



PUBLIC
HEALTH
FOUNDATION
OF INDIA

Annual Progress Report

October 2012



Public Health Foundation of India

Annual Progress Report

(October 2011 – October 2012)

Report submitted to the General Body

October, 2012



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OF INDIA**



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From the President's Pen



CONTEXT

Since the future of the Public Health Foundation of India (PHFI) is integrally linked to the course of public health in India, it is necessary to define India's major health challenges and profile the proposed health system responses, to provide the context for PHFI's mission, activities, accomplishments and future growth plans. This introductory section aims to do that, with special focus on the health goals identified for the 12th Five Year Plan which will soon be released.

This is a Time of Need

India's public health indicators are still a matter of great concern, despite recent improvements in life expectancy as well as infant and maternal mortality rates. The goals set by the 12th Five Year Plan (2012-2017) indicate the priorities that must be urgently and effectively addressed. They also indicate the considerable gap that needs to be bridged if key health indicators are to advance from present levels to the targets set for 2017.

National Health Goals for The 12th Plan

- Reduction of Infant Mortality Rate (IMR) to 25 (*from 47*)
- Reduction of Maternal Mortality Ratio (MMR) to 100 (*from 212*)
- Reduction of Total Fertility Rate (TFR) to 2.1 (*from 2.6*)
- Prevention and Reduction of Underweight Children Under 3 Years to 23% (*from 46%*)
- Prevention and Reduction of Anaemia Among Women Aged 15-49 Years to 28% (*from 59%*)
- Raising Child Sex Ratio in the 0-6 Year Age Group to 945 (*from 914*)
- Reduction of Households' Out of Pocket (OOP) Expenditure to 50% of Total Health Care Expenditure (*from 71%*)

National Health Goals for Communicable Diseases

Tuberculosis	Reduce annual incidence and mortality by half
Leprosy	Reduce prevalence to <1/10,000 population and incidence to zero in all districts
Malaria	Annual Malaria Incidence of <1/1000
Filariasis	<1% microfilaria prevalence in all districts
Dengue	Sustaining case fatality rate of <1%
Chikungunya	Containment of outbreaks
Japanese Encephalitis	Reduction in JE mortality by 30%
Kala-azar	<1% microfilaria prevalence in all districts
HIV/AIDS	Reduce new infections to zero and provide comprehensive care and support to all persons living with HIV/AIDS and treatment services for all those who require it.

UN Goals on Non-Communicable Diseases

In addition, the United Nations and the World Health Organization have set a global goal of 25 percent reduction in mortality related to non-communicable diseases (NCD), under the age of 70 years by 2025, in comparison to 2010 ("25 by 25"). This overarching target which has been approved by the United Nations High Level Meeting (UNHLM, September 2011) and the World Health Assembly (May 2011), has been accepted by India, since non-communicable diseases (cardiovascular diseases, cancer, diabetes, chronic respiratory diseases and mental illness) are high and rapidly growing contributors to early mortality or severe disability and economic loss in the country. Subsidiary targets, related to major NCD risk factors and treatment coverage, are due to be set by the end of 2012.

While India strives to attain these nationally and globally set targets, it must also contend with the need to bridge the distressing inequities in health, made evident by the wide disparities in multiple health indicators across and within States as well as across income, education, gender and caste strata. Not only must the aggregate national health indicators improve substantially by 2017, but the stark differences that exist across these groups must also be substantially bridged to improve the overall health of the Indian people and redress the health inequity that shames us all.

This is a Time of Opportunity

Daunting as the task of achieving rapid progress in India's health indicators seems, there are several developments which predict a positive momentum for efforts to improve public health in India.

These are:

- Increased financial allocation for health, nutrition, water and sanitation in the 12th Plan
- Proclamation of governmental intent to adopt Universal Health Coverage as a goal, with actions to be initiated in the 12th Plan
- The decision to launch a centrally supported scheme for free supply of essential drugs at all public health care facilities across the country
- The proposal to create public health and health management cadres, in central and state health services, as incorporated in the 12th Plan
- The commitment to strengthen rural and urban primary health care through the National Health Mission.
- Increased efforts, by several state governments, to improve the efficiency of health services, especially in the area of maternal and child health

PHFI, along with other public health capacity building institutions in India, can play a very useful role in supporting national and regional efforts to attain the 12th Plan goals. As an institution dedicated to comprehensive capacity building in public health (through education, training, research, policy support, health system strengthening, health communication, advocacy and development of affordable technologies for primary health care), PHFI is well positioned to play an enabling role in the transformation of India's health scenario.

This is a Time of Challenge

For PHFI, this is also a time of challenge, which arises from several factors:

- There is a demand from several states for technical assistance and some request the establishment of new Indian Institutes of Public Health (IIPHS). In the latter case, however, before the establishment of any more IIPHS is contemplated, there is the need to first ensure the financial sustainability of the four IIPHS that are currently operational and the fifth that is proposed to be set up in Shillong. The initial funding proposal for the establishment of PHFI envisaged one to two IIPHS and a small central office. However, the volume of engagement of PHFI and its IIPHS with the central and state governments and other stakeholders rose so sharply, even in the initial years (reflective the huge unmet demand for public health expertise), that the Governing Council of PHFI approved the establishment of five IIPHS in the first phase. This was in anticipation that further funds could be raised through governmental funding and philanthropic contributions, given the vital need for building large scale capacity in public health. However, the global economic crisis that commenced in late 2008, and continues to date, dampened the prospects of fund raising. Nevertheless, this effort has to recommence, given the value that PHFI is bringing and can further add to public health in India and even globally.
- The process of establishing IIPHS in permanent campuses has also suffered due to long delays or even repeated changes in land allocation by the state governments which offered to host them. Delhi, for example, has seen three allocations cancelled due to legal or environmental barriers and is yet to allocate land. As a consequence all four IIPHS in Gandhi Nagar, Hyderabad, Delhi and Bhubaneswar

high rental costs imposing a financial burden. The campus in Gandhinagar is soon to commence construction (tender process has been completed) while land has now become available in Hyderabad and Shillong. The growth plans of PHFI and IIPHS are constrained by the need to operate from rented premises rather than their own campuses which can accommodate a larger volume of work.

- Government sponsored candidates, deputed for education and training, are funded at rates applicable to government affiliated institutions (such as NIHFV) which have government funded campuses and regular budgetary allocations for staff salaries. PHFI incurs a financial loss while undertaking such educational and training programmes but continues to do so because of its mission.

This is a Time to Re-Commit to the Larger Vision

Despite these challenges, PHFI needs to re-commit to the larger vision of supporting India's health transformation by playing an effective role through capacity building, health system strengthening and creating platforms for inter-sectoral coordination. Whether it is organization of health services or appropriate use of health technologies, nutrition or safe water, sanitation or road safety, tobacco control or clean environment, public health law or universal health coverage – the scope of public health action is vast and the potential contribution of PHFI is huge. The purpose of launching PHFI in 2006, was to create a vehicle for rapidly advancing India's public health. The time is now ripe for redefining PHFI's path forward and for the diverse stakeholders who created and nurtured PHFI to renew their commitment to that larger vision. Fresh resources would need to be mobilized to consolidate PHFI's current initiatives and strengthen it further to play a larger role. At the same time, prudent choices will have to be made while setting PHFI's course and the available financial and human resources have to be deployed for the maximum impact ('more for less'). Guidance of the Governing Council and the General Body is sought to chart these coordinates, in the context of India's journey towards better health for her people.

While a detailed description of section-wise activities and accomplishments, related to the preceding year, is provided in later sections of the Annual Report, an overview of the major streams of activity is provided below.

GOVERNANCE

The Governing Council of PHFI in March 2011 unanimously agreed to review the governance of PHFI and recommended that a Governance Reform Committee be constituted to look into the required changes. Pursuant to the acceptance by the Governing Council of the report of the Governance Reform Committee, headed by Mr. J. V. R. Prasada Rao, PHFI has initiated several measures for implementation of its recommendations.

- Committees of the Executive Committee have been constituted to review and guide key areas of PHFI's functioning. These are: Nominations and Compensation Committee (headed by Mr. N.R. Narayana Murthy); Finance & Investment Committee (headed by Mr. Harpal Singh, with Mr. Uday Khemka as Interim Chair during the period of Mr. Singh's medical leave); Fund Raising Committee (headed by Mr. Raj Mitta) and Audit Committee (with Mr. T. N. Manoharan proposed as the Chair, subject to his induction into the General Body of PHFI).
- The Finance and Fund Raising Committees have conducted several meetings this year, in accordance with their terms of reference. They will be reporting to the Governing Council of PHFI.

RESEARCH AND CAPACITY BUILDING PROJECTS

PHFI and the IIPHS have undertaken several projects over the last year, covering a broad canvas of public health. Many of these are competitively adjudged grants while others are commissioned projects. The value of the grants received during the year October 2011-September 2012 is Rs. 217 crores.

Some of the key projects which have been started this year are:

- **HIV/AIDS Partnership; Impact through Prevention, Private Sector & Evidence Based Programming (PIPPSE) Project;** to strengthen the institutional & human capacity in prevention programmes and private sector engagement through innovative approaches for reversal of the HIV epidemic - funded by United States Agency for International Development (USAID). This is the first time an Indian NGO is the prime lead of an international consortium that was competitively awarded a grant by USAID.
- **The Health Governance Hub;** with a focus on investigating critical health policy and systems challenges confronting India and other lower- and middle-income countries (LMIC's) for advancing goals of health equity and justice – funded by Oxfam India.
- **mWellcare Trial;** to test an integrated mHealth application on chronic disease management at the primary health care level in the states of Tamil Nadu & Haryana - funded by the Wellcome Trust.
- **Access, Bottlenecks, Costs and Equity (ABCE);** to provide quality evidence for improving the equity and cost-effectiveness of health systems, with studies to be conducted in five states – supported by University of Washington and the Bill & Melinda Gates Foundation.
- **Rapid Assessment & Potential Scaling up of Jan Aushadhi Scheme;** to conduct a rapid assessment; identify potential challenges and provide a roadmap for future scale-up of Jan Aushadhi Scheme (generic drug stores) supported by Ministry of Chemicals & Fertilizers, Government of India.
- **Development of a Monograph on Smokeless Tobacco & Public Health in India;** to provide a comprehensive overview of current scientific knowledge of smokeless tobacco use, characteristics of products and related policy efforts - in partnership with the Ministry of Health and Family Welfare (MoHFW), World Health Organization – South East Asia Regional Organization (WHO-SEARO), Centre For Disease Control (CDC), USA & Healis Sekhasaria Institute for Public Health.

Completed and ongoing research projects have resulted in 216 scientific publications during October 2011 to September 2012. The average impact factor of the journals where they were published is 5.

EDUCATION AND TRAINING

The Indian Institutes of Public Health (IIPHS), established by PHFI, are continuing to deliver four on-campus post-graduate (PG) Diploma programmes, by themselves and also through partner institutions. In addition, three distance education programmes have been added. Proposals for commencing Master of Science (M.Sc) programmes in Health Informatics and Clinical Research, in collaboration with the Council of Scientific and Industrial Research (through the Academy of CSIR), are at an advanced stage of the planning and approval process. Different options for obtaining a university status, for enabling PHFI to grant post-graduate degrees, are being explored and will be placed before the General Body and the Executive Committee for their guidance. Training programmes, in several theoretical and applied areas of public health, have been organized across the country. The demand for short-term training is rising rapidly and PHFI is raising the level of its response. Apart from the large volume of training, the quality too has elicited praise from a diversity of stakeholders.

PG Diplomas (On-Campus)

PHFI is presently delivering four on-campus programmes:

1. PG Diploma in Public Health Management – One year programme.

Initiated at IIPH (Gandhinagar) in 2008, it is presently being delivered through the four IIPHS in Gandhinagar, Delhi, Hyderabad and Bhubaneswar and also through the PHFI- operated programmes in state government facilities in Gwalior (Madhya Pradesh) and Bangalore (Karnataka). So far 375 graduates have completed the programme from these centres and 156 are in training. At the Bangalore Centre, which is soon to commence operations, 34 students have enrolled in October 2012.

In addition, the programme is offered also by the National Institute of Health and Family Welfare (Delhi), All India Institute of Hygiene and Public Health (Kolkata), Mahatma Gandhi Institute of Medical Sciences (Sewagram), Jawaharlal Nehru Graduate Institute of Medical Education and Research (Puducheri) and the Postgraduate Institute of Medical Education and Research (Chandigarh) which were selected by the MoHFW to conduct this programme which was designed by PHFI in 2008. The officers trained are mostly District, Block and PHC level medical officers nominated by the state governments though other (self-sponsored) candidates are also accepted and trained by PHFI.

2. Diploma in Biostatistics and Data Management – One year programme.

This is being offered by IIPH (Hyderabad) since 2008. The programme seeks mainly to train postgraduates with prior qualifications in statistics or mathematics, in applied biostatistics and data management. In recent years, the Government of Andhra Pradesh has also been sponsoring medical officers from its services. So far, 66 graduates have completed the programme and 22 are in training.

3. PG Diploma in Health Economics, Financing and Policy – Nine month programme.

This is being offered by IIPH (Delhi) since 2008. It provides training to non-physicians as well as physicians in the fundamentals of health economics and its applications in health financing and health policy. So far 35 graduates have completed the programme.

4. PG Diploma in Clinical Research – One year programme.

Offered by IIPH (Delhi) since 2009, this course provides training in clinical research methodology and research management to physicians as well as non-physicians. So far 24 graduates have completed the programme.

Future Directions: When the Master of Public Health (MPH) programme starts in 2013, the PG Diplomas in Health Economics and Clinical Research will get merged into that, to become streams within the MPH. Based on the demand from the National Rural Health Mission and the state governments, the PG Diploma in Public Health Management will continue as a stand-alone one year programme, while also contributing a stream to the MPH programme. Likewise, the PG diploma in Biostatistics too will continue with a dual identity.

Distance Education Programmes:

PHFI presently offers three PG Diploma programmes through distance learning. They are:

1. PG Diploma in Public Health Nutrition - Delivered over a year.

This programme, which has been offered since 2010, provides learning in nutrition science, nutrition policy and nutrition programmes as relevant to public health. While the context is Indian, global learnings are also incorporated where relevant. So far 61 candidates have graduated and 73 are in training.

2. PG Diploma in Health Promotion (with a special track on tobacco control) - Delivered over one year.

This programme has been developed in response to a need expressed by MoHFW and has been developed with technical support from Johns Hopkins University and the University of Southern California (both contributed to the tobacco control modules). So far 31 candidates have registered for this programme which commenced in 2011.

3. PG Diploma in Epidemiology (with special emphasis on infectious diseases) - Delivered over one year.

This programme has been developed with technical support from the London School of Hygiene and Tropical Medicine. It was launched in 2011. So far 89 candidates have registered.

Future Directions: Elsewhere in the world there is a growing interest in developing distance learning as a major pathway of education at the university level. This is now being reflected in educational programmes for public health. While the London School of Hygiene and Tropical Medicine has been a leader in the field for several years, many US Schools of Public Health are now launching or expanding these programmes. For example, the Harvard School of Public Health is proposing to develop an EdX Stream as a high priority. It is now being recognized that such distance learning programmes are not only attractive to working professionals but are also likely to attract students who cannot afford to pay the higher tuition fee of on-campus programmes.

Having commenced distance education programmes related to Public Health, in 2010/2011, and having become an early mover among the Indian institutions in this regard, PHFI proposes to consolidate, strengthen and expand its distance learning programmes. It will develop more diploma programmes customized to specific health system needs and will consider launching programmes also at the Masters level, after conducting a needs assessment. This route can also be used to engage professionals in other disciplines or sectors, e.g., through courses in public health law, public health engineering or public health genetics.

University Status: The limiting factor in PHFI's efforts to promote public health education in India has been its inability to launch an MPH degree so far due to lack of university status. The Innovation Universities bill, under which the Ministry of Human Resource Development was expected to confer university status on institutions such as PHFI, still awaits parliamentary consideration, three years after it was initially announced as a major policy initiative of that Ministry. A non-legislative pathway, by which the University Grants Commission designates Innovation Universities, is presently under discussion. The University Grants Commission had frozen the Deemed University process for some years and has been without a Chairperson for over a year. In these circumstances, it is unlikely that PHFI will soon acquire university status through either of these channels. Interim solutions need to be found to overcome this problem, till the Innovation University process gets underway.

The alternate pathways being currently considered are:

- (i) Launch a Master of Public Health Sciences degree in partnership with the Academy of CSIR.
- (ii) Request the state governments, where IIPHs are located, to confer university status on the respective IIPHs through state legislation.
- (iii) Link with the Central University of Hyderabad for MPH (Nursing) or MPH programmes, with co-branding of IIPH (Hyderabad).
- (iv) Affiliate IIPH (Hyderabad) with the Dr. NTR Health Sciences University in Andhra Pradesh, for MPH and Ph. D programmes.
- (v) Seek partnership with a reputed international university/universities which would be willing to award a co-branded degree.

These options will be placed before the Executive Committee for its guidance.

HEALTH SYSTEM STRENGTHENING, POLICY SUPPORT AND COMMUNICATION

PHFI and the IIPHs have actively engaged with the central and state governments to provide support for the study of health systems (priorities, resources, programmes, performance, impact, constraints, innovations, reconfiguration models) to enable their strengthening for better outreach and effectiveness. Policy development and change are assisted through knowledge translation and informed advocacy as well as regular engagement with policy makers, civil society organizations, media and non-conflicting sections of the private sector. Health communication is also directed at empowering people with the information, motivation and skills needed to protect, preserve and promote their health.

Some of the notable areas of recent engagement are:

- Designation of PHFI as the **technical secretariat** for the High Level Expert Group (HLEG) on **Universal Health Coverage (UHC)** established by the Planning Commission of India.
- Designation of PHFI as the **technical support unit** to support the Ministry of Health and Family Welfare for **strengthening of Routine Immunization** programmes in the country.
- Designation of PHFI as the **technical support unit** to assist the Ministry of Health and Family Welfare in the establishment of **National and Regional Institutes of Allied Health Sciences**.
- **Technical assistance** to the Ministry of Health & Family Welfare in developing the framework for creating **public health cadres** in health services across India.
- Development and pilot testing of the **Swasthya Slate** (a multi-function tablet for diagnostic and decision support services in primary health care).
- Advocacy for **plain packaging for tobacco products and ban on gutkha (oral tobacco)**, resulting in a Private Member's bill for plain packaging being introduced in Lok Sabha and a ban on gutkha (oral tobacco) in 14 states of India.
- Partnering with the Ministry of Health and Family Welfare in public **Communication on Mental Health**.
- Appointment of Prof. K. Srinath Reddy as a member of the **Leadership Council** which will advise the High Level Empowered Group of Heads of State **established by the UN Secretary General to develop the Sustainable Development Goals (SDH)** for the post-2015 UN agenda.

IMPACT

While it would be very difficult to attribute any significant change to public health to specific activities undertaken by PHFI, due to the multiple factors which contribute to any change, PHFI has actively assisted in some major developments that are leading to advancement of public health objectives in India. It provided technical and administrative support to a major report on Universal Health Coverage, many of whose recommendations have been incorporated in 12th Plan. These include increased financial allocations for health, strengthening of primary health care and district hospitals, free supply of essential drugs, creation of public health and health management cadres and increased attention to the social determinants of health. It is creating demand for public health education, through career opportunities which are being opened up in several states with which PHFI has engaged. Through its Future Faculty Programme it has so far supported the training of over 70 public health professionals in reputed international institutions and is creating a talent pool of public health expertise which is beginning to serve India well. It is providing technical support to the Government of India for the national programmes in HIV-AIDS, Routine Immunization, Non-communicable Diseases and Tobacco Control.

Studies by PHFI in Chattisgarh validated the use of mid-level health workers in primary health care and provided support to the proposed governmental policy for training and employing three-year programme graduates. It has created research platforms for the study of zoonotic diseases, which were previously accorded little attention. It has trained public health managers for the National Rural Health Mission and nearly 3000 primary care physicians in diabetes management. Vigorous advocacy by PHFI, along with other civil society partners has resulted in mandating of stronger pictorial warnings on tobacco packs and a ban on *gutkha* (oral tobacco sachets) in 14 states.

The principal change agents for transforming health in India are the central and state governments. PHFI has played a support role, by providing technical assistance which informs and aids governmental initiatives.

Other sections of our society (civil society, academia, the private sector and the media) play a vital role too. PHFI has actively engaged with them and has built partnerships with them to enable collective or collaborative action on health, across sectors. It has also built international partnerships which provide strong support not only to PHFI but also to broader public health capacity building in India.

While PHFI will strive to enhance the quality and scale of its contributions to public health, many national and international institutions and agencies have publicly commended the value it has added to public health capacity building and health system strengthening in India, and some have referred to it as 'a game changing institution'. This recognition comes partly from acknowledgement of its work thus far, and partly from the promise of potential contributions that it brings to the future. We seek the sagacious guidance of the General Body and the Executive Committee, as well as the strong **support of national and international partners, to help us meet these expectations.**

ACKNOWLEDGEMENTS

The rapid growth of PHFI over the last six years, and especially during 2011-12, owes much to the strong and steadfast support received from many institutions and individuals. On behalf of the PHFI family, I would like to thank the Governing Group of PHFI for its visionary and vigilant leadership that kept us on track. We are beholden to the Government of India (Ministry of Health and Family Welfare) and the State Governments of Andhra Pradesh, Delhi Gujarat, Odisha, Meghalaya, Madhya Pradesh, Karnataka and Bihar for their multi-dimensional support. We are also grateful to McKinsey and company for their *pro bono* support to analytic work involving the deployment of the Swasthya State as well as financial planning.

Governance at PHFI



PHFI is autonomously governed as a society and is managed by a fully empowered, independent, Governing Group that is represented by multiple constituencies. These constituencies include representatives from government, contributing philanthropists and leading Indian and international professionals.

The Governing Council of PHFI in March 2011 unanimously agreed to review the governance of PHFI and recommended that a Governance Reform Committee be constituted to look into the required changes. The Committee was chaired by Mr. J. V. R. Prasada Rao and members consisted of Mr. Harpal Singh, Ms. Sujatha Rao, Prof. Lincoln Chen and Dr. David Lynn, with Mr. Shiv Nadar was a special invitee.

The Report of the Governance Reform Committee was presented and discussed in the Governing Council meeting on July 31, 2011. Thereafter, as per the recommendations made, several changes were carried out in the organization of the governing body of PHFI. As per the recommendations of the Committee, the General Body and Governing Council were re-named and re-structured as the General Body and Executive Committee. A Transition Committee was then formed in July 2011 to review the powers and functions of both bodies, suitably amend the PHFI Rules & Regulations and constitute the Executive Committee.

The Transition Committee consisted of Mr N.R. Narayana Murthy (Chair), Mr. Y.V. Reddy, Mr. Montek Singh Ahluwalia, Mr Shiv Nadar and Dr. K Srinath Reddy. Under the guidance of the Transition Committee the PHFI Rules & Regulations have been amended and the Executive Committee has been successfully constituted.

Constitution of the General Body

Name	Affiliation
Mr. N. R. Narayana Murthy (Chairman)	Founder and Chairman Emeritus, Infosys Technologies
Mr. Montek Singh Ahluwalia	Deputy Chairman, Planning Commission of India
Mr. Ashok Alexander	Former Director, Avahan India AIDS Initiative
Ms. Mirai Chatterjee	Coordinator, Social Security, SEWA

Name	Affiliation
Dr. Lincoln Chen	Director of Global Equity Center, Harvard Kennedy School
Dr. James W. Curran	Dean, Rollins School of Public Health, Emory University
Dr. Gary Darmstadt	Director, Bill & Melinda Gates Foundation
Dr. Timothy G. Evans	Dean, James Grant School of Public Health, BRAC University Bangladesh
Mr. Uday Nabha Khemka	Vice Chairman, Sun Group
Mr. Gautam Kumra	Director, McKinsey & Co
Dr. David Lynn	Director, Strategic Planning & Policy, Wellcome Trust
Ms. Kiran Malhotra	Chairperson, AKM Systems
Dr. Raghunath A. Mashelkar	CSIR Bhatnagar Fellow
Mr. Raj Mitta	Chairman, Essential Value Associates
Mr. Shiv Nadar	Chairman, HCL
Dr. Ravi Narayan	Community Health Advisor, SOCHARA
Mr Raman Sharma	Lawyer
Dr. Peter Piot	Director, London School of Hygiene & Tropical Medicine
Mr. J. V. R. Prasada Rao	Former Advisor, UNAIDS India
Dr. Anil Seal	Director, Cambridge Commonwealth Trust
Dr. Amartya Sen	Professor of Economics, Harvard University
Dr. Jaime Sepulveda	Executive Director Global Health Sciences, University of California
Dr. A. K. Shiva Kumar	Advisor, UNICEF
Mr. Michel Sidibe	Executive Director, UNAIDS
Mr. Harpal Singh	Mentor & Chairman Emeritus, Fortis Healthcare India
Dr K. Srinath Reddy	President, Public Health Foundation of India
Mr P.K. Pradhan	Secretary, Ministry of Health and Family Welfare (ex-officio member)

Name	Affiliation
Dr Jagdish Prasad	Director General of Health Services, Ministry of Health and Family Welfare (ex-officio member)
Mr. T.K. A. Nair	Representative of the Prime Minister's office (ex-officio member)
Dr Vishwa Mohan Katoch	Director General, Indian Council of Medical Research (ex-officio member)
Mr Prashanth Vasu	Partner, McKinsey & Company
Mr Ajay Behl	Lawyer

Constitution of the Executive Committee

Mr N.R. Narayana Murthy (Chairman)	Ms. Kiran Malhotra
Mr. Montek Singh Ahluwalia	Dr. R.A. Mashelkar
Ms. Mirai Chatterjee	Mr. Shiv Nadar
Dr. Timothy Evans	Dr. A.K. Shiva Kumar
Mr. Uday Nabha Khemka	Mr. Harpal Singh
Mr. Gautam Kumra	Dr. Gary Darmstadt
Dr. David Lynn	Dr. K. Srinath Reddy (Member secretary)
Secretary, Ministry of Health and Family Welfare (ex-officio member)	

Permanent invitees to the Executive Committee

Mr. Mukesh Ambani	Dr. Lincoln Chen
Dr. James W Curran	Mr. Raj Mitta
Dr. Peter Piot	Mr. J.V.R. Prasada Rao
Dr. Amartya Sen	Dr. Jaimie Sepulveda

Meetings of the Executive Committee in 2012

January 23, 2012
April 17, 2012
July 18, 2012
October 18, 2012

Sub-Committees of the Executive Committee:

The Executive Committee constituted the following sub-committees to aid in the functioning of the Executive Committee and General Body.

Finance and Investment Committee of the Executive Committee of PHFI

- Mr. Harpal Singh (Chair)
- Mr. Gautam Kumra
- Mr. Uday Nabha Khemka
- Dr. A. K. Shiva Kumar
- Mr. Raj Mitta (invitee, as Chair of Fundraising Committee)

Fundraising Committee of the Executive Committee of PHFI

- Mr. Raj Mitta (Chair)
- Ms. Kiran Malhotra
- Dr. Anil Seal
- Mr. Harpal Singh (invitee as Chair of Finance and Investment Committee)

Nomination and Compensation Committee of the Executive Committee of PHFI

- Mr. N.R. Narayana Murthy (Chair)
- Mr. J. V. R. Prasada Rao
- Ms. Mirai Chatterjee
- Dr. A. K. Shiva Kumar

Audit Committee of the General Body of PHFI

- Treasurer of PHFI GB (Chair)
- Dr. Timothy Evans
- Mr. Gautam Kumra
- Dr. David Lynn

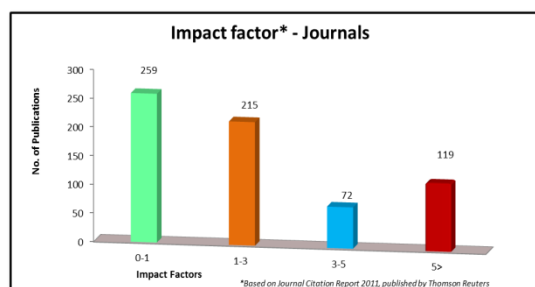
Research & Capacity Building projects



Research Overview

From its inception, PHFI has been mandated to establish a strong national research network of public health and allied institutions, which would undertake policy and programme relevant research that will advance public health goals in priority areas. Research has been an important pillar of PHFI's activities during the past five years. In 2011, PHFI researchers published 258 peer-reviewed journal articles and three books/chapters and monographs. Till October 2012, PHFI researchers had published 153 publications in peer-reviewed journals.

In the past five years (2007-2012), 119 journal articles were placed in publications with an impact factor of five or greater and 71 were placed in publications with an impact factor of three to five.



Research Focus: Research projects at PHFI are interdisciplinary in nature and address public health issues and diseases relevant to India. Our researchers are working on varied issues such as maternal and child health, nutrition, communicable diseases including HIV/AIDS, chronic diseases and mental health, health systems and governance, social determinants of health, and economics of public health financing. Our new research projects tackle neglected tropical diseases such as Kala-azar (visceral leishmaniasis) and Japanese encephalitis; development of affordable health technologies; under-nutrition; and insurance programmes for the poor, just to name a few. These research projects aim to fill the gaps in knowledge and policy measures to improve health governance and delivery of services, build capacity for health human resources, and understand social determinants of health.

Research activities/projects are conducted at PHFI headquarters in New Delhi and the four IIPs, and the five Centres of Excellence that include:

- The South Asia Network for Chronic Disease (SANCD)

- Center of Excellence in Cardio metabolic Risk Reduction in South Asia
- South Asia Centre for Disability Inclusive Development & Research (SACDIR)
- Ramalingaswami Centre for Social Determinants of Health (SDH)
- Centre for Mental Health

Research Environment and Productivity:

PHFI strives to maintain a strong research environment even though the research staff is spread across many locations. In order to build scale and collaborations, PHFI has started organizing a bi-annual research symposium to provide a forum for sharing project updates and findings across Institutes. The objective of these gatherings is to allow researchers to share information and formulate strategy, inform research priorities and research platforms for PHFI at an institutional level. The Second Research Symposium was held at the Indian School of Business, Hyderabad on March 15-16, 2012. The symposium consisted of round table discussions, research sketches, poster sessions and a plenary talk on Universal Health Coverage. Research administration issues were also discussed especially the proposal submission process and guidelines on proposal budgets. The next symposium is planned during January 7-8, 2013 in New Delhi.

PHFI started regular Thursday Research Seminars in February 2012, where leading scholars and research scientists are invited to throw light on current health policy issues and challenges. Speakers from a multitude of organizations such as All India Institute of Medical Sciences, the Gates Foundation, Vaccine Grand Challenge Programme, Translational Health Science and Technology Institute, Medecins Sans Frontieres, Columbia University, University of Pennsylvania and PHFI have been invited to speak on topics such as fetal origin of non-communicable diseases, American healthcare reform (Obamacare), the global burden of disease and public health education in India. These hour long seminars are broadcast either through videoconferencing technology or the Adobe® Connect™ Platform. The latter format is the same technology used for online live sessions of distance education courses at PHFI. The seminars, while placing emphasis on capacity building of researchers, also bring together various research scientists and staff across PHFI Central and the IIPs to stimulate discussion and encourage internal collaborations.

A monthly *Research Updates Newsletter* was started in January 2012 to document and share information on current projects, publications, seminars and grants received by PHFI researchers. It is one of the many information portals that PHFI has been utilizing to improve research communication within PHFI and the IIPHS.

Research Management: There have been important improvements in the process of research and grants management at PHFI. Research management at PHFI is being standardized to enable better compliance with international standards expected by funders. A Grants Coordinator and a Project Development Coordinator facilitates and expedites the research proposal submission process and explores new opportunities for project and grant funding.

Ethics: PHFI has a standing Institutional Ethics Committee (IEC) in New Delhi which holds quarterly meetings four times a year. The IEC is an overarching body which provides guidance and promotes ethical conduct in research, ensuring research subjects are not put to risk and researchers get full benefits of their research. PHFI is committed towards building a strong culture of ethics in the organization that would help in balancing research careers. Towards this end, research ethics training workshops, focusing both on the principles and the process of ethics approval at PHFI, are conducted regularly and all researchers are encouraged to attend. IIPH-Gandhinagar, IIPH-Hyderabad, IIPH-Delhi and IIPH-Bhubaneswar have respective Ethics Committees to review their research proposals.

New Collaborations: PHFI researchers collaborate with a large number of external partners and institutions, both domestic and international. In the past year, PHFI has established partnerships with the Nossal Institute for Global Health, University of Melbourne,



International Clinical Epidemiology Network Trust, Government of Karnataka and the Indo-US Science and Technology Forum (IUSSTF) for conducting

research and building capacity in public health education. PHFI and IUSSTF recently launched the 'Indo-US Public Health Research Fellowships for the Indian Researchers' programme, supported by the Science and Engineering Research Board, Government of India. This programme aims to strengthen and expand the knowledge base of public health research and education in the country.

Research Staff: To lead, manage, and support diverse projects, PHFI has a multidisciplinary team of researchers, with medical and non-medical backgrounds (management, psychology, social sciences, economics, finance, statistics, social work, pharmacy), who specialize in technical areas such as health economics, health systems and financing, policy analysis, epidemiology, clinical research, genetics, nutrition, biostatistics, demography and some others. Our researchers also work on adolescent health, equity issues, urban health, community-based initiatives, women's empowerment, mental health, oral health and climate change. PHFI currently employs 412 faculty and research staff.

PHFI continues to attract top notch talent and researchers in public health. Some of the Research Scientists recently hired include, Dr. Arpita Ghosh, Dr. Santanu Paramanik and Dr. Neha Raykar who is the Lead Economist for the Disease Control Priorities Network and the Transform Nutrition Research Programme Consortium.

Dr. Arpita Ghosh received her Ph.D. in Biostatistics from The University of North Carolina at Chapel Hill. Her doctoral work concerned the development of statistical methods for genome-wide association studies. Dr. Ghosh then joined the National Cancer Institute (NCI), as a post-doctoral fellow.

Dr. Santanu Paramanik, has masters in Statistics and PhD in Survey Methodology from the Joint Program in Survey Methodology (JPSM) at the University of Maryland. Prior to joining PHFI, Dr. Paramanik worked as Survey Statistician at NORC at the University of Chicago, where he was involved in developing a small area estimation methodology for estimating accounting error amounts in the Native American Indian Tribal accounts.

Dr. Neha Raykar, PhD in Economics from University of California, Riverside, has earlier worked as a Visiting Assistant Professor of Economics at Colgate University, New York. Her

primary field of research is development economics, more specifically in areas of health, education, poverty, and economics of household behaviour in developing countries.

Funding: During the past year, PHFI was awarded several competitively adjudged research/project grants from international agencies including Wellcome Trust, Bill and Melinda Gates Foundation, World Health Organization, World Bank, USAID, UNICEF, OXFAM India, Medtronic Foundation, Micronutrient Initiative and the World Food Programme. Major national funding agencies include the MoHFW, Indian Council of Medical Research (ICMR), National Human Rights Commission (NHRC), Department of Science and Technology (DST), and various state level organizations. PHFI also receives significant funding for research from three large capacity building projects which include the Wellcome Trust capacity building grant, the Wellcome Trust funded South Asia Network for Chronic Disease research (SANCD) and National Institutes of Health funded Centre of Excellence for chronic cardiovascular and pulmonary diseases.

Research projects are listed separately, but some of the new projects are described briefly below:

To change health behaviours and improve coverage of health services by activating social platforms for the poor in Uttar Pradesh:

The project's goal is to reduce neonatal mortality rate and improve maternal and child health through changes in family health behaviours and improve access, utilization and quality of services by activating these Self Help Group-based social platforms in 160 blocks in Uttar Pradesh (UP), India. This project is funded by the Bill and Melinda Gates Foundation for four years (2012-2015).

The project will be implemented by a Consortium led by the Public Health Foundation of India. The other members include Rajiv Gandhi Charitable Trust (RGMVP) (key field implementer); Community Empowerment Lab @ Shivgarh (technical partner); Population Council (technical partner); and the Centre for Global Health and Development, Boston University (technical partner). PHFI will also assist in strengthening RGMVP capacity and project implementation to ensure achievement of desired results.

The Immunization Technical Support Unit (ITSU) – The MOHFW entered into a

Memorandum of Understanding with PHFI to implement activities geared towards strengthening the Universal Immunization Programme (UIP). The Immunization Technical Support Unit (ITSU) will supplement the Government of India's efforts in strengthening and revamping the UIP in consultation with existing routine immunization partners. It will also hire staff to provide management and technical expertise to the existing UIP structure. ITSU will have the following functional units under its purview: procurement and logistics; cold chain management; Adverse Events Following Immunization management (AEFI) and vaccine quality and safety; strategic communication; monitoring and evaluation; and evidence generation and Vaccine Preventable Disease surveillance (VPD). The ITSU project is to be implemented in two phases over a period of 36 months.

