand the relationship between program exposure and consistent condom use practices. Significant factors were further analyzed using decomposition method to examine the contribution of different components of that factor towards the total increase in consistent condom use over time.

Results: There was significant increase in consistent condom use with paid female partners among long distance truck drivers from round1 to round2 (Total increase 11%). Truckers, exposed to intensive intervention programmes were two times more likely to use condom consistently with paid partners (OR 2.1; 95% CI 1.4-3.1;p-value <0.0001). Out of total increase in consistent condom use practices with paid partners, truckers who were exposed to Avahan programme contributed 58%.

Conclusions: This study results highlight the ability of intensive program to reach truckers who have sex outside marriage with HIV prevention interventions and promote safe sex behaviour among them.

5. Extent of integration of Indian System of Medicine & Homoeopathy (AYUSH) in National Rural Health Mission (NRHM).

Date of commencement: December 2011

Sponsored by: ICMR

Objectives

- To measure the extent of main streaming of Indian System of Medicine (AYUSH) under NRHM in the demographically weak districts of UP.
- To study the utilization of AYUSH under NRHM programme in the in the selected demographically weak districts of UP.

Progress

Analysis of Data has been done.

Report writing is in progress will be submitted by April 2013.

6. To study the Acceptance level, knowledge, attitude and practice on Indian system of Medicine in North East Areas

Date of commencement: January 1, 2012

Sponsored by :ICMR

Objectives

- a. To measure the levels of KAP of people of North East area on Indian system of Medicine
- b. To study about the common diseases treated by Indian system of Medicine
- c. To study the association between socio demographic characteristics and satisfaction and /or trust on Indian system of Medicine.

Progress

Data collection is in progress as per schedule.

7. Household Malaria Survey in World Bank Project States of India

Date of commencement: April 2012

Sponsored by: NVBDCP

Introduction

The World Bank aided project namely **National Vector Borne Disease Control Project** was initiated in India from August 2008 in several high risk and high *falciparum* incidence districts of India. This project introduces important new and more effective measures for the control and management of two serious vector-borne diseases in India: malaria and kala azar. It will assist the Government of India (GOI) to significantly improve health for some of India's poorest people.

The implementation of National Vector Borne Disease Control Program (NVBDCP) is expected to have a significant additional impact on these diseases. This project, with clear performance indicators, coordinated partnerships, and strengthened monitoring and evaluation mechanisms, will provide strong support to help carry through these changes and complement government investments.

The implementation of project is expected to reduce morbidity and mortality from malaria which account for a significant disease burden and economic loss in India, especially among the poor. The project is also an investment in strengthening the health system. The reduced burden of malaria will contribute to the achievement of the millennium development goals (MDGs) by lowering malaria incidence and mortality and by contributing to lower child and maternal mortality and poverty reduction among remote, rural and tribal populations.

The National Institute of Medical Statistics has been identified as a collaborative partner with the National Institute of Malaria Research, ICMR, New Delhi to provide technical support in conducting the household malaria survey in the high endemic areas of some selected States of India in Phases.

a). The phase-I baseline survey has been conducted in five states namely Andhra Pradesh, Chhattisgarh, Jharkhand, Madhya Pradesh and Odhisa, by NIMR in 2010. The phase II baseline household malaria survey would be conducted in the selected high endemic areas of four states, namely Maharashtra, Gujarat, Karnataka and West Bengal during the malaria transmission season in the year 2013.

Objective

- To study the intervention coverage of National Malaria control program in the selected areas of phase-II states of India.

Secondary objective:

- To provide estimates of household level key indicators related to the program coverage i.e. household owning and using bed nets/LLINs etc.
- To provide estimates of individual level indicators related to the programme coverage such as source of treatment of fever, early test and treatment of malaria etc.

b). The End line household malaria survey would be conducted in the selected high endemic areas of five states, namely Andhra Pradesh, Chhattisgarh, Jharkhand, Madhya Pradesh and Odhisa during the malaria transmission season in the year 2013.

Objectives

- To estimate the key indicators of coverage of malaria control programme
- To assess the change from baseline to end line estimates of key indicators

Progress; The phase II baseline survey design, survey instruments and plan of study have been finalized with the help of National Institute of Malaria Research. This was presented in the Technical Advisory Group meeting constituted by MoHFW and last Scientific Advisory committee meeting of NIMS. The survey will be conducted in the malaria transmission season (July – October) in the year 2013.

The End line survey will also be initiated during the same period after conducting the training of trainer's (TOT) workshop and approval to release the fund.

6. Multi-level Modeling to Analyze RCH Service Utilization and its Correlates

Date of commencement: April 2011

Sponsored by: NIMS (Intramural)

Objectives

- a. To assess the inequity in the access and utilization of different RCH services, viz. maternal (ANC and PNC) and child health care (Immunization and treatment seeking behavior).
- b. To investigate the degree to which the RCH utilization is influenced by the contexts within which the people live and other explanatory variables and to assess the superiority of Multi-level modeling approach over the Standard Logistic Regression for the current situation.

Data and Methodology

The third round of District Level Household Survey (DLHS-3) data was used to carry out the study. In the study, the outcome indicators are maternal and child health while explanatory (independent) variables are district level, village level, household level and individual (women) level factors. Inequity in access and utilization of under consideration RCH services were determined by seeing the access utilization differentials. At the later stage, comparison between the simple logistic regression and multilevel modeling was done to assess the superiority of the multi-level modeling above the other.

Progress

There seems to be positive effect of motivational factors (from health staff and family members) on RCH service utilisation.

The data analysis strongly advocates for the multi level modeling in comparison to the traditional regression approach. Draft report has been prepared.

Ph.D. Guidance

The Institute is a recognized Centre for guiding the Ph.D. students of GGS Indraprastha University. At present following 4 students are undergoing their Ph.D. course from the Institute.

Name of the Student	Topic	Supervisor
Dr. Nomita Chandhiok	Breast feeding and child survival in India	Dr. Arvind Pandey
Kh. Jitenkumar Singh	Spatial and Multilevel modeling to study the utilization of reproductive and health services in empowered action group(EAC) States of India.	Dr. H. K. Chaturvedi

Ram Chandra Bajpai		Dr. H.K. Chaturvedi
Ashsh Yadav		Dr. R.J.Yadav
Shikha Sinha		Dr. Abha Aggarwal

Translational Research Cell

As per the suggestion of DG, ICMR, the Director of the Institute has constituted a translational research Cell with Dr RJ Yadav, Scientist-G, as its chairman and Dr Tulsi Adhikari Scientist D and Dr Atul Juneja Scientist C as members. The cell identified following projects of the Institute relating to translational research.

1. Estimation of Burden of HIV/AIDS in India which is being carried out in collaboration with National Institute of Health and Family Welfare and national AIDS Control Organization was regarded as top priority pragmatic research which models HIV Sentinel Surveillance data into programme planning and implementation. The research embodied promotion of the activity and dissemination wherein two training programs have been organized for the epidemiologists and other researchers and program people of State AIDS Control Societies on modeling and Estimation Projection Packages. This would directly help the health delivery system.

2. As regards in the category of other programs, the clinical trial registry at the Institute is major activity relating to translational research, it has been successful in registering trials from the different researchers in the country. It has been contributed to bringing transparency in clinical research in the country.