The United States Agency for International Development has funded the **HIV/AIDS Partnership: Impact through Prevention, Private Sector and Evidence-based Programming (PIPPSE) Project**. PIPPSE will be managed by a Consortium, led by PHFI, Futures Group, CARE India and Population Services International. The project will be implemented over a period of five years (2012-2017). The project aims to strengthen the institutional and human capacity in prevention programmes and private sector engagement through innovative approaches to contribute to achieving the goal of accelerating the reversal of the HIV epidemic at the national and state levels. The overarching principles of the project approach include health systems strengthening, testing and documenting innovations, and ensuring Quality Assurance (QA) and Quality Improvement (QI). This project shifts attention to the north, to newly emerging vulnerable states where the HIV response, donor attention, and capacity to respond are relatively limited.

Universal Health Coverage (UHC): With the aim of incorporating a comprehensive plan for health in India the Planning Commission of India, under approval by the Prime Minister, constituted the High Level Expert Group (HLEG) on Universal Health Coverage (UHC) in October 2010. The mandate was to develop a framework for providing easily accessible and affordable health care to all Indians and suggest a 10-year strategy going forward. PHFI was appointed as Secretariat by the Planning Commission of India, to provide

technical and administrative support to the High Level Expert Group in preparing its report.

Six terms of reference (ToRs) were formulated under the broader framework of Universal Health Coverage, each of which was addressed by a sub-committee of the High Level Expert Group and a dedicated team from the PHFI secretariat.

While developing its recommendations for India, the review process by HLEG was complemented with the experience of other countries, especially of those in the low and middle income categories.

The Expert Group submitted the final report on Universal Health Coverage for India to the Planning Commission on 21st October 2011, with a formal presentation to the Deputy Chairman, Mr. Montek Singh Ahluwalia on the 28th November, 2011.

The report of the High Level Expert Group on Universal Health Coverage (HLEG-UHC) is available at <http://www.uhc-india.org> along with additional resources and background papers. One of the most widely discussed recommendations of the HLEG is to increase public expenditures on health from 1.2 percent to 2. percent by the end of the 12th Plan and to 3 percent of the GDP by 2022. If implemented, the real per capita health expenditure by government will increase “from around Rs. 650-700 in 2011-12 to Rs. 3,400-3,500 by 2021-22” resulting to lower private out-of-pocket expenditures (HLEG report, 2011, p. 8).

In addition to health financing and financial protection, the report also documents the current gaps in the key elements of the existing health system such as health service norms; human resources for health; community participation and citizen engagement; access to medicines, vaccines and technology and management and institutional reforms. To provide better context for their recommendations and ensure equitable access, the HLEG also discussed the social determinants of health and the role of gender in the delivery of health services in India.

The Health Governance Hub: The Health Governance Hub was formed in September 2011, as an interdisciplinary research unit of PHFI, with a focus on investigating critical health policy and health systems challenges confronting India and other LMICs, and a firm commitment to advancing goals of health equity and justice. The Hub consists of a cross-disciplinary research team

across PHFI Central and the IIPHs, and combines a focus on high calibre, high relevance research with efforts to build research capacity and translate research knowledge effectively for policy and action.

In its first year, the Hub has successfully launched a wide ranging portfolio of research and capacity building initiatives, with support from Oxfam India and the Wellcome Trust PHFI-UK Consortium. Thematic areas addressed include health stewardship and regulation, human resources for health, community action in health, hunger reduction and universal health coverage, and research commenced in six states. Members of the Hub team have been central contributors to the PHFI led efforts for Universal Health Coverage (UHC), and we aim to continue and strengthen our focus on achieving UHC in upcoming programmes.

The Hub’s network of partners now extends across multiple constituencies to a wide range of organizations including Oxfam, WHO, the London School of Hygiene and Tropical Medicine (LSHTM), Johns Hopkins Bloomberg School of Public Health

(JHSPH) the Nossal Institute, Institute of Development Studies (IDS), Sussex, University of the Western Cape, University of Cape Town, the Planning Commission, the National Health System Resources Centre (NHSRC), Public Health Resource Network (PHRN), SOCHARA, Child in Need Institute (CINI) and Ekjut. There have been talks with several respected donors and the partnerships expected to begin working in the coming year, which will significantly expand the coverage of research topics and geographical regions within and outside India.

The website for the Hub (www.healthgovernancehub.net) will be launched shortly, which will showcase and archive information on the Hub's research projects, capacity-building programmes, publications, and representation in various fora.

WHO Nodal Centre

PHFI has been selected as a nodal institution by WHO India office to support the conduct and use of health policy & systems research implementation and scale up of programmes and policy. PHFI will serve as a Nodal Institute in India and facilitate the conduct and utilization of

relevant Implementation Research and Health Policy & Systems research (HPSR) among academic/research institutions and decision-making bodies. PHFI will support the development of health systems research capacity by conducting trainings on implementation and health policy & systems research for researchers in the region as needed, collaborate with existing HPSR capacity strengthening efforts in the region, and work with other nodal network partners to support and facilitate the use of evidence by decision makers at the national and local levels for the scale up of effective interventions. PHFI will also work towards advocating and promoting the use of implementation and health policy & systems research in achieving health-related MDGs.

Institutional Ethics Committee of PHFI

Name	Address/Affiliation
Prof. Ranjit Roy Chaudhury (Chair)	Chairman, Task Force, Apollo Hospitals Educational and Research Foundation (AHERF)
Dr. Prema Ramachandran	Director, Nutrition Foundation of India
Dr Nikhil Tandon	Professor, Department of Endocrinology and Metabolism, All India Institute of Medical Sciences
Mr. Vinod Bhanu	Centre For Legislative Research and Advocacy (CLRA)
Dr. Tulsi Patel	Professor of Sociology, Department of Sociology, Delhi School of Economics University of Delhi
Dr. Siddarth Ramji	Director-Professor & Head, Department of Neonatology, Maulana Azad Medical College,
Mrs. Anjani Aiyagari	Advocate-on-record, Supreme Court of India
Dr. Sanjay Zodpey	Director, Public Health Education, Public Health Foundation of India
Prof. Lalit Dandona	Distinguished Research Professor, Public Health Foundation of India
Prof. Ramanan Laxminarayan	Vice President, Research and Policy, Public Health Foundation of India

Name	Address/Affiliation
Dr. N. Nakkeeran	Associate Professor. Indian Institute of Public Health, Gandhinagar, Public Health Foundation of India

Research projects

PUBLIC HEALTH DOMAINS

Health systems, policy and financing

Completed

ESTABLISHING PUBLIC HEALTH GLOBAL NETWORK TO ENCOURAGE SOUTH COLLABORATION

Geographical Location: DELHI

PHFI has been working towards convergence of global synergies into an LMIC network for exchange and action towards strengthened public health capacity – across research, training, education, health communication and policy action. This electronic network seeks to enable knowledge-sharing, development of common as well as complementary sensibilities, exchange of ideas and researchers, and the development of a common plan of action for the global South. PHFI is developing an LMIC e-network of public health and public health education institutions in the South to take forward the synergies developed in the Public Health Education Conference, and translate them into actionable points.

Objectives: 1) To strengthen partnerships with existing networks such as Meso-America network of Central American Countries and the proposed International Union for Health Promotion and Education (IUHPE) network of Francophone countries to engender cross-learning and the development of a shared global resource; 2) To create an e-source of exchange of ideas and resources among the developing nations, in order to strengthen health systems and their management, develop public health education, public health capacity and research, and other competencies across the network; 3) To provide a platform that can enable researchers, practitioners, educators and policy-makers to link up and jointly address the many challenges posed by low-performing health systems.

An online resource (e-portal) open to membership of the Public Health community (through a PHFI managed Secretariat) which has participation from practitioners, researchers and other stakeholders from developing countries as well as experts and participants from developed countries is being

developed. E-portal architecture, themes/tracks and content areas have been finalized. Curriculum scans and research papers are uploaded. A Knowledge Management Group is being put in place and an International Advisory Committee is being formed. Networks have been established with different schools of public health from various LMIC's to promote knowledge exchange and strengthen public health education in LMIC's.

Project duration: JAN' 08 to DEC' 11

This project was supported by Rockefeller Foundation and was led by Prof K SRINATH REDDY

TECHNICAL ASSISTANCE FOR IMPROVING FUNCTIONING OF THE INSTITUTE FOR PUBLIC HEALTH JHARKHAND IN JHARKHAND

Geographical Location: JHARKHAND

In response to a request from the Government of Jharkhand (GoJ), the Public Health Foundation of India (PHFI) is planning to provide technical assistance (TA) for improving the functioning of the State Institute of Health and Family Welfare (SIHFW), also called the Institute of Public Health (IPH), with the aim of establishing a strong health institution in Jharkhand. Based on the current status of the IPH, PHFI will design short and long term strategies and provide TA for their implementation, to ensure sustainable in-service training and capacity building by this institution for health care functionaries in the state. PHFI will assist the state in the following ways: 1) Strategic planning to identify an operationalization framework with linkages to strategic partners; 2) helping with the policy changes required for the operationalization of IPH; and 3) designing priority training programmes for identified cadres in this first phase which will be for a duration of six months.

PHFI is committed to implementing the long term strategy for making the IPH fully functional within three years.

Goal: To provide Technical Assistance to the Government of Jharkhand to establish a strong Institute of Public Health in Ranchi, Jharkhand.

Objectives: 1) Identify short and long term strategies for improving the functioning of IIPH.; 2) Design Training Needs Assessment (TNA) and

assist the GoJ in carrying this out for selected cadres of Human Resources for Health (HRH), managerial staff under the Department of Health and Family Welfare and those under the National Rural Health Mission; 3) Develop a "Management Development Programme" (MDP) for leadership development based on the results of the TNA; 4) Develop guidelines for designing and conducting in-service training courses and monitoring their outcomes.

The Training Division of PHFI successfully completed a TNA of the various cadres in the state of Jharkhand. A detailed cadre-wise report of the TNA findings was prepared and submitted to MCH-STAR. This project was scheduled to run from 27th June to 26th November 2011. However, the entire TNA activity was delayed for two reasons: First, due to the incorporation of increased cadres in the study as recommended by Managing Director (MD) NRHM and the Technical Advisory Group; and second, because of the delay in the request letters from the MD, NRHM, for participation of the Medical Officers and Programme Managers in the study due to the audit process going on at the district level in the state of Jharkhand. Hence the project received a no cost extension till 31st March 2012 from MCH-STAR.

During the extension period the technical content of existing packages from PHFI and similar courses from reputed institutions were reviewed, and preferred learning techniques and approaches from the TNA findings were identified for delivering an MDP course. Based on the TNA findings a series of five modules, along with a Facilitators' guide on the Management Development Programme for NRHM Programme Managers and Medical Officers were developed. After approval by the Jharkhand State Government, the MDP training programme will be conducted for the identified cadre.

Project duration: JUN' 11 to NOV' 11

This project was supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR) - United States Agency for International Development (USAID) and was led by Dr ABHAY SARAF

TECHNICAL ASSISTANCE FOR ASSESSMENT AND MAPPING OF HUMAN RESOURCES IN HEALTH IN JHARKHAND

Geographical Location: JHARKHAND

Goal: for the state of Jharkhand to establish a sustainable strategy to have a competent health work force as per the Indian Public Health Standards (IPHS).

This project aims to develop a larger health work force strategy. However, considering the priority needs of the state it will focus on short term strategies for optimizing the performance of the cadre responsible for maternal, newborn and child health and nutrition (MNCHN) related services. MNCHN has been identified by the State as a priority to meet the National Rural Health Mission (NRHM) targets as well as for the achieving the larger Millennium Development Goals (MDG).

Objectives: 1) To assess the availability, distribution and competence of Human Resources for Health (HRH) within the Department of Health and Family Welfare (DHFV), Government of Jharkhand (GoJ); 2) To identify and study factors affecting performance of HRH based on the workforce life cycle strategy, prioritizing the cadre responsible for delivery of MNCHN services; 3) To compile national and international evidence for promising/best practices to address identified performance issues of HRH; 4) To develop a draft outline for short and long term HRH strategies for GoJ approval.

Expected results: 1) Data on availability, distribution and competence of HRH disaggregated by tribal and non-tribal districts; 2) Classification of factors affecting performance of HRH in Jharkhand disaggregated by cadre; 3) Options for addressing identified factors affecting performance through evidence review; 4) Draft short and long term HRH strategies developed for GoJ.

Proposed deliverables/products: 1) Factsheets on HRH by cadre describing availability, distribution and competence; 2) Compendium of factors affecting HRH performance and options for improving performance; 3) Draft HR policy based on findings and recommendations from the study.

Primary data collection has been completed and data analysis is underway. Compilation of global and Indian evidence from literature is also complete. The final report will include the assessment and mapping of the human resource in Jharkhand.

Project duration: APR' 11 to OCT' 11

This project was supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR) - United States Agency for International Development (USAID) and was led by Dr SANJAY ZODPEY

CROSS-COUNTRY COMPARISON OF MASTERS AND DOCTORAL LEVEL PUBLIC HEALTH PROGRAMMES WITH A FOCUS ON COMPETENCY-DRIVEN CURRICULUM

Geographical Location: DELHI

Goal: To landscape Master's and Doctoral level public health education in Bangladesh, India, the United States and Vietnam for facilitating educational reforms.

Objectives: 1) To undertake a landscaping exercise of Master's and Doctoral level public health programmes with focus on competency based curriculum using a questionnaire based approach; 2) To undertake a cross-country comparison of competency frameworks [and related issues] used in Bangladesh, India, the United States and Vietnam; 3) To chart and compare the educational flow and pedagogic patterns across various public health programmes; 4) To explore the employers' expectations about what competences they want from Master's and Doctoral level graduates; 5) To examine the scope for innovations in training programmes, acquisition of global health perspectives and employment opportunities for public health graduates; 6) To suggest possible strategic pathways that can be adopted for facilitating public health educational reforms.

A workshop on "Cross-country Comparison of Masters and Doctoral level Public Health Programmes with a focus on Competency-Driven Curriculum" was organized by the Public Health Foundation of India [PHFI], in co-operation with the China Medical Board [CMB] and the Harvard School of Public Health [HSPH]. The BRAC School of Public Health and the Hanoi School of Public Health were invitees and the School of Public Health, Fudan University, Shanghai participated as a workshop observer. The major objectives of the workshop were: (a) To undertake discussions on a landscaping exercise of Master's and Doctoral level public health programmes with focus on competency based curriculum; and (b) to undertake a cross-country comparison of

competency frameworks [and related issues] used in Bangladesh, India, the United States and Vietnam. Two working groups have been constituted, for promoting and reviewing progress in competency-driven curricular reform over the coming 15 months. The groups will work on defining and articulating a competency-driven curriculum for furthering a unique "public health approach" methodology. Developing specific curricular innovations shall be attempted to reflect a competency-driven approach, including integrated courses, shared case studies, a course in specific problem-solving, etc.

Project duration: JAN' 12 to AUG' 12

This project was supported by China Medical Board and was led by Dr SANJAY ZODPEY

INTERNATIONAL HEALTH SECURITY : TRAINING, RESEARCH AND NETWORKS FOR IMPROVED PUBLIC HEALTH EMERGENCY PREPAREDNESS AND RESPONSE IN INDIA

Geographical Location: ANDHRA PRADESH

The potential ability of countries such as India to engage fully in surveillance, mount an effective public health emergency response and undertake preparedness activities is important for international health security. The emergence of new infectious diseases, the re-emergence of others and, the impacts of climate change are interrelated and are a cause for health security concern globally. This project aims to improve capacity in India to deliver the requirements of International Health Regulations (2005) by (i) strengthening disease surveillance systems for early diseases detection and response, (ii) developing national capacity to respond to an outbreak or public health emergency, and (iii) developing networks as a collaboration mechanism for communicable disease control and public health emergency preparedness and response. This novel project is a collaborative effort between the Health Protection Agency (UK), Indian Institute of Public Health (Hyderabad) and Rajarajeshwari Medical College (Bangalore) and would result in increased overall epidemiological capacity and enhanced public health emergency preparedness and response skills using three inter-related components: enhancing knowledge; improving skills; and building networks. The outcome of the project will go a long way in

strengthening the public health emergency preparedness capacity in India which in turn will help reduce threat to UK.

As part of the agreed project activities and deliverables, three training programmes will be conducted in the two year period. The first training programme held in April 2010 was attended by 55 participants. The second training programme was held in the month of February 2011. This training programme is for senior and mid career health and para medical personnel serving the government and the training is on "Public health emergencies and disasters: Preparedness and management".

Another objective of the training is to have an exchange of trainees / faculty between the Indian and UK partners in order to facilitate cross learning and sharing of knowledge. As a part of this initiative, three trainee participants from UK would be visiting IIPHH in the month of February 2011 for a period of three months (Feb - Apr 2011).

Indian Institute of Public Health, Hyderabad (IIPHH) in collaboration with the Health Protection Agency (HPA), UK conducted a series of three, five day training programme on Public Health Emergencies and Disasters: Management and Preparedness, as a part of capacity development of mid and senior level public health professionals within the Indian Health System. The three training programmes were held between 26th April to 30th May in 2010, April 11th to 15th and September 26th to 30th in 2011, at Hyderabad. All the 3 trainings were held at Dr. MarriChenna Reddy Institute of Human Resource Development (MCRHRD). Participants represented an aggregate of 76 organizations, 14 states and 41 districts. A total of 128 participants were trained from 3 training programmes. Facilitators comprised of 3 faculty members from the IIPHH, 2 each from the HPA, SPHERE, OXFAM and GVK- EMRI. The various topics that were presented and discussed included, India's disaster profile, planning for management of incidents, bioterrorism and emerging infections, investigation of disease outbreak, emergency medical response, and psychosocial aspects of public health emergencies, including disasters and outbreaks.

Project duration: JAN' 10 to DEC' 11

This project was supported by Health Protection Agency and was led by Dr G.V.S. MURTHY

ASSESSMENT OF FACTORS CONTRIBUTING/AFFECTING AVAILABILITY AND RETENTION OF HEALTH WORKFORCE IN RURAL AND REMOTE AREAS OF ODISHA

Geographical Location: ODISHA

The scarcity of qualified health workers in rural areas is a critical challenge for the health sector in India. Diverse interventions have been instituted by central and state governments to attract health workers to rural areas and to enhance the retention of qualified workers. The reasons for unwillingness to remain in rural and remote areas, however, are still only poorly understood. This study explores factors influencing health workers retention in rural and remote Odisha. The study was carried out in six districts of Odisha. Quantitative and qualitative data was collected using a mixed method approach. A total of 226 semi-structured interviews were conducted with different categories of health staff such as doctors, nurses, pharmacists, multipurpose health workers (MPHW) and lab technicians. The study findings reflect that except for a few districts, the ratio of MPHW (F) to population is around one to 5,000, in a state which is at par with the prescribed norms of the Government of India. The ratio of government allopathic doctors, laboratory technicians and staff nurses to population are: 13,000, 40,000 and 15,000, respectively. The majority of the health staffs feel that "strong personal will to serve people", "physical infrastructure", "training opportunities", "support by seniors", "good schooling for their children" and "promotion avenues after certain years of rural service" are very important for continuing to work in rural and remote areas. Most of the participants were found to be satisfied with the support they received from their seniors and the local community, and the respect and trust of their patients. The major reasons for dissatisfaction with respect to working in rural areas included the lack of promotional avenues after rural service, dealing with poor physical infrastructure, and lack of schooling facilities for their children. The five reasons, ranked in order of priority, mentioned by the study participants for remaining in the same place were: permanent government service, pension facility, social service, source of regular income and job satisfaction. A combination of interventions like monetary incentives with enhanced career opportunities for professional

growth (training, higher studies and promotion), scholarships and preference in seat allocation in reputed (residential) schools to the children of staff working in rural and remote areas, and suitable physical infrastructure at the workplace, would be more effective than financial incentives alone. There is a need for a clearly defined human resource policy for health personnel across all cadres with defined parameters for performance appraisal, transfer and promotion.

The study has been completed and the report submitted to Government of Odisha and the funding agency i.e, the Technical Management Support Team, Odisha, under the Department for International Development. The abstract of the study has also been submitted to the National Conference on bringing Evidence into Public Health Policy (EHPH 2012) to be held on October 5-6 2012 at Bangalore, jointly organized by the Institute of Public Health, Bangalore and the Institute of Tropical Medicine, Antwerpen, Belgium. The abstract has been accepted for oral presentation during the conference. The abstract will be published in the British Medical Central Proceedings.

Project duration: NOV' 11 to MAR' 12

This project was supported by Infrastructure Professionals Enterprises (P) Ltd.-Department for International Development (DFID) and was led by Dr SHRIDHAR KADAM

RAPID ASSESSMENT AND POTENTIAL SCALING UP OF JAN AUSHADHI SCHEME

Geographical Location: PUNJAB, RAJASTHAN, ODISHA, HARYANA, DELHI, ANDHRA PRADESH, WEST BENGAL, UTTARAKHAND

Background: Launched in 2008, the Jan Aushadhi campaign was intended to set up generic medicine stores in public hospitals as a means to supply unbranded medicines, at a reasonable price ensuring good quality drugs. The first store was set up in Ludhiana, Punjab in 2008 but has expanded to over 100 stores in a span of two to three years. The stores are spread across eight states and one union territory. The bulk of those stores are located in the three states of Rajasthan, Punjab and Odisha. However, it is recently reported that only half of those stores are actually in operation. Critical Concerns: The target of

setting up 630 such stores in each district of the country by 2012 remains a distant goal. The tardy progress of the Scheme was: (a) the result of lack of enthusiasm at both central and state levels in the Ministry/Department of Health and Family Welfare for space allocation; (b) poor adherence to prescription of drugs by generic names by the doctors; and (c) management and implementation failure of CPSUs in discharging their functions in a timely and appropriate manner.

Key Objectives of the Study: In order to operationalise the existing Jan Aushadi Stores (JAS) and to expand them to other districts and towns, we propose: i) To conduct rapid assessment of the existing JAS; ii) To identify the potential challenges and provide a roadmap for future scale-up of JAS; iii) To provide the implementation framework of JAS with specific emphasis on converting Jan Aushadhi into a low cost pharmacy chain at different levels in states; iv) To outline timelines and financial implications for scale-up of the scheme including cost of setting up the drug stores (one time capital cost) and operating cost (per annum)

Proposed Methodology: In order to carry out rapid assessment of the existing JAS and to identify the current challenges confronting the scheme, we propose to collect both quantitative and qualitative data from various stakeholders involved in the scheme directly or indirectly. The following indicators are proposed to be identified and collected during the field surveys of JAS: i) Availability and stock-outs of key essential medicines at the stores (from the Essential Drugs List); ii) A comparative assessment of the CPSU/other prices supplied to the stores and the difference between tender and market prices; iii) Budgetary flow of funds between various stakeholders including its design features and allocation mechanism; iv) Conduct prescription audit at the stores so that prescriptions and dispensing practices of doctors and dispensers respectively could be examined; v) Conduct client satisfaction exit interviews to elicit views of the patients; vi) Mapping of private facilities (especially drugs stores) around the district and sub-district public health facilities. This would help to facilitate identifying current incentive structures of the private facilities and disincentives of the JAS scheme.

As far as the qualitative data is concerned, we intend to conduct stakeholder interviews with the

following institutions involved in running the scheme, directly or indirectly: i) Department of Pharmaceuticals; ii) Bureau of Pharmaceutical PSUs of India; iii) State Government Officials (district hospital managers – DMOs, etc.); iv) Small and Medium Scale Enterprises; v) NGOs/Charitable Organizations/Co-operatives; vi) Officials of the supply chain systems; vii) Institutions involved in tendering/procurement process.

Project duration: MAY' 12 to SEP' 12

This project was supported by Department of Pharmaceuticals-Ministry of Chemicals and Fertilizer, Government of India and was led by Dr SAKTHIVEL SELVARAJ

Ongoing

UNIVERSAL HEALTH COVERAGE (UHC)

Background: With the aim of incorporating a comprehensive plan for health in India in the 12th Five-Year Plan, the Planning Commission of India, under approval by the Prime Minister, constituted the High Level Expert Group (HLEG) on Universal Health Coverage (UHC) in October 2010.



The overall mandate of the HLEG was to develop a framework for Universal Health Coverage, to be progressively implemented between 2010 and 2020. It was charged with sifting through evidence, weighing options and making recommendations for India's quest to achieve, or at a minimum, move significantly towards, universal health coverage for its 1.2 billion citizens over the coming decade.

The Planning Commission appointed PHFI as the Secretariat of the HLEG, to provide technical and logistical support for preparing the Group's report.



Under the broader framework of Universal Health Coverage, six terms of reference (ToRs) were formulated, each of which was addressed by a sub-committee of the High Level Expert Group and a dedicated team from the PHFI secretariat.

The ToRs given to the HLEG related to: (1) human resources for health; (2) physical and financial norms for quality and access; (3) improved management of health; (4) community involvement and public-private partnerships; (5) reforms of the pharmaceutical sector; and (6) health financing, insurance and financial protection. In addition to this, the HLEG felt the need to provide additional situational analyses and recommendations pertaining specifically to the (7) social determinants of health; as well as (8) gender and universal health coverage.

The HLEG submitted its report to the Planning Commission in October 2011, at a time of historically unprecedented opportunity for advancing people's health through the introduction and effective implementation of UHC. The Prime Minister declared, in his Independence Day Address on August 15, 2011, that health would be accorded the highest priority in the 12th Five Year Plan which would become operational in 2012. There is a clearly articulated governmental intent to increase the public financing of health to 2.5 percent of India's GDP, during the course of the 12th Plan.

The HLEG's report was presented as a summary of discussions of its findings, and recommendations for establishing a framework for Universal Health Coverage, to be progressively implemented between 2011 and 2020. The HLEG also drew upon the work and wisdom of several past expert committees which had provided valuable

recommendations on strengthening different elements of the health system in India.



While financial protection was the principal objective of this initiative, it was recognized that the delivery of UHC also requires the availability of adequate healthcare infrastructure, a skilled health workforce and access to affordable drugs and technologies, to ensure the entitled level and quality of care to every citizen. Further, the design and delivery of health programmes and services call for efficient management systems as well as the active engagement of empowered communities. The original terms of reference directed the HLEG to address all of these needs as part of evolving the framework of UHC. Since the social determinants of health have a profound influence not only on the health of populations but also on the ability of individuals to access healthcare, the HLEG decided to include a clear reference to them, though such determinants are conventionally regarded as falling in the domain of non-health sectors.

Submission of UHC report: The Expert Group submitted the final report on Universal Health Coverage for India to the Planning Commission on 21 October, 2011 and made a formal presentation to the Deputy Chairman, Mr. Montek Singh Ahluwalia on the 28 November, 2011.

Website: UHC website was finalized and active by mid- January, 2012. www.uhc-india.org. The site showcases the report, background papers, media coverage and will serve as an interactive medium for UHC resources, publications, national and international events and as an important tool for UHC advocacy in the near future.

The report is currently in its advocacy stage.

A list of consultations/ activities/ conferences of UHC that have taken place is as below:

- Union Health Ministry uptake (9th December, 2011): HLEG-PHFI Secretariat invitation to present the UHC Report to Dr. Ghulam Nabi Azad, Minister of Health and Family Welfare.
- National Advisory Council (NAC): Invitation to present the report to the NAC (21st of March 2012)
- Prime Minister's Office (30th March, 2012): HLEG chair Prof. K. Srinath Reddy and member Dr. A .K Shiva Kumar invited to present at the Prime Minister's Office.
- High Level Expert Group (HLEG) meeting (9th August, 2012): To review the draft chapter on health in the 12th Five-Year Plan document.
- Advocacy Strategy Meeting (9th March, 2012)
- National Conference on 'Universal Health Coverage in India: Advancing the Agenda and Addressing the Challenges' (11-12th April, 2012)
- Regional consultation on 'Emerging policy options for UHC' Organized at Tata Institute of Social Sciences, Mumbai (10th and 11th May, 2012)
- On-going Study: Identifying operational pathways for accommodating and gradually integrating disease control programmes into the framework of UHC
- 'State Level Meeting on Universal Health Coverage for India: Implications for Gujarat' (October 13, 2012).

Recent Impact of the HLEG UHC Report in the policy space:

- Access to medicines: 'Free supply of essential drugs through hospitals', The Hindu, August 1, 2012
- Drug price control: '348 vital drugs to come under price control', The Hindu, September 27, 2012
- Bachelor of Rural Health Care (BRHC) degree programme: 'Medical Council of India approves three-and-a-half-year medical course', The Times of India, September 24, 2012.
- Shortage of doctors: Shortage of doctors: 'Centre plans more doctors for better healthcare', The Times of India, August 27, 2012

- Health plan roll-out: 'NAC forms panel for health plan roll-out', Live Mint: The Wall Street Journal, August 24, 2012

ACCESS, BOTTLENECKS, COSTS AND EQUITY (ABCE) PROJECT IN FIVE INDIAN STATES

Geographical Location: ANDHRA PRADESH, BIHAR, GUJARAT, MADHYA PRADESH, TAMIL NADU

The Access, Bottlenecks, Costs, and Equity (ABCE) project is designed to provide quality evidence for improving the equity and cost-effectiveness of health systems. By simultaneously considering both supply and demand, ABCE will help develop the next generation of tools to inform equity-focused policy and strategy choices. This study will address both the need for interventions, and the costs and constraints of delivering them to those most in need. ABCE's outputs and analyses will support policy makers, development partners and national stakeholders in achieving better and more equitable outcomes with a systematic approach to informed decision making. The project will accomplish its goal by employing a multi-disciplinary, quantitative approach to harness all available information. This study will be conducted in five diverse states in India.

The study protocols were developed and pre-testing conducted. The training for the data collection team is in progress and the data collection will soon start in Tamil Nadu.

Project duration: DEC' 11 to MAR' 13

This project is being supported by University of Washington; Bill & Melinda Gates Foundation and is led by Dr LALIT DANDONA

DEVELOPING CASE STUDIES OF INNOVATIONS IN PUBLIC HEALTH FOR COMPETENCY STRENGTHENING AND ADVOCACY

Geographical Location: INDIA

The overall goal of the project is to strengthen institutional capacity for accelerating the decline in the maternal mortality ratio and, over time, to sustain a very low maternal mortality regime through appropriate technical, programmatic and organizational responses. Institutional capacity will

be strengthened by developing high quality case studies, for competency strengthening and for advocacy purposes usage, with the aim of improving maternal health.

The objectives of the project are: 1) Development of case studies through print and audio-visual documentation of innovative experiences in public health that provide important learning for public health practice, with focus on improving maternal health; 2) Incorporation of these case studies as teaching /training materials in: (a) the public health curriculums of the Public Health Foundation of India and its network of Indian Institutes of Public Health, and those of medical and nursing colleges and other public health institutions for public health professionals; (b) in-service training programmes of government at state, district and facility levels and those run by non-governmental organizations; 3) Utilization of these case studies for advocacy with senior policy makers, programme managers and professional leaders.

An inventory of innovations in maternal and newborn health was compiled and 23 of them selected for in-depth documentation. The 23 innovations have been studied and films have been made on them. Each innovation has a detailed written case study supporting it. The dissemination phase of the project is on-going where seven workshops/training programmes will be undertaken and more than 250 people will be trained.

Project duration: APR' 10 to DEC' 12

This project is being supported by MacArthur Foundation and is led by Dr JAY SATIA

EVALUATION OF THE BIHAR FAMILY HEALTH INITIATIVE

Geographical Location: BIHAR

The Family Health Initiative in Bihar, India funded by the Gates Foundation, aims to reduce maternal and child mortality and improve key nutrition and health outcomes. Innovative solutions will be implemented in the public and private sectors to improve the reach, coverage, and quality of maternal and child health services. In this project we are evaluating the impact of the Family Health Initiative in Bihar through a series of assessments.

The data collection for a baseline survey of the population, health personnel and health facilities

was completed for all districts in the state of Bihar, and analysis of the data is currently in progress. The study design for the process and cost-effectiveness assessments of the Bihar Initiative are being developed.

Project duration: SEP' 11 to OCT' 12

This project is being supported by Bill & Melinda Gates Foundation; Mahematica Policy Research and is led by Dr LALIT DANDONA

INDIA RESEARCH SITE LANDSCAPE ANALYSIS

Geographical Location: INDIA

Although India lacks a full-fledged demographic and disease surveillance study site as in other parts of Asia and Africa, a significant number of field sites for public health research have been initiated in India over the last few years. While these sites have achieved varying degrees of success in research productivity and policy impact, there remains a significant demand for multipurpose study sites that can serve a variety of research purposes, ranging from disease surveillance to establish burden, to laboratories for testing health system and delivery interventions. Multipurpose cohorts or study sites can enable cost-sharing across multiple studies, establish strong baselines for comparisons across time and serve as platforms for training researchers. The Public Health Foundation of India and the Gates Foundation have a shared interest in such multipurpose cohorts/platforms. Exploring the strengths and weaknesses of existing study sites on multiple criteria is an initial step to setting up platforms, either in conjunction with existing efforts, or in entirely new locations.

The overall objective of this project is to map and scan the existing sites in order to assess their potential for larger research projects and interventions. This will be accomplished by: 1) Mapping all relevant field sites and demographic field sites in India; 2) Selecting 20 sites based on certain defined criteria and with the help of an expert committee; 3) Surveying these sites to gain further information on study population, past, current and planned studies, publication record, principal project investigators, baseline data, institutional arrangements with associated strengths and weaknesses, links to local community and medical facilities, logistical strength, and availability of local facilities to enable

larger research operations, plus other variables to be determined by an expert group convened at the start of the project; 4) Generating videographic and photographic records of the 20 selected sites including geo-coding them; 5) Building strategy on how these 20 sites will be then systematically strengthened and scaled up to serve as platforms for research.

Seventeen research sites across India have been visited and documented in-depth. Documentation also involved audio-visual documentation. The website development for the landscape analysis has begun.

Project duration: AUG' 11 to SEP' 12

This project is being supported by Bill and Melinda Gates Foundation and is led by Dr RAMANAN LAXMINARAYAN

DISEASE CONTROL PRIORITIES NETWORK

Geographical Location: INDIA

The objective of the Disease Control Priorities Network (DCPN) is to produce definitive technical publications, based on extensive analytical work and consultations with technical experts and policy-makers from around the world, to inform national and global level health policy-making. The DCPN aims to improve the allocation of health resources across a wide range of investment options, including interventions, service delivery platforms (e.g. community health clinics, hospitals, public health services) and research and development of new health technologies. Within the overall goal, there are four project objectives: 1) Inform allocation of resources across interventions and health service delivery platforms; 2) Inform allocation of resources to scientific discovery and product development; 3) Create a Disease Control Priorities Network (DCPN), comprising of institutions in many countries; 4) Core analytics, methods, and management. These objectives are the focus of the DCPN project. PHFI will work with the core analytics, methods and management as well as coordination of some of the volumes such as Brain Disorders.

Project duration: APR' 11 to NOV' 12

This project is being supported by University of Washington-Bill and Melinda Gates Foundation and is led by Dr RAMANAN LAXMINARAYAN

HEALTH GOVERNANCE HUB

Geographical Location: DELHI, MADHYA PRADESH, CHATTISGARH

Good governance is the key for developing societies to be able to realize fundamental goals of better health and health equity. However, health governance in India is poorly understood - even as broad-based health systems reforms are proposed through schemes such as the National Rural Health Mission and Universal Health Coverage, there remains very limited empirical research on governance, to help orient and support these processes of change. The Health Governance Hub at PHFI is a consolidated programme of research linked to capacity building and advocacy with the following aims: 1) Creation of a strong, evolving evidence base for systems change and policy advocacy on core issues of health governance, especially as they relate to equity and social justice; 2) Strengthening capacities of key community-based civil-society organizations for conducting high quality research on health governance; and 3) Creation of more effective channels for "bottom-up" flow of knowledge on key field-level issues and concerns to policy-planners and decision-makers;



Proposed core activities of the Hub will include research in nine thematic areas relating to improved health systems performance and community empowerment (Regulation and stewardship, Public-private partnerships, Community action, Panchayati Raj institutions, Health workforce governance, Health Information Systems, Pharmaceutical policy, Urban health governance and Public health philanthropy); capacity building of research NGOs; and knowledge translation for policy and action. To these ends, the Hub will forge links with civil

society organizations, decision-makers and policy-planners, and with selected academic partners in India and internationally.



Lead-up phase: The Health Governance Hub has commenced in November 2011 with research activities in four thematic areas (Regulation and stewardship, Community action for health, Public health philanthropy, Health workforce governance). Subsequently, the Hub will extend its scope to the full range of planned activities.

Project duration: NOV' 11 to MAR' 13

This project is being supported by Oxfam India and is led by Dr KABIR SHEIKH

STUDY ON TECHNICAL ASSISTANCE TO MINISTRIES OF HEALTH

Geographical Location: DELHI

The divide between research and policy is substantial in many low and middle income countries. Both supply and demand factors are responsible for this. On the supply side, the limited local pool of human and financial resources has constrained the production of quality research. The result is that many low and middle income countries are characterized by limited institutional capacity to generate research to aid policy making. On the other hand, avenues for research to influence policy are also severely limited. One reason for this is the bureaucratization of policy making, in which, researchers and research institutions have only a minor role. Other common obstacles in this regard are centralized decision making and a policy making culture that gives little importance to evidence based research. This study is concerned with the uptake of research evidence in policy decisions for health and the factors which are conducive for this. Specifically, this study

seeks to: 1) Present a conceptual understanding of institutional embeddedness of research and apply it in the context of research in health policy making. Further, through a review of literature, document the institutional arrangements that facilitate the embedding of research use in the policy-making domain; 2) Present country case studies to illustrate the embeddedness of research use in policy-making and the contextual and institutional factors that create enabling conditions for it. We examine these questions from the perspective of the six World Health Organization building blocks – service delivery, health workforce, information, medical products, and financing and governance. Information is sourced from the existing literature and from country case studies.

The report has been completed and delivered to the Alliance for Health Systems and Policy Research, WHO. We are now undertaking dissemination activities in the project.

Project duration: DEC' 11 to DEC' 12

This project is being supported by World Health Organization and is led by Dr KRISHNA D. RAO

DEVELOPMENT OF CURRICULUM FOR VIRTUAL CERTIFICATE COURSE ON M&E OF HEALTH PROGRAMMES

Geographical Location: DELHI

There is a need to build the capacity of Programme Officers and Human Resources for Health (HRH) in Monitoring and Evaluation in low and middle income countries. This distance learning course is an addition to the workshops on M&E being conducted by the Measure Evaluation (University of North Carolina) - PHFI partnership. This programme envisages introducing basic tools to build capacity of busy young and mid-level HRH to strengthen health systems in countries. The reach of this programme will be global. The cost is kept low and the duration is short so that the busy young professionals find the resources and time to actively participate and enrich their knowledge without having to take a break from their work schedules. The course will have both synchronous and asynchronous components and will make best use of modern technology available with the organization.

Currently a series of video conferences have been held for content development and lessons learnt from PHFI's past experience with similar courses.

Project duration: MAY' 12 to JUN' 13

This project is being supported by The University of North Carolina at Chapel Hill (UNC-CH) - United States Agency for International Development (USAID) and is led by Dr ABHAY SARAF

DATA INFORMED PLATFORM FOR HEALTH

Geographical Location: UTTAR PRADESH

In low-resource settings, the use of local health data for planning is usually limited. Information sharing across governmental and other service providers will reduce duplication of effort and ensure resources are not wasted. In India multiple data sources exist at district level. The Health Management Information System reflects health facility utilization and performance; local programme staff report on human and physical resources; and non-governmental organizations report on community-based activities. This information could be shared by programme managers, working together, with technical support to act as a catalyst. The shared data could empower local decision making, repositioning health service delivery in congruence with the available resources and the community's maternal and newborn health needs. Currently it is difficult to ascertain the causes of any change in maternal and newborn health outcomes.

The Proposed "Data-Informed Platform for Health" (DIPH), is a framework to guide coordination, bringing together key data from public and private health sectors on inputs and processes that could influence maternal and newborn health. The primary aims are: 1) to promote the use of local data for decision-making and priority-setting at the local health administration level; 2) To promote the use of local data on inputs and processes for programme appraisal and comparison at the regional or zonal level.

Project duration: JUL' 12 to OCT' 12

This project is being supported by London School of Hygiene and Tropical Medicine and is led by Dr SANGHITA BHATTACHARYA

Social determinants of health and disability

Completed

APPLICATION OF GEOGRAPHIC INFORMATION SYSTEMS (GIS) TO PUBLIC HEALTH PRACTICE IN INDIA

Geographical Location: WEST BENGAL

The study aims to create a comprehensive geospatial database linking health status of rural populations along with their social, cultural and environmental characteristics. Using this information we will devise a community health index that will predict the health outcome of communities for a given set of physical and social factors. This information will then be provided back to community representatives, district and state policy makers to effect policy changes at the peripheral levels.

Data collection of ten blocks in 24 South Paraganas covering 2500 households has been collected. The database is currently being cleaned and organized. The collected survey data will be combined with secondary spatial data to identify principle drivers of health outcomes at the community level in rural population of 24 South Paraganas.

Project duration: JUL' 09 to OCT' 11

This project was led by Prof K SRINATH REDDY

URBANISATION AND SPATIAL INEQUALITIES IN HEALTH IN BRAZIL AND INDIA

Geographical Location: INDIA & BRAZIL

The overall aim of the project is to enhance the use of social science research and statistical methods in public health in Brazil, India and the UK by training in appropriate social science methods. The project will achieve this through a) the analysis of national survey and census data in relation to the themes of urbanisation, economic development and social equity in health; b) encourage stronger links between the social sciences and public health by linking social science researchers with public health researchers in the common goal of increasing health equity; c) use available data in Brazil and India to answer the

question of whether people and populations living in more socioeconomically mixed neighborhoods, cities and states have better health than those in more segregated areas.

Secondary data sources in Brazil and India are being used to examine the following key hypotheses: 1) Districts, cities and states with less spatial socioeconomic inequalities have better health than areas with greater spatial socioeconomic inequalities; 2) For a given level of income/socioeconomic position, people living in areas with less spatial socioeconomic inequalities have better health than those living in more segregated areas.

1. Capacity building programmes to enhance the use of social science research and statistical methods in public health in Brazil, India and the UK completed.
2. Indian Data procured and analysis completed.
3. Three conference papers presented for dissemination of research - "Urbanization and Spatial inequalities in health in Brazil and India" ESRC Research Methods Conference in Oxford (5-8th July); " Socioeconomic segregation in major Indian cities and mortality", paper presented by PI in IEA World Congress of Epidemiology (7 -9 August 2011) "Socioeconomic segregation, gender and mortality in major Indian cities" paper presented by Co-PIs in Gender Equity and Exclusion in South and Central Asia: Emerging Challenges (17th - 18th October, 2011) at Jamia Millia University, Delhi. 3. Research papers currently underway in both these topics.

Project duration: MAY' 10 to SEP' 11

This project was supported by Economic and Social Research Council and was led by Dr SITAMMA M.

DEVELOPING A COMPREHENSIVE PLAN TO INSTITUTIONALISE INTER-SECTORAL INVOLVEMENT IN PROMOTING HEALTH AND DEVELOPMENT AMONG ADOLESCENTS IN INDIA

Geographical Location: DELHI, GUJARAT, TAMIL NADU

In this project, we are reviewing policies and programmes relevant to adolescent health and development in India. In this context, four

ministries - Ministry of Health and Family Welfare (MOHFW), Ministry of Youth Affairs and Sports (MOYAS), Ministry of Human Resource Development (MHRD) & Ministry of Women and Child Development (MWCD) - are focussed upon, as collectively their policies and programmes cover the main issues relating to adolescent health promotion. This project runs in three phases including a Rapid Programme Review (RPR) of existing national programmes focusing on sexual and reproductive health, HIV, nutrition etc. Relevant policies/programmes will be analysed to highlight strengths and weaknesses in addressing adolescent issues. Consultation with key policy makers at the national level will be carried out. Tamil Nadu and Gujarat have been selected to assess the status of implementation of these programmes at the grass roots level. Innovative models for inter-sectoral synergy for better coordination and implementation of the policies will be proposed. A cohesive operational framework will be developed for a multi-sectoral response to promote adolescent health in the country building on the existing blocks. Recommendations will be disseminated through an advocacy workshop. Finally, a white paper containing recommendations will be prepared for presentation to the Government of India.

A request to form an interministerial group has been sent to the Adolescent Reproductive and Sexual Health (ARSH) in the MoHFW. A core group consisting of United Nations Population Fund (UNFPA), UNICEF, WHO and PHFI under the leadership of MoHFW has been formed. The first phase of the project has commenced and the RPR of the six identified domains concerning adolescent health are being reviewed. Weekly meetings with MoHFW are being held. The second phase of the project has commenced and in-depth qualitative interviews with programme managers and policy makers at central and state level have been held. Analysis of Interviews has been completed. The third phase of consultations has also commenced. The final report is under compilation.

Project duration: JAN' 11 to DEC' 11

This project was supported by World Health Organization and was led by Dr MONIKA ARORA

VALIDATION OF INCLEN NEURO DEVELOPMENTAL SCREENING TOOL (NDST)

Geographical Location: ANDHR PRADESH

Neuro-developmental Disabilities (NDDs) are a diverse group of severe chronic conditions that begin at any point in development up to 22 years of age, usually lasting throughout a person's lifetime. This study is to design culturally appropriate interventions and reduce the burden of NDDs in India with wide applicability in other low and middle income countries, and to assess the prevalence of ten common NDDs among children aged two to nine years in India. NDDs included in the study are; Attention-deficit/hyperactivity Disorder (ADHD), Epilepsy, Learning Disorders (LD), Mental Retardation (MR), Neuromotor Impairments including cerebral Palsy (CP), Autism Spectrum Disorders (ASD), Speech and Language Disorders, Hearing Impairment (HI) and Vision Impairment (VI). The Disability Centre at IIPH, Hyderabad has been entrusted with the responsibility of data collection in Andhra Pradesh.

Objectives: 1) To validate Neurodevelopment Screening Tool (NDST) using Consensus Clinical Criteria (CCC); 2) To undertake formative research for identifying modifiable (environmental, social and familial) risk factors of NDDs; 3) To estimate prevalence of NDDs among children aged two to nine years using a two-stage survey method [Stage 1- application of NDST in the community, Stage 2-application of CCC to assign diagnostic category]; 4) To characterize the clinical spectrum of NDDs including Autism Spectrum Disorders in the study population; 5) To quantify potentially modifiable risk factors derived from formative research in Phase I of the study.

The data collection was completed in July 2012. The data collection was delayed due to local civil disturbances. IIPH was involved in validating the screening tool in 25 clusters in urban Hyderabad in collaboration with the Medcity Institute of Medical Sciences. All data has been transmitted to INCLEN and the final report is awaited.

Project duration: NOV' 11 to MAY' 12

This project was supported by National Institute of Health, National Trust, Autism Speaks & INCLEN International and was led by Dr G.V.S. MURTHY

MIGRATION, POVERTY AND ACCESS TO HEALTHCARE: A STUDY ON PEOPLE'S ACCESS AND HEALTH SYSTEM'S RESPONSIVENESS IN FAST GROWING SMALLER CITIES (NASIK)

Geographical Location: MAHARASHTRA

The aim of the present study is to develop and test a supportive strategy of health care, which would achieve the desired levels of accessibility and delivery of health care services to migrants living in fast-growing smaller cities in India. The study will be carried out in two phases namely: 1) Formative phase; 2) Intervention phase, including implementation and evaluation.

Objectives of the Formative phase: (a) To assess the migrants' health care access in the vulnerability context of migration and livelihood insecurity; (b) To understand the factors (individual-/community-/system-level) affecting the migrants' access to health care services; and (c) To identify key points to develop an intervention to improve health care access for the socio-economically disadvantaged migrants.

The data collection process has been completed.

Project duration: MAY' 11 to APR' 12

This project was supported by Indian Council of Medical Research and was led by Dr ANJALI BORHADE

TO DEVELOP A SOUTH-EAST ASIA REGION(SEAR) PROGRAMME MANAGEMENT COURSE FOR ADOLESCENT SEXUAL & REPRODUCTIVE HEALTH (ASRH) AND HIV AND YOUNG PEOPLE(HIV/YP)

Geographical Location: DELHI

Adolescents represent a positive force in every society and have a crucial impact on the country's future prospects. The data from the region indicates that adolescents are facing a range of health and social challenges. Intervention during adolescence will help in significantly reducing these risk factors in order to prevent and control the burden of NCDs. Investing in the health and development of adolescents is essential for achieving the Millennium Development Goals (MDGs), promoting public health and ensuring

economic development. There are increasing evidences for a need of effective interventions to improve adolescents' health, and growing consensus about priorities for action, in terms of what needs to be done and how. However, there is an urgent need to develop the capacity of Programme Managers, health workers and other stakeholders on tackling implementation of adolescent health programmes and interventions in countries of SEA Region, where needs are greatest and resource limited. With this background, PHFI with support from the WHO, Regional Office for SEA and in collaboration with the London School of Hygiene and Tropical Medicine (LSHTM) organized the two-week course to pilot test the content, framework and the structure developed for the course "Promoting Adolescent Health and Prevention of HIV in Young People".

With pilot testing of the course content, framework and structure as the major objective this two week course intended to equip the participants with the knowledge, conceptual frameworks and tools necessary to strengthen and develop their capacity for managing health sector policies and programmes for adolescent health and development.

The course was adapted from the WHO-SEARO training course for "District Level Programme Managers on Programming for HIV/AIDS and Reproductive Health for Young People in South and South-East Asia" and "Adolescent Health in Low and Middle Income countries" of LSHTM, United Kingdom. The course content has been designed for programme managers, health care service providers working at different levels (Central, State and District), Non Government Organizations (NGOs) and Community Based Organizations (CBOs) personnel and stakeholders from various academic institutes.

This pilot course was attended by a total of 18 international and national participants from the NGOs, department of health and hospitals. Faculty for the course included the resource persons from the PHFI, Indian Institutes of Public Health, Delhi (IIPH-D), WHO, LSHTM, having extensive expertise in epidemiology, health sector programming for adolescent health and development.

PHFI will shortly produce a final course capsule based on the feedback received from this pilot testing course.

Project duration: AUG' 11 to NOV' 11

This project was supported by World Health Organization and was led by Dr MONIKA ARORA

NATIONAL LEVEL WORKSHOP TO REVIEW RECOMMENDATIONS FROM RAPID PROGRAMME REVIEW OF ADOLESCENT HEALTH IN INDIA

Geographical Location: DELHI

Adolescents constitute a special group requiring special interventions. There is, however, a lack of adolescent-friendly health services and inadequate policy orientation to meet adolescent/young people's health needs in the South East Asia region. Therefore, the Public Health Foundation of India (PHFI) conducted a rapid programme review (RPR) to examine the existing programmes and policies relating to adolescent health and development (AHD) concerns in India the main objectives being; (1) to analyze the policies, environment, programmes and interventions related to AHD particularly in the government ministries; (2) to assess the present scale of implementation of such interventions and the extent of convergence at the grass roots level; and (3) to identify the opportunities and challenges for establishing inter-sectoral linkages amongst programmes in multiple ministries.

An extensive literature review of the existing adolescent programmes and policy issues has been completed and reveals that they are scattered across different government departments and ministries such as the Ministry Of Health and Family Welfare, the Ministry of Youth Affairs and Sports, the Ministry of Human Resource Development and the Ministry of Women and Child Development (MWCD) at the Central and State levels. In addition the Government of India has ratified and endorsed all major international conventions and declarations relevant to adolescents such as United Nation's Convention of Rights of the Child (UNCRC). However, currently there is no specific policy that aims to promote AHD comprehensively, and the lack of convergence between already existing programmes was evident.

It was also evident that some areas such as reproductive and sexual health, HIV/AIDS and nutrition were given more importance in national programmes i.e. Adolescent Reproductive & Sexual Health Programme, School Health Programme, Menstrual Hygiene Scheme, Integrated Counselling & Training Centres (ICTCs), Rajiv Gandhi Scheme for Empowerment of Adolescent Girls - SABLA, Ministry of Women and Child Development (MWCD) and Anaemia Control Programme. However, programmes on other key concerns such as tobacco, alcohol and substance use, mental health and violence and injuries were limited and implementation varied among states.

The results of this programme review and data collected through qualitative methods at the states have been shared with WHO. A national workshop is planned in October 2011 to disseminate these results to all central and state officials.

Subsequent to the earlier submission, the planned National Workshop has successfully commenced on 8th and 9th December, 2011. The multi-sectoral convergence framework was shared with the Ministry of Health and Family Welfare and WHO. Discussions and deliberations on the framework led to revisions in the framework. Currently, PHFI team is finalizing the final report together with multi sectoral convergence framework for submission.

Project duration: JUL' 11 to OCT' 11

This project was supported by World Health Organization and was led by Dr MONIKA ARORA

WORKING GROUP MEETING: PROMOTING MULTI-STAKEHOLDER EFFORTS TOWARDS SHAPING EVIDENCE INFORMED ALCOHOL POLICY IN INDIA AND SWEDEN

Geographical Location: DELHI

A workshop on Promoting Multi-Stakeholder Efforts towards Shaping Evidence-Informed Alcohol Policy in India and Sweden was held in February 2012. The Public Health Foundation of India (PHFI) as a signatory of a Memorandum of Understanding on cooperation in the field of Health Care and Public Health, between India and Sweden is committed to promote bilateral cooperation between the two countries on the basis of equality, reciprocity and mutual benefit.

Also, PHFI and its partner HRIDAY (Health Related Information Dissemination Amongst Youth), in association with the Swedish National Institute of Public Health (SNIPH), has been entrusted with the responsibility of exploring collaborative work opportunities in the area of Public Health and Alcohol Policy.

The objective of this workshop was to provide platforms to develop and enhance collaborations between India and Sweden in the area of Alcohol Policy, and to create opportunities for networking, knowledge exchange and mutual learning between the Swedish and Indian public agencies, academic and research institutions, civil society organizations, private agencies and businesses. As part of this workshop, three working groups were constituted to identify priority commitments for action in the realm of Public Health and Alcohol Policy, which will ultimately contribute to the long-term joint action plan, which was presented in the closing valedictory session. The plan focused on the following key components: 1) Development of evidence based national alcohol policy: a) Guiding principles of global alcohol strategy; b) Addressing social determinants of health; 2) Surveillance systems: a) Patterns of use; social costs and community responses; b) Developing methodology for surveys; 3) Developing sustainable practices in public health care: a) Primary health care: detection of problems and stop-gap interventions; b) Training general practitioners and other professionals; c) Working through professional organizations; d) Multi-sectoral coordination, Government-NGO Partnerships, Public Private Partnerships (PPPs)

Post this workshop key recommendations from the working group were utilized to develop a long term action plan for setting up a Centre of Excellence in Alcohol Control at PHFI. The proposal has been submitted to the Swedish International Development Agency for approval.

Project duration: FEB' 12 to FEB' 12

This project was supported by Swedish National Institute of Public Health and was led by Ms KAVITA CHAUHAN

DEVELOPMENT OF MODULE ON GENDER EQUITY IIN HEALTH FOR POST GRADUATE DIPLOMA IN PUBLIC HEALTH MANAGEMENT

Geographical Location: DELHI

Gender and Social Inclusion In Public Health Management – a training module seeks to strengthen the understanding of the issue and strategies for implementation. Though structured as a six hour module, it can be used not only for the Public Health Management post graduate diploma course offered by the Public Health Foundation of India (PHFI) but can also be adapted for other workshops and sessions that PHFI/Indian Institutes of Public Health faculty and staff/academic partner institutes may wish to conduct.

The overall learning objectives of the module are as follow: 1) Increased understanding of on concepts, analysis and attitudes relating to gender and social inclusion; 2 Increased understanding of the importance, benefits and urgency of the need to empower women and socially excluded groups, and promote their agency in the context of accessing health care and related information; 3) To understand the intersection between gender and other types of social exclusion/inclusion and patients' experiences in accessing health services; 4) To measure equity in health care, including the use of different indices of equity to monitor and measure health care delivery, quality and reach.

The module content design was competed.

Project duration: JUN' 11 to DEC' 11

This project was supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR)-United States Agency for International Development (USAID) and was led by Dr ANJALI BORHADE

Ongoing

BASELINE DATA COLLECTION RELATED TO MARRIED ADOLESCENTS REPRODUCTIVE HEALTH IN SELECTED NORWAY-INDIA PARTNERSHIP INITIATIVE (NIPI) FOCUS DISTRICTS IN INDIA

Geographical Location: RAJASTHAN, MADHYA PRADESH

The study, using mixed methods and involving multiple stakeholders for data gathering, will capture information about the present status and gaps in addressing the sexual and reproductive health concerns of married adolescents. The first phase is a baseline assessment to plan for an intervention model at a later stage. This will be a community based model to provide married adolescents with a service package focusing on reproductive health, delaying first pregnancy and promoting spacing between two births. The study will be implemented in four districts, eight blocks and 40 villages selected from the two focus states under NIPI.

The project activities were initiated in the last week of April 2012 after getting the institutional ethical clearance. Initial field visits were made in April and May 2012 to identify the study districts, blocks and villages, in consultation with state authorities and NIPI officials. During the same field visit, NGOs in Rajasthan were identified whose role was to provide data collectors. The study tools were developed and shared with various stakeholders and approval received from the World Health Organization. The Research Officer was recruited in July. Due to the increased work load and lack of time, a consultant was also hired to assist in project activities. First training of data collectors in Alwar (one of the study districts) took place in mid-August. The data collection in Alwar is proceeding. This will be followed by training of data collectors and data collection in the second study district in Rajasthan (Sikar).

Project duration: OCT' 11 to SEP' 12

This project is being supported by World Health Organization and is led by Dr SANJAY ZODPEY

WOMEN'S RESEARCH INITIATIVE - PHASE I

Geographical Location: INDIA

The overall goal of the Women's Research Initiative (WRI) is to foster multi-disciplinary training and research focused on global health and nutrition of women and children (i.e., maternal, neonatal and child health [MNCH]). A major component of WRI is to develop the foundation for a network of systematic public health evaluation and research sites (SPHERES) that enable an integrated field approach to MNCH research and programme implementation at scale. It is envisioned that individual SPHERES will cover

several hundred thousand persons and track tens of thousands of pregnancies and newborns annually. The first stage of WRI – which will lay the groundwork for SPHERES – involves development of country-level landscape analyses of MNCH. The landscape analyses will comprehensively describe, analyze and propose research directions for improving MNCH at the country level. Summary of progress - The project team has identified key topics to be addressed at the country level as well as site specific analysis; and a local data repository for integrated and multi-level analyses for the project is being developed. Work on two manuscripts regarding the relationship between health and health system indicators and determinants and their impact on programme implementation and health outcomes are currently in progress.

Project duration: MAY' 12 to OCT' 12

This project is being supported by Harvard School of Public Health, Boston and is led by Dr GARIMA PATHAK

Women and child health

Completed

ASSESSING AND SUPPORTING NORWAY INDIA PARTNERSHIP INITIATIVE (NIPI) INTERVENTIONS

Geographical Location: RAJASTHAN, ODISHA

The Norway-India Partnership Initiative (NIPI) was designed to provide up-front, catalytic and strategic support to accelerate the implementation of the National Rural Health Mission (NRHM) in five focus states, specifically to improve Maternal and Child health service delivery quality and access. The NIPI activities are spread across five years (2007-2012) corresponding to the duration of NRHM and has been functional in Rajasthan, Odisha, Bihar, Madhya Pradesh and Uttar Pradesh. As per the recommendations of the Joint Steering Committee of NIPI to initiate operations research, a proposal was put forth by PHFI and University of Oslo. The project 'Assessing and Supporting NIPI Interventions' (ASNI) was awarded by the National Committee on Operation Research chaired by the Additional Secretary and Mission Director, NRHM. The study has a multi-disciplinary approach

designed to assess current NIPI interventions through a gender and equity lens in the states of Rajasthan and Odisha.

The aim of the study is two-fold: 1) to understand the functioning of three thematic areas under NIPI activities: facility based Yasodha initiatives; the Home Based Newborn Care provided by Accredited Social Health Activist (ASHA); and techno managerial support provided by NIPI and their convergence within NRHM. 2) To identify key obstacles in the effective implementation of these initiatives so as to recommend modifications and design an intervention package to improve equity, efficiency and sustainability of the programme.

A combination of qualitative methods and quantitative surveys will be deployed to draw together the required information. The study will be conducted in one NIPI focus district and one non-NIPI district which will act as a control area to allow for assessment of the additional benefits provided by NIPI and to identify modifiable barriers specific to the NIPI programme. Based on the current level of functioning of the NIPI interventions and identified barriers (if any), recommendations will be formulated and an intervention package developed in consultation with all stakeholders. A costing study will be used to estimate the costs of addressing the various bottlenecks in the system. During the study period, PHFI and University of Oslo will partner with the State Institutes like State Institute of Health and Family Welfare, Odisha and University of Rajasthan.

The research study is completed. The study used qualitative methods including FGDs, IDIs and observations along with community surveys to assess the impact of the Yasodha and Home Based New Born Care (HBNC) components of the NIPI interventions. The study found that both the NIPI interventions has resulted in significant improvements in knowledge and practice indicators related to maternal and new born health. Yashodas have resulted in improved rates of initiation of breast feeding among mothers who had a c-section and have improved the rates of postnatal checks available to mothers in the facility compared to those mothers with no support from Yashodas. Simialry, ASHAs trained by NIPI to provide HBNC have resulted in improved levels of knowledge on danger signs, family planning, breast feeding and have reported higher rates of birth registration than those who received post

natal visits by ASHAs not trained by NIPI. The study also provided some relavant reeommendations to improve the benefits of the programme and have recommended sacle up of these intervetions across the study states and the nation.

Project duration: OCT' 09 to SEP' 11

This project was supported by Norwegian Ministry Of Foreign Affairs and was led by Dr BEENA VARGHESE

QUALITY ROADMAP FOR INSTITUTIONAL BIRTHS (QRIB)

Geographical Location: UTTAR PRADESH

Over the past few years, under the National Rural Health Mission (NRHM), India has seen some unprecedented growth in the rate of institutional births. However, this phenomenal increase in institutional deliveries has also brought to light the problems of overcrowding and compromised Quality of Care (QOC). The overall purpose of the Quality Roadmap initiative is to enable full benefits of increasing institutional births through embedding quality improvement interventions at the facility levels in the health system.

Objectives:1) To conduct a comprehensive needs assessment of the status of quality of care for institutional births across selected districts; 2) To develop tools for measuring QOC for assuring good quality of care for all institutional births; 3) Launch a sustainable knowledge forum (community of practice) for learning and sharing lessons on quality improvement for institutional birth in India; 4) Develop a preliminary roadmap based on findings from the above activities to improve quality of institutional births in India.

As part of the needs assessment, a thorough literature review of national and international literature related to quality of care has been conducted. In-depth interviews with providers and administrators at the various health facilities have also been completed. An expert group meeting was called to discuss the possibility of developing a tool for internal assesment and quality improvement rather than an external quality assessment tool. The expert group endorsed the idea and study team developed a checklist/quality assessment tool by level of facility. This tool was used at various facilities in the two study districts in UP to test both the feasibility and acceptability

of a self assessment and quality improvement tool. The final report is due by January 31 2012.

Project duration: MAR' 11 to SEP' 11

This project was supported by Engender Health - Bill and Melinda Gates Foundation and was led by Dr BEENA VARGHESE

EVIDENCE-BASED INTERVENTIONS FOR ACCELERATED ACHIEVEMENT OF MILLENNIUM DEVELOPMENT GOALS (MDGs) IN ODISHA

Geographical Location: ODISHA

Odisha continues to be one of the high priority states owing to poor health indicators. Eleven high priority districts contribute to more than 60 percent of the infant mortality of the state. The Government of Odisha has launched Integrated Management of Neonatal and Childhood Illnesses (IMNCI) as an important child survival strategy in sixteen priority districts since 2005-06. For strengthening the quality of the immunization programme, a pilot intervention has been carried out in which health personnel in selected districts have been trained in supportive supervision. There is also a need for building the capacity of district officials on IMNCI, supportive supervision and maternal & child health (MCH). This project addresses those needs. It has three broad components: (1) Capacity building of district officials on IMNCI, supportive supervision and induction of MCH coordinators on maternal and child health (Part-A); (2) strengthening of external monitoring and supervision of routine immunization and IMNCI implementation in four high priority districts (Bolangir, Koraput, Nuapara and Malkanagiri) with provision of on-site hand-holding support and a scientific documentation of pre-and post-intervention differences (Part-B); and (3) assessment of supportive supervision strategy in selected districts of Odisha through a randomized control quasi-experimental study design (Part-C).

Progress against the three major components of the project up to the end of July 2012 are as follows: Part-A: All training programmes are completed. Part-B (i) FUSE training plans, district level induction plans on IMNCI, and IMNCI supervision plan developed with the district team; (ii) IMNCI is now placed on the agenda of all district level meetings; (iii) District health

functionaries were oriented on printing and immediate distribution of IMNCI logistics; (iv) There was emphasis on increasing the internal monitoring of routine immunization (RI), using the monitoring checklist; (v) The district authority and the MCH coordinators were sensitized to maintain training scores for both IMNCI and RI training; (vi) seventy five percent of all trainings were attended by project staff in all four intervention districts; (vii) ninety nine percent of the anganwadi centres (AWCs) designated for IMNCI monitoring were visited by the project staff and in 80 percent they were accompanied by internal monitors of the district; (viii) One hundred percent of the RI session sites were visited together with the internal monitors and their checklists were submitted at district level for consolidation. Part-C: The randomized post-test study to understand the effect of the supportive supervision strategy and to gauge any significant changes in the programme performance and in the level of knowledge and skills of both supervisors and supervisees was completed. Results of the study suggest that the intervention package, which included supportive supervision guidelines were implemented in spirit, and it independently contributed to improved knowledge of supportive supervision among the supervisees. It further established that district level officials attached high importance to the utility of supervision as a key strategy to improve immunization quality. The report is now being finalized for dissemination to UNICEF and also being prepared for publication in a suitable journal.

Project duration: JUL' 11 to JUN' 12

This project was supported by The United Nations Children's Fund (Unicef) & Public Health Foundation of India and was led by Dr BHUPUTRA PANDA

WOMEN'S PERCEPTION OF QUALITY AND SATISFACTION WITH MATERNAL HEALTH SERVICES

Geographical Location: JHARKHAND & DEVELOPING COUNTRIES

Half a million women die annually due to pregnancy and childbirth related events and, in addition, three hundred million women in the world suffer from long-term or short-term illness brought about by pregnancy or childbirth. India alone accounts for a fifth of the global maternal

mortality burden. Efforts under Reproductive and Child Health Programme, phase II (RCH-II) to improve maternal survival include Janani Suraksha Yojana (JSY), the conditional cash transfer scheme for institutional deliveries implemented since 2005. Several evaluation studies have acknowledged JSY as most visible and effective in terms of generating demand. However, none of the studies has touched upon the crucial aspect of women's perspective on the quality of care provided.

Evidence is needed to determine: 1) The satisfaction level of women with the service provided by the public health system; 2) whether cash incentive schemes are a significant facilitator of women's satisfaction; and 3) what other facilitators of women's satisfaction should be strengthened or barriers removed to support long-term demand and generate significant changes in health-seeking behaviour.

The proposed project has thus been designed as research into women's perceptions of quality and satisfaction with maternal health care. This will also to reveal some key barriers and facilitators in the demand and utilization of maternal health services.

Objectives: 1) To estimate the current status of satisfaction with maternal health care services in the context of JSY in the state of Jharkhand; 2) To identify the determinants of satisfaction regarding maternal health care services.

The research primarily focuses on the condition of maternal health in the state of Jharkhand. The study has two inter-related activities: (1) A literature review to explore scientific assessment methodologies and determinants of women's satisfaction with the quality of maternal care; and (2) a primary research to determine perceptions, determinants and levels of satisfaction on quality of care in maternal health services in Jharkhand in the context of JSY.

Expected Outcomes: 1) Identification and recommendation of suitable methods for assessing women's satisfaction with maternity care in the Indian context; 2) Determination of the level of women's satisfaction with maternity care services by socio-economic and demographic differences; 3) Systematic identification of aspects of maternity care in the public health system which lead to less than optimal satisfaction under JSY; 4) Determination of the type of care that women

receive in home settings which deter the utilization of health services.

The research project was completed in August. A key contribution of the study has been the development of methods and tools to assess the level of women's satisfaction with maternal health services. The study findings were widely disseminated.

Project duration: NOV' 11 to JUN' 12

This project was supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR) - United States Agency for International Development (USAID) and was led by Dr SANGHITA BHATTACHARYA

IMPROVING MANAGEMENT OF FACILITY BASED NEWBORN CARE IN BIHAR

Geographical Location: BIHAR

The objective of the project is to develop and implement a quality assurance mechanism to improve facility based newborn care in the state of Bihar. The entire process of developing the model and tools will be based on a literature review of the methods and techniques used by different organizations in India and across the globe. The findings from an assessment done on Special Care Newborn Units (SCNUs) in India by the Indian Institute of Public Health-Delhi, will serve as key inputs for developing and finalizing the model. The guidelines on facility based newborn care already developed by the Ministry of Health and Family Welfare will also be taken into consideration. Draft tools will be prepared by the team and discussions held with experts in India for their approval before the tools are administered in the SCNUs. An online system of data transmission will be created for the unit heads to submit the monthly and quarterly reports. These would be analyzed by the project team and feedback given to the respective units within seven working days.

Outcomes: 1) Monitoring mechanism for improvement of quality of services in newborn care corners (NCC), newborn care corners (NSU) and Special Care Newborn Units (scnu); 2) Medical Colleges as hubs of monitoring and mentoring of facility based newborn care; 3) Policy brief on 'developing a quality assurance system for facility based newborn care. An MOU has been signed

with UNICEF Bihar and the team is working on the model.

The first phase self assessment toolkit and quality assurance toolkit were developed. A toolkit manual in the form of user's guide was developed and submitted. All the toolkits and the user manuals were translated into Hindi. The toolkits were pretested and modified accordingly. The team was oriented on the usage of the toolkit and the data collection procedure. In the second phase, the data entry format in excel was developed with



codes and the teams were oriented. A field status report detailing the current observations was submitted in January '12. An interim report stating the project status was submitted in February '12. In the third phase, handholding for external monitoring was done. A Quality Assurance Monitoring Analysis report was submitted in January-February 12. In the fourth phase another handholding was done for external quality assessment and a analysis report submitted on April '12. A facilitator's guide on Root Cause Analysis (RCA) method for the purpose of explorative study was prepared and submitted. A list of various signs and signages to be used in the facility based newborn care units, was submitted. In the fifth phase, in July '12 project dissemination was done and a project end report submitted.

Project duration: AUG' 11 to JUL' 12

This project was supported by The United Nations Children's Fund (Unicef) & Public Health Foundation of India and was led by Dr SUTAPA B. NEOGI

DEVELOP/ADAPT AND FIELD TEST CAPACITY BUILDING PACKAGE FOR REPRODUCTIVE AND CHILD HEALTH (RCH) PROGRAMME MANAGERS

Geographical Location: DELHI

The World Health Organization has developed three global packages on programme management related to maternal, child and adolescent health. The current project aims to develop a comprehensive reproductive child health programme management package relevant to the Indian context. It will be a short course to enhance the capacity of programme managers currently deployed at regional, state and block level programme management units in the public health delivery system in India. The methods adopted for developing this package will include adaptation and integration of material from the three WHO packages, as well as the addition of new material relevant to programme management. The development of the package will be done by a consultative process, taking the opinions of key experts in the field. Once the package is ready, it will be field tested by conducting a training programme using the modules developed for this course. The modular package also will be used for developing a self learning interactive DVD at a later stage.

An initial consultation meeting was organized in September, attended by experts and professionals representing Ministry of Health and Family Welfare, academic institutions, bilateral and multilateral developmental organizations. The consultation aimed at achieving a consensus on framework of the proposed comprehensive course in RCH for programme managers. The team members were also sensitized by World Health organization in ICATT- IMNCI Computerized and Adaptation Tool. This will be utilized further for developing e-package related to this course. Currently, work is ongoing in formulation of modules of this short course, Three modules are under preparation. They will be pilot tested in coming month by holding a training for programme managers.