3. Invited Talks by the Scientists in Conferences/Training/Seminars/Workshops

Date	Topic of Lecture	Name of the Conferences/ Training/Seminars/ Workshop	Name of Scientist
April 20, 2012	HIV estimation in India	Capacity Building Workshop on Strategic Information and Epidemic Analysis for HIV/AIDS for State Epidemiologists at NACO.	Dr. Arvind Pandey
April 29, 2012	Lecture on Statistics	Inspire Internship Programme for College Students for Early Attraction of Talents for Science at M.D. University, Rohtak sponsored by the DST Under Its Scheme for Early Attraction of Talents for Science”.	Dr. Arvind Pandey
July 11,2012	Shaping India’s Population Policy and Programmes	National Conference for Population Action – “Towards a Better Tomorrow” organized by Jansankhya Sthirta Kosh (JSK) on World Population day, 11 July, 2012 at Vigyan Bhavan, New Delhi.	Dr. Arvind Pandey
8-9 August 2012	Concepts of Biostatistics and Design of Clinical Trials and Sample size	PGIMER RML Hospital New Delhi	Dr. Atul Juneja
11 August, 2012	Probability and Statistical Distributions	CRAM Training Workshop, PGIMER RML Hospital New Delhi	Dr. H. K. Chaturvedi
Sept 3, 2012.	“Concept of Monitoring and evaluation in Social developmental Programme”	Officials of NGOs of different states at NIPCED, Delhi	Dr. R. J. Yadav
Sept 7, 2012	An evaluation of Adolescent health services in India	Delivered Inaugural address in the symposium on mentoring for promotion of Adolescent health on organized by Govt. Medical College and Hospital, Chandigarh.	Dr. R. J. Yadav
5 Sept 2012	Sampling Methods in health research	Participants of NGO in a workshop conducted by NIPCCD, New Delhi. Delivered the talk in Hindi on the occasion of Hindi week	Dr. Atul Juneja

21-23 Sept 2012	Issues on Sample size determination	Workshop on clinical trials held at Gov. medical College Chandigarh	Dr. Atul Juneja
27 Sept 2012	Statistical issues in Dissertation writing	Workshop for faculty of colleges offering PG courses in Homoeopathy at Central Council for Homoeopathy New Delhi	Dr. Atul Juneja
8 October, 2012	Delay in Reporting Febrile Illness in the Endemic Areas: Some Possible Correlates	Annual Conference of Indian Society of Medical Statistics held at Ludhiana	Dr. H. K. Chaturvedi
10.10.2012	CTRI	Workshop organized by DCGI & WHO at Hotel Metro, New Delhi	Dr. Abha Aggarwal
October 10, 2012	Population Growth Curves	Demographic and Social Statistics including Gender Statistics” for the participant from CSO Afghanistan during 8-19 October at NASA organized by NASA	Dr. D Sahu
Oct.10-12, 2012	Fertility and Reproductive Health	Workshop on “Techniques of Analysis of Demographic and Health Statistics and Application of Computer Software at Indian Statistical Institute, Kolkata.	Dr. Arvind Pandey
Oct.13, 2012	Policies and programmes like RCH and NRHM undertaken to address the issues of Health care population growth in India	training programme on ‘Demographic and Social Statistics including Gender Statistics’ at National Academy of Statistical Administration (NASA), NOIDA Ministry of Statistics & Programme Implementation, Govt. of India,	Dr. Arvind Pandey
20 October 2012	Methods in Randomized Response Techniques	Workshop on Randomized Response Techniques at Govt. Medical College Chandigarh	Dr. Atul Juneja
2 November 2012	Research Ethics	Workshop on research Methodology conducted by JamiaMilia University New Delhi.	Dr. Atul Juneja
November 5, 2012	“Monitoring and evaluation in Social developmental Programme”	Delivered Lectures to the officials of NGOs of different states at NIPCED, Delhi.	Dr. R. J. Yadav

7 November 2012	Sampling Methods in health research	Workshop at NIPCCD, New Delhi	Dr. Atul Juneja
December 19-21, 2012	Geostatistical models and its application in Epidemiology	National Workshop on "Geostatistics and Spatial Data Analysis" Pondicherry University Pondicherry	Dr. H. K. Chaturvedi
20 December 2012	Descriptive statistics and presentation of data	Workshop on Research Methodology conducted by Dept. Of PSM AIIMS Bhopal	Dr. Arvind Pandey Dr. Atul Juneja
December 27-29, 2012	"Biostatistics and Data Management"	Research Methodology Workshop for South Zone HRRCs and FUs during at National Institute of Research in Tuberculosis, TN.	Dr. R.J. Yadav
Dec.30, 2012-Jan.1, 2013		International Conference on 'Recent Advances in Mathematical Statistics and its Application in Applied Sciences' at the Dept. of Statistics, Gauhati University.	Dr. Arvind Pandey
Jan.6-8,2013		Meeting of ISBA Regional Meeting & International Workshop on Bayesian Theory & Applications (IWCBT) at DST Centre for Interdisciplinary Mathematical Sciences at BHU.	Dr. Arvind Pandey
January 7-11, 2013	Mentor	The Scientific Writing Course – Follow-up Workshop in Taj Banjara, Hyderabad organized by population Council, Delhi	Dr. D. Sahu
February 12, 2013		As Guide of Ph.D, attended Doctoral research committee on at IP University, Delhi.	Dr. R. J. Yadav Dr. H.K. Chaturvedi
February 19, 2013	'Findings and experience of the NCD risk factors survey, India	WHO Expert planning meeting on monitoring the prevention and control of NCDs and co-morbidities, WHO, New Delhi	Dr. H. K. Chaturvedi
19 February 2013	Data processing and analysis	Workshop on Health System Research at NIHF, New Delhi	Dr. Atul Juneja

March 15-17, 2013	Bio Statistics and Data Management	As a resource person, taught to Research Methodology Workshop for Eastern Zone HRRCs and FUs during at Government Medical college, Silchar, Assam.	Dr. R. J. Yadav
February 27, 2013	Introduction to inferential statistics and Hypothesis testing	Training Course on data analysis using SPSS for health and Demographic Research at NIHFV, New Delhi	Dr. D. Sahu
March 21-22, 2013	"Statistics and its application in Health Research"	Research Methodology Workshop for JR and SRF of ICMR at National Institute of Mental health and Neurosciences, Bangalore.	Dr. R. J. Yadav

Dr. R.J.Yadav delivered the Inaugural address on the occasion of Golden Jubilee celebrations of the Department of Statistics, at Sri Venkateswara University, Tirupati, Andhra Pradesh on August 11, 2012.



4. Scientific Meeting Conference/Seminars/Workshops attended

Date	Name of the Conferences/ Training/Seminars/Workshop	Name of Scientist
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March 30 – April 1, 2012	Workshop on outcome research entitled “From Idea/Research Question to Manuscript for Publication”, National Institute for Research in Reproductive Health, Mumbai	Mr. B.K. Gulati
April 9-11, 2012	National workshop on “Computer Models for Population and Family Planning for Evidence-based Decision Making and Advocacy” & Speaks on the use of projection models and its applications for national and state level policies and programmes at NIHFV, New Delhi.	Mr. B.K.Gulati
16-18 April 2012	World information Technology Conference at Vigyan Bhawan, New Delhi	Dr. R.J. Yadav, Dr. Abha Aggarwal Dr. D Sahu Dr. Tulsi Adhikari Dr. Atul Juneja
April 23, 2012	Meeting of Technical Expert Group on TB Burden Estimation in India, LRS Institute for Tuberculosis and Allied Diseases, New Delhi.	Dr. H.K. Chaturvedi
April 24, 2012	Scientific Meeting for designing of Research studies at DMRC Jodhpur	Dr. Arvind Pandey Dr. Abha Aggarwal
April 25-26, 2012.	Project Review Committee Meeting at Centre for Policy Research, New Delhi	Dr. R.J. Yadav
April 27, 2012	Meeting of Committee for Management and Systems Division-3 at Bureau of Indian Standards, Manak Bhawan, New Delhi.	Dr. R.J. Yadav
April 29, 2012	Inspire Science Camp sponsored by DST (Delivered a Talk on “An important component of Scheme for Early Attraction of Talents for Science” at MDU, Rohtak	Dr. Arvind Pandey Dr. Atul Juneja
May 4, 2012	Meeting of Subcommittee for “Basic statistical methods, MSD 3:4 at 14 Hrs at Bureau of Indian Standards, ManakBhawan, New Delhi.	Dr. R.J. Yadav
May 8, 2012	Meeting to identify the “Future directions in Tribal Health Research (Communicable Diseases)” at Div. of ECD, ICMR.	Dr. Arvind Pandey
May 11, 2012	Meeting of Technical Advisor Group (TAG) on Systematic Review of Evidences on Family Planning at Population Foundation of India, New Delhi.	Dr. Arvind Pandey