Project duration: JUL' 11 to DEC' 11

This project was supported by World Health Organization and was led by Dr SANJAY ZODPEY

ASSESSMENT OF NAVJAAT SHISHU SURAKSHA KARYAKARAM

Geographical Location: RAJASTHAN, MADHYA PRADESH

Navjaat Shishu Suraksha Karyakram (NSSK) is a recent initiative of the Government of India which addresses the component of Essential Newborn

Care (ENC) including resuscitation of the newborn. It is an operational research project which has also provided training to critical health care providers (Medical Officers, Auxiliary Nurse Midwives and Staff Nurses) at District Hospitals, Community Health Centres and Primary Health Centres. The project will document the improvements in knowledge and skills of health care providers in ENC and will study the neonatal mortality and survival outcomes at the facility level in two districts of India. This assessment will provide relevant information about the health care delivery for neonates at the peripheral health centres and will enable policy makers and health officials to evaluate, plan and work towards further improving the quality of newborn care being administered through the government health system.

Data collection for the endline assessment is completed as the project team visited Madhya Pradesh and Rajasthan for this purpose and conducted a facility assessment, postnatal client interviews, and interviews of programme managers. Analysis and tabulation of data and report preparation is in progress.

Project duration: JAN' 10 to MAY' 12

This project was supported by Ministry of Health and Family Welfare and was led by Dr SUNIL S. RAJ

PHASE-1, PREPARATORY PHASE, FERROUS SUCROSE IN PREGNANT ANAEMIC WOMEN IN INDIA(FeSpw)-A RANDOMIZED OPEN LABEL STUDY

Geographical Location: DELHI

The overall aim of the study is to provide reliable evidence on the safety, effectiveness and efficiency of IV iron sucrose in the treatment of moderate and severe iron deficiency anaemia in pregnant women in India, in improving maternal and foetal outcomes.

The study will be done in three phases: 1) Phase I- Preparatory phase; 2) Phase II- Study implementation phase; 3) Phase III- Data analysis and dissemination phase

Specific objectives of phase I: Formation of Technical Advisory Group (TAG)/ Steering Committee; Data Safety Monitoring Board and Trial coordination team; Finalization of the study protocol and tools; Obtaining clearance from the

ethics committee; Developing a study manual for the operations, recruitment and training of the project team.

Besides this, an observational study on the use of iron sucrose is being conducted in two districts of Tamil Nadu covering all health facilities. This will provide useful inputs that can feed into the clinical trial.

The Technical Advisory Group was formulated, consisting of experts and investigators with Dr Dinesh Aggarwal from UNFPA as the chair. The first TAG meeting on 11th-12th July aimed at seeking inputs for finalizing the protocol. Sites chosen are 3 Medical colleges and 4 district hospitals from 3 states. The DSMB of 5 members has also been constituted. Project team comprising of a study coordinator based at IIPHD, investigators and co-investigators from each site has been formed. A 2 days formal training of all investigators and stakeholders was held on 31st Oct -1st November 2011. The first draft of the manual of operations was discussed and finalized after the consultation. The observational study is being conducted at 2 districts each from Tamil Nadu and UP. Data collection process is still on. Monitoring visits were paid to all the sites by the project team. The protocol for the RCT has been submitted to ethics committee of Indian Institute of Public health and the Medical Colleges. An approval is awaited from all the centres. Following this the next phase of the project will be initiated.

Project duration: JUN' 11 to OCT' 11

This project was supported by World Health Organization and was led by Dr SANJAY ZODPEY

Ongoing

UNIVERSAL IMMUNIZATION PROGRAMME STRENGTHENING

Geographical Location: UTTAR PRADESH, BIHAR

Around 27 million new births occur in India every year, making it the largest birth cohort in the world. Of these, fewer than 44 percent receive the full schedule of immunization so crucial in battling child mortality. This is in stark contrast to Bangladesh, which has managed to raise its child immunization rate to 82 percent by age two, and Nepal where at least 80 percent of children are

fully immunized by that age. Although India's under-five mortality has declined from an estimated 114.3 to an estimated 62.6 per thousand births between 1990 and 2010, in child survival India still lags behind other countries with similar gross domestic product.

The Universal Immunization Programme (UIP) was launched in 1985 by the Indian government (a relaunch of the Expanded Programme of Immunization (EPI) started in 1978) with the goal of extending six basic vaccines to all infants and the tetanus vaccine to pregnant women. While ambitious in scope, the UIP needs strengthening in critical areas to realize success. The Public Health Foundation of India (PHFI) and the Oak Foundation have a shared interest in bolstering the UIP machinery with the capacity to ensure high rates of routine immunization for India's children.

The overall goal of the contract is to furnish PHFI with the resources to be the lead partner in the Ministry of Health and Family Welfare's (MOHFW) efforts to set up an Immunization Technical Support Unit (ITSU) within the UIP. The ITSU would add staff with the management and technical expertise required to create a stronger immunization programme fully led by the Government of India. The principal beneficiaries of this work are the Government of India (primarily MOHFW and UIP), state governments in India, and all parties involved in increasing routine immunization quality and coverage for India's children.

This work will be carried out in two phases, with the Inception Phase constituting the first nine months. PHFI will fulfil the early requirements of setting up an ITSU, providing the MOHFW with guidance on a revamped UIP organisational structure and on a strategy for relaunching the UIP. During this first phase, PHFI will also complete an application to the Gates Foundation for a followup grant that will provide PHFI with resources to operationalise the ITSU for a further two years and three months, with the possibility of a continuation grant, if it were deemed useful and necessary by both parties.

This contract is concerned with the Inception Phase. The specific objectives of the Inception Phase are: 1) Recruit high quality talent to operate the ITSU; 2) Define the functional requirements and organization design for UIP; 3) Plan for, and secure, top priority human resources to fit the

revamped organizational design; 4) Help rebrand and relaunch the Universal Immunization Programme.

Project duration: MAR' 11 to OCT' 12

This project is being supported by Bill and Melinda Gates Foundation and led by Dr RAMANAN LAXMINARAYAN

IMPACT OF THE CHECKLIST ON EARLY NEONATAL MORTALITY, STILLBIRTHS AND MATERNAL MORTALITY

Geographical Location: RAJASTHAN

The safe childbirth checklist (SCC), a WHO tool to improve quality of maternal and newborn health during institutional delivery, is being implemented by JHPIEGO in Rajasthan. The Public Health Foundation of India (PHFI) leads the evaluation efforts of this intervention. The goal of this evaluation is to measure the effectiveness and cost-effectiveness of the WHO SCC in reducing early neonatal mortality. The evaluation will use a quasi-experimental design (using both quantitative and qualitative methodologies) in which clusters of facilities where the checklist is implemented (called intervention sites) will be matched and compared with those where it is not implemented (called comparison sites). The study sites include district hospitals and first referral units comprised of sub-district hospitals and community health centres in the state of Rajasthan. Effectiveness of the SCC would be measured through differences between the intervention and comparison sites in early neonatal mortality and in still-births.

This is three year project, the current contract is for one year and will be extended annually.

Project duration: JUN' 12 to JUN' 15

This project is being supported by The Children's Investment Fund Foundation & UBS Optimus Foundation and led by Dr BEENA VARGHESE

POST-GRADUATE DIPLOMA IN MANAGEMENT OF MATERNAL AND CHILD HEALTH MANAGEMENT

Geographical Location: DELHI

The mother and child disease burden contributes a substantial load to the public health system of India. Defining the human resource needs for

providing quality maternal, newborn and child health services across such a large and diverse population is truly challenging. The significant challenges and increased requirements of the public health projects on maternal and child health are putting pressure on programme managers to acquire advanced academic training and new information. A number of institutions and universities at the national and international level are currently offering Maternal and Child Health courses through distance learning programmes, but a comprehensive package with focus on the public health system in India is lacking. Most of the courses are meant for medical graduates. The development of this course will provide an opportunity for medical as well as non-medical graduates to enhance their skills in programme management. This is going to be particularly beneficial for those who have work and family commitments, lack access to higher education and have financial constraints preventing them from enrolling in full time courses. The course will expose the students to theories and concepts in programme management tailored to maternal and child health issues. It will create a foundation for working successfully in the public health system.

Goal of the course: To enhance capacity and skills of participants to manage reproductive and child health (RCH) programmes. Objectives of the course: 1. To develop an in-depth understanding of technical and programmatic issues related to RCH programmes; 2. To strengthen the capacity to plan, manage and monitor RCH programmes at the district level and above. Eligibility criteria for participants: 1) At least two years of relevant work experience in the health sector; 2) At least a Bachelors' degree in Medicine or Nursing, or Masters in Social Work, Nutrition or Business Administration.

Teaching modality: It is a distance learning programme with one contact programme of five days duration at the beginning of the course. The different modalities will include self reading, computer based interactive sessions, discussion with mentors, group work and field based assignments. There will also be e-mail tutorial support and group discussion through a web based system. Duration of the course: Nine months, which can be extended to 12 months. It can be extended to a maximum of 24 months in exceptional cases, after consulting the coordinators.

ed interactive sessions, discussion with mentors, group work and field based assignments. There will also be e-mail tutorial support and group discussion through a web based system. Duration of the course: Nine months, which can be extended to 12 months. It can be extended to a maximum of 24 months in exceptional cases, after consulting the coordinators.

A consultation was organized in July, 2011 of all the resource persons to finalize the chapters for each module. For each module, group meetings and teleconferences were conducted to discuss the ongoing updates on the written work. For each module, authors submitted their first drafts of the assigned chapters, which were then reviewed internally and feedback given. The drafts were simultaneously run through an anti-plagiarism software to check for the reasonable originality of the contents, and when required, authors were asked to modify the contents. For each module, a master document was prepared. Nine out of ten modules have been reviewed internally and externally. Currently the master documents of these nine modules are being modified according to the comments of the external reviewers in order to finalize them. For the tenth module, the master document is in the process of being prepared. Requirements for the delivery of the course were also worked out with the IT department and the pattern was finalized for online delivery of the course.

Project duration: MAR' 2011 to DEC' 12

This project is being supported by The United Nations Children's Fund (Unicef) and led by Dr SANJAY ZODPEY

TECHNICAL ASSISTANCE AND SUPERVISION FOR OPERATIONALIZATION OF MATERNAL DEATH REVIEW IN STATE OF ANDHRA PRADESH

Geographical Location: ANDHRA PRADESH

Maternal Mortality is of great concern in India as it continues to be high. One of the efforts to tackle this is to promote a review of every maternal death that occurs in the country. For this purpose, an operational research study is presently being undertaken in Andhra Pradesh. The objective is to develop a maternal death review (MDR) implementation tool in consonance with national

policies and directions. The tool needs to be operationalized in 10 districts in the state. A MDR team has been set up in collaboration with the United Nations Children's Fund and the state government. The proposed framework for the MDR involves both facility and community based reviews. The Indian Institute of Public Health-Hyderabad team is hand holding the district level officials for effective implementation of the MDR by improving timeliness and completeness of the reviews and reporting to the state level without any delays.

Project duration: MAY' 12 to DEC' 12

This project is being supported by The United Nations Children's Fund (Unicef) & Public Health Foundation of India and led by Dr G.V.S. MURTHY

BRINGING THE SAFE CHILD PROTECTION TOOLS TO PRACTICE: PARTNERSHIPS FOR DATA COLLECTION, ANALYSIS AND IMPLEMENTATION RESEARCH IN INDIA AND HAITI

Geographical Location: DELHI-NCR

The primary aim of this project is to use the four dimensions of the SAFE framework to develop and validate a methodology and simple assessment tools to evaluate the untoward effects of development and globalization on children's security and well-being. The SAFE Child Impact Assessment" (SCIA) will be applied in a range of settings to inform improvements in protection strategies, the development of systems of care for vulnerable children and families, and the promotion of children's rights. The ultimate aim is to develop a broader series of tools (the "SAFE Toolkit") that can be readily adapted in a range of situations and settings at varying levels of globalization and development.

The various steps of the project: 1) Visit by Havard School of Public Health (HSPH) team in India, meeting with collaborating partners (February-March, 2012); 2) Project activities planned with timeline; 3) Recruitment of Research Assistant (part time); 4) Recruitment of Research Coordinator (full time); 5) Developing item pools under each SAFE domain with collaborating partners; 6) Developing 'Community Advisory Board' member's list; 7) Delphi exercise with

experts; 8) Young Lives National conference – paper presentation.

Project duration: JAN' 12 to DEC' 12

This project is being supported by Oak Foundation-Havard School of Public Health and led by Dr ARUNA BHATTACHARYAA

Public health nutrition

Completed

EVALUATION OF MALNUTRITION TREATMENT CENTRES (MTCs) AND PROSPECT OF CHILDREN AFTER REHABILITATION IN JHARKHAND

Geographical Location: JHARKHAND

Severe Acute Malnutrition (SAM) among children remains a major cause of morbidity and mortality in the state of Jharkhand. Estimates from NFHS-3 indicate that 11.8 percent of children below five years are wasted below -3SD, which roughly translates into 300,000 children being severely malnourished in the state. To address this problem in the state, the Government of Jharkhand has established MTCs for inpatient management of severe acute malnourished children. To date MTCs remain the dominant strategy of the Government to address the SAM problem in the state.

This study plans to review the MTC operations holistically and help to generate evidence and suggestions for policy makers to improve management of malnourished children, both at the centres and in their homes after discharge. The study will also provide information about the nutritional status of these children, especially their growth, after their discharge from the MTCs. By carrying out nutritional and morbidity assessment on the children the study will help in identifying the risk factors that have implications on their health and nutritional status in the post rehabilitation period.

Objectives of the study: 1) To understand the perspectives of the caregivers regarding the management of severely malnourished children in MTCs; 2) To identify the barriers and challenges in accessing the services and following MTC guidelines both at the institutional as well as at the community level; 3) To assess the nutritional

outcome in children during their stay at the MTC and after they leave the MTC.

The project successfully completed three concurrent studies (one qualitative and two quantitative) to understand and measure the growth status of children after their discharge from MTC, as well as to understand the perception of the caregivers about the management of the children at the MTC. The findings, duplicated in three reports, have been submitted to the funders.

Project duration: JUL' 11 to MAY' 12

This project was supported by The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR) - United States Agency for International Development (USAID) and was led by Mr ANURAAG CHATURVEDI

EVALUATION OF NUTRITION INITIATIVES OF THE GOVERNMENT OF GUJARAT UNDER INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS) SCHEME

Geographical Location: GUJARAT

Government of Gujarat has undertaken various initiatives in the state aimed at improving health and nutritional status of children. Some of the significant initiatives are providing extruded fortified blended food (Balbhog) to children between 6 and 36 months, providing ready to eat Sheera, Upma & Sukdi as supplementary food to pregnant, lactating women and adolescent girls, organizing annaprashan diwas to promote complimentary feeding, conducting village health and nutrition days and distributing nutri candies to improve health and nutritional status in children.

This study aims to understand the perception of beneficiaries about take home foods, assess the impact of ICDS interventions on the nutritional status of children and study in detail the present training capacity of the state to strengthen infant young child feeding (IYCF) practices. The study will be carried out in 4 districts of Gujarat. The specific objectives include : 1) Understand perception of key stakeholders about Bal Bhog, Sheera, Upma & Sukdi: This component of the study will be carried out in 12 blocks of four districts. We will conduct a total of 40 FGDs & in-depth interviews with users and non users to understand the product appeal, attributes,

product's perceived efficacy, beliefs, attitude and social norms. This study will also help to understand distribution and consumption pattern of supplementary food in beneficiary families and help us gain insight about determinants for non-usage of foods in children, adolescent girls, pregnant and lactating women; 2) Assess the nutritional impact of ICDS initiatives among children aged 6 months-3 years: This is an evaluation study that will be conducted in 4 districts on a sample of 1600 children. The study will assess impact of ICDS initiatives on nutritional growth and hemoglobin status in beneficiaries; 3) Assess training need assessment (TNA) of AWW and supervisors: To improve focus of frontline workers on infant young child feeding practices(IYCF), training needs assessment will be conducted to identify gaps for IYCF activities in the state. We propose to carry out TNA at three levels; (a) training structure analysis to understand existing organizational effectiveness in delivering IYCF activities (b) task analysis to understand knowledge, skills, attitudes and abilities needed to undertake IYCF activities and (c) competency analysis to measure existing competence among AWWs/supervisors to counsel beneficiaries on IYCF practices . The TNA will be carried out in 4 districts and will cover 80 AWWs and 20 supervisors.

Three reports have been submitted to donors ; (1) Understand perception of key stakeholders about Bal Bhog, Sheera, Upma & Sukdi (2) Assess the nutritional impact of ICDS initiatives among children aged 6 months-3 years (3) Assess training need assessment (TNA) of AWW and supervisors detailing out the results and findings. Based on the feedbacks relevant revisions are currently in progress.

Project duration: DEC' 10 to SEP' 11

This project was supported by Global Alliance for Improved Nutrition (GAIN) and was led by Mr ANURAAG CHATURVEDI

DEVELOPING A TRAINING CURRICULUM AND PROGRAMME ON FOOD SAFETY AND STANDARDS

Geographical Location: ANDHRA PRADESH

The scope of work are following: 1) To build the capacity for professionals in food safety and hygiene (Designated Officers, Food safety Officers,

Food handlers) to international criteria; 2) To establish a consortium of stakeholders including Government, academic institutes and technical team having National and International repute to take forward the task; 3) Based on relevant occupational needs, the programme will be designed to provide essential underpinning knowledge, competence and understanding about food safety and standards. It will equip designating officers to lead the food safety strategy, planning and its implementation, monitoring and surveillance in their districts, and enable Food safety officers to educate and inform food handlers about basic good practice in food safety and hygiene and to deliver safe food to the consumers; 4) Food Handler Training - Levels 1 – 4 Food handler training will be developed, in line with international standards, and offered to Food handlers, depending on whether they handle low- or high-risk foods; 5) The training programme for Food Safety Officers will include levels 1-4 training as for food handlers but would in addition enable them to fulfill a more strategic and managerial role. It will also equip them to have more in-depth knowledge of and competence in food surveillance, risk assessment, plus how to develop a constructive interface with stakeholders and partner organizations, and implementing the Food Safety laws. Additional training would include basic epidemiology, inter-sectoral collaboration, management and monitoring and evaluation. It is intended that a 5 day training programme will be developed for this group; 6) The training programme developed for Designated officers will in addition include management and leadership competence to enable them to lead the food safety strategy for their districts. It is expected that this would include competence in managing their staff and external relationships both with industry and public sector partners and, developing district food safety plans and handling the legal aspects. Further competencies such as leading the food safety officers, understanding key links between Millennium Development Goals and food safety, surveillance and monitoring, linking with health authorities and District Collector to strengthen food safety, writing a food safety plan for the district will be included as part of the training. It is intended that a 6 day training programme will be developed for this group.

Competency frameworks developed for food regulators and food handlers food safety education. Based on these curriculum and training content developed for both food regulators and

food handlers. Food handlers material includes three levels of training for the catering, manufacturing and retail sectors. Food regulators training content has also been developed for a six month training programme for food safety officers and a 15 day training programme for designated officers. Material being printed.

Project duration: AUG' 10 to NOV' 11

This project was supported by Food Safety and Standards Authority of India and was led by Dr G.V.S. MURTHY

VALIDATION OF KEY INFORMANTS FOR IDENTIFYING CHILDREN WITH DISABILITY IN BANGLADESH AND PAKISTAN

Geographical Location: ANDHRA PRADESH, BANGLADESH & PAKISTAN

The study aims to validate the use of key informants for identification of children and young adolescents with disability. There is a paucity of data on the prevalence and magnitude of disability in the developing world. Since population based surveys are very expensive, it was felt that using community based personnel would be a cost effective method of providing reasonable estimates for the planning of need based services. The study is being undertaken in three districts of Bangladesh and one district in Pakistan. A household survey has just been completed in Bangladesh which will be used for validating the estimates obtained through the key informants. Since the Disability Centre is a collaboration between the Public Health Foundation of India and the London School of Hygiene and Tropical Medicine (LSHTM), part of the work for the study is being undertaken in India. Data management and analysis will be undertaken at the Disability Centre in addition to providing quality assurance in Bangladesh and Pakistan. The Disability Centre has developed the data entry modules and is also involved presently in data cleaning.

The study was completed in June 2012. A Dissemination meeting was organized at Dhaka on 17th July 2012. The Dissemination meeting was attended by the Hon. Minister for Social Welfare, Government of Bangladesh, the Secretary Social Welfare and Director Social Welfare, Government of Bangladesh, plus other invitees from national and international organizations based in

Bangladesh. The study demonstrated that Key Informant Methodology was an effective method of identifying children with disability in low and middle income countries. The method was validated and shown to have high sensitivity and acceptable positive and negative predictive values. The results compared very well with a household survey for children with disability in the same area. The project which was initially to be completed in January 2012 was extended till June 2012 and the funding from LSHTM for data management was provided till June 2012.

Project duration: JUN' 10 to JUN' 12

This project was supported by London School of Hygiene And Tropical Medicine and was led by Dr G.V.S. MURTHY

Ongoing

TRANSFORM NUTRITION

Geographical Location: INDIA, BANGLADESH, KENYA, ETHIOPIA (Focal, Inner ring)

NEPAL, VIETNAM, NIGERIA, ZIMBABWE (Outer ring)

Undernutrition in early life is responsible for the deaths of millions of young children annually. It reduces the amount of schooling children attain and increases the likelihood of their being poor as adults, if at all they survive. The human and economic costs are enormous, and yet the rate of undernutrition reduction remains glacial. Why is this? We know "what works" in terms of direct nutrition interventions, but scaling up is not happening fast enough or not at all. We know there are large resource flows in sectors such as agriculture, social protection and health systems, but their potential to improve nutrition is rarely exploited. Finally, wider societal norms do not support nutrition as well as they could: better nutrition is in everyone's interests, but is nobody's responsibility.

The Transform Nutrition research programme consortium (TN) aims to solve these puzzles and transform thinking and action on nutrition. We will strengthen the content and use of nutrition-relevant evidence to accelerate undernutrition reduction through this decade in the two highest burden regions of South Asia and sub-Saharan

Africa, with special focus on four high-burden countries (Kenya, India, Bangladesh and Ethiopia).



We will focus on the 1,000 day period from pre-pregnancy to 24 months of age – the "window of opportunity" -- where interventions are most effective at reducing undernutrition. Our research will be structured around three core "pillars" relating to direct and indirect interventions, and an "enabling environment" for nutrition. These pillars are aligned with the three levels of the undernutrition problem (at immediate, underlying and basic causal levels). Embedded in these research pillars, and permeating the work we do, are three cross-cutting themes: governance, inclusion and fragility.

TN will generate six core outputs over its lifetime (three relating to knowledge and evidence, two to communications and uptake, and one on nutrition-relevant capacity). Together these outputs will contribute to the achievement of: (a) Transformed thinking and action on nutrition among technical, operational and policy communities; (b) nutrition moving higher up the development agenda; and (c) nutrition-relevant actions being better resourced and supported in the focal countries, and beyond.

Project duration: JUN' 11 to MAR' 13

This project is being supported by International Food Policy Research Institute and led by Dr RAMANAN LAXMINARAYAN

MEASURING THE COMMITMENT TO REDUCE HUNGER: DEVELOPING AND IMPLEMENTING A HUNGER REDUCTION COMMITMENT INDEX FOR INDIA

Geographical Location: DELHI-NCR, BIHAR, UTTAR PRADESH, ODISHA

The Public Health Foundation of India (PHFI), in partnership with Oxfam India and the Institute of Development Studies (IDS) Sussex, is conducting a study to develop a "Hunger Reduction Commitment Index"(HRCI) for India and its states. HRCI is a tool developed by a consortium of organizations led by IDS Sussex, to measure political commitment to address the problem of hunger and in alleviating the conditions that underpin it. The HRCI measures commitment of governments and other stakeholders credibly, and in doing so, enables governments to track refine and prioritize their efforts. While all the other similar initiatives look at indicators related to outcomes retrospectively, the HRCI prospectively focusses on indicators of political commitment. The India HRCI is being developed as a composite of different indicators in three major areas of political commitment - legal framework, policies and programmes and budgetary expenditures - related to different development sectors that directly or indirectly contribute to hunger and malnutrition. PHFI has modified the methods and indicators of the global index to meet the situations and priorities of India and its states. The index will be developed through rigorous desk review of available secondary data. An expert survey in select settings as well as a community voice study would inform this process. The India HRCI will be prepared for all those states where data on select indicators are readily available. Our report will also include a narrative on barriers and enablers of hunger/malnutrition elimination in India and its states, in order to suggest a roadmap for improvement.

Project duration: APR' 12 to NOV' 12

This project is being supported by Oxfam India and led by Dr RAMANAN LAXMINARAYAN

EVALUATION OF EFFECTIVENESS OF THE DISTRICT EXTENDER (DE) MODEL OF SUPPORTING VITAMIN A SUPPLEMENTATION (VAS) PROGRAMME IN SELECTED STATES OF INDIA

Geographical Location: MADHYA PRADESH, UTTAR PRADESH, CHATTISGARH

Background: The Micro-Nutrient Initiative (MI) has been running the District Extender programme in seven states to support and improve the Vitamin A Supplementation programme in those states. The District Extender plays the role of a facilitator and

is a key agent in improving the capacities of the frontline health workers.

Project Objective: The MI currently is interested in evaluating the District Extender model in terms of its contribution to the VAS programme in the respective states. The Indian Institute of Public Health- Delhi, is about to conduct a study for this purpose with the following specific objectives: 1) To assess the contribution of District Extenders in positively influencing the VAS programme processes including coverage and quality of the programme; 2) To assess the contribution of District Extenders in improving the technical and operational capacity of the Health and the Integrated Child Development Services systems including their key functionaries w.r.t components of BCHNPM; 3) To identify the factors that contribute towards the effectiveness of the model and design a conceptual model for the purpose of replication. Explore the sustainability of the VAS programme if the DEs are withdrawn and especially comment on whether the high coverage rates can be achieved in their absence; 4) To establish whether the improved VAS coverage can be attributed to the presence/absence of DEs; 5) To assess the effect of DEs on the coverage of other bundled services; 6) To conduct a self appraisal of DEs on their roles.

Tools have been developed, pretested and finalized. Data collection is being conducted at the district level.

Project duration: APR' 12 to SEP' 12

This project is being supported by The Micronutrient Initiative and led by Mr SHOMIK RAY

ENDLINE EVALUATION OF THE WHEAT FLOUR FORTIFICATION PROJECT

Geographical Location: MADHYA PRADESH

The study intends to conduct an endline evaluation of the village level flour fortification project implemented by the World Food Programme and the Tribal Welfare Department, Government of Madhya Pradesh (MP) in villages inhabited by the Sahariya tribal community in three districts of MP. The village level flour fortification project aimed to reach 90 percent of the millers, to develop their capacity to fortify flour in their mills and reduce the prevalence of anaemia by five percent by the end of pilot phase. The project also aimed to increase the knowledge

of the community on the causes, consequences and prevention of micronutrient malnutrition and anaemia.

AIim: This endline evaluation aims at assessing the performance of the village level flour fortification project in achieving its objectives vis-a-vis the baseline study and provide a blueprint for possible replication.

Objectives: 1) To analyse the achievements of the fortification project in terms of significant outcomes and outputs including programme related outcomes/outputs and health and socio-demographic outcomes in the community; 2) To identify the facilitating and inhibiting factors associated with this project; 3) To do a cost benefit analysis by using the best available impact and economic data; 4) To develop a blueprint for the possible scaling up and replication of the project.

Project duration: JUN' 12 to OCT' 12

This project is being supported by World Food Programme and led by Dr SUPERNA GHOSH-JERATH

DISEASE DOMAINS

Non-communicable diseases

Completed

REGIONAL ASSESSMENT OF MULTI-SECTORAL PARTICIPATION AND WORKSHOPS TO SENSITIZE AND ENGAGE OTHER SECTORS IN THE CONCEPT OF HEALTH PROMOTION AND NCD PREVENTION

Geographical Location: DELHI, MUMBAI, CHENNAI, KOLKATA, CHANDIGARH

In recent times, non-communicable diseases have emerged as major causes of morbidity and mortality in the low and middle income countries. The overall aim of this initiative is to adopt health promotion principles for NCD prevention and identify avenues to integrate these health promotion activities into the existing gamut of national programmes. This can be achieved by engaging multi-sectoral stakeholders, thus raising the visibility and knowledge around NCD

prevention, and mobilising action pathways by key stakeholders involved in NCD prevention and health promotion and communication. The UN General Assembly will hold a Non-communicable Disease (NCD) summit involving Heads of State in September 2011 to address the threat posed by NCDs to low- and middle-income countries (LMICs). A multi-sectoral regional meeting at the country level will articulate India's position and country specific plans to formulate and prioritize effective interventions on NCD prevention as an outcome of the UN summit.

Objectives: 1) To conduct situational analysis of existing health promotion and prevention programmes on Non-Communicable Diseases in selected districts of five states and to conduct regional workshops in four regions; 2) To collate existing international and national resources around health promotion; 3) To create a consultative platform at the regional level to have national consensus, prepare India's position for the national workshop in August 2011 and the UN summit in September 2011; 4) To collate recommendations from regional consultations and develop a recommendation paper to be used at the national consultation; 5) Engage media to enhance the visibility of health promotion in NCD prevention.

Literature review for the multi-sectoral partnerships in India and other countries is complete. In-depth interviews with the stakeholders and FGDs for NGOs will be conducted. Questionnaire and FGD guidelines for the same have been developed. The workshops will be held in consultation with WHO on 11th July at Mumbai, 15th July at Chandigarh, 23rd July at Chennai and 27th July at Kolkata and 5th August, 2011 in Mumbai. We have submitted the final report of the project to WHO.

Project duration: MAY' 11 to AUG' 11

This project was supported by World Health Organization and was led by Dr MONIKA ARORA

MONITORING AND EVALUATION OF THE RS-10 (ROAD SAFETY IN 10 COUNTRIES PROJECT) INTERVENTION

Geographical Location: ANDHRA PRADESH

With the background of rising road traffic injuries and fatalities across the world, particularly in developing countries, research into the knowledge,

attitudes and practices of road users, and the incidence and outcome of traffic incidents is urgent. This study aims to address the epidemiology of road traffic injuries in Hyderabad (particularly helmet use and drunk driving, both identified as local risk factors), as well as evaluate the effectiveness of selected road traffic safety programmes implemented as part of the RS-10 project in collaboration with the World Health Organization and Health and Family Welfare Department, Government of Andhra Pradesh.

Project duration: MAR' 11 to DEC' 11

This project was supported by Johns Hopkins Bloomberg School of Public and was led by Dr SHAILAJA TETALI

EYE HEALTH WITHIN THE PUBLIC HEALTH SYSTEM IN INDIA: A REVIEW OF ITS FUNCTIONING IN FIVE IDENTIFIED LOCATIONS IN THE COUNTRY

Geographical Location: ANDHRA PRADESH, HIMACHAL PRADESH, RAJASTHAN, KERALA, WEST BENGAL

India launched its National Programme for Control of Blindness (NPCB) in 1976 and over the last 36 years has made significant progress in delivering eye care to its populace. A recent review of all the National Programmes in the country has shown that the NPCB is one of the better performing ones. National programmes, favourable policies and multi-sector initiatives have provided avenues and schemes for the implementation of eye health within the larger public health system in the country. There is, however, little evidence to substantiate or show the impact of these policies/programmes and schemes at the implementation level. Thus there is a need to find out the penetration of policies, programmes and schemes for eye health in the overall public health system in the country, including the gaps which may exist and the opportunities for bridging them.

Justification: Currently there are many schemes, policies and programmes operating across the country. If these initiatives are implemented as conceived, they should lead to the desired better eye health status of the population.

This research is planned to look at the access to eye health policies, programmes and schemes at

the implementation levels in identified locations in the country, to understand their impact as well as identify gaps in implementation, for suggesting corrective and appropriate measures to lead to the desired outcomes.

Objectives: 1) To review the implementation of national level policies, programmes and schemes on eye health in five identified locations in the country; 2) To compare the provisions of the policies, programmes and schemes with their actual implementation in these five locations and identify the gaps between the provisions and actual implementation at district levels and below in the five locations; 3) To understand and document the extent of integration and inclusion of primary eye care within the primary health care system in the identified study locations; 4) To formulate recommendations and produce a report for advocacy which can be discussed at appropriate levels to promote better implementation of the schemes for eye health in the country.

Five district locations within India where an active Operation Eyesight Universal India partner was active were selected to represent the five zones of the country, Kullu (Himachal Pradesh), Srikakulam (Andhra Pradesh), Enakulam (Kerala), Udaipur (Rajasthan) and Siliguri (West Bengal). Visits were conducted and primary stakeholder consultations and discussions were held. Secondary data was collected and analyzed. Thematic analysis was performed and draft reports have been completed. The final report and its dissemination remains to be done. A publication is planned as part of the dissemination strategy.

Project duration: SEP' 11 to FEB' 12

This project was supported by Operation Eyesight Universal, India and was led by Dr B. R. SHAMANNA

PREPARATION OF A MONOGRAPH ON SMOKELESS TOBACCO AND PUBLIC HEALTH IN INDIA

Geographical Location: DELHI

Smokeless tobacco use is now a global public health concern and more so for India. Almost 50 percent of all tobacco used in India is consumed in one or the other form of smokeless tobaccos. There are more than 200 million smokeless tobacco users in India. Due to many factors, such

as marketing, social acceptability, easy access, lack of awareness, industry organization and challenges in regulation, smokeless tobacco has become an epidemic of unparalleled proportion, with the increase in use by young and old, men and women alike resulting in an alarming health burden. There have been sporadic attempts to review the research on smokeless tobacco and several of them are highly cited documents but all have limitations because of their specific objectives, severe restrictions on the length and rather meagre resources for undertaking the task. Thus a need for a comprehensive report on smokeless tobacco use in India has often been felt and expressed in various forums. In response to rising epidemic of smokeless tobacco usage in India, the Public Health Foundation of India along with Healix- Sekhsaria Institute for Public Health, the World Health Organization, and the Centres for Disease Control and Prevention under the Ministry of Health and Family Welfare, Government of India are developing an evidence based peer reviewed publication on "Smokeless Tobacco and Public Health in India- A Scientific Monograph". The monograph aims to provide a snapshot of the current scientific knowledge on smokeless tobacco use, characteristics of the products, and related policy efforts. The report will showcase the latest data from recent surveys and epidemiological studies, describe toxicity analyses and findings, provide the latest and comprehensive scientific perspective on the constituents, prevalence, morbidity, and mortality rates associated with the many varieties of smokeless tobacco products. The information in "Smokeless Tobacco and Public Health in India- A Scientific Monograph" will also document sources of information and gaps, research and policy needs, and provide critical action steps and recommendations. This report will raise the profile of the challenge posed by smokeless tobacco so that national and international tobacco control efforts can accurately respond to this epidemic.

The first stakeholder consultative meeting to discuss the concept proposal for the report and the process to develop a comprehensive report was held last year. The outline of the chapters has been finalized and the team of authors which will lead and assist in writing these chapters have been identified and recruited. The first draft of the chapters will be received by the end of this month. The Editor's meeting with the authors to finalize the chapters has been fixed and is scheduled to be held in November 2012.

Project duration: FEB' 12 to JUL' 12

This project was supported by Healix-Sekhsaria Institute for Public Health and was led by Dr MONIKA ARORA

STUDY THE PROPORTION OF TOTAL HEALTH CARE VISITS TO PRIMARY, SECONDARY AND TERTIARY HEALTH FACILITIES ACCOUNTED FOR BY EYE HEALTH OUTPATIENT AND INPATIENT VISITS IN VISHAKHAPATNAM DISTRICT OF ANDHRA PRADESH

Geographical Location: ANDHRA PRADESH

Sightsavers partnered with the Andhra Pradesh State Department of Health and Family Welfare to provide training and capacity building for eye health professionals through continuous education and refresher training of ophthalmic para-professionals across the state of Andhra Pradesh. Visakhapatnam district with Sankar Foundation Eye Hospital is a major partner in the delivery of the initiative. Through a comprehensive engagement process with the state government, in addition to the training, it is now proposed to develop the other required support systems at the community level. Visakhapatnam was chosen as one of the pilot districts since Sightsavers have an active partner as well as a training centre in this district. The study planned to measure the proportion of total health care visits to primary, secondary and tertiary health facilities accounted for by eye health outpatient and inpatient visits in Visakhapatnam district. This will be done in order to understand what further inputs can improve service delivery and whether it is necessary to provide them.

Forty seven facilities comprising the Regional Eye Hospital, area hospitals, the District Headquarters Hospital, Community Health Centres (purposely selected), and Primary Health Centres (randomly selected) were studied with respect to patient load for eye care, human resources availability, infrastructure for provision of level of care as well as training needs of personnel at each of these locations. The draft analysis was shared with the Joint Director, National Programme for Controlling Blindness (NPCB), Government of Andhra Pradesh and the final report is under preparation.

Project duration: DEC' 11 to FEB' 12

This project was supported by Sightsavers-Royal Commonwealth Society for the Blind and was led by Dr B. R. SHAMANNA

BASIC MESSAGES FOR TRAINING PRIMARY HEALTH WORKERS IN PRIMARY EYE CARE

Geographical Location: ANDHRA PRADESH

SACDIR-Indian Institute of Public Health-Hyderabad was given a short term consultancy, an Agreement for Performance of Work, by the World Health Organization South East Asia Regional Office (WHO SEARO) to develop basic training material on primary eye care for first level health care personnel in low and middle income countries in the South East Asia Region. The work involved identifying key messages and developing and validating a manual for primary care personnel.

The work has been completed. A prototype of the validated manual was submitted to WHO SEARO.

Project duration: DEC' 11 to FEB' 12

This project is being supported by World Health Organization and led by Dr G.V.S. MURTHY

TO DEVELOP A DOCUMENT ON "BASIC MESSAGES FOR TRAINING PRIMARY HEALTH WORKERS IN PRIMARY EYE CARE"

Geographical Location: ANDHRA PRADESH

A workshop on "Prevention of Avoidable Blindness and Visual Impairment in SEA Region" was held from 22-24 September 2011 in Madurai, India. Among the priorities identified at the workshop, one was inclusion of primary eye care in primary health care. Towards this, it is proposed to develop basic messages for training of primary health workers in primary eye care. The main points to include are as follows: 1) Collect and review materials available from different countries in the SEA Region (Nepal, India, Sri Lanka, Myanmar, etc.); 2) Develop a draft on basic messages for health care workers on avoidable blindness and visual impairment by 30, January, 2012; 3) Incorporate suggestions and comments made by peer reviewers and DPR and prepare final report by end February 2012.

Project duration: DEC' 11 to FEB' 12

This project was supported by World Health Organization and was led by Dr G.V.S. MURTHY

DESIGNING, DEVELOPMENT AND LAYOUT SETTING OF BOARDS AS SPECIFIED UNDER SECTION 6 OF THE COTPA, 2003

Geographical Location: DELHI

The current activity aimed to undertake designing, development and layout setting of boards under Section 6 of COTPA, as specified by the Ministry of Health and Family Welfare (MOHFW) in the amendment made by it under COTPA Rules 2004 for Rule 5 vide G.S.R 619 (E) dated 11 August, 2011. As per this notification, the specified boards were designed in English and Hindi and pictograms were provided for 18 regional languages. These were copied into 500 CDs, which were submitted to the MOHFW for wider dissemination to retailers/vendors of tobacco products in various Indian states for compliance with this provision of COTPA. The draft designs of the boards, CD cover and jacket designs were approved by the MOHFW before mass production.

Project duration: NOV' 11 to DEC' 11

This project was supported by World Health Organization and was led by Dr MONIKA ARORA

Ongoing

GENETIC ASSOCIATION STUDY OF PLOYMORPHISMS RELATED TO CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND ITS MEASURES, IN NORTH INDIAN POPULATION: COPD GENETICS CONSORTIUM

Geographical Location: DELHI, HARYANA, HANDHIGARH, GUJARAT

SANCD/PHFI has created a chronic obstructive pulmonary disease (COPD) Genetic Consortium consisting of clinicians and geneticists which aims at recruiting 3000 cases and 3000 controls from North and West India. The aim of the consortium is to validate previously identified genetic variants related to COPD in Indian population. The fieldwork is expected to commence from January

2012 with the funding from Department of Biotechnology, Govt. of India.

Project duration: OCT' 11 to OCT' 14

This project is being supported by Department of Biotechnology, Government of India and is led by Dr D. PRABHAKARAN

PREVALENCE OF RHEUMATIC HEART DISEASE AMONG SCHOOL CHILDREN OF 5-15 YEARS AGE GROUP, USING ECHOCARDIOGRAPHY WITH DOPPLER AT THREE SITES IN INDIA

Geographical Location: GOA, MANIPUR, RAIPUR

Hypothesis: The prevalence of rheumatic heart disease in children is at five to ten times more by echocardiography as compared to that achieved by clinical examination alone. Those found to have valvular abnormalities by echocardiography due to rheumatic heart disease, may develop progression of cardiac lesions on follow up.

Major study objectives: To determine the prevalence of rheumatic heart disease in school children of 5-15 years age group using echocardiography with Doppler. The study is designed as a cross-sectional epidemiological survey. Children diagnosed to have clear evidence of rheumatic heart disease or any other cardiac illness will be treated as per existing guidelines. Those found to have isolated abnormalities on echocardiography suggestive of rheumatic heart disease without any clinical evidence will be kept on follow up. Their contact details will be obtained and these children will be followed on a yearly basis (or earlier if develop any symptoms), either in their school or at their home with repeat clinical evaluation and echocardiography. Sample size

We plan to screen approximately 1500 to 2500 children per site over a period of 12-18 months. Going by the published literature, approximately 40-50 children with echocardiographic rheumatic heart disease are likely to be diagnosed at each site.

Project duration: SEP' 11 to SEP' 13

This project is being supported by Medtronic Foundation and is led by Prof K SRINATH REDDY

GLOBAL HEALTH ACTIVITIES IN DEVELOPING COUNTRIES TO COMBAT NON-COMMUNICABLE CHRONIC CARDIOVASCULAR AND PULMONARY DISEASES

Geographical Location: HARYANA

SimCard Trial is a cluster randomized trial to be implemented in India and China by the George Institute of Global Health, China and Public Health Foundation of India (CoE-CARRS). The overall goal the study is to develop, pilot test, and evaluate a highly simplified but guideline-based programme for cardiovascular management in resource-scarce settings. The specific aim is to evaluate the effects of implementing a simple low-cost cardiovascular management programme for high-risk individuals, delivered by primary care providers and community healthcare workers (CHWs), on the proportion of patients appropriately treated with diuretics as well as a number of secondary outcomes. In each country, 12 villages will be selected to be randomized to receive the intervention (6 villages) or usual care (6 villages). Before the intervention begins, a village-wide screening will be done to identify and measure high-risk individuals in all villages. The intervention will be one year long. A post-intervention assessment of all high-risk individuals will also be conducted. Process evaluation, economic evaluation, and verbal autopsy represent important aspects of the evaluation matrix. The results of the study are expected to both advance scientific knowledge to prepare for future large-scale studies and to provide translational evidence necessary for sound policy making to address the cardiovascular disease problem in resource-scarce settings.

Project duration: SEP' 11 to AUG' 13

This project is being supported by The George Institute for Global Health and is led by Dr AJAY S VAMADEVAN

A STATE LEVEL ANALYSIS OF INDIA'S FISCAL POLICIES FOR TOBACCO CONTROL

Geographical Location: ANDHRA PRADESH, GUJARAT

Objectives: Except for a few studies that emerged recently, scant attention has been paid to

understanding the complexity and structure of tax policy measures and their implications on tobacco consumption in the country. While Sunley (2009) and John et al. (2010), attempted to capture the structure and impact of tobacco taxes in India, their primary focus was on the central government taxes, and their implications on revenue and morbidity. Currently the Centre for Global Health and Research (CGHR) is engaged in putting together district level tobacco score cards while PHFI is involved in multiple interventions at the state level (Andhra Pradesh and Gujarat). Civil society organizations such as the Voluntary Health Association of India (VHAI) and The Campaign for Tobacco-Free Kids (CTFK) are presently engaged in an advocacy and dissemination exercise of tobacco control policies at both the central and state government levels. The key thrust of this proposal is state-level analysis. A recent paper (Jha, Rao, et.al. 2011) highlights some of the state-level initiatives but an in-depth analysis of the tax structure and rates of the states is critical, given that states can play a vital role in tobacco taxation. While some states have taken a proactive role, others are lagging behind. We need to synthesize evidence and disseminate this to the states which are lagging behind. In addition, as the country moves into Goods and Services Tax (GST) regime, the state-level SGST (State Goods and Services Taxes) would play a critical role. While GST aims to bring in uniformity in tax structure, given the federal nature of the country, Indian states will continue to play a vital role in tobacco taxation, and therefore an analysis of the current and past trends in state taxes is critical.

India has been in the forefront of enacting Framework Convention on Tobacco Control (FCTC) mandated legislation in the country, but concerted action both at the central and state government levels is urgently required. Creating evidence, effectively utilizing evidence for policy-making, and disseminating evidence and policies by engaging various stakeholders at the state-level assumes critical importance at this stage. In order to understand some of the issues underlined above, this study envisages pursuing the following:

Overall Goal: To strengthen tobacco control initiatives, by producing and disseminating evidence for the need to have health-focused fiscal policy measures in India.

Specific Objectives: 1) To examine the current tax structure both at the central and state levels on all tobacco products (smoking and smokeless) and their contribution to revenue generation to the state and central governments ; 2) To examine the changing shares of household expenditure on different tobacco products over the years, in order to understand its relationship to the changing tax structures of the state and central governments; 3) To analyze the changing tax structure on all tobacco products (including smokeless tobacco) during the last one decade and examine its impact on tobacco consumption at the state level ; 4) To provide likely scenarios of revenue generation from an increase in tax on tobacco products and its distributional effects across the population in Indian states; 5) To disseminate evidence generated from this exercise for stronger and more effective fiscal policies at all levels of government in India.

The first objective seeks to examine the current structure of tobacco taxes, in terms of tax exemptions, tax rates, etc. at both the central and state levels, across all products (smoke and smokeless tobacco products). The tax administrative structure and difficulties encountered in the implementation of various taxes will be also studied in order to understand and provide inputs for future changes, especially in the context of the proposed roll out of GST in the country. The second objective examines in detail the shift in demand of tobacco products and aims to link the changes in demand with changes in the tax structure over the years. The third objective would examine the impact of tobacco tax changes in the last 10 years (both at the central and state levels) on consumption patterns of various tobacco products. Lastly, the fourth objective envisages capturing the likely revenue generation potential of the proposed tax increase at both central and state levels. This would also include examining various scenarios of distributional aspects (rich-poor impact, especially on bidi consumption).

Methodology: Empirical Framework: The study would adopt the empirical model developed by Deaton (1997) to empirically estimate expenditure and price elasticity of demand for tobacco products. Further, the study aims to simulate the impact of tax increase on consumption and expenditure of different tobacco products at the state level. The relationship between tax increase and consumption of tobacco will be established

through price elasticity estimates. Using the household level data, Deaton (1997) estimates price elasticity of a number of consumption items by distinguishing between unit values of commodities and price of commodities. Following the same argument and the empirical model, the present study proposes to estimate the price elasticity from household level data on consumption expenditure in India. The projected impact of tobacco tax increases at both the central and state government levels would be derived based on a static model (modified version of the Jha, et.al. 2009). We intend to simulate the impact of tobacco tax increases (cigarette, bidis and smokeless tobacco) on the consumption of various tobacco products, household expenditure, and the potential for higher government revenue. In addition, the simulation would also attempt to project the potential impact of tobacco tax increases on the likely level and trends in morbidity. The model simulation is expected to be carried out across major Indian states.

Project duration: MAR' 12 to MAR' 13

This project is being supported by International Development Research Centre (IDRC-CRDI) and is led by Dr SAKTHIVEL SELVARAJ

Infectious diseases

Completed

REGIONAL WORKSHOP ON M&E OF HIV/AIDS PROGRAMMES

Geographical Location: DELHI

The Measure Evaluation, University of North Carolina at Chapel Hill - United States Agency for International Development (USAID), in partnership with Public Health Foundation of India (PHFI) is conducting a series of workshops on Monitoring and Evaluation (M&E) on HIV/AIDS programmes. The objective of these workshops is to increase the knowledge of M&E among public health professionals, with the goal of having improved M&E systems in place in government, the public sector and non-government organizations worldwide, with special focus on the Association of Southeast Asian Nations (ASEAN) region countries.

This "Monitoring and Evaluation of Population Health and Nutrition Programmes" workshop, the

sixth in the series, was held from 13th - 22nd February, 2012 at New Delhi. Eighteen participants from the following nine countries attended this workshop, Sri Lanka, Armenia, Indonesia, Mozambique, Nepal, USA, the Philippines, Thailand and India. Faculty for this workshop were from Measure Evaluation (University of North Carolina at Chapel Hill), Training Division, PHFI and the Indian Institute of Public Health, Delhi. The mode of delivery for the workshop was through lectures, case studies and group work. The overall satisfaction score given by the participants is 8.72 out of 10. A Professional Network Group of participants has been formed by Measure Evaluation as a platform for future networking and knowledge sharing.

Project duration: NOV' 11 to MAR' 12

This project was supported by The University of North Carolina at Chapel Hill (UNC-CH) - United States Agency for International Development (USAID) and was led by Dr ABHAY SARAF

SOCIAL ASSESSMENT STUDY UNDER REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME (RTNCP)-II

Geographical Location: DELHI

The main purpose of this study is to understand the socio-economic, cultural and contextual factors that determine access, utilization and compliance with services provided under RNTCP by identified population groups. The primary objectives of the study are to: (i) understand the health seeking behavior of the marginalized and vulnerable groups and its socio-cultural context, (ii) to identify the barriers and facilitating factors associated with full utilization of services, in terms of accessibility, acceptability and affordability, both for diagnosis and treatment under RNTCP, by marginalized and vulnerable groups, and (iii) to recommend strategies for improving programme protocol and strengthening the programme interventions, to ensure better provision of services to the above-mentioned groups.

The study sites were eight districts selected across five states (AP, Assam, Odisha, Rajasthan, UP). The study focussed on the tribal and urban slum populations from among the marginalized and vulnerable groups in these districts. The research activities which included systematic literature review, programme data analysis and primary data

collection have been completed. Data analysis and report writing is in progress. The report will be submitted by the end of this month.

Project duration: APR' 11 to DEC' 11

This project was supported by Central Tuberculosis Division, Ministry of Health & Family Welfare - International Development Association and was led by Dr GARIMA PATHAK

BUILDING INTER-SECTORAL TRAINING AND RESEARCH CAPACITY FOR COMBATING ZOO NOTIC INFECTIONS IN INDIA

Geographical Location: DELHI

Zoonotic diseases are of growing national and international significance with regard to health, food safety, trade, security and economics. Up to 60% of the known agents infecting humans are zoonotic in origin and up to 75% of the emerging infections (e.g. avian influenza H5N1, Severe acute respiratory syndrome (SARS), Ebola/ Marburg etc.) are zoonotic in origin. Prevention and control of zoonoses thus requires a multi-dimensional, integrated system-wide approach that is more complete and efficient compared to compartmentalized models operating under sectors.

Roadmap to Combat Zoonoses in India (RCZI) Initiative was thus launched in March 2009 as national level endeavour on multi-sectoral collaborative research, capacity building and advocacy for prevention and control of zoonoses. The Public Health Foundation of India is the nodal agency for RCZI. The current project seeks to consolidate and expand upon the achievements of RCZI in the last year through research, training and advocacy initiatives.

The expected objectives of the project are: 1) To consolidate and foster multi-sectoral partnership and linkages through coordination meetings of the Joint Working Technical Group; 2) To peer review the multi-sectoral capacity building training package for district officers on Integrated Prevention and Control of Zoonoses; 3) To pilot test the training package on Integrated Prevention and Control of Zoonoses; 4) To peer review the framework for targeted advocacy on 'recommendations for revision of medical curriculum for re-orientation of zoonoses related

content; 5) To peer review the recommendations for medium to long term communication strategy for zoonoses prevention and control in India.

The expected outcomes (and products) of the project are as follows: 1) Inter-sectoral coordination mechanism established under the previous year's activities of RCZI (Joint Working Group) consolidated; 2) Short term and long term capacity building tools developed (three day training package for scale up developed and framework for advocacy for the revision of medical and veterinary curricula finalized); 3) Health communication and health promotion strategic frameworks developed for dissemination (medium to long term health communication strategy).

The grant enabled resuming of the RCZI Joint Working Group (JWG) meetings. Two interactions of the multi-disciplinary JWG were organized in August and September, respectively. The national experts discussed the progress made in intersectoral coordination, multi-sectoral research collaborations and capacity strengthening related to zoonoses in India over the previous year. The JWG reviewed the progress and recommended support measures for resource mobilization, collaborative research initiatives, including mapping of existing institutional capacity and popularisation of the Strategic Research Agenda, and capacity building initiatives such as review and testing of ToT on one health for frontline health workers, and medical curriculum revision exercises. The second Joint Working Group Meeting coincided with a symposium on one health research with the additional participation of University of California, Global Health Institute. A range of issues related to one health research and capacity building were discussed in the symposium. Representative research studies were presented and discussed from the US and Indian sides. Innovative measures to foster long term research networks were presented by RCZI partner institutions in addition to a list of priority research themes that could be taken up by Indian and US partners.

Project duration: MAY' 11 to SEP' 11

This project was supported by WORLD HEALTH ORGANIZATION and was led by Dr MANISH KAKKAR

REGIONAL CONSULTATION ON 'ONE HEALTH'

Geographical Location: DELHI

The One Health Alliance of South Asia (OHASA), formed in 2009 by EcoHealth Alliance (ecohealthalliance.org), aimed to develop a cohesive network of inter-governmental and inter-organizational entities in support of the One Health perspective. The One Health perspective emphasizes that the health of humans, animals, and ecosystems are inter-connected and therefore requires experts from various scientific fields to work together to address global health challenges. OHASA members are focused on research and policy initiatives related to emerging and endemic zoonoses, particularly viral pathogens such as rabies, avian influenza, Nipah virus, and others, which are significant trans-boundary health issues in South Asia. The long-term goal of OHASA is to develop a sustainable network of scientists and policy makers with representation from each member country to support targeted trans-boundary and trans-national collaborative research programmes; and to provide timely expert information to government agencies that can be used to inform policies for collaborative approach to disease control. The Public Health Foundation of India (PHFI) is a member of the OHASA steering committee.

In the series of meetings organised by EcoHealth Alliance under the One Health initiative, this consultation was held in New Delhi (India) on July 31 - August 01, 2012 in partnership with PHFI. The goal of the meeting was to develop consensus for the utility of a One Health Alliance in South Asia and gain multilateral endorsement to proceed as a working group of experts committed to identifying strategic priorities and pursuing opportunities for funding that will promote the long-term sustainability of the network. A white paper was produced by the attendees and the OHASA Steering Committee on the need for such a network, the goals of the network, and a draft roadmap as suggested by the participating countries.

Project duration: MAY' 12 to AUG' 12

This project was supported by EcoHealth Alliance and was led by Dr MANISH KAKKAR

EXPERT CONSULTATION FOR MODEL DISSEMINATION AND IDENTIFICATION OF NEXT STEPS FOR RABIES CONTROL EFFORTS IN TAMIL NADU

Geographical Location: TAMIL NADU

Reports from 2009 suggest that Tamil Nadu has made a coordinated effort involving public health and animal husbandry agencies, putting in place interventions like Animal Birth Control - Anti-Rabies (ABC – AR) and universal vaccine supply to address this public health challenge. These have led to a substantial reduction in rabies incidence in the state. With the technical and financial support of the WHO Country Office in India, Road Map to Combat Zoonoses in India (RCZI) undertook the challenging task of appraising the rabies control initiative in Tamil Nadu, reviewing intervention strategies of the programme and documenting their effect on the status of dog bite and rabies cases.

The RCZI activity follows upon the earlier assessment of the rabies control initiative in Tamil Nadu conducted by PHFI. RCZI aims to disseminate PHFI findings to state officers and national experts for their feedback. It also seeks to identify next steps on rabies control in rural areas of Tamil Nadu in consultation with relevant stakeholders. Consequently, a national expert consultation on rabies control was organized in Chennai on 9-10 August, 2011 in technical collaboration with Directorate of Public Health, Government of Tamil Nadu.

Specific objectives of the activity are as follows: 1) To disseminate the findings of Tamil Nadu rabies control initiatives to stakeholders in Tamil Nadu and outside; 2) To seek expert inputs for further improvement of rabies control interventions and their implementation in Tamil Nadu; 3) To identify next steps in rabies control in Tamil Nadu with special focus on rabies in rural areas

Expected outcomes (and products) from the project are: 1) Advocacy for rabies control conducted and best practices of rabies control in Tamil Nadu disseminated to stakeholders in Tamil Nadu and other states; 2) Rabies control initiative in Tamil Nadu further refined with help of expert inputs; 3) Roadmap developed for more effective control of rabies in rural Tamil Nadu.

The consultation was organized successfully in Chennai on 9-10 August in Chennai with a wide selection of participants ranging from state programme managers, researchers and donor agency representatives from human health and animal health sectors. The experts discussed different aspects of the rabies control initiative being implemented in Tamil Nadu. They suggested that the rabies control initiative in Tamil Nadu has demonstrated the operational feasibility of population based interventions for rabies control in India. The experts advocated the Government of Tamil Nadu to consolidate current rabies control efforts under a common strategic vision for a rabies control programme in the state.

Project duration: MAY' 11 to Sep' 11

This project was supported by World Health Organization and was led by Dr MANISH KAKKAR

Ongoing

THE HIV/AIDS PARTNERHIP: IMPACT THROUGH PREVENTION, PRIVATE SECTOR AND EVIDENCE-BASED PROGRAMMING

Geographical Location: MAHARASHTRA, UTTAR PRDESH, ODISHA, UK

The Private Sector and Evidence-based Programming (PIPPSE) Project, will include strategies that would enhance the institutional and human capacity of the National Aids Control Organization (NACO), State AIDS Control Societies and other related institutions to respond to the HIV/AIDS epidemic effectively. This objective will be accomplished by supporting innovations that will strengthen systems to improve the quality of planning, implementation, monitoring and evaluation of prevention programmes, as well as the prevention to care continuum, including private sector engagement. The goal is to contribute to India's national strategy of saturating coverage of most-at-risk-populations (MARPs), and to provide high quality prevention services to reduce HIV prevalence among MARPs and the general population by 25 percent from the baseline (first year: 2012), over five years in selected states. The overarching strategy of this project is to support multiple national level innovations using experimental designs that will

produce significant breakthroughs in the prevention to care continuum, including private sector models leading to impact in containing the HIV epidemic in the country. The United States Agency for International Development (USAID), through this project, will assist the Government of India in scaling-up proven innovations and take steps to support their replication globally.



Project duration: JUN' 12 to MAY' 17

This project is being supported by United States Agency for International Development (USAID) and is led by Dr SUNIL S. RAJ

COST-EFFECTIVENESS OF ANTI-RETROVIRAL TREATMENT AND ITS DETERMINANTS

Geographical Location: ANDHRA PRADESH, RAJASTHAN

This study will gather data across anti-retroviral treatment (ART) facilities in Andhra Pradesh and Rajasthan states to understand and attempt to quantify the costs and constraints of ART service delivery within each state. Comparable cost effectiveness estimates will be computed and the quantities of the intermediate outputs required to deliver ART will be determined. The ultimate goal of this costing exercise will be to calculate the cost of delivering ART specific interventions in a variety of settings. Analysis of qualitative data will enable contextualising the quantitative findings. A variety of well-established econometric methods will be employed to explore the relationships between inputs, intermediate outputs, health outcomes, and total costs of ART services. It is expected that this empirical work will enable decision-makers to use evidence to identify the costs and consequences of different policy options. This study will detail ART service provision bottlenecks

and cost-effective policy/strategy options for improving ART service provision in India.

The study protocols are being developed and the data collection will begin soon.

Project duration: JAN' 12 to NOV' 12

This project is being supported by University of Washington; Bill & Melinda Gates Foundation and is led by Dr LALIT DANDONA

Health promotion & Tobacco Control

Project STEPS: Project STEPS (Strengthening Tobacco control Efforts through innovative Partnerships and Strategies) is a multi-component tobacco control intervention project being implemented in six districts each of the two states, Andhra Pradesh and Gujarat. The project is funded by the Bill and Melinda Gates Foundation.

Community Component: Several activities have been undertaken at the community level in partnership with 15 NGOs in the two states. Community walks (5121) and wall writings (3914) with tobacco control messages covered over 3500 villages, including remote and tribal areas. Self Help Groups (SHGs) with more than 700 members were formed to sensitize and motivate tobacco users to quit. Volunteers were also engaged as vigilante reporters to monitor violations and write about tobacco control efforts in their districts. The efforts at the community level have generated wide media attention towards tobacco control in the two states. News clippings related to tobacco have been monitored covering 36 Newspapers and more than 2100 clippings have been analyzed so far.

As part of policy implementation, the district and sub-district administrations have been sensitized to tobacco control. More than 1500 law enforcers have been trained on enforcement of tobacco control laws in 56 orientation and training workshops conducted at district and sub-district level in the two states. Further, tobacco control has been on the agenda in 56 inter-disciplinary review meetings (40 in Gujarat and 16 in Andhra Pradesh) held at the sub-district level.

Health Systems Component: Active engagement with health professionals has been established under the project with trainings of medical officers in each district. At the primary health care level around 750 health professionals have been trained so far in the two states. The trainings prepare medical officers and other health professionals to effectively screen for the tobacco use status of a visitor, provide them with methods of brief intervention advice, and how to play a leadership role in their respective health facilities to deal with the tobacco burden in the community.

Distance Learning: Two batches taking the Short term course (STC) have successfully completed the course. They included professionals from various disciplines trained in tobacco control. The third batch has commenced. The Centre for Tobacco Control in Africa (CTCA) has also indicated interest to PHFI for building capacity of their staff in tobacco control. A team of delegates from the College of Medicine, University College Hospital, Ibadan, Nigeria will be visiting PHFI to discuss further capacity building.

Youth Empowerment Component: A successful and cost-effective school-based tobacco use prevention intervention is being scaled up in approximately 1,000 schools in the two intervention states. Teachers' and student Peer Leaders' trainings are ongoing with approximately 1,200 teachers and 6,000 Peer Leaders trained. All intervention material has been developed in partnership with the state governments.

Economics of tobacco: Looking at the economics of growing tobacco, data was collected from 6,000 households to find out which were the alternative crops to tobacco which could be grown in India. Data is also collected from tobacco vendors to study their dependence on tobacco and suggest economically viable alternatives for them. The project overall is effectively monitored for its cost effectiveness.

Advocacy: An official launch of training films, developed as part of STEPS project for capacity building of professionals, was done in partnership with MoHFW. The training films have been shared with all state governments for wide dissemination and trainings at grassroots level. Advocacy for implementation of section 6(a) of COTPA (requiring display of warning boards at point of sale against sale of tobacco products to minors) was undertaken with the help of partnering NGOs in each district. A total of 3,028 vendors complied with the provision under STEPS districts. This is the first attempt in the entire country to display these boards, which were notified by the Government of India last year.

Dissemination of initial findings/sharing knowledge and experiences: STEPS data has been presented at international conferences including eight abstracts at the 15th World Conference on Tobacco OR Health, three at the 2012 World Cancer Congress, and one at the third

European Conference on Qualitative Research for Policy Making.

Pongalipaka - the tobacco-free village: PHFI's local NGO partner 'NATURE' is implementing a community intervention programme on tobacco control under Project STEPS in Vishakhapatnam. The NGO approached the villagers of Pongalipaka to form SHGs for mobilizing the community to promote tobacco



control activities and provide an avenue for cessation counseling to tobacco users. The NGO sensitized the *Sarpanch* of the village in a one to one meeting on tobacco control. Further a few SHGs already working in the village were mobilized to sensitize women, youth and tobacco users on the ill effects of tobacco. The NGO workers along with the SHG members of the village educated and persuaded the eight shopkeepers in the village not to sell tobacco products in the village who have now stopped selling tobacco products for the benefit of their own people. The *Sarpanch* has assured the shopkeepers that he will arrange loans through banks so that they can switch over to other profitable businesses like *addaku* – local made plates used to serve food. Now, Pongalipaka is a village free from tobacco. About 60 members are working as *Bharat Nirman* volunteers in the village and they are also helping the village people to stay away from tobacco products.

Smoke-free/Tobacco-free Awards: The Governments of Andhra Pradesh and Gujarat in collaboration with PHFI have invited applications from *Panchayats*, municipal bodies and educational institutions to recognize outstanding leadership and excellence in promoting effective smoke free/tobacco free policies. The awards were announced on the occasion of World NO Tobacco Day on May 31, 2012. The award will be given under two categories i.e. Smoke-free *Panchayats* and Municipal **Corporations** and Tobacco-free

Educational Institutions. The awards will be announced soon by the respective governments.

WHO Director General's award for contribution to tobacco control: On the occasion of World No Tobacco Day, 2012, Dr. Monika Arora, Head: Health Promotion and Tobacco Control, PHFI, was awarded the World Health Organization Director General's Award in recognition of her outstanding contribution to tobacco control in India. The award was handed over to Dr. Arora by the WHO Representative for India Dr. Nata Menabde in an official function organised by WHO and MoHFW on May 31, 2012 at Nirman Bhawan, New Delhi.

Plain Packaging of Tobacco Products in India: A joint Australia-India Taskforce of Tobacco Control experts has been constituted between the Australia India Institute, the Nossal School of Global Health at the University of Melbourne, Australia, PHFI, HRIDAY (Health Related Information Dissemination Amongst Youth) and the International Union for Tuberculosis and Lung Disease (The Union). This Taskforce has been established to determine whether plain packaging legislation for all types of tobacco products is a viable tobacco control measure for India. Dr. K. Srinath Reddy is the Indian Chair of this Taskforce.

The Policy Document has been disseminated to all MPs. The tobacco control unit is under discussion with a senior and respected MP who has submitted a Private Members' Bill on plain packaging in the Lok Sabha. Currently, discussions are underway at PHFI with respect to the next steps regarding advocacy with policy makers, and further research on trade and legal issues pertaining to plain packaging of tobacco products.



The members of this joint Australia-India Taskforce have developed a Policy Document that describes the developments of the plain packaging movement in Australia and also provides the evidence that has been gathered to support the feasibility and acceptability of plain packaging in India, through multi-stakeholder analysis and market research. The Policy Document was released in July 2012 by senior officials from the MoHFW and Members of Parliament (MPs). The document can be accessed at www.ctchp.org

Capacity building

PHFI-UK CONSORTIUM WELLCOME TRUST CAPACITY BUILDING PROGRAMME

Four committees involving members from PHFI/IIPHs and the UK Consortium Universities steer the work of the PHFI-UK Consortium Wellcome Trust Capacity Building Programme. The Teaching & Training Committee, Research Committee, Evaluation Committee, and the Executive Committee work in close consultation with one another. Over 75 persons have had, or are having, research, teaching and training capacity built systematically under this programme for contributing to public health in India.

Achievements: Sixteen doctoral candidates are currently in various stages of doctoral study under this Wellcome Trust Strategic Award. Each candidate is expected to complete the doctoral study in three years, which includes one year in the UK and two years of research/field work in India. These candidates are presently undergoing their research phase in India and are associated with PHFI/IIPHs. One candidate is due to start her doctoral study this year. Six more candidates have been selected for the doctoral study and are currently awaiting placement at the UK universities.

Eleven candidates have received Masters training up to September 2012 under this Wellcome Trust Strategic Award. Post completions of their Masters, the candidates returned to India and have been placed in PHFI/IIPHs in various capacities. Four candidates recently started their Masters study at the London School of Hygiene and Tropical Medicine and Liverpool School of Tropical Medicine.

Ten India-based and five UK-based research fellowships have been awarded so far to PHFI/IIPH faculty/research staff. The India-based research fellowships are based at PHFI and/or IIPHs and are expected to be completed within two years. Each research fellow is paired with a supervisor in India and UK. The UK-based research fellowships are based at the partner institutions in the UK. The duration of this

fellowship is up to eight months. Each fellow is paired with a supervisor in India and UK.

Two large research grants contributing to the capacity building of 11 researchers and 15 small research grants have been awarded so far. The research under these grants is based at PHFI/IIPHs, includes collaboration with UK partner institutions and is aimed at capacity building in public health research at PHFI/IIPHs.

Eight short courses have been held so far under Wellcome Trust Programme that had a total of 181 participants. Out of these courses, four short courses have been held at IIPH Delhi in collaboration with University of Bristol, London School of Hygiene and Tropical Medicine and University College London; one at IIPH Gandhinagar in collaboration with University College London; and three at IIPH Hyderabad in collaboration with London School of Hygiene and Tropical Medicine and University of Leeds. The plan is to develop and deliver 6 short courses each calendar year for the remainder of the programme.

The Faculty Exchange Visits programme encourages staff of PHFI/IIPHs and the UK partner to apply for visits from India to UK and from UK to India. Supervisors of doctoral students and research fellows are particularly encouraged to apply.

Plans for future

- Recruit PhD candidates for training in areas that need further strengthening at PHFI/IIPHs on priority.
- Develop further research capacity at PHFI/IIPHs through awarding of research fellowships and research grants.
- Organize and deliver more short-courses in India on priority topics through teams of UK and India faculty.
- Develop distance learning modules in collaboration with UK partner institutions.

Enhance faculty exchanges between PHFI/IIPHs and the UK Consortium partners with tangible expected outcomes

Completed

GIVE 2 ASIA GRANT FOR IIPH DELHI

Geographical Location: DELHI

Give 2 Asia is a U.S. non-profit corporation and Canadian public charity founded by the Asian Foundation to promote charitable giving from the U.S. and Canada to Asia. Give 2 Asia approved a grant to the Public Health Foundation of India (PHFI) to support public health education in India, which was made possible by the Deshpande Foundation fund. Part of the grant supported operations for a new public health institute in Delhi, while the remaining funds were added to PHFI's corpus fund.

The grant has been used for developing the infrastructure of the Indian Institute of Public Health -Delhi. The Institute offers four post graduate diploma programmes, a few short-term training programmes and workshops. A number of research projects have been undertaken by the faculty at the Institute which include mother and child health, neonatal health, pharmaco-economics and an assessment of the implementation of the PNDDT Act, to name a few.

Project duration: NOV' 08 to NOV' 11

This project was supported by Give 2 Asia and was led by Prof K SRINATH REDDY

STRENGTHENING THE CAPACITY BUILDING INITIATIVE OF SIHMC, GWALIOR- 2ND PHASE

Geographical Location: MADHYA PRADESH

The Post-Graduate Diploma in Public Health Management (PGDPHM) was designed to bridge the gap in public health managerial capacity amongst health professionals in the context of the National Rural Health Mission. The development of a sustainable, robust and dynamic health cadre can address the state's public health challenges. The Public Health Foundation of India is collaborating with the Government of Madhya Pradesh in offering the Post Graduate Diploma in Public Health Management at the State Institute of Health Management and Communication (SIHMC) - Gwalior.

The academic year 2011-12 has been successfully completed at SIHMC-Gwalior. The students of the

second batch at the Institute have successfully completed the PGDPHM final examinations and results have been declared.

Project duration: AUG' 11 to JUL' 12

This project was supported by Government of Madhya Pradesh and was led by Dr SANJAY ZODPEY

STRENGTHEN PUBLIC HEALTH WORKFORCE CAPACITY IN INDIA BY ESTABLISHING NEW INSTITUTES OF PUBLIC HEALTH, UNDERTAKING RESEARCH, ADVOCACY, POLICY INFORMATION ACTIVITIES, STRENGTHENING EXISTING INSTITUTIONS AND FACILITATING ESTABLISHMENT OF STANDARDS IN PUBLIC

Geographical Location: DELHI, GUJARAT, ANDHRA PRADESH

The Public Health Foundation of India has received a grant from Pfizer for the purpose of offering and administering educational scholarships at one or more of the four Indian Institutes of Public Health (IIPH). This scholarship would be awarded to meritorious students who propose to dedicate themselves to improving health care in rural areas of India and who are motivated to work with multiple partners including the government, non-government and industry. The grant will be used to support the selected candidates in the coming academic years at the IIPHS- Delhi, Hyderabad and Gandhinagar which offer the following programmes: 1) Post graduate diploma in Public Health Management (PGDPHM); 2) Post graduate diploma in Biostatistics and Data Management (PGDBDM); 3) Post graduate diploma in Health Economics, Health Care Financing and Health Policy (PGDHEP); 4) Post graduate diploma in Clinical Research (PGDCR).

In the first year (academic year 2009-10), we did not utilize any of the grant amount. In the second year (academic year 2010-11), we utilized Rs 9.75 lakhs to offer scholarships to 18 participants across the IIPHS. In the third year (academic year 2011-12), a total amount of Rs. 17 lakhs is being utilized to offer scholarships to 33 candidates across the various IIPHS. The remaining amount of Rs. 3,25,000/- will be disbursed as scholarships in

the next academic year 2012-13 across the various IIPhs.