May 11, 2012	Technology Day Fuction 2012 at Vigvan Bhavan, New Delhi organized by Department of Science and Technology, Ministry of Science & Technolohy, Govt of India	Dr. D. Sahu
May 15, 2012	Meeting on discussion on estimates developed for National Sample Survey on Leprosy at NirmanBhawan, New Delhi	Dr. AbhaAggarwal
May 15, 2012	Institutional Review Board meeting of NIPCED, New Delhi.	Dr. R.J. Yadav
May 16, 2012	Meeting of subcommittee for "Basic statistical methods, MSD 3:4 at 11 Hrs at Bureau of Indian Standards, ManakBhawan, New Delhi.	Dr. R.J. Yadav
May 21, 2012	Meeting of Technical Resource Group on Research and Development at NACO, MoHFW, Chanderlok Building, New Delhi.	Dr. Arvind Pandey
June 2-3, 2012	Meeting of ICMR Tribal Health Forum at Regional Medical Research Centre, Port Blair.	Dr. Arvind Pandey
July 2-6, 2012	Training Course on Scientific Writing, National Institute of Health & Family Welfare, New Delhi	Mr. B. K. Gulati
4-6 June 2012	Workshop on Bootstrapping techniques at CMC Vellore	Dr. D. Sahu Dr. AtulJuneja
June 5, 2012	Expert Group Meeting on "Consortium for Clinical Trials of relevance to India (CORI Group) at ICMR	Dr. Arvind Pandey
June 8, 2012	Meeting of Technical Group on Methodology for Assigning Causes of Death at Nirman Bhawan, New Delhi under the chairmanship of DGHS.	Dr. Arvind Pandey
June 8, 2012	Meeting of Subcommittee on MSD at Bureau of Indian Standards, Manak Bhawan, New Delhi.	Dr. R.J. Yadav
Jul 09-13 2012	Training course on GIS for Health Management held at NIHFW, New Delhi.	Dr. S.K. Benara Dr. Anil Kumar Dr. Abha Aggarwal
June 11, 2012	Knowledge Network Project Consortium Meet, at Conference room, Population Council, India Habitat Centre, New Delhi	Dr. D. Sahu
July 22, 2012	Conducted Junior Research Fellow Examination as the Member of Examination committee of ICMR.	Dr. R.J. Yadav
July 24, 2012	EFC committee meeting organized by ICMR.	Dr. R.J. Yadav

May – November, 2012	Series of meeting of National Working Group of HIV/AIDS Estimation for the Estimation of HIV burden 2010-11 at NIMS, ICMR, New Delhi	Dr. Arvind Pandey Dr. D. Sahu Mr. Jiten Kumar Singh
June 25, 2012	Meeting to discuss the issue relating to conducting of Integrated National Health Survey/National Family Health Survey at NirmanBhawan, New Delhi.	Dr. Arvind Pandey
June 26, 2012	Expert Group Meeting on “Consortium for Clinical Trials of relevance to India (CORI Group) at ICMR	Dr. Arvind Pandey
July 12, 2012	Meeting of the Tribal Health Research Forum at ICMR.	Dr. Arvind Pandey
July 13, 2012	Expert Committee Meeting to review the progress of the project National Registry for Assisted Reproductive Technique(ART) Clinics in India at ICMR, New Delhi.	Dr. Arvind Pandey
30 July 2012	Meeting on the Technical Report on epidemiology related to Bhopal Gas Disaster at NIOP ICMR New Delhi	Dr. R.K. Gupta, Dr. AtulJuneja
6 August 2012	Meeting on the review of technical report on epidemiology related to Bhopal Gas disaster at NIREH, ICMR Bhopal	Dr. Arvind Pandey, Dr. R.K. Gupta, Dr. AtulJuneja
August 8-9, 2012	ICMR Tribal Health Research Forum Meeting at Regional Medical Research Centre, Bhubaneswar.	Dr. Arvind Pandey
August 16, 2012	Workshop on Technical Report at National Institute for Research in Environmental Health (NIREH) of ICMR at Bhopal (discussed in the meeting of Expert Group on Epidemiological work under NIREH).	Dr. Arvind Pandey Dr. R.K. Gupta, Dr. Atul Juneja
16-18 August 2012	International Conference on Epidemiology at St. Thomas College Pala (Kerala)	Dr. Tulsi Adhikari Dr. Atul Juneja
August 17,2012	First Meeting of the Technical Advisory Committee (TAC) for National Family Health Suvey (NFHS-4) at National Institute of Health & Family Welfare (NIHFW), Munrika, New Delhi	Dr. Arvind Pandey
August 22, 2012.	Advisory Committee Meeting of the project “Effect of Institutional delivery on perinatal and neonatal outcomes”	Dr. R.J. Yadav

August 25, 2012	Selection Committee Meeting (as Chairman) for the post of Data Entry operator at ICMR	Dr. R.J. Yadav
28 August 2012	Project Review meeting of Multi-centric project on Marmachikitsha at CCRAS New Delhi	Dr. AtulJuneja
September 6-7, 2012	National seminar on India's 2011 Census: Interpretations and Implication of Results at JNU Convention Centre, JNU, New Delhi organized by CSRD, JNU, New Delhi	Dr. Arvind Pandey Dr. D. Sahu
Sept 11, 2012	Meeting at IP University for Ph.D. student at Dwaraka	Dr. Abha Aggarwal
Sept 12-13, 2012	Scientific Review Group Meeting on Medical Sociology and Biostatistics at Desert Medicine Research Centre, Jodhpur.	Dr. R.J. Yadav
Sept 13, 12	Project Review Group of RCH meeting of ICMR at ICMR HQ.	Dr. Abha Aggarwal
Sept 15, 2012	First Meeting of the Evaluation Committee of Distance Education at IIPS, Mumbai	Dr. Arvind Pandey
Sept.17, 2012	Meeting to examine the tables sent by NIREH for the data Analysis work of Bhopal for Technical Report (1996-2010) at ICMR, New Delhi.	Dr. Arvind Pandey
Sept 17, 2012	Organizing Committee Meeting of the International Conference on Statistics and Informatics in Agricultural Research at IASRI New Delhi.	Dr. R.J. Yadav
Sept.18, 2012	Meeting under the Chairmanship of Joint Secretary (AG) to discuss the IDSP Study and ICMR's future role at DGHS, Min. of H&FW, NirmanBhawan, New Delhi.	Dr. Arvind Pandey
Sept. 21, 2012	Guest of honour at Inaugural Function and resource person in the ICMR sponsored Workshop on "Biostatistical Aspects of Randomized Clinical Trials (RCT) and Medical Ethics" at Government Medical College & Hospital (GMCH), Chandigarh. Also, to act as in expert in panel discussion and delivered a talk on Basics of Health Research Methods.	Dr. Arvind Pandey
Sept. 24, 2012	15th Institutional Ethical Committee (IEC) Meeting of Future Group International India at India Habitat Centre, Lodhi Road, New Delhi.	Dr. Arvind Pandey
Sept 27, 2012	Finalization of course content for M.Sc(Clinical Research) meeting at PHFI, Vasant Kunj, New Delhi	Dr. Abha Aggarwal
Sept 27, 2012	Meeting of expert Committee on "Malaria Burden in India" at NIMR, Dwarka, New Delhi.	Dr. Arvind Pandey Dr. H. K.

		Chaturvedi
Oct 03-05 2012	Workshop on Informatics on clinical research and REDCap organized by National Institute of Epidemiology (ICMR) Chennai	Dr. Anil Kumar, Dr. Tulsi Adhikari
October 2, 20125	Review Meeting of the Study on the health effects of pesticide usage at ICMR	Dr. Arvind Pandey
Oct. 3, 2012	Working Group Meeting of NACO to discuss the further course of action on Estimation at NIMS	Dr. Arvind Pandey Dr. D. Sahu
Oct. 3, 2012	Working Group Meeting of NACO to discuss the further course of action on Estimation at NIMS	Dr. Arvind Pandey
3 Oct 2012	Participated in Debate competition on Surrogacy as a part of Hindi week celebration held at ICMR New Delhi	Dr. Atul Juneja
Oct. 4, 2012	1st Steering Committee Meeting on "India Specific Child Survival Call to Action" at MOHFW, Nirman Bhawan, New Delhi.	Dr. Arvind Pandey
October 5, 2012	Expert Group Meeting to decide priority areas of research in communicable diseases in North East Region at ICMR.	Dr. Arvind Pandey
October 5-6, 2012	Annual Sentinel Surveillance for HIV Infection 2012-2013 National Pre-surveillance meeting of regional Institutes and SACs at NIHF, Delhi	Dr. D. Sahu
6-8 October 2012	Annual Conference of Indian Society of Medical Statistics held at DN Medical College Ludhiana	Dr. Arvind Pandey, Dr. R.J. Yadav, Dr. Abha Aggarwal Dr. H. K. Chaturvedi Dr. Atul Juneja Mr. B.K. Gulati Mr. Sharad Mathur
8 October 2012	Chaired the Session, Annual Conference of Indian Society of Medical Statistics held at Ludhiana	Dr. H. K. Chaturvedi

October 10, 2012	Governing Body (GB) Meeting of ICMR Min. of H&FW, Nirman Bhawan, New Delhi.	Dr. Arvind Pandey
Oct.12, 2012	Second Meeting of the Technical Advisory Committee (TAC) on National Family Health Survey (NFHS-4) at MOHFW, Nirman Bhawan, New Delhi.	Dr. Arvind Pandey
Oct. 23, 2012	High Level Task Force Meeting of the Govt. of Haryana with the adverse social indicators in the Health Sector under the Chairmanship of Principal Secretary, Govt. of Haryana, Chandigarh.	Dr. Arvind Pandey
28 October to 2 Nov 2012	NIH workshop on Clinical Research and Practices organized by CDSA at IIC New Delhi	Dr. Abha Aggarwal Dr. Atul Juneja
October 29 - November 3, 2012	CDSA-NIH Training Workshop on Principles and Practice of Clinical Research, India International Centre, New Delhi	Mr. B. K. Gulati
Nov.1, 2012	Meeting of Academic Committee of the Institute of Human Behavior & Allied Sciences (IHBAS), Delhi.	Dr. Arvind Pandey
Nov.3 , 2012	Institutional Ethics Committee Meeting of Institute of Human Behavior & Allied Sciences (IHBAS), Dilshad Garden, Delhi,	Dr. Arvind Pandey
6 November 2012	Meeting of review of protocol on evaluation of kit for early detection of oral cancer at ICMR, New Delhi	Dr. H. K. Chaturvedi Dr. Atul Juneja
Nov. 7, 2012	Medicines for Malaria Venture in collaboration with the ICMR Malaria in Southeast Asia: Perspectives, progress and partnerships at New Delhi,	Dr. Arvind Pandey
8.11.2012	Meeting with NIC & DCGI Representative at NirmanBhawan, New Delhi.	Dr. Abha Aggarwal
Nov.14, 2012	Meeting with DG, ICMR with the Directors on individual basis to get an update of the progress for the ongoing transnational research projects and the new approaches, which are likely to be added in their programme at ICMR Hqrs.	Dr. Arvind Pandey
November 14, 2012	Session on HSS 2010 & IBBS to review the progress in HSS, present the preliminary findings from HSS 2010 and discuss the road map for National IBBS which are in currently planning at NACO, Delhi	Dr. D. Sahu
Nov. 15, 2012	86 th Meeting of the Governing Body of ICMR at Nirman Bhawan, New Delhi.	Dr. Arvind Pandey

Nov. 15, 2012	Training workshop on Statistical Methods for Evaluation of Diagnostic kits at NIMS-ICMR organized by NIMS, New Delhi	Dr. D. Sahu
Nov. 16, 2012	Technical Resource Group meeting on estimation of HIV burden and HSS organized by NACO at NACO	Dr. D. Sahu
Nov. 22-25, 2012	ICMR Meeting of the Principal Investigators in the proposal entitled "A Multi-Institutional Pilot Study to Evaluate Capability of Infra Red Thermography of Breast to Demonstrate Breast Cancers with Clinical Mammographic & Pathological Correlation" at Tata Memorial Centre (TMC), Mumbai.	Dr. Arvind Pandey
Nov. 26, 2012	Meeting of Joint Panel of ICMR-ICSSR at ICMR	Dr. Arvind Pandey
Nov. 20, 2012	Second Meeting of the 'Technical Expert Group on TB Burden Estimation in India' at LRS Institute.	Dr. Arvind Pandey
21-24 November 2012	Chaired a session at Annual conference of Indian Society of History of Mathematics organised to commemorate 100 birth year of Prof Ramanajunam held at Dept. Of Mathematics, MD University Rohtak.	Dr. Atul Juneja
Nov. 23, 2012	Meeting of the Principal Investigators in the proposal entitled "A Multi-Institutional Pilot Study to Evaluate Capability of Infra Red Thermography of Breast to Demonstrate Breast Cancers with Clinical, Mammographic & Pathological Correlation" at Tata Memorial Centre (TMC), Mumbai	Dr. Arvind Pandey
Dec. 2-3, 2012	Meeting of Jodhpur Conclave & Pre-SAC to promote collaborative bio-medical research with medical colleges, universities and develop partnership with these institutes and Govt. of Rajasthan to address public health issues at DMRC, Jodhpur.	Dr. Arvind Pandey
Dec 5, 2012	Technical Advisory Committee Meeting to finalize the methodology of Survey on measuring outcomes for children and women in the MOSPI, New Delhi.	Dr. R.J. Yadav
Dec. 6, 2012	First Meeting of the Sub Group II of NFHS-4 on Questionnaire at NirmanBhawan, New Delhi.	Dr. Arvind Pandey
Dec.7, 2012	3rd Meeting of the Scientific Advisory Board (SAB) in the Committee Room of CCRAS, New Delhi.	Dr. Arvind Pandey
Dec. 7, 2012	Meeting of the Expert Committee to finalize the protocol for disease burden study at NIMR, Dwarka, New Delhi.	Dr. Arvind Pandey Dr. H. K. Chaturvedi