Scholarship details:

2010-11:

- IIPH-D: PGDHEP- 3,00,000, PGDCR-3,50,000;
- IIPH-H: PGDBDM- 2,50,000
- IIPH-G: PGDPHM- 75,000

2011-12:

- IIPH-D: PGDHEP- 2,00,000; PGDCR-3,00,000; PGDPHM- 5,00,000
- IIPH-H: PGDBDM- 1,00,000; PGDPHM - 1,50,000
- IIPH-G: PGDPHM: 3,50,000
- IIPH-B: PGDPHM: 1,00,000

Project duration: MAY' 09 to JUN' 12

This project was supported by Pfizer Inc. and was led by Dr SANJAY ZODPEY

TRAINING OF ANMs IN KASTURBA GANDHI BALIKA VIDYALAYAS

Geographical Location: ANDHRA PRADESH

Adolescents constitute one-fourth of the Indian population. While an apparently healthy group, they face a number of physical, mental, sexual, economic and social challenges. Adolescence is a critical period of development in a person's life with dramatic physical and emotional changes. How we take care of adolescents will determine India's future health. With this consideration, we proposed to conduct a training programme for the auxiliary nurse midwives (ANMs) of 358 Kasturba Gandhi Balika Vidyalayas (KGBVs) on adolescent health issues, with emphasis on menstrual health and hygiene, anaemia and nutrition.

About the Course: A three day residential training programme aimed at providing an overview of Adolescent Reproductive and Sexual Health, in the context of a holistic approach to adolescent girls at residential schools. The programme consisted of interactive sessions to build knowledge and skills of participants on core topics regarding adolescent health.

Training attendees: This course is intended for health care providers, namely the in-charge ANMs of KGBV schools who were involved in screening, counseling and referring adolescents regarding

growth, nutrition, communicable disease and for any risk behaviour (sexual & substance abuse). The participants were deputed by the Rajiv Vidya Mission from their respective regions. The language of communication was Telugu, English and Hindi.

Take Home: 1) The participants were provided with resource materials on Adolescent Health to include: a) Reproductive and sexual health including HIV; b) Personal and menstrual hygiene; c) Communicable disease management; d) Nutrition; e) First aid; f) Healthy lifestyles in adolescents; 2) Certificate of participation: Six hundred of the ANMs posted in KGBVs under Government of Andhra Pradesh's Rajiv Vidya Mission (Sarva Siksha Abhiyan).

All the districts of Andhra Pradesh were covered and additionally 50 biology teachers were trained on adolescent health with emphasis on menstrual health and hygiene, anaemia and nutrition.

Project duration: MAY' 12 to JUN' 12

This project was supported by Kasturba Gandhi Balika Vidyalayas Society-Government of Andhra Pradesh and was led by Dr M JAYARAM

DISTANCE LEARNING EPIDEMIOLOGY PROGRAMME FOR NATIONAL HEALTH SYSTEMS RESOURCE CENTRE (NHSRC) UNDER THE INTEGRATED DISEASE SURVEILLANCE PROGRAMME (IDSP)

Geographical Location: DELHI

The NHSRC, on behalf of IDSP, is involved in capacity building of the recruited technical consultants (epidemiologists) at district and state positions. As part of this exercise, NSHRC has given a grant to PHFI to develop five distance learning modules on epidemiology. The course is a blend of classroom learning and field experience designed on distance learning principles with opportunities for students to engage in offline learning (through CDs) blended with contact training sessions. The course material has been developed and delivered in the form of interactive self-learning CDs. PHFI has been tasked to customize Distance Learning Epidemiology modules in terms of the context and content as per requirement of the NSHRC, with internal checks for relevance before submitting to the NSHRC for review.

Once NSHRC has approved the content, the learning materials would be subjected to instructional design to make the modules interactive. CD's would then be burnt and the products submitted to NSHRC. At this time all five modules (Fundamentals of Epidemiology, Basic Statistics, Communicable Diseases, Non-communicable diseases and Scientific Writing) have been shared with NSHRC and we are awaiting their comments.

Project duration: APR' 10 to MAY' 12

This project was supported by National Health Systems Resource Centre-Ministry of Health and Family Welfare and was led by Ms VIJAYLUXMI BOSE

Ongoing

DEVELOPING INNOVATIVE METHODS TO ENHANCE THE UTILITY OF THE HEALTH INFORMATION SYSTEM OF INDIA IN UNDERSTANDING DISEASE BURDEN AND IN EVALUATING THE IMPACT OF POPULATION HEALTH INTERVENTION

Geographical Location: INDIA

This project will provide major methodological advances in analyzing the diverse range of population health databases in India - to better understand the estimation of disease burden trends, the determinants of disease burden and the impact of major health interventions on population health status - through the application of advanced statistical methods to databases and holistic interpretation of findings. This research is important for better utilization of the rich and increasing large-scale health data from various sources in India. This study should, therefore, be of substantial use to health research on national priorities as it will deal with the leading causes of disease burden and health system priorities in India.

Project duration: JAN' 12 to DEC' 14

This project is being supported by Indian Council of Medical Research and is led by Dr LALIT DANDONA

Other initiative

AFFORDABLE HEALTH

Affordable Health Technologies drive innovations that are defining future approaches to information, education and knowledge management in clinical care, and public health. The need for health technology infrastructure, personal health technologies and e-enabled health delivery and financing is well recognized in the healthcare arena but often lack of coherent health technology policy, well designed technologies and the lack of a technology proficient workforce is a barrier to fully realize the benefits of health IT. In the affordable health technologies division of Public Health Foundation of India, we aim to develop a multi-pronged approach for the Indian public to leverage health technologies to obtain better health. Our mission comprises of creating the right ecosystem for health technologies adoption, creating core technologies as well as defining a methodology to create systems that address the needs of public health system and using technology for better education of the healthcare workforce.

Swasthya Slate

The aim of this project is to employ affordable tablet platforms, interface healthcare diagnosis sensors to the tablet and provide software for decision support systems and best practices. The ruggedized, tablet design will include provisions for working on several exchangeable battery packs that can be charged separately.

The Swasthya Slate has evolved from being a concept of an affordable tablet with diagnostic capability to a designed, developed and evaluated prototype device that has the capability to perform the following diagnostics:

1. Blood Pressure
2. Blood Sugar
3. Blood Haemoglobin
4. Heart Rate
5. Water Quality (Total Suspended Particles in Water)
6. Electrocardiogram
7. Body Temperature
8. Urine Protein

The Swasthya Slate includes specialized applications that help users perform a variety of

screenings and health analysis protocols. It allows users to deliver fast and accurate care at home, in clinics and just about anywhere. It contains decision support tools to enable users to deliver quality recommendations for achieving better health.



The slate stores electronic medical records both locally on the phone/tablet and also pushes the data onto our cloud. This allows offline/online operations and doctor on call services. Explore our website for more information.

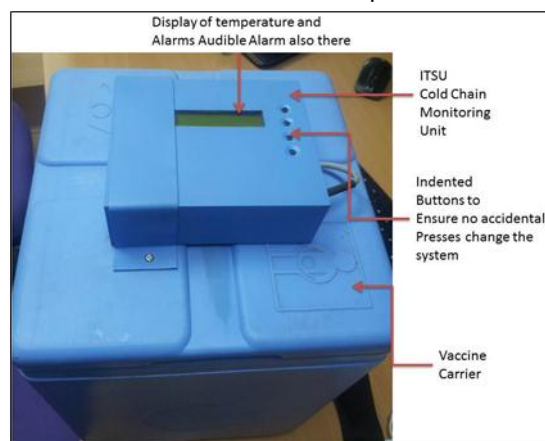
From a design perspective we are on a third iteration that will include an onboard printer, 12 lead ECG and a hardware lock.

We have tested the device in Andhra Pradesh where it was used to screen 134 individuals. Our device performance met all the metrics and from a screening perspective we were able to recognize high risk and medium risk individuals. We have also developed a partnership with ehealthpoint in Punjab where the device is being used by ANMs to screen and monitor the health of mothers.

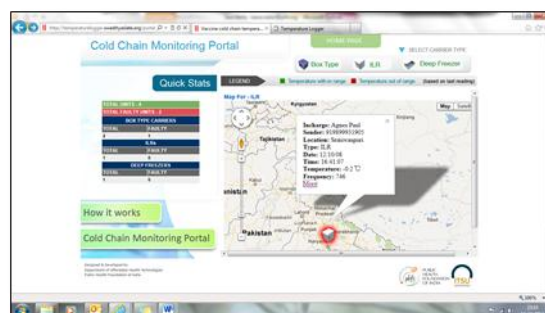
We are now rolling out full-fledged pilots in Andhra Pradesh, Jammu and Kashmir and working with the central government on pilots covering 3-4 districts.

From a dissemination perspective we have been featured in several news stories, both nationally and internationally and presentations on the device have been made in various forums. One can view a selection of these and more information on the website www.swasthyaslate.org

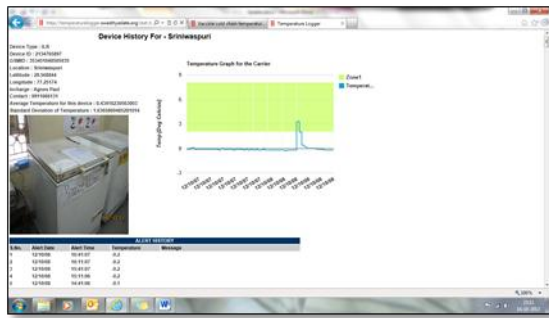
Vaccine Temperature Monitoring: Vaccine temperature monitoring or cold chain monitoring is a human intensive task which can lead to ineffective vaccines when not performed correctly. In collaboration with the ITSU team in PHFI, the affordable health technologies division has worked on a unique technology solution. We have designed and developed a vaccine temperature sensor which monitors the temperature of the



vaccines and stores the result in a cloud with the geographical location of the device. If the temperature is outside range it sends an alarm SMS to the server which then sends the alarm to concerned officials who can perform intervention. Evaluated in Srinivaspuri PHC in New Delhi, it shows the ease with which the device can be setup and used. The temperature of the Srinivaspuri vaccine refrigerator can be monitored on <http://temperaturesensor.swasthyaslate.org>. We are now in the process of rolling out this service in 50 centres in Bihar.



GPS position of vaccine sight monitored with colour coding to depict their status of temperature.



Detailed log of temperature for a site with graphs and picture of the installation.

Mental Health video Games: Working in collaboration with DRDO, (Defence Research Development Organization) PHFI is designing, developing and evaluating video games that can screen players for mental health issues and further can provide mental health interventions. We have completed design of a framework for designing games for cognitive assessment and using the ubiquitous nature of computing to serve as a platform for mental health screening. The proposed framework to assess cognitive abilities through games involves embedding the neuropsychological tests within the game structure. To establish the viability of this concept a pilot study was carried out. On the basis of this framework, a prison themed game was developed with the aim to assess the player's level of stress. Stress affects working memory and attention span. Digit span test is a neuropsychological test used to measure working memory. The prison game represents an implementation of this test in gaming scenario. Thus, stress levels of a person can be identified by working memory assessment through this game. The validity of such a game is demonstrated through an experiment. The results of the experiment analysis indicate that the short term stress experienced by the players can be successfully predicted based on the performance in the cognitive game.

The key in the development of these games is the ease by which we can screen individuals. Mental health is a taboo subject and often people do not get screened or seek treatment. By developing games that can reach wide masses, we can screen individuals and offer them help. This is a key feature of our system.

A paper on this concept has been sent to the IEEE conference on Ambient Systems to be held in Greece 2013.

Estimating the need for medical devices for universal health coverage:

As India strives to achieve universal health coverage, one under-explored area lies in the need for medical devices. In a study funded by American Chambers of Commerce, PHFI is exploring the need for medical devices and the framework required for their acquisition, maintenance and use to support the mission of universal health coverage. The report is a unique report which for the first time studies the need of medical devices from a public health perspective. It will be presented in November to the Central Government and the Planning Commission for discussion and policy planning on the issue.



Centres of Excellence (CoE)



CENTRE OF EXCELLENCE IN CARDIO-METABOLIC RISK REDUCTION IN SOUTH ASIA (COE-CARRS)

The Centre of Excellence in Cardio-metabolic Risk Reduction in South Asia (COE-CARRS) at PHFI is one of the 11 Centres of Excellences worldwide funded jointly by the National Heart, Lung and Blood Institute (NHLBI), USA and Chronic Disease Initiative, UnitedHealth Group, USA. PHFI and Emory University are the lead partners with the All India Institute of Medical Sciences (AIIMS), Aga Khan University (AKU), Karachi, and the Madras Diabetes Research Foundation (MDRF) functioning as network partners. The Centre for Chronic Disease Control, New Delhi (CCDC) functions as the Scientific & Executive Secretariat of CARRS.



The broad aims of this centre are to conduct translational research, build capacity and connect science with policy, with special focus on cardio-metabolic disease prevention and control in South Asia. The research team at CARRS is led by seven eminent academicians in South Asia and the US. In addition, nine other research scientists lead the research projects at CARRS.

Core Research Projects:

There are two major research projects under COE CARRS - CARRS Surveillance Study and CARRS Translation Trial. The details of the the research activities can be found at the website of CARRS (<http://www.coecarrs.org>)

1.

CARRS Surveillance Study: CARRS Surveillance Study aims to develop a model surveillance system for cardio-metabolic diseases in South Asia. It is a hybrid cohort-modelled cross-sectional multi-centre

surveillance study and has three sites; Chennai (India), Delhi (India) and Karachi (Pakistan). It projected recruitment of 12,000 adults aged ≥ 20 years by a multi-stage cluster random sampling methodology, stratified by gender. We completed baseline assessment of 12,000 participants by January 2012. To compensate for attrition during follow up, additional recruitments were made by leveraging funds from other sources. By September 2012, 14,230 participants were recruited in all three sites and we have created a bio-bank of DNA, Serum and urine of 12,000 adults. In addition, we have completed the first follow up of 10,000 of these participants with a 90 percent response rate. In addition to achieving its objectives, the Surveillance Study has provided an excellent platform for a number of sub-studies by young researchers.

Sub-studies with CARRS Surveillance:

1. Fruit and vegetable purchasing patterns and preferences in South Delhi.
Investigator: Lauren Finzer
Status: Completed and paper is accepted for publication
2. Social network analysis of cardiovascular risk in Delhi, India – A pilot study
Investigator: Laura Kelly
Status: Data collection has been completed and analysis is ongoing
3. Practices Related to Purchase/Use of Cooking Oil, Reheated Oil, Ghee, and Butter in Urban Delhi Households
Investigator: Veena Kekineni
Status: Data collection has been completed and analysis is ongoing
4. Social and Cultural Aspects of Stress, Depression, and Diabetes in Urban India
Principal Investigator: Emily Mendenhall
Status: Completed and paper has been accepted for publication
5. Prevalence of Poly Cystic Ovarian Syndrome (PCOS) in Delhi and Chennai
Investigator: Samara Rifkin
Status: Data collection has been completed in Chennai and is ongoing in Delhi
6. Psychiatric determinants of CVD in Urban India
Investigator: Gitanjali Narayanan
Status: Data collection is ongoing
7. Assessment of dietary salt intake levels among adults in Delhi and Haryana, India.
Investigator: Sailesh Mohan

Status: Data collection is ongoing

Publications: One article has been published and two have been accepted for publication.

2. CARRS Translation Trial: The objective of CARRS Translation trial is to test whether a clinic-based case management intervention to reduce cardiovascular disease (CVD) risk among Type 2 diabetes patients in South Asia is more effective and sustainable compared to existing care. The intervention uses non-physician care coordinators to help patients improve their care and follow-up, as well as decision-support software to help physicians care for their patients. The study is a multi-site, individually randomized, controlled translation trial of a cardiovascular risk reduction intervention in 1,120 Type 2 diabetes patients attending 10 established out-patient clinics in South Asia (9 in India and 1 in Karachi), over an average of 30 months. Since the study aims to reduce CVD risk factors like elevated blood glucose, blood pressure, and cholesterol; participants eligible for the study are patients with Type 2 diabetes and poorly controlled blood glucose (HemoglobinA1c [HbA1c] $\geq 8.0\%$) as well as either high blood pressure (systolic blood pressure [SBP] ≥ 140 mmHg) and/or high cholesterol (LDL-cholesterol ≥ 130 mg/dl).

We completed recruitment on 31 August 2012 and the total number of participants recruited for the trial is 1,146. The trial is now in the follow-up phase and we expect to complete an average of 30-month follow-up by the end August 2014.

Achievements: 1) Development of web based decision support software for the cardiovascular risk management among patients with Type-2 Diabetes Mellitus and 2) Training of ten non-physicians in diabetes management, counselling and use of decision support software

Publication: One article has been published.

Other completed/ on-going research projects of COE-CARRS/CCDC

A. Epidemiological

- 1. Alcohol Relapse Project:** This study examines the risk factors of alcohol relapse, particularly in terms of self and informant reports of personality and personality disorders in a longitudinal design (N=200).

Collaboration: NIMHANS, Bangalore and Washington University in St. Louis.

Funding: Fogarty International

Status: Data collection is complete

2. Genomics of lipids and Blood Pressure in Indians:

The objective is to test whether environment modifies the genotype-phenotype association in lipids and blood pressure. We plan to genotype 50-60 Special Needs Plans (SNP) (most replicated SNPs in GWAS?) among 1500 urban and 1500 rural samples. Study findings will help designing a large GXE GWAS?? in the Indian settings

Funding: CSIR

Status: DNA extraction completed in 2,000 samples

3. The Andhra Pradesh Children & Parent Study (APCAPS):

This is a follow-up of participants from the Hyderabad Nutrition Trial. The main aim of the study is to examine the trans-generational effects of social, environment and genetic risk factors on obesity, diabetes and other chronic diseases in India

Sponsor: Wellcome Trust & LSHTM

Status: Data collection complete

B. Clinical Trials

1. Use of a Multi-drug Pill In Reducing cardiovascular Events (UMPIRE):

UMPIRE is a randomised, controlled, open label trial comparing a cardiovascular polypill strategy (the Red Heart Pill: aspirin, statin and two BP lowering medicines) with "usual care" in 2,000 high risk participants in Europe and India for duration of three years. Imperial College, London is the coordinating centre for the study.

Collaboration: Imperial College, London & George Institute, Hyderabad

Funder: European Commission

Status: The trial was successfully completed and results will be published in the coming months

2. **CABG Off or On Pump Revascularization Study (CORONARY):**

To determine whether off-pump CABG surgery compared to on-pump CABG surgery reduces major clinical vascular events in the short term (30 days) and whether the benefits are maintained long term (5 years) in patients undergoing isolated CABG surgery (Sample: 4,700). It is a large, simple, multi-centre, international randomized control trial comparing off-pump CABG vs. on-pump CABG. CCDC is the national coordinating centre.

Sponsor: Canadian Institute of Health Research

Study Centre: Population Health Research Institute, Canada

Status: The study is complete and primary results have been published.

3. **Surgical Treatment of Ischemic Heart Failure Extension Study (STICH/STICHES):**

The objective of the study is to determine whether CABG with MED improves 10 year survival compared to MED alone and how treatment-related outcome differences seen at five years vary over time. 165 patients enrolled in India from eight sites in STICH will be followed up.

Collaboration: UKE Clinical Research Institute, United States

Sponsor: NHLBI/DCRI

Status: Clearance obtained and the first Investigator meeting held.

4. **SimCard Trial:**

A cluster random trial to evaluate the effects of a simplified cardiovascular risk management strategy among high risk subjects in China and India through Community Health Workers. CCDC is responsible for the Indian arm of the study. Six villages from Ballabgarh were randomized for 40+ age group receiving Health Education & Drugs (Diuretics & Aspirin) or usual care.

Collaboration: AIIMS, New Delhi & George Institute, China

Sponsor: NHLBI

Status: Recruitment and Intervention phase

5. **IEC based Dietary intervention trial for Hypertension (DISHA):**

This is a cluster randomised control trial to evaluate the efficacy of dietary intervention through Information Education Communication (IEC) tools with *Anganwadi* Centres (AWCs) as the centre of knowledge dissemination for hypertension risk reduction. CCDC is the national coordinating centre.

Funding: ICMR

Status: The baseline recruitment of the participants began in August 2012

C. **Demonstration Projects**

1. **mPower Heart Project:**

This project aims at developing a low-cost, high quality CVD care delivery model for primary care setting in India. The study is being done in six Community Health Centres & 36 Sub-centers in Solan, Himachal Pradesh. The intervention includes a structured training programme for the health care team, community outreach through community health workers and mHealth Decision Support to promote quality of care.

Collaboration: AIIMS and Government of Himachal Pradesh

Sponsor: Medtronic Foundation

Status: Intervention phase

2. **Prevention of type 2 diabetes in women with gestational diabetes in urban India – a feasibility study:**

This is a phase 2 trial of lifestyle behavioural changes to prevent future diabetes among women with history of gestational diabetes. (Sample Size: 250 pregnant women)

Collaboration: AIIMS, New Delhi & The Centre for Fertility Management, Hyderabad

Sponsor: IDF

Status: Intervention phase

D. **Projects approved and awaiting start-up**

1. Effectiveness, cost-effectiveness and acceptability of a simplified strategy using a low-dose combination 3-in-1 antihypertensive pill ("Triple Pill") for the

management of hypertension in urban India (with George Institute, India; Funding agency NHMRC)

2. Effectiveness of an innovative and multi-disciplinary programme addressing BP control in rural India (with George Institute, India; Funding agency NHMRC)
3. mWellcare Trial: A pilot trial of an integrated mHealth application on chronic disease management (reduction in blood pressure and glucose) in different health systems at a primary care setting each in Tamil Nadu and Haryana (Sponsor: Wellcome Trust)
4. UDAY: Multi-component, multi-level, comprehensive intervention programme to improve the prevention, detection and optimal management of diabetes (Sponsor: Eli Lilly and Company Foundation)
5. Yoga-CaRe Trial: A clinical trial of yoga-based cardiac rehabilitation programme on cardiovascular health in India and mechanistic study in UK. 4,000 acute myocardial infarction patients (30-80 years) in 16 hospitals will be randomized to receive either Yoga-CaRe or enhanced Standard Care. (Sponsor: ICMR, MRC-UK)

Capacity Building Activities

CARRS along with CCDC offers a number of training opportunities in cardio-metabolic disease epidemiology and prevention across the life-course, in cross-connecting subject areas (nutrition and lifestyle, environmental health, obesity and diabetes, stroke and other vascular diseases) and population science disciplines (epidemiology and biostatistics; clinical trials; translation research, social sciences, and economics) with an overarching aim of strengthening the limited research capacity in India. Various training programmes include the Fogarty International Clinical Research Training Program, Annual Teaching Seminar on Cardiovascular disease Epidemiology, the NIH-D43 funded Interdisciplinary Trainee Programme on Post-doctoral Fellowships and Junior Faculty Fellowships.

Apart from this, the research projects of CARRS/CCDC serve as platforms for

training/mentoring Post-doctoral fellows, Doctoral fellows, Master's degree students, Post Graduate diploma students and interns supported by PHFI. Short-term trainees are accepted from US universities (Emory, NorthWestern, Alabama, Harvard etc) on an annual basis to launch and sustain research partnerships between the institutions.



a) On-going / Completed training programmes

1. COE-CARRS has been accredited as an International Clinical Research Training Site by Fogarty International. This programme offers joint mentorship with Emory University, North-Western University, University of Alabama and Albert Einstein College of Medicine in the Bronx, New York. The Centre has trained two Fogarty Fellows and eight Fogarty Scholars in last three years. The trainees have put out 26 publications and made six grant applications during their tenure.
2. Through our collaborator CCDC we conduct NIH sponsored Interdisciplinary D-43 post-doctoral training in cardiovascular research. CCDC along with Emory University, Atlanta has trained four post-doctoral fellows and eight junior faculty persons under this programme since 2010. Currently, six post-doctoral fellows are undergoing training.
3. Our collaborator CCDC has received D 71 grant, Fogarty International Centre 1 D71 TW009139-01 - Cardiovascular Research Training in Biostatistics, Aging and Policy in India (Fogarty International). The objective of this programme is to develop and refine an international clinical research training programme for future post-doctoral research fellows at the CCDC in three target areas: advanced cardiovascular biostatistics,

cardiovascular health and aging and cardiovascular health policy modeling.

4. ASCEND: Asian Collaboration for Excellence in Non-Communicable Disease (FIC) An NCD research training programme for early career researchers. Investigators of CARRS provide mentoring to trainees.



b) Training grants awarded and waiting to start up

1. R25 (capacity building project in collaboration with a consortium of US universities)

c) Short term training:

Apart from the long term trainings, the Centre regularly conducts short term training workshops to enhance research capacity and leadership abilities of young researchers.

Connect Science with Policy

CARRS/CCDC is actively engaged in policy advocacy in India. Under the leadership of Prof. Srinath Reddy, CARRS contributed to formulating India's position in the 2011 UN Summit on Non-Communicable Diseases. Further Dr. Reddy, Dr. Prabhakaran, Dr. Nikhil Tandon and Dr. Mohan have assisted the Government of India and state governments in various capacities to formulate and implement non-communicable disease prevention programmes.

Other policy activities of CARRS are listed below:

1. Consultancy from World Bank for developing NCD component for the Karnataka Health System Development and Reforms Project

2. Developing a model NCD care delivery model for primary care setting in Himachal Pradesh in collaboration with the state government
3. Contributed to developing World Bank Policy Volume – 6, on Non-communicable diseases. The reports at <http://phfi.org/publications/policy-notes>

Publications: We have published 102 peer reviewed articles in last three years with an average impact factor of 8.7. In addition, we have also published many training manuals and monographs.

Administration

I.

Staff: CARRS is led by a team of eminent investigators from India, Pakistan and the USA. Profs. Dorairaj Prabhakaran and K. M. Venkat Narayan are the lead investigators of CoE-CARRS from PHFI and Emory University respectively. Prof. Nikhil Tandon, Dr. V Mohan, Dr. Masood Kadir, Dr. Mohammed Ali and Prof. KS Reddy represent the collaborating institutions viz. All India Institute of Medical Sciences, Madras Diabetes Research Foundation, The Aga Khan University, Emory University and PHFI/CCDC respectively. In addition, nine core research scientists, 10 physician scientists from 10 collaborating hospital sites and a field team composed of 30 staff work at various project locations.

- II. **Infrastructure:** CCDC, which is the Scientific and Executive Secretariat of CARRS, provides office space for CARRS research and training activities. CARRS established a state-of art genetic laboratory infrastructure jointly with CCDC, South Asia Network of Chronic Diseases (SANCD) which is another Centre of Excellence under PHFI.

CARRS is also establishing a CSIR reference laboratory and bio-repository for chronic disease research. CSIR in principle has agreed to fund an amount of Rupees 20 crores for the development of the laboratory.

- III. **Funding:** The core funding of the Centre is from the National Heart, Lung and Blood Institute of USA and UnitedHealth Group which will cease by June 2014. CARRS also receive project specific funding from the Indian Council for Medical Research,

European Union, Canadian Institute of Health Research, Medtronic Foundation and the Wellcome Trust. The Centre for Chronic Disease Control, New Delhi which currently functions as the Scientific & Executive Secretariat of CARRS provides office space and bears general and administrative expenses

- 5) Fundraising for an office space for CARRS in the Delhi-NCR.
- 6) Fundraising for obtain a corpus to support Junior Faculty and Post-doctoral Trainee Fellowships in Inter-disciplinary training in cardio-metabolic diseases.

Challenges: Currently overseas research funding bodies, particularly the National Heart, Lung and Blood Institute of USA and UnitedHealth Group, support the core funding of the major research projects undertaken by CARRS. Their funding will cease by June 2014. Absence of committed core grant and research funding is a major challenge to sustaining and maintaining a critical mass of highly talented research staff. It will also impede sustaining and implementing larger studies which are necessary to provide a convincing evidence base to formulate cardio-metabolic diseases interventions for the vast and diverse South Asian population.

Lack of permanent office space is another constraint that limits the capacity to house the growing number of staff and laboratory equipment.

Plans for the Future

For the coming five years CARRS plans to achieve the following goals:

- 1) Establish an Online Training Programme for Primary Health Care Professionals for the management of Cardio-metabolic diseases in India.
- 2) Develop mHealth interventions to support low-cost, high quality health care services for the screening and management of hypertension and diabetes at primary health care settings in India.
- 3) Develop a registry on Acute Coronary Syndrome to follow the trends in quality of secondary and tertiary care and devise strategies to promote evidence based practices.
- 4) Develop policy advocacy strategies and establish strong working relationships with other units of PHFI in order to enhance and improve our public policy advocacy with stakeholders and governments.

SOUTH ASIA NETWORK FOR CHRONIC DISEASE (SANCD)

Aims & Objectives: The mission of SANCD is to promote and strengthen chronic disease research capacity in South Asia through sharing skills and knowledge between network partners, with the aim of improving the prevention and control of chronic disease in the region.

Objectives

- To establish and maintain an infrastructure and core interdisciplinary scientific staff.
- To build on 'state of the art research' based on a combination of excellent research methodology, research laboratory services, health databases and research governance.
- To conduct aetiological research (including genetic epidemiology), translational research, health care evaluation studies, including randomized controlled trials (RCTs), evidence synthesis, health systems and health policy research.
- To mentor and provide career structures for researchers at all stages of their careers.
- To establish a network to facilitate dissemination of best evidence to support health care provision in chronic disease, the setting of priorities and practices for policy makers, practitioners and researchers.

Scale: We have a staff of 26 with the expertise of the researchers ranging from demography, epidemiology, genetic and epigenetic epidemiology, health economics, biostatistics and qualitative methods to systematic reviews. In conjunction with CCDC, we have established a Genetics and Biochemistry Laboratory (GBL), where DNA and RNA extraction as well as biochemical analyses of various biological specimens are processed for various research projects, by a staff of 12 people. In addition to staff employed in the New Delhi office we have field staff in Hyderabad (~25 people), in Chennai (~10 people) and in Goa (~10 people).

Activities: The main focus of SANCD is to facilitate and carry out interdisciplinary public health research on chronic diseases in South Asia, through a network of eight institutions in the

region (Centre for Chronic Disease Control (CCDC), New Delhi; SNEHA, Mumbai; Aravind Eye Hospital, Pondicherry; Sangath, Goa; Voluntary Health Services (VHS), Chennai; International Centre for Diarrheal Diseases, Bangladesh (ICDDR,B); Institute for Research and Development, Sri Lanka (IRD); and Aga Khan University, Pakistan). Faculty and exchange programmes are also facilitated by international partners in the UK (London School of Hygiene and Tropical Medicine (LSHTM), London; University of Bristol, Bristol, Newcastle University; University College, London (UCL)).

Sources of funding: Core funding is provided by a five-year Wellcome Trust Strategic Award on Research Capacity Strengthening awarded to Professor Shah Ebrahim. Other funding for research has been granted based on competitive applications from sources such as the UK Department for International Development, the European Union FP7 programme, National Institutes of Health, Department of Biotechnology, the Wellcome Trust and International Development Research Centre (IDRC), Canada.

List of Major Projects and their status (2011-2012)

Completed Projects

♦ Impact of social health insurance schemes in low and middle income Countries (LMICs) - DFID funded

Several low and middle income countries (LMICs) have introduced social health insurance programmes for the people in the informal sector to enhance access to healthcare and provide financial protection from the burden of illness. Parallel to this there has been growing interest in evaluating the impacts of health insurance programmes. A competitively awarded systematic review on "Do Social health insurance schemes in developing country settings improve health outcomes and reduce the impoverishing effect of healthcare payments for the poorest people" was conducted in collaboration with experts from LSHTM to assess the impacts of social health insurance schemes on health outcomes and healthcare payments within LMIC settings. The final report has been published and an abstract was presented at the International Health Economic Association meeting in Toronto July 2011.

On-going Projects (alphabetic order)

- ♦ **APCAPS:** The Andhra Pradesh Children And Parent Study (APCAPS) is an extension of the Hyderabad Nutrition Trial (a cluster-randomized trial of protein-calorie supplementation to pregnant mothers and their infants) in rural Hyderabad in 1987-90. Respondents were reexamined between 2003 and 2005 and we have now collected and collated data from 28 of the 29 target villages. Over 7,000 participants have been recruited for anthropometric measurements, DXA measures of total body fat and abdominal adiposity and non-invasive vascular measures. Currently, the team is involved in data cleaning and undertaking preliminary analyses of the first 4,500 individuals recruited. A full survey of the APCAPS villages is underway, recruiting all the households in the village prior to on-going follow up for births, deaths and clinical events. The validation exercise of 5 percent of the study population has now been started.
- ♦ **Chronic Disease Risk Factor Study (CDRF):** The household CDRF study (also referred to as "Household Cohort Study") is being carried out in three sites: Matlab (ICDDR, Bangladesh); Goa and Chennai (India). The data collection is complete for Bangladesh. Electronic data capture has resulted in real-time viewing and downloading of data, which has helped the SANCD team better understand and respond to challenges and complexities in each location. Creative techniques have been implemented to enhance participation.
- **ICDDR, Bangladesh:** The team has completed data collection in Dagorpur village. A total of 1,142 participants have been recruited out of whom 805 are adults and 337 children, from 307 households. The data manager is working with SANCD on various aspects of data cleaning, management and analysis.
- ♦ **Sangath, Goa:** To date 937 participants including 711 adults and 226 children have been recruited from 260 households. The Goa team is also collecting 24 hour urine samples from a sample of study participants to measure the level of urinary salt. High salt levels are associated with high blood pressure but few studies of salt excretion in India have been conducted. They have completed the first half of the sample (n=50) with much persistence and success
- ♦ **VHS, Chennai:** The Chennai team has completed the rural sample of 124 households (462 individuals) at Sirudhavur. They have started the survey of an urban area at Thuraiyakkam, where they have collected data from 375 individuals in 123 households.
- ♦ **SANCD Mentoring Programme:** A long-term mentorship programme whereby teams of CDRF staff have been paired up with mentors in SANCD to write a research paper using CDRF data on a topic of interest. SANCD staff initiated the programme with a one-day seminar in Chennai on "Writing a Research paper" with interested CDRF staff.
- ♦ **DNA Biobank - Dry Blood Spot Study:** The aim of this collaboration is to extend the National Institute of Nutrition's (NIN) Monitoring Survey (2009-11) by collecting dried blood spots for subsequent DNA extraction and creation of a DNA bio-repository for genetic epidemiological studies. We have now collected >15,000 dry blood spot samples and hope to develop a low-budgeted DNA bio-bank so that future genomic studies on highly phenotyped NIN data can be conducted. We have standardized DNA extraction using dry blood spot and are now working on their efficiency for high throughput genotyping. In 2012, we have extended the collection to another 20,000 dry blood spots from the ongoing urban survey of NIN in ten states of India.
- ♦ **Initiatives to bridge the gap between evidence and policy:** India carries out significant public health research but the formal mechanisms by which the evidence from this research can be used to inform public policy are relatively weak. Even evidence based mechanisms for clinical medicine are not well evolved in India. To address the gap between evidence and policy, the programme has initiated formative research to explore the possibility of formally introducing Health Technology Assessment (HTA) in India. For the HTA capacity building programme we propose to undertake

research, and sensitize and engage important stakeholders both in academia and government. Current initiatives include; finding out the best health technology assessment model which can be implemented in India, and examining the evidence base and lessons learnt in various other low and middle income countries to propose ways of integrating Health Technology Assessment in Policy in India. The programme aspires to work in the area of evidence based medicine by supporting the creation of clinical practice guidelines & promoting and undertaking systematic reviews in areas relevant to policy and practice. The programme has established a relationship with leading HTA experts globally, and has conducted a workshop on HTA in India.

- ♦ **Food acquisition and intra-household distribution study:** The study aimed to explore food acquisition and intra-household consumption patterns in low and middle income (LMI) households in Delhi. Following the National Council for Applied Economic Research (NCAER) criteria, 20 LMI households were randomly selected from the sampling frame of Centre for Cardio-metabolic Risk Reduction in South Asia (CARRS) study. Data was derived from 20 questionnaires, four key informant- interviews, and 20 in-depth interviews collected during September-November 2011. Analysis revealed that more than half of the households were spending two-thirds of their income on food. The major food expenditures were on vegetables, 'milk and milk products', and 'cereal and cereal products'; comprising 22%, 16%, and 15% of the total food expenditure respectively. Household income, food prices, food preferences, and seasonal variation influenced the expenditure on food. People usually ate two-three times a day with the exception of children, and the sequence of eating was often based on the work pattern of the household members and cultural beliefs. Contrary to previous evidence, there was no gender bias in intra-household food distribution. High per capita salt intake (12 grams per day) made them vulnerable to hypertension. Women considered food acquisition, preparation and distribution as part of their self-worth and played a major role in food related issues.