Dec.11, 2012	25th Scientific Advisory Committee Meeting of RMRCT, Jabalpur.	Dr. Arvind Pandey
Dec 11, 12	CTRI Audit with WHO	Dr. Arvind Pandey, Dr. S.D. Seth, Dr. Abha Aggarwal, Dr. Atul Juneja & CTRI Team
13-15 Dec 2012	34 th Annual Conference of IASP held at Gokhle Institute of Economics and Politics Pune and presented the paper	Dr. Arvind Pandey Dr. R.J. Yadav Dr. Abha Aggarwal Dr. D. Sahu Dr. Tulsi Adhikari Dr. Atul Juneja
Dec.14-15, 2012	Brainstorming Meeting using 'Goals Model' to assess Impact of HIV Prevention Interventions' at NARI Pune.	Dr. Arvind Pandey
Dec.14, 2012	Brainstorming Meeting using 'Goals Model' to assess Impact of HIV Prevention Interventions' at NARI Pune.	Dr. Arvind Pandey Dr. D. Sahu
21-23 Dec 2012	International conference on frontiers of Statistics and its application in conjunction with 32th annual convention of Indian Society for Probability and Statistics (ISPS) at Department of Statistics, Pondicherry University	Dr. R.J. Yadav
December 31- January 2013	International Conference at Department of Statistics, Gauhati University, Assam.	Dr. Arvind Pandey, Dr. R.J. Yadav Dr. R.K. Gupta
Jan 9 –Feb 22, 2013	Meeting of ICMR-Health Accounts Scheme	Dr. Tulsi Adhikari
Jan.10, 2013	BSL-Lab inauguration & NIV Annual Day Celebration Programme at NIV, Pune,	Dr. Arvind Pandey
Jan.11, 2013	First Technical Committee Meeting on Population Issues under the Chairmanship of Dr. S.Y. Quraishi at National Institute of Health & Family Welfare (NIHFW), Munirka, New Delhi.	Dr. Arvind Pandey

Jan.12-13, 2013	Meeting of Tribal Health Research Forum of VCRC at ICMR.	Dr. Arvind Pandey
January 13, 2013	Meeting of the "Study on Association of Oral Pre - cancers with Use of Pan Masala" at ICMR, New Delhi.	Dr. H. K. Chaturvedi
Jan.14, 2013	Expert Group Meeting of ICMR-INDIAB to review the clarifications submitted by investigators of ICMR-INDIAB-1 study and progress of work done under INDIAB-NE Study and INDIAB-phase II at National Institute of Pathology (ICMR), New Delhi.	Dr. Arvind Pandey
January 14, 2013	Expert group meeting "Multi Centric study to validate the effectiveness of C-Kit for early detection of oral cancer" at ICMR Hqrs. New Delhi	Dr. H. K. Chaturvedi
Jan.18-19, 2013	Meeting of Pre-Surveillance of Central Team Members of HIV Sentinel Surveillance of NACO at National Institute of Health & Family Welfare (NIHFW), New Delhi.	Dr. Arvind Pandey Dr.D.Sahu
January 14-21, 2013	Meeting of the Experts - World Bank Review Mission for implementation of Malaria and Kala-azar project at NVBDCP, New Delhi	Dr. H. K. Chaturvedi
Jan. 23, 2013	3rd Scientific Advisory Committee Meeting of National Institute for Research in Environmental Health (ICMR) at Bhopal.	Dr. Arvind Pandey
Jan. 28, 2013	Meeting to discuss XII Plan Activities at ICMR.	Dr. Arvind Pandey
Jan.30, 2013	First Meeting of the Sub-Committee for the development of a methodology for compilation of Index of Service Production for Health Sector of the Ministry of Statistics & Programme Implementation, Central Statistics Office MOHFW, NirmanBhawan, New Delhi.	Dr. Arvind Pandey
Feb 7-9 2013	Workshop on Regulatory Trials conducted by CDSA at St. Johns Medical College, Bangalore	Dr. H.K. Chaturvedi Dr. Atul Juneja
Feb 7, 2013	Meeting of committee for Management and Systems Division-3 at 11 Hrs at Bureau of Indian Standards, ManakBhawan, New Delhi.	Dr. R.J. Yadav
Feb 8, 2013	Review meeting of Leprosy with JALMA, CLD & other Experts at MoHFW, New Delhi	Dr. Abha Aggarwal
Feb. 8, 2013	Meeting of Scientific Advisory Group (SAB) of Social & Behavioral Research Unit, ICMR.	Dr. Arvind Pandey

Feb.13-18, 2013	Supervisory visit for the supervision and monitoring of the Annual HIV Sentinel Work in the Eastern UP (Basti & Maharajganj) as a Central Team Member.	Dr. Arvind Pandey
Feb 14, 2013	Meeting of Renewal of national provision license for Cochrane library at ICMR Hq, New Delhi.	Dr. R.J. Yadav
Feb. 20-21, 2013	Meeting of SAG (ECD) at ICMR, New Delhi.	Dr. Arvind Pandey
March 1, 2013	Pre-SAC Meeting at ICPO, NOIDA.	Dr. Arvind Pandey
March 6, 2013	Expert Group Meeting for a proposed task force "Health systems preparedness for interventions for diabetes, hypertension, chronic respiratory diseases and cardiovascular disease and deaths due to non-communicable diseases among the tribal population in India" at ICMR.	Dr.H.K. Chaturvedi
March 18, 2013	Meeting to review the latest update and schedule for survey of household under World Bank & GAFTM supported projects at NVBDCP, New Delhi.	Dr. Arvind Pandey Dr. H.K. Chaturvedi
March 22-24, 2013	Visited NIMR field unit, Hardwar for the DDT evaluation project	Dr. Arvind Pandey Dr. Tulsi Adhikari
Meetings at NIMS		
May 3, 2012	Steering Committee Meeting of the CTRI Project under the Chairmanship of Dr. V.M. Katoch, Secretary, Department of Health Research and Director General, ICMR at NIMS.	Dr. Arvind Pandey, Dr. Abha Aggarwal, Dr. Atul Juneja & CTRI Team
June 6, 2012	Meeting with DCGI in connection with CTRI at NIMS.	Dr. Arvind Pandey, Dr. Abha Aggarwal, Dr. Atul Juneja & CTRI Team
Sept.27, 2012	Expert Group Meeting to review Epidemiological research work at National Institute for Research in Environmental Health (ICMR), Kamla Nehru Hospital Building, Gandhi Medical College Campus, Bhopal at NIMS.	Dr. Arvind Pandey

Oct.4, 2012	Expert Group Meeting to review Epidemiological research work at National Institute for Research in Environmental Health (ICMR), Kamla Nehru Hospital Building, Gandhi Medical College Campus, Bhopal at NIMS.	Dr. ArvindPandey
Jan.9, 2013	Expert Committee Meeting of National Sample Survey to assess the burden of leprosy” at NIMS.	Dr. ArvindPandey Dr. AbhaAggarwal
March 28, 2013	Expert Committee meeting of National Sample Survey for discussion on state level Estimates of Leprosy	Dr. Arvind Pandey Dr. Abha Aggarwal

5. Publications

NIMS scientists published a number of research papers in the peer reviewed journals with an average impact factor of 0.614.

1. Arvind Pandey, Abha Aggarwal, Mohua Maulik, Jyotsna Gupta & Atul Juneja (2013): Challenges in Administering a Clinical Trials Registry: Lessons from the Clinical Trials Registry-India. *Pharmaceutical Medicine*, March, 2013, DOI.10.1007s40290-013-0009-3.
2. Arvind Pandey, DCS Reddy, M. Thomas, D. Sahu, Shashi Kant & M. Bhattacharya, (2012) Estimates of Prevalence and Number of HIV infection in India 2007- An Update, *Demography India*, Vol. 39(2), 239-245.
3. Arvind Pandey, Damodar Sahu, Taoufik Bakkal, DCS Reddy, S. Venkatesh, Shashi Kant, M. Bhattacharya, Yujwal Raj, ParthoHaldar, Deepak Bhardwaj, Nalini Chandra. Estimate of HIV prevalence and number of people living with HIV in India 2008-09. *BMJ Open* 2, 2012, September 30, 2012; 2:e000926, doi: 10.1136, pp.1-8. (IF 1.58)
4. Arvind Pandey, R.M. Mishra, DCS Reddy, Mariamma Thomas, Damodar Sahu (2012) Alcohol use and STI among men in India: Evidences from a national household survey. *Indian Journal of Community Medicine*, Vol.37 (2), April, 2012, pp. 95-100. (IF 0.76)
5. Arvind Pandey, R.M. Mishra, Damodar Sahu, S.K. Benara, Mandakranta Biswas, U. Sengupta, Mandar K Mainkar & Rajat Adhikary (2012) Heterosexual risk behaviour among long distance truck drivers in India: the role of marital status. *Indian Journal of Medical Research*, Vol. 136 (Supl.) October, 2012, pp. 44-53. (IF 2.061)
6. Abha Aggarwal, Arvind Pandey & Anita Agarwal (2012): A Logistic Regression Analysis for assessment of age and gender factors associated with Leprosy. *Health and Population – Perspectives & Issues*; 2012, Vol. 33, No. 4 pgs. 243-248.
7. A.K. Dwivedi, S.N. Dwivedi, S.V.S. Deo, Rakesh Shukla, Arvind Pandey & D.K. Dwivedi (2012) An epidemiological study on delay in treatment initiation of cancer patients, *Health* , 2012, Vol. 4, No.2, pp.66-79. (IF 1.137)
8. H.K. Chaturvedi, J. Mahanta, Ram Chandra Bajpai & Arvind Pandey (2013) Correlates of opium use: retrospective analysis of a survey of tribal communities in Arunachal Pradesh, India. *BMC Public Health*, 2013, Vol. 13: 325. (IF = 2.076)
9. Jeetendra Yadav, R.J. Yadav & Arvind Pandey (2012) Food fortification in Madhya Pradesh- An Evaluation, *Population, Reproductive and child health- Perspective and challenges*, Hindustan Publishing Corporation, Delhi, 2012, pp. 269-77.
10. K. [Agarwal](#), A. [Batra](#), A. [Dabral](#) & Abha [Aggarwal](#) (2012): Evaluation of isosorbidedemononitrate for cervical ripening prior to induction of labor for post dated

pregnancy in an outpatient setting. [International Journal of Gynaecology & Obstetrics](#), 2012, Vol. 118(3):205-9. (IF 1.836)

11. Manisha Rastogi, Rudra P. Ojha, B. Parimala Devi, Abha Aggarwal, Aruna Agrawal & GP Dubey (2012); Amelioration of Age Associated Neuroinflammation on Long Term Bacosides Treatment *Journal of Neurochemical Research*, 2012, Vol. 37 (4) Pgs. 869 – 874.
12. M. Gupta, V. Pilaniya, P. Chatterjee, N. Sood, M.K.Sen, Tulsi Adhikari, J.C. Suri (2012) Prevalence of nocturia in sleep-disordered breathing and its correlation with severity of the disease; *Indian Journal of Sleep Medicine*, 2012, Vol. 7(1), pp 23-28.
13. R. Goel, K. P. Malik, A. Goel, N. Sharma, A. Aggarwal. Agricultural related corneal disease Nepal J Ophthalmol. 2013 Jan; 5(9):45-9.
14. R.M. Mishra, Madhulika Dube, Saggurti Niranjana, Arvind Pandey, Bidhubhusan Mahapatra & Sowmya Ramesh (2012) The association between adolescent entry in trucking industry and risk of HIV among long distance truck drivers in India. *HIV & AIDS- Research and Palliative Care*, 2012, Vol. 4, pp. 141-148.
15. R.M. Mishra, Madhulika Dube, Damodar Sahu, S. Niranjana & Arvind Pandey (2012) Changing epidemiology of HIV in Mumbai: An application of the Asian Epidemic Model. *Global Journal of Health Sciences*, 2012, Vol. 4(5), pp. 100-112.
16. R.J. Yadav, Arvind Pandey & Padam Singh (2012): An evaluation of the ICDS food fortification in Uttarakhand. *Indian Journal of Community Health*, Vol. 24(3) July-September, pp.193-197.
17. R.K. Gupta and Arvind Pandey (2012): Factors Affecting Youths to Risky Sexual Behaviour in India-An Analysis, *Journal of Empirical Research in Social Science*, Volume 7, No. 1-2, March-September, 2012, pp. 1-6.
18. S.N. Dwivedi, Shahina Begum, A.K. Dwivedi & Arvind Pandey (2012) Community effects on public health in India: A hierarchical model, *Health* 2012. Vol. 4, No.8, pp. 526-536. (IF = 1.137)
19. S. Sharma, S.M. Agarwal, Atul Juneja, Ashok Sehgal (2012) Review of factors spurring the Risk of Breast cancer. *Environment and Ecology*, 2012, 30(2), 281-290.
20. Kh. Jitenkumar Singh and Uttam 2012. Initiation of breastfeeding practices in Odisha: Evidence from District Level Household Survey-3. Population, Reproductive and Child Health: Perspectives and Challenges. Eds. U.V.Somayajulu et al. Serials Publication, New Delhi, ISBN: 978-81-8387-579-0; 2012; 278-287.

Technical Reports

1. National Institute of Medical Statistics, ICMR & National AIDS Control Organization, 2012, *Technical Report - India HIV Estimates (2012)* MOHFW, New Delhi (Source: <http://www.naco.org>)
2. National Institute of Medical Statistics, ICMR & UNICEF, India. (2012) *Infant and Child Mortality in India – Levels, Trends and Determinants* (Source: <http://www.unicef.org>)

6. Statistical Consultancy

Dr. Arvind Pandey

1. Technical support to National Institute of Research in Environmental Health for the preparation of its Population Based Long Term Epidemiological Study on Health Effects of Gas Victims of Bhopal.
2. Review of over 20 papers from journals like: Indian Journal of Medical Research, Demography India, Journal of Family Planning and Reproductive Health Care, UK; AIDS, STI, AIDS & Behaviour etc.

Dr. R.J. Yadav

Reviewed 7 papers in IJMR

Dr. Abha Aggarwal

1. Consultancy for design and data analysis to various MD & DNB thesis from Safdarjung Hospital (Dept. Medicine, Radiology, Orthopaedics, Cardiology, Gynaecology, Dermatology, Burn, Anaesthesia, paediatrics and Ophthalmology); RML hospital (Dept. of Anaesthesia, Skin, Cardiology and Medicine) and LHMC hospital: Obs & Gyne and Anatomy department.
2. Reviewed over 15 papers in IJMR

Dr. H.K. Chaturvedi

Provided Statistical Consultancy for design and data analysis to various MD, Ph.D. thesis PGIMER, RML hospital and LHMC New Delhi; and Amity University, NOIDA.

Reviewed 15 research papers for the IJMR (8), International Health (1), American Journal of Public Health (2), Oman Medical Journal(2), Global Research Journal Microbiology (1) and BMC – Health Services Research (1).

Reviewed Scientific Projects and Reports – Six

Dr. R.K. Gupta

1. Technical support to National Institute of Research in Environmental Health for the preparation of its Population Based Long Term Epidemiological Study on Health Effects of Gas Victims of Bhopal.