- ♦ **Genetics of Chronic Obstructive Pulmonary Disease Consortium:** SANCD has initiated a new project on the genetics of chronic obstructive pulmonary disease to validate recently identified SNPs using a case-control study design in the Indian population, in partnership with a number of clinicians and geneticists. AIIMS, New Delhi; Vallabhbhai Patel Chest Institute (VPCI), University of Delhi; Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh ; Post Graduate Institute of Medical Sciences, Rohtak, Haryana; Pramukhswami Medical College (PSMC), Gujarat are the collaborating partner institutes for this project. The study is funded by the Department of Biotechnology, India. Training of field investigators has been completed in VPCI, New Delhi, and recruitment of cases and controls has recently been started in all five collaborating sites. A field protocol for quality control was produced for training. Some challenges have been identified which includes getting 3,000 cases and 3,000 controls in two years, recruiting COPD cases without a history of smoking and retaining the trained field staff.
- ♦ **IMS genetics:** On IMS samples, we have generated data on >100 SNPs related to cardio-metabolic traits and validated associations related to type 2 diabetes, obesity and related continuous traits. We recently got funds from Wellcome Trust for generating MetaboChip (>200,000 SNPs) based data on 5,000 IMS participants (2,500 sib ?? pairs). These funds will also be utilized for exploratory work on epigenetics using illumina's 427k array on 100 samples.
- **mWellcare:** An integrated mHealth system for the prevention and care of chronic diseases, is funded by a grant (subject to contract) from the Wellcome Trust Affordable Technology for India initiative, to develop and test a mobile phone based decision support system, by the primary health workers and physicians, at CHCs or mini Primary Health Centres, for the diagnosis and evidence-based treatment of high blood pressure and/or diabetes in one northern state (Haryana) and one southern state (Tamil Nadu) of India. The study is being carried out by SANCD in conjunction with LSHTM and CCDC. The project has got

ethical clearances from PHFI and LSHTM. A preparatory meeting of the study was held on 16-17th November, 2011 at SANCD, New Delhi during which the participants were updated about the study developments; discussed project management structure; and follow-up actions to be done. The study is expected to begin after further clearances and approvals.

♦ **Multi-dimensional Analysis of Janani Suraksha Yojana programme Activities in eight EAG states (MAJA):**

SANCD received a small grant under the PHFI - Wellcome Trust Capacity Building Programme (WTP), to provide a comprehensive overview of the roll-out of the Janani Suraksha Yojana (JSY) programme in India. This initiative provides conditional cash transfers to women for giving birth in healthcare facilities. Although JSY is a national programme, the eight empowered action group (EAG) states have special focus. The study is aimed to help planners of National Rural Health Mission (NRHM) in proposing evidence-based modifications / improvements in the second phase of the programme (NHRM-2, 2013-2020). As a part of the secondary data analysis in the study, deliveries for the years 2007-08 were analyzed from the data collected in District Level Household and Facility Survey-Phase 3 (DLHS-3) to find out the out-of-pocket expenditure (OOPE) to the family of delivery care, according to the place and type of delivery. The proportion of families who have borrowed money/sold property for meeting delivery costs and the JSY programme's reach/ non-reach – according to place and type of delivery were also estimated. The study has got ethical clearance for primary data collection from three states (Uttar Pradesh, Jharkhand and Madhya Pradesh). Findings of the secondary data analysis were shared at national and international conferences.

- **PREMIUM Evaluation Study:** The **PR**ogramme for **E**ffective **M**ental health **I**nterventions in **U**nder-resourced health systems (**PREMIUM** - PI, Vikram Patel, Sangath, Goa) aims to develop interventions for the management of Depressive Disorders (DD) and Alcohol Use Disorders (AUD) in India and to evaluate them in a randomized

controlled trial. SANCD is trying to explore the intervention development strategies of PREMIUM during the first year (October 2010 to September 2011) by adopting the following approaches: 1) Procedures followed in developing the intervention and the extent to which these procedures are consistent with the protocol and the Medical Research Council (MRC) guidelines; 2) Cost and utility of each of the components of the process was assessed; and 3) Stakeholders' experience of the developmental phase and the extent to which different aspects of the process influenced decisions concerning the format, content and delivery of the final interventions was explored. An Investigator's Group Meeting was held in April 2012 in Goa where the interim findings of the exploration exercise carried out by SANCD along with the executive summary of the findings were shared with the PREMIUM team.

New Projects

- ♦ **Comparison of fiscal and regulatory policies to prevent non-communicable diseases in India:** This newly funded research study by International Development Research Centre (IDRC), Canada aims to generate the evidence-base for the effectiveness of alternative fiscal, legal, and regulatory strategies on controlling the NCDs related to tobacco, salt, sugar and palm oil. The study is in its initial phase and is a collaborative venture between Dr David Stuckler (University of Cambridge), Dr Sanjay Basu (University of California) and SANCD. Here

Achievements

- Recruitment of a highly qualified team of researchers spanning a range of critical disciplines in public health (demography, epidemiology, anthropology, genetics, economics, health systems, biostatistics, qualitative methods, systematic review, biochemistry).
- Ongoing/completed several large-scale studies in various South Asian populations evaluating the genetic and environmental influences of chronic diseases with private, public and government partnerships (Dry blood spot extension of NNMB Survey to

create bio-bank of 10,000 individuals (NIN-partner); Population-based measurement of chronic disease risk factors in rural households of Matlab, Bangladesh, Goa and Chennai (ICDDR,B, Sangath, VHS –partners); Multi-generation epidemiological cohort in 29 villages following siblings, parents and children from the 1980's Hyderabad Nutrition Trial (CCDC, NIN – partners).

- Maintaining a Genetics and Biochemistry Laboratory (GBL), in collaboration with CCDC, for DNA & RNA extraction, their quantification, storage and processing, a genotyping platform, and biochemical analysis of biological samples for various projects.
- Received multiple competitive research awards from the Wellcome Trust Affordable Technology for India initiative (mWellcare), UK Department for International Development (DFID; Meta-analysis of social health insurance schemes in developing countries), Department of Biotechnology, India (COPD Consortium) and the Wellcome Trust (eg, Evaluating methodology of developing a complex randomized trial in mental health, using Medical Research Council (MRC) guidelines (Sangath, LSHTM –partners) and IDRC, Canada (for generating the evidence-base for the effectiveness of alternative fiscal, legal, and regulatory strategies on controlling NCDs related to tobacco, salt, sugar and palm oil.)
- Led scientific conferences, workshops, training, annual meetings as well as exchange programmes for staff (eg., Potential for Health Technology Assessment in India, Mixed Method Research, Electronic Data Capture (EDC) for Health Research etc). A scientific advisory board and mentorship programme comprised of international leaders in Public Health have provided additional resources for SANCD staff and researchers - David Stuckle. University of Cambridge & SV Subramanian, Harvard School of Public Health; John Gabbay & Andree Le May- University of Southampton; Neil Pearce, Ulla Sovio, Pat Doyle, LSHTM; Chris Millett, Imperial College, London.)
- Acceptance of scientific abstracts, oral and poster presentations and peer-reviewed

journal publications & reports across a range of topics from SANCD scientific staff.

Factsheets on:

- Stroke
- Breast Cancer
- Coronary Heart Diseases in India
- Economic Implications of Chronic Diseases in India

Newsletters:

- CDRF Newsletters
- SANCD Newsletters

Challenges

- 1) Retention - Retaining persons after they have received specialized training through courses, workshops and/or conferences (eg, biostatisticians) is a challenge. This will likely become an acute issue during the last year (Jan 2013-Dec 2013) of secure core funding.
- 2) Eligibility issues for researchers applying to Indian funding agencies – SANCD staff are not eligible to be Principal Investigators on grant applications organizations as they do not hold permanent contracts with Public Health Foundation of India; this limits research growth potential. Shah Ebrahim is not eligible to be a PI on Dept of Biotechnology or ICMR grants as he is not an Indian national.
- 3) Strengthening our relationships with network partners and forging new partnerships where there is mutual benefit.
- 4) Identifying increased senior mentoring within the larger PHFI family.
- 5) To establish a regular flow of financial funding to support the increased research, academic and training activities of SANCD staff.

Plans for the Future

- 1) To continue projects in food, health economics and nutrition; and a series on tobacco in collaboration with Harvard, LSHTM and PHFI using national & international data sources on tobacco use in India.

- 2) Further development of collaborative research with social scientists, economists and political scientists and scientists from India, UK and the US for evaluating the causal pathways and bi-directional relationships of poverty and chronic diseases.
- 3) A preliminary submission for a new strategic award has been made to Wellcome Trust to allow continued funding for NCD activities. The scope is to be restricted to India rather than South Asia and the submission is led by Dr D Prabhakaran and Dr V Patel. A decision on whether a full proposal may be submitted will be known in November 2012.
- 4) A preliminary submission for a new strategic award has been made to Wellcome Trust for funding to support APCAPS as this study has great potential but is expensive to run from the core budget. This is led by Dr Sanjay Kinra, LSHTM. The timelines are the same as for the other submission.

How does SANCD status impact on outcomes?

- Substantive research findings on the burdens of non-communicable diseases and the effects of migration on health status impact on preventive health programmes.
- Attract competitive awards for building research capacity
- Builds exchange of scientific expertise and mentoring between the UK, the US and India, especially in fields, such as genetics, epigenetics, biostatistics and economics.
- Increased exposure to SANCD scientific interests and networks in the region and abroad; attracts new researchers, potential collaborators and potential funding opportunities.
- Development of software to extract complex nutritional data from food frequency questionnaires based on Indian diets (Aravind- partner).
- Increased national and international profile developing as a centre of excellence on chronic diseases in the South Asia region.

SOUTH ASIA CENTRE FOR DISABILITY INCLUSIVE DEVELOPMENT & RESEARCH (SACDIR)

SACDIR is a centre of excellence established under PHFI on October 3, 2010, in technical collaboration with, and supported by, the London School of Hygiene and Tropical Medicine, and its component institution, the International Centre for Eye Health (ICEH), London.



Mr Javed Abidi was the Chief Guest and Dr P V Ramesh, Principal Secretary Health, Government of Andhra Pradesh, Dr R. Pararajasegaram, Advisor Sightsavers International and Prof. Andrew Smith, ICEH, LSHTM, London were the guests of honour at the launch. Prof. K. Srinath Reddy, President PHFI, presided over the launch meeting which was attended by 150 guests.



LSHTM is Britain's national school of public health and a leading postgraduate institution worldwide for research and postgraduate education in global health. ICEH is a research and education group which aims to improve eye health and eliminate avoidable blindness, with a focus on low income

populations. ICEH has recently increased its scope of work to influence other areas like hearing impaired and other special needs for persons with disabilities.

Mission

'Inclusive Millennium: Evidence and Action for Empowering Persons with Disabilities'.

Objectives

Training & Education:

- Train and reorient health care personnel to concerns of persons with disabilities;
- Run short and long term training courses/modules on disability, potentially disabling conditions and inclusive development;
- Organize modules on application of the International Classification of Functioning (ICF) recommended by WHO.

Research

- Develop the evidence base for documenting the prevalence and magnitude of disabilities within the South Asia context;
- Conduct high quality need-based epidemiological, operations, sociological and outcomes-based research to improve the quality of life of persons with disabilities;
- Augment research capacity in the South Asia region through skill transfer.

Programme Development

- Evaluation of existing programmes for persons with disabilities in India and other South Asian countries;
- Develop innovative modalities for identifying persons with disabilities and providing appropriate care;
- Conduct cost effectiveness analysis of specific interventions for disabled persons.

Advocacy

- Advocate at appropriate congregations and fora for disability inclusive development;
- Assist and influence policy development initiatives to foster disability inclusive development in the country and the region.



Milestones

- SACDIR was launched on October 3, 2010.
- Under the centre, eight research projects are under process and three projects completed.
- The centre has conducted seven trainings programmes so far.
- Annual/Short course Project contract (limited to a maximum period of 12 months) has been entered into By and Between SACDIR, PHFI and the Christian Blind Mission (CBM), Germany, through the latter's South Asia Regional Office for South India and Sri Lanka, Bengaluru, Karnataka.

The Memorandum of Understanding (MoU) Between SACDIR, PHFI and CBM through is under process.

Publications

Three book chapters and 35 articles have been published in different national and international Journals. Seven papers were presented in national and international conferences.

Research Projects

On-going

S N	Name of the Project	Funding Agency
1	Multi-centric Collaborative Study on the impact of Global warming and Ultra Violet Radiation (UVR) exposure on ocular health in India	Indian Council of Medical Research
2	Incidence of cause specific blindness in Andhra Pradesh	CBM through LSHTM
3	Barriers to employment and employability for persons with disabilities in Hyderabad, Andhra Pradesh, India	CBM, Germany, through its South Asia Regional Office for South India and Sri Lanka
4	Gender as a determinant of the uptake of services in persons with disabilities	CBM, Germany through its South Asia Regional Office for South India and Sri Lanka
5	Review of the rural and urban mental health programme undertaken by the Banyan	The Banyan, Chennai
6	Validation of Key Informants for identifying children with disability in Bangladesh and Pakistan	CBM through LSHTM
7	The public health impact of folate deficiency and strategies to improve maternal and child health outcomes in India	Research Grant under the PHFI-UKC Wellcome Trust Capacity Building Programme
8	Use of Child-to-Child approach for visual and hearing impairment	Bernadotte Foundation
9	Validation of INCLIN Neuro Developmental Screening Tool (NDST)	NIH; National Trust; Autism Speaks; INCLIN International

Completed

S N	Name of the Project	Funding Agency
1	Study the proportion of total health care visits to primary, secondary and tertiary health facilities accounted for by eye health outpatient and inpatient visits in Vishakhapatnam district of Andhra Pradesh	Sightsavers International
2	Eye Health within the Public Health System in India: A review of its functioning in five identified locations in the country	Operation Eyesight Universal
3	Basic messages for training primary health workers in primary eye care.	WHO

THE RAMALINGASWAMI CENTRE FOR SOCIAL DETERMINANTS OF HEALTH

Achievements: 1) The research projects initiated in 2010 under this Centre, on which several investigators, research scientists and research fellows are working, continued during this reporting period; 2) Analysis of the association between trends in social sector spending across states in India with trends in child mortality over the past 15 years was done using mixed-effects regression models that adjusted for potential confounders. The manuscript from this analysis is under review for publication; 3) The effect of the Mahatma Gandhi National Employment Guarantee Scheme started in India in 2006 on a major basic determinant of health – food consumption in vulnerable groups in the population – was analyzed across Indian states using data from the National Sample Survey Organization's national employment and consumer expenditure surveys, conducted prior to and after the implementation of the employment guarantee scheme. This analysis is complete and the manuscript is under review for publication; 4) The sanitation trends across the Indian states over the past 20 years were analyzed using standardized definitions. The inequities in sanitation improvements were assessed and the trends of spending on the various aspects of sanitation in India were analyzed to identify gaps. The manuscript from these analyses is under preparation.

Plans for the Future

1) National and sub-national analyses using multilevel multivariate models are planned to understand how social determinants, such as education, environment, housing conditions, urban design, social protection and gender equity, have affected health trends over the past two decades; 2) These analyses will also throw light on the impact of some of the major nationwide interventions on improving the social determinants of health. This effort is expected to contribute to the development of a relevant national health equity surveillance system.

CENTRE FOR MENTAL HEALTH

Background: Mental, Neurological and Substance use disorders (MNS) are the largest source of burden of disease globally. Notable examples of MNS disorders, in terms of the burden of disease, include: Autism, Mental retardation and Epilepsy in childhood; Depression, Psychoses and Alcohol use disorders in adulthood; and Dementia in old age. There is a huge disparity between this burden and availability of mental health services especially in the South Asian region. It is estimated that up to 90 percent of people with MNS disorders do not receive evidence-based health care. Moreover, most services are concentrated in urban areas. There are also instances of human rights violations of patients with mental health disorders in the form of restrictions to their freedom in their homes, in mental hospitals and in traditional healing centres. The Centre for Mental Health (CMH) at PHFI was launched on September 7, 2012, to address gaps in the area of Mental, Neurological and Substance use (MNS) disorders. The Centre will be a collaborative network of institutions in South Asia, with the shared goals of promoting research, building capacity and advocacy aimed at reducing inequalities in access to care and health outcomes for people affected by MNS disorders. Members of CMH will include faculty and research staff members in PHFI and partner organizations who have an interest in issues related to MNS disorders, as well as other stakeholders in the field of mental health. The Centre's work-plan to promote research, capacity building and advocacy will be guided both by national priorities and global priorities in the discipline of mental health.



Funding: The proposal for the Centre was precipitated by the successful application by PHFI to the National Institute of Mental Health (NIMH) for a Hub for International Mental Health

Research. The grant ("SHARE"-South Asian Hub for Advocacy, Research and Education on Mental Health) will fund the functioning of the centre for the initial period.



Current Research Projects: The Centre will offer a 'home' to enable all other projects and initiatives related to MNS disorders in PHFI to be part of an integrated programme of work. The Centre will also work closely with other Centres of Excellence in PHFI which have thematic and programmatic overlaps, notably those devoted to chronic diseases (New Delhi) and disabilities (Hyderabad). Major examples of ongoing projects which will be integrated in the Centre are:

SHARE (South Asian Hub for Advocacy Research and Education on Mental Health): SHARE is a five year programme of research and capacity building in the South Asian region, with a primary core in PHFI and a secondary core in Pakistan. It is one of the NIMH funded hubs for promoting global mental health.

PRIME (Programme for Improving Mental Health Care): PRIME is a six year research programme consortium funded by DFID and launched in 2011, which aims to develop, evaluate and scale up a mental health care component in primary and maternal health care in three African (Uganda, South Africa, Ethiopia) and two South Asian countries (India and Nepal).

DCPN (Disease Control Priorities Network): DCPN is a global initiative that will commission a working group on 'brain and mind disorders' to estimate the cost-effectiveness of platforms of care for MNS disorders.

VISHRAM (Vidarbha Stress and Health Programme): VISHRAM is community based programme aimed at improving the detection and care of depression and alcohol use disorders in suicide affected communities of Vidarbha. PHFI is evaluating the programme.

mWELLCARE: This is a three year project from the Wellcome Trust Affordable Technologies in Health initiative to develop a mobile phone based application to improve the detection and management of chronic diseases and risk factors.

EMERALD: This is a five year, European Commission grant, to PHFI and five other country partners (i.e. the PRIME countries plus Nigeria), led by the Centre for Global Mental Health (UK), to research mental health systems in these countries.

Publications



Oct' 2011 to Oct' 2012

2012

Abubakar, T, **Gudlavalleti, MV**, Sivasubramaniam, S, Gilbert, CE, Abdull, MM, Imam, AU. Coverage of hospital-based cataract surgery and barriers to the uptake of surgery among cataract blind persons in Nigeria: the Nigeria National Blindness and Visual Impairment Survey. *Ophthalmic Epidemiol.* 2012; 19:58-66.

Acharya, A, **Vellakkal, S**, Taylor, F, Masset, E, **Satija, A**, Burke, M, **Ebrahim, S**. Impact of national health insurance for the poor and the informal sector in low and middle-income countries: a systematic review. *Eppi-Centre.* 2012; [Epub ahead or print].

Agrawal, S. Effects of living arrangement on the health status of elderly in India: Finding from a national cross sectional survey. *Asian Popul Stud.* 2012; 8:87-101.

Agrawal, S. Effect of indoor air pollution from biomass and solid fuel combustion on prevalence of self-reported asthma among adult men and women in India: findings from a nationwide large-scale cross-sectional survey. *J Asthma.* 2012; [Epub ahead of print].

Agrawal, PK, **Agrawal, S**, Mullany, LC, Darmstadt, GL, Kumar, V, Kiran, U, Ahuja, RC, Srivastava, VK, Santosham, M, Black, RE, Baqui, AH. Clean cord care practices and neonatal mortality: evidence from rural Uttar Pradesh, India. *J Epidemiol Community Health.* 2012; [Epub ahead of print].

Agrawal, S. The socio-cultural context of family size preference, ideal sex and induced abortion in India: findings from India's National Family Health Surveys. *Health Care Women Int.* 2012; [Epub ahead of print].

Agrawal, P, Mishra, V, **Agrawal, S**. Covariates of maternal overweight and obesity and the risk of adverse pregnancy outcomes: findings from a nationwide cross sectional survey. *J Public Health (Oxf).* 2012; 20:387-97.

Allagh, KP, **Thippaiah, A**. Developing training modules for nurses in safe motherhood. *Indian Journal of Public Health Research & Development.* 2012; 3:93-6.

Anchala, R, Pant, H, Prabhakaran, D, Franco, OH. 'Decision Support System (DSS) for prevention of cardiovascular disease (CVD) among hypertensive (HTN) patients in Andhra Pradesh, India' - a cluster randomised community intervention trial. *BMC Public Health.* 2012; 12:393.

Anderson, S, **Laxminarayan, R**, Salant, SW. Diversify or Focus? Spending to Combat Infectious Diseases When Budgets Are Tight. *J Health Econ.* 2012; 31:658-75.

Arora, M, Gupta, VK, Nazar, GP, Stigler, MH, Perry, CL, **Reddy, KS**. Impact of tobacco advertisements on tobacco use among urban adolescents in India: results from a longitudinal study. *Tob Control.* 2012; 21:318-24.

Arora, M, Mathur, MR, Singh, N. A framework to prevent and control tobacco among adolescents and children: Introducing the IMPACT model. *Indian J Pediatr.* 2012; [Epub ahead of print].

Arora, M, Tewari, A, Nazar, G, Gupta, V, Shrivastava, R. Ineffective pictorial health warnings on tobacco products: lessons learnt from India. *Indian J Public Health.* 2012; 56:61-4.

Arora, M, Tewari, A, Dhavan, P, Nazar, GP, Stigler, MH, Juneja, NS, Perry, CL, **Reddy, KS**. Discussions with adults and youth to inform the development of a community-based tobacco control programme. *Health Educ Res.* 2012; [Epub ahead of print].

Ashokkumar, T, Chacko, TV, **Munuswamy, S**. Physical disabilities among the rural elderly: Identifying surrogate markers of unmet disability care needs. *International Journal of Tropical Medicine.* 2012; 7:38-41.

Azhar, GS. DOTS for TB relapse in India: a systematic review. *Lung India.* 2012; 29:147-53.

Azhar, GS. Future of healthcare in India: lessons from Scandinavia. *Global Journal of Medical and Public Health.* 2012; 1:73-80.

Babu, GR. Do you see an elephant or just its trunk? The need of learning Modern Epidemiologic Methods: an introduction. *The Internet Journal of Epidemiology.* 2012; 10.

Babu, GR, Laxminarayan, R. The unsurprising story of MDR-TB resistance in India. *Tuberculosis (Edinb).* 2012; 92:301-6.

- Babu, GR.** Evidence for health policy in India: do we have enough data? *J R Soc Med.* 2012; 105:365.
- Barry, M, **Dhillon, PK**, Stampfer, MJ, Perner, S, Ma, J, Giovannucci, E, Kurth, T, Mucci, LA, Rubin, MA. Alpha-Methylacyl-CoA racemase expression and lethal prostate cancer in the Physicians' Health Study and Health Professionals Follow-up Study. *Prostate.* 2012; 72:301-6.
- Basu, S, Stuckler, D, **Vellakkal, S, Ebrahim, S.** Dietary salt reduction and cardiovascular disease rates in India: a mathematical model. *PLoS One.* 2012; 7:e44037.
- Beaglehole, R, Bonita, R, Horton, R, Ezzati, M, Bhala, N, Amuyunzu-Nyamongo, M, Mwatsama, M, **Reddy, KS.** Measuring progress on NCDs: one goal and five targets. *Lancet.* 2012; 380:1283-5.
- Behar, BK, Satish, K, Jena, SK, **Hussain, MA,** Sama, S. Prevalence of hypertension and diabetes mellitus among people seeking cataract surgery in rural South India. *The Internet Journal of Epidemiology.* 2012; 10.
- Bhan, N, **Srivastava, S, Agrawal, S,** Subramanyam, M, Millett, C, **Selvaraj, S,** Subramanian, SV. Are socioeconomic disparities in tobacco consumption increasing in India? A repeated cross-sectional multilevel analysis. *BMJ Open.* 2012; 2.
- Bhattacharyya, S, Srivastava, A,** Avan, BI, Graham, WJ. Quality care at childbirth in the context of health sector reform program in India: contributing factors, challenges and implementation lesson *Health System and Policy Research.* 2012; 1.
- Bhutta, ZA, **Reddy, KS.** Achieving equity in global health so near and yet so far. *JAMA.* 2012; 307:2035-6.
- Brown, HS, 3rd, Stigler, M, Perry, C, Dhavan, P, **Arora, M, Reddy, KS.** The cost-effectiveness of a school-based smoking prevention program in India. *Health Promot Int.* 2012; [Epub ahead of print].
- Charan, J, **Saxena, DB.** Suggested statistical reporting guidelines for clinical trials data. *Indian J Psychol Med.* 2012; 34:25-9.
- Cook, J, **Chatterjee, S,** Sur, D, Whittington, D. Measuring risk aversion among the urban poor in Kolkata, India. *Appl Econ Lett.* 2012; 20:1-9.
- Dale, C, Prieto-Merino, D, Kuper, H, Adamson, J, Bowling, A, **Ebrahim, S,** Casas, JP. Modelling the association of disability according to the WHO International Classification of Functioning, Disability and Health (ICF) with mortality in the British Women's Heart and Health Study. *J Epidemiol Community Health.* 2012; 66:170-5.
- Damore, C, **Nair, R,** Nair, SS. An assessment of public private mix under RNTCP in District Sanarlamtha, Gujarat, India. *Int J Trop Med Public Health.* 2012; 1:11-29.
- Dandona, L,** Prasad, J. Strengthening primary healthcare in India. *BMJ.* 2012; 344:e3410.
- Dhillon, PK, Jeemon, P,** Arora, NK, Mathur, P, Maskey, M, Djuwita Sukirna, R, **Prabhakaran, D.** Status of epidemiology in the WHO South-East Asia region: burden of disease, determinants of health and epidemiological research, workforce and training capacity. *Int J Epidemiol.* 2012; 41:847-60.
- Dikshit, RP, Yeole, BB, Nagrani, R, **Dhillon, PK,** Badwe, R, Bray, F. Increase in breast cancer incidence among older women in Mumbai: 30-Year trends and predictions to 2025. *Cancer Epidemiol.* 2012; 36:e215-20.
- Dror, DM, **Vellakkal, S.** Is RSBY India's platform to implementing universal hospital insurance? *Indian J Med Res.* 2012; 135:56-63.
- Farooqui, HH, Zodpey, S.** Cervical cancer control in India: taking evidence to action. *J Public Health Policy.* 2012; 33:165-72.
- Farooqui, HH, Hussain, MA, Zodpey, SP.** Malaria control in India: has sub-optimal rationing of effective interventions compromised programme efficiency? *WHO South-East Asia Journal of Public Health.* 2012; 1:128-32.
- Ferri, CP, Acosta, D, Guerra, M, Huang, Y, Llibre-Rodriguez, JJ, Salas, A, Sosa, AL, Williams, JD, Gaona, C, Liu, Z, Noriega-Fernandez, L, **Jotheeswaran, AT,** Prince, MJ. Socioeconomic factors and all cause and cause-specific mortality among older people in Latin America, India, and China: a population-based cohort study. *PLoS Med.* 2012; 9:e1001179.
- Geli, P, **Laxminarayan, R,** Dunne, M, Smith, DL. "One-Size-Fits-All?" Optimizing treatment duration

for bacterial infections. *PLoS One*. 2012; 7:e29838.

Ghosh, R. Child mortality in India: a complex situation. *World J Pediatr*. 2012; 8:11-8.

Graham, WJ, **Varghese, B.** Quality, quality, quality: gaps in the continuum of care. *Lancet*. 2012; 379:e5-e6.

Gupta, V, Vinay, DG, Rafiq, S, Kranthikumar, MV, Janipalli, CS, Giambartolomei, C, Evans, DM, Mani, KR, Sandeep, MN, Taylor, AE, Kinra, S, Sullivan, RM, Bowen, L, Timpson, NJ, Smith, GD, Dudbridge, F, **Prabhakaran, D,** Ben-Shlomo, Y, **Reddy, KS, Ebrahim, S,** Chandak, GR, for the Indian Migration Study Group. Association analysis of 31 common polymorphisms with type 2 diabetes and its related traits in Indian sib pairs. *Diabetologia*. 2012; 55:349-57.

Gupta, V, Khadgawat, R, Ng, HK, **Walia, GK,** Kalla, L, Rao, VR, Sachdeva, MP. Association of TCF7L2 and ADIPOQ with Body Mass Index, Waist-Hip Ratio, and Systolic Blood Pressure in an Endogamous Ethnic Group of India. *Genet Test Mol Biomarkers*. 2012; [Epub ahead of print].

Gupta, I, Guin, P, **Trivedi, M.** The new patent regime and disease priorities in India. *Glob Public Health*. 2012; [Epub ahead of print].

Hasan, H, Zodpey, S, Saraf, A. Diabetologist's perspective on practice of evidence based diabetes management in India. *Diabetes Res Clin Pract*. 2012; 95:189-93.

Hasan, H, Sharma, K, Zodpey, S. Emerging Landscape of the Pharmaceutical Management Education in India. *Journal of Health Management*. 2012; 14:141-50.

Hazarika, I. India at the crossroads of Millennium Development Goals 4 and 5. *Asia Pac J Public Health*. 2012; 24:[Epub ahead of print].

Heath, GW, Parra, DC, Sarmiento, OL, Andersen, LB, Owen, N, **Goenka, S,** Montes, F, Brownson, RC, for the Lancet Physical Activity Series Working Group. Evidence-based intervention in physical activity: lessons from around the world. *Lancet*. 2012; 380:272-81.

Jaykaran, Yadav, P, Kantharia, ND, **Saxena, D.** Gender and racial bias in drug promotional material distributed by pharmaceutical companies. *J Pharmacol Pharmacother*. 2012; 3:55-6.

Jeemon, P, Prabhakaran, D, Goenka, S, Ramakrishnan, L, Padmanabhan, S, Huffman, M, Joshi, P, Sivasankaran, S, Mohan, BVM, Ahmed, F, Ramanathan, M, Ahuja, R, Sinha, N, K.R., T, **Reddy, KS,** on behalf of the Sentinel Surveillance in Industrial Populations Study Group. Impact of comprehensive cardiovascular risk reduction programme on risk factor clustering associated with elevated blood pressure in an Indian industrial population. *Indian J Med Res*. 2012; 135:485-93.

Jeemon, P, Prabhakaran, D. Does uric acid qualify as an independent risk factor for cardiovascular mortality? *Clin Sci (Lond)*. 2012; [Epub ahead of print].

Joshi, R, Chow, CK, Raju, PK, Raju, KR, Gottumukkala, AK, **Reddy, KS,** Macmahon, S, Heritier, S, Li, Q, **Dandona, R,** Neal, B. The Rural Andhra Pradesh Cardiovascular Prevention Study (RAPCAPS): a cluster randomized trial. *J Am Coll Cardiol*. 2012; 59:1188-96.

Kakkar, M, Venkataramanan, V, Krishnan, S, Chauhan, RS, **Abbas, SS,** on behalf of Roadmap to Combat Zoonoses in India (RCZI) initiative. Moving from rabies research to rabies control: lessons from India. *PLoS Negl Trop Dis*. 2012; 6:e1748.

Kanchan, M, Levine, T, Zahiruddin, QS, **Zodpey, SP.** Medical savings account: Implications for consumer choice, individual responsibility and efficiency. *Int J Med Public Health*. 2012; 2:7-14.

Khalil, A, Huffman, MD, **Prabhakaran, D,** Osmond, C, Fall, CH, Tandon, N, Lakshmy, R, **Prabhakaran, P,** Biswas, SK, Ramji, S, Sachdev, HS, Bhargava, SK, on behalf of the New Delhi Birth Cohort. Predictors of carotid intima-media thickness and carotid plaque in young Indian adults: the New Delhi Birth Cohort. *Int J Cardiol*. 2012; [Epub ahead of print].

Khan, AA, **Dey, S,** Taha, AH, Huq, FS, Moussawi, AH, Omar, OS, Soliman, AS. Attitudes of Cairo University medical students toward smoking: the need for tobacco control programs in medical education. *J Egypt Public Health Assoc*. 2012; 87:1-7.

Khanduja, S, Jhanji, V, Sharma, N, Vashist, P, **Murthy, GVS,** Gupta, SK, Satpathy, G, Tandon, R, Titiyal, JS, Vajpayee, RB. Trachoma Prevalence in

Women Living in Rural Northern India: Rapid Assessment Findings. **Ophthalmic Epidemiology**. 2012; 19:216-20.

Klein, EY, Smith, DL, **Laxminarayan, R**, Levin, S. Superinfection and the evolution of resistance to antimalarial drugs. **Proc Biol Sci**. 2012; [Epub ahead of print].

Klein, E, **Laxminarayan, R**. Resistance movement: Hospital administrators must join the fight against antibiotic overuse. **Mod Healthc**. 2012; 42:22.

Kondapaka, KK, Prasad, SV, Satyanarayana, S, Kandi, S, Zachariah, R, Harries, AD, Nagaraja, SB, **Tetali, S, Anchala, R, Kannuri, NK**, Murthy, K, Koppu, D, Vangari, L, Ra, S. Are tuberculosis patients in a Tertiary Care Hospital in Hyderabad, India being managed according to National Guidelines? **PLoS One**. 2012; 7:e30281.

Kumari, R, **Pant, H**, Oruganti, R, **Murthy, GVS**, Ajitha, K, **Suresh, M**. Evaluating the Fixed Nutrition and Health Day program in the rural area of Shamirpet, Ranga Reddy District and the urban area of Dabeerpura, Hyderabad District. **Nat J Res Com Med**. 2012; 1:61-122.

Kuruganti, S, **Mekala, J**, Williams, JD, Sangapaneni, K, Rao, GN, Rani, PK. Preventive eye health approach and elimination of avoidable blindness in remote rural areas - a vision health guardian approach. **Rural and Remote Health**. 2012; 12:1912.

Kuzawa, CW, Hallal, PC, Adair, L, Bhargava, SK, Fall, CH, Lee, N, Norris, SA, Osmond, C, Ramirez-Zea, M, Sachdev, HS, Stein, AD, Victora, CG, **Prabhakaran, P, Prabhakaran, D, Reddy, KS**, for COHORTS Group. Birth weight, postnatal weight gain, and adult body composition in five low and middle income countries. **Am J Hum Biol**. 2012; 24:5-13.

Lakshmi, JK. Less equal than others? Experiences of AYUSH medical officers in primary health centres in Andhra Pradesh. **Indian J Med Ethics**. 2012; 9:18-21.

Lamy, A, Devereaux, PJ, **Prabhakaran, D**, Hu, S, Piegas, LS, Straka, Z, Paolasso, E, Taggart, D, Lanis, F, Akar, AR, Jain, A, Noiseux, N, Ou, Y, Chrolavicius, S, Ng, J, Yusuf, S. Rationale and design of the coronary artery bypass grafting surgery off or on pump revascularization study: a

large international randomized trial in cardiac surgery. **Am Heart J**. 2012; 163:1-6.

Lamy, A, Devereaux, PJ, **Prabhakaran, D**, Taggart, DP, Hu, S, Paolasso, E, Straka, Z, Piegas, LS, Akar, AR, Jain, AR, Noiseux, N, Padmanabhan, C, Bahamondes, JC, Novick, RJ, Vijayanath, P, **Reddy, S**, Tao, L, Olavegoeascoechea, PA, Airan, B, Sulling, TA, Whitlock, RP, Ou, Y, Ng, J, Chrolavicius, S, Yusuf, S, the CORONARY Investigators. Off-pump or on-pump coronary-artery bypass grafting at 30 days. **N Engl J Med**. 2012; 366:1489-97.

Laxminarayan, R. Crafting a system-wide response to healthcare-associated infections. **Proc Natl Acad Sci U S A**. 2012; 109:6364-5.

Laxminarayan, R, Heymann, DL. Challenges of drug resistance in the developing world. **BMJ**. 2012; 344:e1567.

Lipska, KJ, Beran, D. Promoting the use of DPP-4 inhibitors in Asia. **Diabetes Res Clin Pract**. 2012; [Epub ahead of print].

Lloyd-Sherlock, P, McKee, M, **Ebrahim, S**, Gorman, M, Greengross, S, Prince, M, Pruchno, R, Gutman, G, Kirkwood, T, O'Neill, D, Ferrucci, L, Kritchevsky, SB, Vellas, B. Population ageing and health. **Lancet**. 2012; 379:1295-6.