Dr. D. Sahu

1. Statistical Consultancy to MD Students (Delhi Medical Colleges), Ph.D. thesis (JNU CSR department) and reviewed 7 journal articles for the IJMR (4), IJMC(3).

Dr. Tulsi Adhikari

1. Provided consultancy for design and data analysis to various MD & DNB thesis from Safdarjung Hospital; RML hospital & LHMC hospital; and review of over 10 papers in IJMR.
2. Provided consultancy to the ICMR Taskforce study on Estimation of Oxidative Stress during Oral Iron Supplementation in Daily & Weekly Schedule among pregnant mothers.
3. Provided consultancy to the ICMR Taskforce study on Health Account Scheme.
4. Provided consultancy to the NIMR study “DDT residues in human milk, whole blood and adipose tissues from DDT sprayed areas and areas where DDT not sprayed”

Dr. Atul Juneja

1. Provided consultancy for design and data analysis to various MD & DNB thesis from RML hospital, LHMC hospital and BL Kapoor Hospital and reviewed over 10 papers in various journals including IJMR.

7. Major Achievement during the year 2012-2013

Awards/Honours

Prof. Arvind Pandey delivered the prestigious Prof. George Simmons Memorial Oration of the Indian Association for the Study of Population (IASP) at Gokhale Institute of Politics and Economics at Pune on Dec.13-15, 2012.



Dr. Abha Aggarwal was conferred the Fellow of Indian Society for Medical Statistics (FSMS) during its Annual Conference held on 6-8th Nov. 2012 at Daya Nand Medical College and Hospital at Ludhiana.

Dr. Dinesh Kumar, Assistant Professor, Govt. Medical College & Hospital, Chandigarh was awarded as ICMR postdoctoral fellowship for three months w.e.f. 26 November 2012 on the topic “Adolescent friendly health Scheme” under the supervision of Dr. R.J. Yadav, Scientist G at the Institute.

Participation in International Meetings

Prof. Arvind Pandey attended the 19th International AIDS Conference AIDS held at Washington DC, USA during 22-27 July 2012.

Dr. R.J. Yadav attended the meetings of International organization for standardization ISO/TC 69, its Subcommittees and Working Groups at Institute of Statistical Mathematics, Tachikawa, Tokyo, Japan during 18-22 June 2012 as a member of Indian Delegation. About thirty countries participated the meeting.

Support to Professional Bodies

Dr. Arvind Pandey served Ex-Officio (past President) of the Indian Society for Medical Statistics (ISMS).

Dr. R.J. Yadav functioned as the General Secretary while Mr. Sharad Mathur was Treasurer of the Indian Society for Medical Statistics (ISMS).

Examiners of Ph.D. thesis

Dr. Arvind Pandey, Director, served as the examiner of Ph.D. thesis from International Institute for Population Sciences (IIPS), Mumbai), University of Kerala, Trivandrum, Gauhati University, Guwahati and Institute of Medical Sciences, B.H.U.,

Dr. R.J. Yadav served as the examiner of Ph.D. thesis from International Institute for Population Sciences (IIPS), Mumbai), Gauhati University, Guwahati, University of Madras, Chennai

Dr. HK Chaturvedi served as the examiner of Ph.D. thesis from T.M. Bhagalpur University, Bhagalpur, BIHAR

Dr. Damodar Sahu served as the examiner of M. Phil. thesis from JNU, New Delhi.

हिन्दी दिवस

हिन्दी दिवस की महत्ता को संजोए रखते हुए भारतीय संविधान में हिन्दी के स्तर के उचित मापदण्ड हेतु 12 सितम्बर 1949 को हमारे देश के प्रथम प्रधानमंत्री पण्डित जवाहर लाल नेहरू ने इस पर टिप्पणी करते हुए कहा था कि हम विदेशी भाषा पर निर्भर नारे रहे और हमारी अपनी भाषा होनी चाहिए। इस तथ्य के ध्यानार्थ हिन्दी भाषा को भारतीय राजभाषा के रूप में स्वीकृत किया गया।

राष्ट्रीय आयुर्विज्ञान सांख्यिकी संस्थान (आई०सी०एम०आर०) नई दिल्ली में हिन्दी की निरन्तर प्रगति के लिए भारत सरकार द्वारा मानित 14 सितम्बर 2012 को हिन्दी दिवस के रूप में मनाया गया।

प्रो० अरविन्द पाण्डेय संस्थान के निदेशक ने समारोह की अध्यक्षता करते हुए हिन्दी में कार्य करने के लिए कर्मचारियों को प्रोत्साहित किया। इस अवसर पर आचार्य राकेश यादव हृदय विशेषज्ञ हृदय संबंधी देखभाल पर अपने विचार अभिव्यक्त करने के लिए आमंत्रित किया गया। उन्होंने संस्थान के कर्मचारियों को सम्बोधित करते हुए उन्होंने संस्थान के कर्मचारियों को सम्बोधित करते हुए हृदय संबंधी बीमारियों के कारणों और उपायों पर प्रकाश डाला। हिन्दी में दिए गए उनके व्याख्यान ने सभी को प्रभावित करते हुए अपने जीवन स्तर में सुधार लाने की प्रेरणा दी।

इस महत्वपूर्ण दिन पर आई०सी०एम०आर० मुख्यालय: नई दिल्ली के (वरिष्ठ हिन्दी अधिकारी) को भी आमंत्रित किया गया। प्रो० पाण्डेय ने उनका स्वागत करते हुए उनसे अनुरोध किया है कि वो संस्थान के कर्मचारियों को सम्बोधित करें। श्री डी०सी० त्रिपाठी ने अपने व्याख्यान में कहा कि हमें कार्यालय के समस्त कार्यों में तकनीकी एवं वैज्ञानिक कार्य सहित हिन्दी का अधिक से अधिक प्रयोग करने का प्रयत्न करना चाहिए। उन्होंने कहा कि यह जरूरी नहीं है कि इस सभी तकनीकी अनुवाद की मांग करे अपितु दैनिक प्रयोग में आने वाली भाषा जिसमें प्रमुख अंग्रेजी शब्दों को शामिल करते हुए कार्य करें जिससे कि हमें हमेशा अनुवाद की आवश्यकता ना हो।

यह शैली हमारी वैज्ञानिक पद्धति में हिन्दी प्रयोग हेतु संतोषप्रद एवं उत्साहवर्द्धक होगी। इस अवसर पर उपस्थित सभी अधिकारियों ने इसकी सराहना की। श्री त्रिपाठी ने भी संस्थान में हिन्दी के प्रयोग को बढ़ावा देने के लिए कर्मचारियों को प्रोत्साहित किया।

इस अवसर पर शिक्षा का बदलता स्वरूप विषय पर वाद –विवाद प्रतियोगिता का आयोजन किया गया जिसमें निर्णायक मण्डल के पदाधिकारीगण डाक्टर डी०सी० त्रिपाठी डा० आर० जे० यादव और डा० (श्रीमति) आभा रानी अग्रवाल की भी महत्वपूर्ण भूमिका रही। संस्थान के कई अधिकारियों ने इस प्रतियोगिता में भाग लिया। इस अतुल जुनेजा जिन्होंने इस विषय पर पक्ष में अपने विचार रखे को हिन्दी समिति ने प्रथम श्री बी०एस० शर्मा को विपक्ष में बोलने पर द्वितीय एवं श्री जितेन्द्र यादव को तृतीय और श्री नरेश अग्रवाल को सान्तवना पुरस्कार दिए गए। इस दौरान कविता-गायन, प्रतियोगिता का आयोजन भी किया गया। जिसमें प्रथम द्वितीय एवं तृतीय पुरस्कार क्रमशः श्रीबी०एस० शर्मा, श्री बी०पी० सिंह एवं जितेन कुमार श्री जितेन्द्र यादव ने सांतवना पुरस्कार प्राप्त किया।

हिनदी में पूरे वर्ष कार्य करने पर श्री बी0एस0 शर्मा एवं श्री बी0पी0 सिंह को प्रथम पुरस्कार तथा द्वितीय पुरस्कार श्री बलराजशर्मा, श्री देशबन्धु एवं श्री देशराज को दिया गया और तृतीय पुरस्कार सर्व श्री नरेश अग्रवाल श्री रामपाल, श्री दीनदयाल मांझी, श्री रामनाथ एवं श्री विमल कुमार को दिए गए। आई 0सी0एसम0आर मुख्यालय में सरोगसी विषय पर हुए वाद विवाद प्रतियोगिता में संस्थान के अधिकारियों ने भाग लिया। जिसमें डा0 अतुल जुनेजा को इस विषय पर विपक्ष में अपने विचार रखने पर सान्तवना पुरस्कार दिया गया।



Retirements

Mr. Deen Dayal Manjhi retired from his services at NIMS on 28th Feb 2013 as Daftary. He joined the Institute on ---- and retired from his services after – years of service.



Dr. Arvind Pandey, greeting Mr. Manjhi on his retirement



LIBRARY SERVICES

- Library is having LIBSYS Software.
- Eleven Journals of Medical Statistics has been subscribed.
- Important Medical Statistics reference books have been purchased.
- Services of following four E-journals are provided to scientists which are coming through ICMR Headquarters.
 1. Nature
 2. Science
 3. New Journal of England Medicine
 4. Lancet
- Services of JCCC is provided to the scientist.
- Inter Library Loan a service is provided to the users through DELNET (Developing Library Network).
- Weekly Indexing Services of the Journals is also provided to the scientist.
- Library services are also provided to the summer training programme students/PhD scholars who have registered through NIMS.
- Institute is having Library Committee under the Chairmanship of Dr. R J Yadav Scientist G for the development of the Library and other Library activities such as purchase of Journals/Books/E-books etc.

Shri Naresh Agarwal LIO attended the following Conferences

NACLIN 2012

Scientific Advisory Committee Members 2012

1. Prof. P.P. Talwar, **Chairman**
Ex-Head, Dept. of Statistics, NIHFV,
B-1/1027, Vasant Kunj,
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EPOS , 445, Udyog Vihar, Phase-III
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4. Dr. F. Ram, **Member**
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International Institute of Population Sciences,
Station Govandi Road,
Deonar, Mumbai: 400 088.
5. Dr. S.N. Dwivedi **Member**
Professor

Deptt. Of Biostatistics

AIIMS,

New Delhi.

- | | | |
|-----|--|--------|
| 6. | Dr. Rattan Chand,
Chief Director (Statistics)
Ministry of Health & Family Welfare,
Nirman Bhawan,
New Delhi-110011. | Member |
| 7. | Dr. R.S. Paranjape,
Director,
National AIDS Research Institute,
Plot No. 73, 'G' Block,
MIDC Bhosari,
Pune : 411 026. | Member |
| 8. | Dr. R.C. Yadav,
Professor,
Department of Statistics,
B.H.U., Varanasi 221 005. | Member |
| 9. | Dr. D.C.S. Reddy,
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T.G. Complex, K.G.M.U.,
Lucknow-226003. | Member |
| 10. | Dr. M. Bhattacharya, | Member |

Prof. & Head,
Deptt. of Community Health Administration,
NIHFW, Munrika,
New Delhi.

- | | | |
|-----|---|------------------|
| 11. | Dr. Shashi Kant
Professor,
Centre of Community Medicine,
AIIMS,
New Delhi 110029. | Member |
| 12. | Head, Division of ECD
ICMR | Member |
| 13. | Dr. Arvind Pandey
Director, NIMS,
New Delhi. | Member Secretary |

Ethic Committee Members

Prof. S..D.Seth

Chairman

Advisor,
Clinical Trial Registry-India,
Ansari Nagar, New Delhi-110029.

Prof. (Ms.) Neerja Jayal,

Law and Governance Division,
Jawaharlal Nehru University,
New Delhi-110067.

Dr. Shashi Kant,

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Dr. R.N. Gupta,

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Dr. Sanghamitra Acharya,

Professor,
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School of Social Sciences,
Jawaharlal Nehru University,,
New Delhi-110067.

Dr. Sudesh Nangia,

Professor (Retd.)

Centre for Study of Regional Development,

JNU, New Delhi-110067.

Special Invitee

Dr. Arvind Pandey,

Director, NIMS,

Ansari Nagar, New Delhi.

Staff List

Group A

1. Prof. Arvind Pandey, Director
2. Dr. R.J. Yadav, Scientist 'G'
3. Dr. R.K. Gupta, Scientist 'F'
4. Dr. S.K. Benara, Scientist 'F'
5. Dr. (Mrs.) Abha Rani Aggarwal, Scientist 'F'
6. Dr. H.K. Chaturvedi, Scientist 'F'
7. Dr. Anil Kumar, Scientist 'E'
8. Dr. Damodar Sahu, Scientist 'D'
9. Dr. Tulsi Adhikari, Scientist 'D'
10. Dr. Atul Juneja, Scientist 'C'
11. Mr. Kh. Jitenkumar Singh, Scientist 'C'
12. Mr. B.K. Gulati, Scientist 'B'
13. Mr. B.S. Sharma, A.O.
14. Mr. Naresh Aggarwal, L.I.O.

Group 'B' staff (Technical)

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2. Mr. S.K. Mathur, T.O.(A)
3. Mr. K.L. Badolia, T.O.(A)
4. Mr. Vinay Kumar, T.O.(A)/Store Officer
5. Mr. Shiv Kumar, T.O.(A)
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13. Mr. Gurmeet Singh, T.O.(A)
14. Mr. Parmatma Mahato, T.O.(A)
15. Ms. Sunita, T.O. (A) W.E.F.
16. Mr. Charan Singh, T.O.(A)
17. Ms. Madhu Mehra, T.A. (Research)
18. Mr. Jatinder Yadav, T.A. (Research)
19. Ms. Geeta Sharma, Technical Assistant
20. Ms. Prabila Toppo, Technical Assistant

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2. Ms. Usha Gulati, P.A.
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4. Ms. Raj Kala, S.O.
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6. Mr. Mukesh Kaushik, Asstt.
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2. Mr. Ram Pal, Ldc
3. Ms. Kapil Gautam, Technician (C)
4. Mr. Yatendra Kumar, Technician (C)
5. Mrs. Ashpinder Kaur, Technician (C)
6. Mr. Ganesh Prasad Jena, Technician (C)
7. Mr. Thandi Mal, Technician (C)
8. Mr. Raj Kumar Yadav, Technician (A)
9. Mr. Desh Bandhu, Sr. Driver
10. Mr. Des Raj, Driver
11. Mr. D.D. Manjhi, Attendant (Service)
12. Mr. Dharamvir Singh, Attendant (Service)
13. Mr. Gopi Chand, Attendant (Service)
14. Mr. Jagili Sabar, Attendant (Service)
15. Mr. Gyan Chand, Attendant (Service)
16. Mr. Neeraj Kumar, Attendant (Service)
17. Mr. Ram Nath, Attendant (Service)
18. Mr. Vijay Chand, Attendant (Service)
19. Mr. Vimal Kumar, Attendant (Service)
20. Ms. Raj Mala, Attendant (Service)