Lyngdoh, T, Vuistiner, P, Marques-Vidal, P, Rousson, V, Waeber, G, Vollenweider, P, Bochud, M. Serum uric acid and adiposity: deciphering causality using a bidirectional mendelian randomization approach. **PLoS One**. 2012; 7:e39321.

Mackey, S, **Murthy, GV**, Muhit, MA, Islam, JJ, Foster, A. Validation of the key informant method to identify children with disabilities: methods and results from a pilot study in Bangladesh. **J Trop Pediatr**. 2012; 58:269-74.

Malhotra, S, Neogi, SB, Raj, SS, Sharma, K, Zodpey, SP. Tracking survival of institutional births for neonatal period-feasibility at district hospitals. **Indian Pediatr**. 2012; 49:479-80.

Manimunda, SP, Benegal, V, Sugunan, AP, **Jeemon, P**, Balakrishna, N, Thennarasu, K, Pandian, D, Pesala, K. Tobacco use and nicotine dependency in a cross-sectional representative sample of 18,018 individuals in Andaman and Nicobar Islands, India. **BMC Public Health**.

2012; 12:515.

Mendenhall, E, Narayanan, G, **Prabhakaran, D**. Depression and diabetes in India: Perspectives and recommendations. *Diabet Med*. 2012; [Epub ahead of print].

Mishra, J, **Pati, S**, **Hussain, MA**, Srivastava, N, Mishra, S. Screening for Sickle Cell Disease: A hospital based study in Eastern Odisha, India. *South Asian Journal of Experimental Biology*. 2012; 2:57-60.

Mohanam, PP, Mathew, R, Harikrishnan, S, Krishnan, MN, Zachariah, G, Joseph, J, Eapen, K, Abraham, M, Menon, J, Thomas, M, Jacob, S, Huffman, MD, **Prabhakaran, D**, on behalf of the Kerala ACS Registry Investigators. Presentation, management, and outcomes of 25 748 acute coronary syndrome admissions in Kerala, India: results from the Kerala ACS Registry. *Eur Heart J*. 2012; [Epub ahead of print].

Moussawi, AH, Yassine, M, **Dey, S**, Soliman, AS. Clinical profile, quality of care and recurrence in arab-american and caucasians prostate cancer patients in michigan. *J Immigr Minor Health*. 2012; [Epub ahead of print].

Murthy, S, Rao, KD, **Ramani, S**, **Chokshi, M**, **Khandpur, N**, **Hazarika, I**. What do doctors want? Incentives to increase rural recruitment and retention in India. *BMC Proc*. 2012; 6:5.

Murthy, GVS, **John, N**, **Shamanna, BR**, **Pant, HB**. Elimination of avoidable blindness due to cataract: Where do we prioritize and how should we monitor this decade? *Indian J Ophthalmol*. 2012; 60:438-45.

Nair, H, Holmes, A, Rudan, I, Car, J. Influenza vaccination in healthcare professionals should be mandatory. *BMJ*. 2012; 344:e2217.

Nair, H, Shu, XO, Volmink, J, Romieu, I, Spiegelman, D. Cohort studies around the world: Methodologies, research questions and integration to address the emerging global epidemic of chronic diseases. *Public Health*. 2012; 126:202-5.

Nair, H, Arya, G, Vidnathirana, J, Tripathi, S, Talukder, SH, Srivastava, V. Improving neonatal health in South-East Asia. *Public Health*. 2012; 126:223-6.

Nair, M. Protein conjugate polysaccharide

vaccines: challenges in development and global implementation. *Indian J Community Med*. 2012; 37:79-82.

Nair, R, Nair, SS. Is behaviour change communication an effective strategy for increasing immunization coverage? *Adv Trop Med Pub Health Int*. 2012; 2:40-60.

Nair, R, Nair, SS, Malhotra, S, Sachdeva, A. Shifting trends of HIV epidemiology among most at risk groups (MARGs) in India. *Int J Med Sci Public Health*. 2012; 1:18-31.

Nair, M, Webster, P. Managing priorities. *Medical Education*. 2012; 46:733-5.

Nair, M, Ali, MK, Ajay, VS, Shivashankar, R, Mohan, V, Pradeepa, R, Deepa, M, Khan, HM, Kadir, MM, Fatmi, ZA, **Reddy, KS**, Tandon, N, Narayan, KV, **Prabhakaran, D**. CARRS Surveillance study: design and methods to assess burdens from multiple perspective. *BMC Public Health*. 2012; 12:701.

Nakkeeran, N, **Zodpey, S**. Qualitative research in applied situations: strategies to ensure rigor and validity. *Indian J Public Health*. 2012; 56:4-11.

Nambiar, D. HIV-related stigma and NGO-isation in India: a historico-empirical analysis. *Sociol Health Illn*. 2012; 34:714-29.

Nambiar, D, Rimal, RN. Duty and destiny: Psychometric properties and correlates of HIV-related stigma among youth NGO workers in Delhi, India. *AIDS Care*. 2012; [Epub ahead of print].

Nambiar, D, Nguyen, MH, Giang, LM, Hirsch, J, Parker, RG. Tabula diptycha: Differential HIV knowledge, stigma and intended behavioural outcomes amongst visitors at Vietnam's Pain and Hope exhibition. *Glob Public Health*. 2012; [Epub ahead of print].

Negandhi, H, **Sharma, K**, **Zodpey, S**. History and evolution of public health education in India. *Indian J Public Health*. 2012; 56:12-6.

Negandhi, PH, **Sharma, K**, **Zodpey, S**. An innovative National Rural Health Mission capacity development initiative for improving public health practice in India. *Indian J Public Health*. 2012; 56:110-5.

Neogi, SB, **Malhotra, S**, **Zodpey, SP**, Mohan, P. Does facility-based newborn care improve

neonatal outcomes? A review of evidence. *Indian Pediatr.* 2012; 49:651-8.

Nesbitt, RC, Mackey, S, Kuper, H, Muhit, M, **Murthy, GVS**. Predictors of referral uptake in children with disabilities in Bangladesh - Exploring barriers as a first step to improving referral provision. *Disabil Rehabil.* 2012; 34:1089-95.

Nuesch, E, Dale, CE, Amuzu, A, Kuper, H, Bowling, A, Ploubidis, GB, Lowe, G, Rumley, A, **Ebrahim, S**, Casas, JP. Inflammation, coagulation and risk of locomotor disability in elderly women: findings from the British Women's Heart and Health Study. *Eur J Epidemiol.* 2012; [Epub ahead of print].

Panda, B, Chauhan, AS. Right to privacy and confidentiality among acquired immuno deficiency syndrome cases – public health vs human rights perspectives. *Int J Curr Res.* 2012; 4:211-5.

Panda, B, Pati, S, Chauhan, AS. Public health nutrition programmes in Odisha: A conceptual approach to assessment of intervention. *Global Research Analysis.* 2012; 1:67-9.

Patel, JV, Lip, GY, **Prabhakaran, D, Reddy, KS**, Gill, PS, Hughes, EA. Anthropometric discriminators of the risk of high blood pressure amongst public schoolchildren in Gujarat, India. *Int J Clin Pract.* 2012; 66:418-20.

Pati, S, Sharma, K, Zodpey, SP, Chauhan, K, Dobe, M. Health promotion education in India: present landscape and future vistas. *Glob J Health Sci.* 2012; 4:159-67.

Paul, L, **Jeemon, P**, Hewitt, J, McCallum, L, Higgins, P, Walters, M, McClure, J, Dawson, J, Meredith, P, Jones, GC, Muir, S, Dominiczak, AF, Lowe, G, McInnes, GT, Padmanabhan, S. Hematocrit predicts long-term mortality in a nonlinear and sex-specific manner in hypertensive adults. *Hypertension.* 2012; 60:631-8.

Pradeepa, R, **Prabhakaran, D**, Mohan, V. Emerging economies and diabetes and cardiovascular disease. *Diabetes Technol Ther.* 2012; 14 S59-67.

Praveen, EP, Sahoo, J, Khurana, ML, Kulshreshtha, B, Khadgawat, R, Gupta, N, Dwivedi, SN, Kumar, G, **Prabhakaran, D**, Ammini, AC. Insulin sensitivity and beta-cell function in normoglycemic offspring of individuals with type 2 diabetes mellitus: Impact of line of inheritance. *Indian J*

Endocrinol Metab. 2012; 16:105-11.

Praveen, EP, Khurana, ML, Kulshreshtha, B, Dwivedi, SN, **Prabhakaran, D**, Khadgawat, R, Gupta, N, Kumar, G, Ammini, AC. Plasma testosterone in adult normoglycaemic men: impact of hyperinsulinaemia. *Andrologia.* 2012; [Epub ahead of print].

Praveen, PA, Roy, A, **Prabhakaran, D**. Cardiovascular disease risk factors: A childhood perspective. *Indian J Pediatr.* 2012; [Epub ahead of print].

Prince, MJ, **Ebrahim, S**, Acosta, D, Ferri, CP, Guerra, M, Huang, Y, Jacob, KS, Jimenez-Velazquez, IZ, Rodriguez, JL, Salas, A, Sosa, AL, Williams, JD, Gonzalez-Viruet, M, **Jotheeswaran, AT**, Liu, Z. Hypertension prevalence, awareness, treatment and control among older people in Latin America, India and China: a 10/66 cross-sectional population-based survey. *J Hypertens.* 2012; 30:177-87.

Prince, M, Acosta, D, Ferri, CP, Guerra, M, Huang, Y, Rodriguez, JLL, Salas, A, Sosa, AL, Williams, JD, Dewey, ME, Acosta, I, **Jotheeswaran, AT**, Liu, Z. Dementia incidence and mortality in middle-income countries, and associations with indicators of cognitive reserve: a 10/66 Dementia Research Group population-based cohort study. *Lancet.* 2012; [Epub ahead of print].

Prince, M, Brodaty, H, Uwakwe, R, Acosta, D, Ferri, CP, Guerra, M, Huang, Y, Jacob, K, Llibre Rodriguez, JJ, Salas, A, Sosa, AL, Williams, JD, **Jotheeswaran, A**, Liu, Z. Strain and its correlates among carers of people with dementia in low-income and middle-income countries. A 10/66 Dementia Research Group population-based survey. *Int J Geriatr Psychiatry.* 2012; 27:670-82.

Purohit, B, Wadhwa, A. Organisational climate from view point of motivation in district hospital, India. *Health.* 2012; 4:400-6.

Raban, MZ, Dandona, R, Dandona, L. Availability of data for monitoring of non-communicable disease risk factors in India. *Bull World Health Organ.* 2012; 90:20-19.

Rabiu, MM, Kyari, F, Ezelum, C, Elhassan, E, Sanda, S, **Murthy, GVS**, Sivasubramaniam, S, Glibert, C, Abdull, MM, Abiose, A, Bankole, O, Entekume, G, Faal, H, Imam, A, Sang, LP,

Abubakar, T. Review of the publications of the Nigeria National Blindness Survey: Methodology, prevalence, causes of blindness and visual impairment and outcome of cataract surgery. *Ann Afr Med*. 2012; 11:125-30.

Rao, M, **Kadam, S, Sathyanarayana, T, Shidhaye, RR, Shukla, R, Ramachandra, SS, Bandyopadhyay, S, Chandran, A, Anitha, C, Sitamma, M, George, MS, Singh, V, Sivasankaran, S, Shatrugna, V.** A rapid evaluation of the Rajiv Aarogyasri community health insurance scheme in Andhra Pradesh, India. *BMC Proc*. 2012; 6 Suppl 1:O4.

Reddy, KS, Yadav, A, Arora, M, Nazar, GP. Integrating tobacco control into health and development agendas. *Tob Control*. 2012; 21:281-6.

Reddy, KS. Universal Health Coverage in India: the time has come. *Natl Med J India*. 2012; 25:65-7.

Roe, MT, Armstrong, PW, Fox, KA, White, HD, **Prabhakaran, D,** Goodman, SG, Cornel, JH, Bhatt, DL, Clemmensen, P, Martinez, F, Ardissino, D, Nicolau, JC, Boden, WE, Gurbel, PA, Ruzyllo, W, Dalby, AJ, McGuire, DK, Leiva-Pons, JL, Parkhomenko, A, Gottlieb, S, Topacio, GO, Hamm, C, Pavlides, G, Goudev, AR, Oto, A, Tseng, CD, Merkely, B, Gasparovic, V, Corbalan, R, Cinteza, M, McLendon, RC, Winters, KJ, Brown, EB, Lokhnygina, Y, Aylward, PE, Huber, K, Hochman, JS, Ohman, EM. Prasugrel versus clopidogrel for acute coronary syndromes without revascularization. *N Engl J Med*. 2012; [Epub ahead of print].

Roopa, S, **Prabhakaran, D.** Mortality and morbidity of lowering low-density lipoprotein cholesterol with simvastatin. *Natl Med J India*. 2012; 25:90-1.

Rout, RC, **Panda, B, Chauhan, AS.** Situational analysis of doctors working in health department of Odisha: A descriptive study. *International Journal of Research in Commerce, Economics & Management*. 2012; 2:1-3.

Rout, SK. Improving comparability and availability of private health expenditure data in health accounts in the Asia-Pacific region: a case of India. *Journal of Health Management*. 2012; 14:239-50.

Rudan, I, Theodoratou, E, Zgaga, L, **Nair, H,** Chan, KY, Tomlinson, M, Tsai, AC, Biloglav, Z, Huda, T, Arifeen, SE, Chopra, M, Campbell, H. Setting priorities for development of emerging interventions against childhood pneumonia, meningitis and influenza. *J Glob Health*. 2012; 2:[Epub ahead of print].

Saggurti, N, Jain, AK, Sebastian, MP, Singh, R, **Modugu, HR,** Halli, SS, Verma, RK. Indicators of mobility, socio-economic vulnerabilities and HIV risk behaviours among mobile female sex workers in India. *AIDS Behav*. 2012; 16:952-9.

Saha, S, Rathod, H. Shortage of doctors in rural health centers: empirical evidence from Gujarat. *Int J Med Public health*. 2012; 2:53-60.

Sahu, B, Hutter, I. 'Lived Islam' in India and Bangladesh: negotiating religion to realise reproductive aspirations. *Cult Health Sex*. 2012; 14:521-35.

Sahu, B, van Wissen, LJG, Hutter, I, Bosch, A. Fertility differentials among religious minorities: cross-national and regional evidence from India and Bangladesh. *Population, Space and Place*. 2012; 18:503-13.

Sarkar, BK, Reddy, KS. Priorities for tobacco control research in India. *Addiction*. 2012; [Epub ahead of print].

Sarna, A, Tun, W, **Bhattacharya, A,** Lewis, D, Shashikumar, Y, Apicella, L. Assessment of unsafe injection practices and sexual behaviours among male injecting drug users in two urban cities of India using respondent driven sampling. *Southeast Asian J Trop Med Public Health*. 2012; 43:652-3.

Sathyanarayana, T, Babu, GR. Targeted sexual exploitation of children and women in India: Policy perspectives on Devadasi system. *Ann Trop Med Public Health* 2012; 5:157-62.

Satija, A, Taylor, FC, Khurana, S, Tripathy, V, **Khandpur, N,** Bowen, L, **Prabhakaran, D,** Kinra, S, **Reddy, KS, Ebrahim, S.** Differences in consumption of food items between obese and normal-weight people in India. *Natl Med J India*. 2012; 25:10-3.

Saxena, DB, Shah, HM, Karan, J. National guidelines for Rabies prophylaxis and administration of cell culture vaccines. *The*

Indian Practitioner. 2012; 65:296-7.

Selvaraj, S, Hasan, H, Chokshi, M, Sengupta, A, Guha, A, Shiv, M, Srinivasan, S, Phadke, A, Gopakumar, KM, Santhosh, MR, Menghaney, L, Bhardwaj, K. Pharmaceutical Pricing Policy: a critique. **Econ Polit Wkly.** 2012; 47:20-3.

Selvaraj, S. The impact of health insurance in low- and middle-income countries. Escobar, ML, Griffin, CC, Shaw, P. Brookings Institution Press, 2011; p221. **Glob Public Health.** 2012; 7:434-6.

Selvaraj, S, Karan, A. Why publicly-financed health insurance schemes are ineffective in providing financial risk protection. **Econ Polit Wkly.** 2012; 47.

Shah, D, Choudhary, P, Gupta, P, Mathew, JL, Gera, T, Gogia, S, Mohan, P, **Panda, R, Menon, S.** Promoting appropriate management of Diarrhea: a systematic review of literature for advocacy and action: UNICEF-PHFI Series on Newborn

and Child Health, India. **Indian Pediatr.** 2012; 49.

Shahrawat, R, **Rao, KD.** Insured yet vulnerable: out-of-pocket payments and India's poor. **Health Policy Plan.** 2012; 27:213-21.

Sharma, K, Zodpey, SP, Tiwari, RR. Need and supply gap in occupational health manpower in India. **Toxicol Ind Health.** 2012; [Epub ahead of print].

Sheikh, K, Rajkumari, B, Jain, K, Rao, K, Patanwar, P, Gupta, G, Antony, KR, Sundararaman, T. Location and vocation: why some government doctors stay on in rural Chhattisgarh, India. **Int Health.** 2012; 4:192-9.

Shroff, Z, Murthy, S, Rao, KD. Reservation in postgraduate education for government in-service doctors: a case study from Andhra Pradesh. **BMC Proc.** 2012; 6:6.

Singh, V, Anchala, R, Shukla, R, Kadam, S, Sathyanarayan, TN, Tetali, S, Rao, M, MadhusudhanaRao, B. Competency based training on epidemic investigation, response and control practices-Heterogeneous District Rapid Response Team (RRT) training for public health workforce of Andhra Pradesh state, India. **Indian Emergency Journal.** 2012; 7:16-26.

Singh, S, Chhabra, P, Sujoy, R. Role of Traditional Birth Attendants (TBAs) in provision of antenatal and perinatal care at home amongst the urban poor in Delhi, India. **Health Care Women Int.** 2012; 33:666-76.

Singh, V, Chauhan, MB, Deswal, M, Dahiya, K, Dahiya, P, Sachdeva, A, Singh, R, **Nair, R.** Comparison of effect of simvastatin and metformin monotherapy on lipid profile and testosterone levels in polycystic ovary syndrome. **Global Journal of Medical and Public Health.** 2012; 1:24-5.

Singh, R, **Purohit, B.** Limitations in the functioning of village health and sanitation committees in a North Western State in India. **Int J Med Public health.** 2012; 2:39-46.

Singhal, D, Desai, R, Desai, S, Shastri, M, **Saxena, D.** Authors' reply. **J Pharmacol Pharmacother.** 2012; 3:80-1.

Srikrishna, SR. Non-communicable diseases prevention: time to put our act together. **Global Journal of Medical and Public Health.** 2012; 1:1-2.

Srinivasan, M, Mascarenhas, J, Rajaraman, R, Ravindran, M, Lalitha, P, Glidden, DV, Ray, KJ, Hong, KC, Oldenburg, CE, Lee, SM, Zegans, ME, McLeod, SD, Lietman, TM, Acharya, NR, Steroids for Corneal Ulcers Trial Group, Collaborators from India; **Murthy, GVS.** Corticosteroids for bacterial keratitis: the Steroids for Corneal Ulcers Trial (SCUT). **Arch Ophthalmol.** 2012; 130:143-50.

Srinivasan, M, Mascarenhas, J, Rajaraman, R, Ravindran, M, Lalitha, P, Glidden, DV, Ray, KJ, Hong, KC, Oldenburg, CE, Lee, SM, Zegans, ME, McLeod, SD, Lietman, TM, Acharya, NR, Steroids for Corneal Ulcers Trial Group, Collaborators from India; **Murthy, GVS.** The steroids for corneal ulcers trial: study design and baseline characteristics. **Arch Ophthalmol.** 2012; 130:151-7.

Stuckler, D, McKee, M, Ebrahim, S, Basu, S. Manufacturing epidemics: the role of global producers in increased consumption of unhealthy commodities including processed foods, alcohol, and tobacco. **PLoS Med.** 2012; 9:e1001235.

Sullivan, R, Kinra, S, Ekelund, U, Av, B, Vaz, M, Kurpad, A, Collier, T, **Reddy, KS, Prabhakaran, D, Ebrahim, S,** Kuper, H. Evaluation of the Indian

Migration Study Physical Activity Questionnaire (IMS-PAQ): a cross-sectional study. *Int J Behav Nutr Phys Act.* 2012; 9:13.

Sun, L, Klein, EY, **Laxminarayan, R.** Seasonality and temporal correlation between community antibiotic use and resistance in the United States. *Clin Infect Dis.* 2012; [Epub ahead of print].

Tandon, N, Fall, CH, Osmond, C, Sachdev, HP, **Prabhakaran, D,** Ramakrishnan, L, Dey Biswas, SK, Ramji, S, Khalil, A, Gera, T, **Reddy, KS,** Barker, DJ, Cooper, C, Bhargava, SK. Growth from birth to adulthood and peak bone mass and density data from the New Delhi Birth Cohort. *Osteoporos Int.* 2012; [Epub ahead of print].

Tetali, S. Too much energy; Ian, R, Edwards, P. The energy glut. The politics of fatness in an overheating world. Zed Books Ltd, 2010; p182. *Indian J Med Ethics.* 2012; 9:133.

Thom, S, Field, J, Poulter, N, Patel, A, **Prabhakaran, D,** Stanton, A, Grobbee, DE, Bots, ML, **Reddy, KS,** Cidambi, R, Rodgers, A. Use of a Multidrug Pill In Reducing cardiovascular Events (UMPIRE): rationale and design of a randomised controlled trial of a cardiovascular preventive polypill-based strategy in India and Europe. *Eur J Prev Cardiol.* 2012; [Epub ahead of print].

Trivedi, M. Book Review: School health services in India: The social and economic contexts. *Contributions to Indian Sociology.* 2012; 46:255-7.

Vellakkal, S. Financial protection in health insurance schemes: A comparative analysis of mediclaim policy and CHAT scheme in India. *Journal of Health Management.* 2012; 14:13-25.

Waghmare, L, Shrivastav, T, Khatib, N, Jain, A, **Zodpey, SP,** Gaidhane, AM, Zahiruddin, QS. The cross sectional study of anthropometric parameters in young healthy individuals having parental history of hypertension. *Int J Med Public health.* 2012; 2:38-43.

Walters, K, **Dandona, R,** Walters, LC, Lakshmi, V, **Dandona, L,** Schneider, JA. Wives without husbands: Gendered vulnerability to sexually transmitted infections among previously married women in India. *AIDS Care.* 2012; [Epub ahead of print].

2011

Agrawal, S, Ebrahim, S. Prevalence and risk factors for self-reported diabetes among adult men and women in India: Findings from a national cross-sectional survey. *Public Health Nutr.* 2011;1-13.

Babu, GR, Samari, G, Cohen, SP, **Mahapatra, T,** Wahbe, RM, Mermash, S, Galal, OM. Breast cancer screening among females in Iran and recommendations for improved practice: a review. *Asian Pac J Cancer Prev.* 2011; 12:1647-55.

Babu, GR. India's tryst with creation of public health cadre. *Ann Trop Med Public Health.* 2011; 4:143-4.

Babu, GR. "Opportunities for improving public health system in India" analysis of current state of affairs and pointers for future. *Ann Trop Med Public Health.* 2011; 4:69-70.

Babu, GR, Murthy, GV. "To Use or Not to Use"-dilemma of developing countries in introducing new vaccines. *J Glob Infect Dis.* 2011; 3:407-9.

Babu, GR. It might be survival that determines shopping *J Epidemiol Community Health* 2011; 66:e-Letter.

Burugina Nagaraja, S, Satyanarayana, S, Chadha, SS, Kalemene, S, Jaju, J, Achanta, S, Reddy, K, Potharaju, V, Shamrao, SR, Dewan, P, Rony, Z, **Tetali, S, Anchala, R, Kannuri, NK,** Harries, AD, Singh, SK. How do patients who fail first-line TB treatment but who are not placed on an MDR-TB regimen fare in South India? *PLoS One.* 2011; 6:e25698.

Charan, J, Yadav, P, **Saxena, D,** Kantharia, ND. Drug advertisements published in Indian Medical Journals: Are they ethical? *J Pharm Bioall Sci.* 2011; 3:403-6.

Chauhan, AS, Hussain, MA, Pati, S, Nallala, S, Mishra, J. Knowledge and attitudes related to HIV/AIDS among medical and allied health sciences students. *Indian Journal of Community Health.* 2011; 23:96-8.

Dandona, L, Raban, MZ, Dandona, R. Analysis of evaluations of health system/policy interventions in India. *Natl Med J India.* 2011; 24:261-6.

Dandona, L, Benotsch, EG. Evaluation of the Avahan HIV prevention initiative in India. *BMC Public Health.* 2011; 11:11.

Dhillon, PK, Penney, KL, Schumacher, F, Rider,

JR, Sesso, HD, Pollak, M, Fiorentino, M, Finn, S, Loda, M, Rifai, N, Mucci, LA, Giovannucci, E, Stampfer, MJ, Ma, J. Common polymorphisms in the adiponectin and its receptor genes, adiponectin levels and the risk of prostate cancer. *Cancer Epidemiol Biomarkers Prev.* 2011; 20:2618-27.

Dhillon, PK, Kenfield, SA, Stampfer, MJ, Giovannucci, EL. Long-term aspirin use and the risk of total, high-grade, regionally advanced and lethal prostate cancer in a prospective cohort of health professionals, 1988-2006. *Int J Cancer.* 2011; 128:2444-52.

Do, R, Xie, C, Zhang, X, Mannisto, S, Harald, K, Islam, S, Bailey, SD, Rangarajan, S, McQueen, MJ, Diaz, R, Lisheng, L, Wang, X, Silander, K, Peltonen, L, Yusuf, S, Salomaa, V, Engert, JC, Anand, SS, INTERHEART investigators, **Collaborators from India: Reddy, KS, Prabhakaran, D**. The effect of chromosome 9p21 variants on cardiovascular disease may be modified by dietary intake: evidence from a case/control and a prospective study. *PLoS Med.* 2011; 8:e1001106.

Eber, MR, Shardell, M, Schweizer, ML, **Laxminarayan, R**, Perencevich, EN. Seasonal and temperature-associated increases in gram-negative bacterial bloodstream infections among hospitalized patients. *PLoS One.* 2011; 6:e25298.

Ganguly, NK, Arora, NK, Chandy, SJ, Fairuze, MN, Gill, JP, Gupta, U, Hossain, S, Joglekar, S, Joshi, PC, **Kakkar, M**, Kotwani, A, Rattan, A, Sudarshan, H, Thomas, K, Wattal, C, Easton, A, **Laxminarayan, R**, Global Antibiotic Resistance Partnership (GARP) - India Working Group. Rationalizing antibiotic use to limit antibiotic resistance in India. *Indian J Med Res.* 2011; 134:281-94.

Gilbert, SF, Soliman, AS, Karkouri, M, Quinlan-Davidson, M, Strahley, A, Eissa, M, **Dey, S**, Hablas, A, Seifeldin, IA, Ramadan, M, Benjaafar, N, Toy, K, Merajver, SD. Clinical profile, BRCA2 expression, and the androgen receptor CAG repeat region in Egyptian and Moroccan male breast cancer patients. *Breast Dis.* 2011:[Epub ahead of print].

Giraldez, RR, Clare, R, Lopes, RD, Dalby, AJ, **Prabhakaran, D**, Brogan, GX, Giugliano, RP, Tricoci, P, James, SK, Tanguay, J-F, Pollack, CV, Harrington, RA, Braunwald, E, Newby, LK. Undiagnosed Diabetes Mellitus, Pre-Diabetes, and Outcomes in Patients with Non-ST-Segment Elevation Acute Coronary Syndromes. *Circulation.* 2011; 124:A9147.

Hasan, H, Zodpey, SP, Saraf, A. Diabetologist's

perspective on practice of evidence based diabetes management in India. *Diabetes Res Clin Pract.* 2011.

Huffman, MD, Mathew, R, Harikrishnan, S, Krishan, MN, Zachariah, G, Joseph, J, **Prabhakaran, D**, Faizal, A, Jayagopal, PB, Varghese, PK, Nambiar, A, Mohanan, PP, Kerala ACS Registry Investigators. Abstract: Comparison of risk models to predict in-hospital mortality for patients with acute coronary syndrome in India: The CSI-Kerala Risk Score. *Circulation.* 2011; 124:A16250.

Huxley, RR, Barzi, F, Lam, TH, Czernichow, S, Fang, X, Welborn, T, Shaw, J, Ueshima, H, Zimmet, P, Jee, SH, Patel, JV, Caterson, I, Perkovic, V, Woodward, M, Asia Pacific Cohort Studies Collaboration and the Obesity in Asia Collaboration, **Collaborators from India: Prabhakaran, D, Reddy, S**. Isolated low levels of high-density lipoprotein cholesterol are associated with an increased risk of coronary heart disease: an individual participant data meta-analysis of 23 studies in the Asia-Pacific region. *Circulation.* 2011; 124:2056-64.

Jonnalagada, S, Harries, AD, Zachariah, R, Satyanarayana, S, **Tetali, S**, Keshav Chander, G, Rao, S, Rao, R, Peri, S, **Anchala, R, Kannuri, NK**. The timing of death in patients with tuberculosis who die during anti-tuberculosis treatment in Andhra Pradesh, South India. *BMC Public Health.* 2011; 11:921.

Kakkar, M, Abbas, SS. One health: Moving from concept to reality. *Lancet Infect Dis.* 2011; 11:808.

Katta, A, Gopalakrishnan, S, Ganeshkumar, P, Christopher, AV, Jha, RK, **Munuswamy, S**. Morbidity pattern and nutritional status of elderly population in rural Tamil Nadu. *Journal of the Indian Academy of Geriatrics.* 2011; 7:159-62.

Khandelwal, S, Dayal, R, Jha, M, **Zodpey, SP, Reddy, KS**. Mapping of nutrition teaching and training initiatives in India: the need for Public Health Nutrition. *Public Health Nutr.* 2011:1-6.

Kishore, SP, Siegel, KR, Ahmad, A, Aitsi-Selmi, AA, Ali, MK, Baker, P, Basu, S, Bitton, A, Bloomfield, GS, Bukhman, G, Emery, E, Feigl, AB, Grepin, K, Huffman, MD, Kajana, K, **Khandelwal, S**, Kolappa, K, Liu, C, Lokhandwala, N, Marwah, V, Mwatsama, M, Novak, N, Nundy, S, Park, PH, Perez, CP, Price, MR, Rapkin, N, Rice, H, Seligman, B, Shah, S, Silva, JD, Sridhar, D, Stuckler, D, Vedanthan, R, Zaman, J, 'The Young Professionals' Chronic Disease Network. Youth manifesto on non-communicable diseases. *Global Heart.* 2011; 6:201-10.

Laxminarayan, R, Klugman, KP. Communicating trends in resistance using a drug resistance index. *BMJ Open*. 2011; 1:e000135.

Laxminarayan, R, Powers, JH. Antibacterial R&D incentives. *Nat Rev Drug Discov*. 2011; 10:727-8.

Mamtarani, KJK, **Saxena, D,** Patel, B, Chaudasma, R, Desai, VK. Knowledge, attitudes and beliefs about HIV among young people – A baseline survey in Navsari and Dang districts of Gujarat. *Int J Med Public health*. 2011; 1:20-3.

Marie, N, Gakidou, E, Levin-Rector, A, Khera, A, Murray, CJL, **Dandona, L.** Assessment of population-level effect of Avahan, an HIV-prevention initiative in India. *Lancet*. 2011; 378:1643-52.

Mathew, R, Harikrishnan, S, Krishan, MN, Zachariah, G, Joseph, J, Huffman, MD, **Prabhakaran, D,** Cholakkal, M, Ponnouse, E, Govindannunni, U, Abraham, AK, Mohanan, PP, Kerala ACS Registry Investigators. Rural/urban differences in hospital characteristics, patient presentation, process-of-care measures, and outcomes of 25,748 acute coronary syndrome admissions in Kerala, India: results from the Kerala ACS registry. *Circulation*. 2011; 124:A10038.

Mathur, MR, Singh, N, **Arora, M.** Tobacco use and cardiovascular diseases - Evidence, interventions and primary prevention. *J Prevetive Cardiology*. 2011; 1:66-72.

Mohanan, PP, Mathew, R, Harikrishnan, S, Krishan, MN, Zachariah, G, Joseph, J, Huffman, MD, Eapen, K, Abraham, M, Menon, J, Manoj, P, Jacob, S, **Prabhakaran, D,** Kerala ACS Registry Investigators. Abstract 9151: Presentation, management, and outcomes of 25,748 acute coronary syndrome admissions in Kerala, India: results from the Kerala ACS registry. *Circulation*. 2011; 124:A9151.

Nair, H, Brooks, WA, Katz, M, Roca, A, Berkley, JA, Madhi, SA, Simmerman, JM, Gordon, A, Sato, M, Howie, S, Krishnan, A, Ope, M, Lindblade, KA, Carosone-Link, P, Lucero, M, Ochieng, W, Kamimoto, L, Dueger, E, Bhat, N, Vong, S, Theodoratou, E, Chittaganpitch, M, Chimah, O, Balmaseda, A, Buchy, P, Harris, E, Evans, V, Katayose, M, Gaur, B, O'Callaghan-Gordo, C, Goswami, D, Arvelo, W, Venter, M, Briese, T, Tokarz, R, Widdowson, MA, Mounts, AW, Breiman, RF, Feikin, DR, Klugman, KP, Olsen, SJ, Gessner, BD, Wright, PF, Rudan, I, Broor, S, Simoes, EA, Campbell, H. Global burden of respiratory infections due to seasonal influenza in young children: a systematic review and meta-analysis. *Lancet*. 2011; 378:1917-30.

Nair, M, Webster, P, Ariana, P. Impact of non-health policies on infant mortality through the social determinants pathway. *Bull World Health Organ*. 2011; 89:778.

Narula, J, **Prabhakaran, D.** Globally Yours.... *Global Heart*. 2011; 6:223-4.

Negandhi, PH, **Negandhi, HN,** **Zodpey, SP,** Ughade, SN, Biranjan, JR. Risk factors for low birth weight in an Indian urban setting: a nested case control study. *Asia Pac J Public Health*. 2011; [Epub ahead of print].

Neogi, SB, **Malhotra, S,** **Zodpey, SP,** Mohan, P. Assessment of special care newborn units in India. *J Health Popul Nutr*. 2011; 29:500-9.

Ng, M, Gakidou, E, Levin-Rector, A, Khera, A, Murray, CJ, **Dandona, L.** Assessment of population-level effect of Avahan, an HIV-prevention initiative in India. *Lancet*. 2011; 378:1643-52.

Niswade, A, **Zodpey, SP,** Ughade, S, Bangdiwala, SI. Neonatal morbidity and mortality in tribal and rural communities in Central India. *Indian J Community Med*. 2011; 36:150-8.

Panda, R. A growing concern: How soon will India run out of water? *J Glob Health*. 2011; 1:135-7.

Pandit, N, **Pant, R.** Role efficacy of nurses in hospitals of Gujarat. *International Journal of Research in Technology and Management*. 2011; 1:69-76.

Rao, M, **Ramchandra, SS,** **Bandhopadhyay, S,** **Chandran, A,** **Shidhaye, R,** **Tamisettyanarayana, S,** **Thippaiah, A,** **Sitamma, M,** **George, SM,** **Singh, V,** **Sivasankaran, S,** Bangdiwala, SI. Addressing healthcare needs of people living below the poverty line: a rapid assessment of the Andhra Pradesh. Health Insurance Scheme. *Natl Med J India*. 2011; 24:335-41.

Reddy, KS. Improving childhood nutrition in India. *BMJ*. 2011; 343:d7188.

Riewpaiboon, A, **Chatterjee, S,** Piyathakit, P. Cost analysis for efficient management: diabetes treatment at a public district hospital in Thailand. *Int J Pharm Pract*. 2011; 19:342-9.

Rudan, I, Theodoratou, E, **Nair, H,** Marušić, A, Campbell, H. Reducing the burden of maternal and neonatal infections in low-income settings. *J Glob Health*. 2011; 1:106-9.

Sangwan, VS, Basu, S, Vemuganti, GK, Sejjpal, K,

Subramaniam, SV, **Bandyopadhyay, S**, Krishnaiah, S, Gaddipati, S, Tiwari, S, Balasubramanian, D. Clinical outcomes of xenofree autologous cultivated limbal epithelial transplantation: a 10-year study. *Br J Ophthalmol*. 2011; 95:1525-9.

Sharma, K, Zodpey, SP. Public health education in India: need and demand paradox. *Indian J Community Med*. 2011; 36:178-81.

Sharma, K, Zodpey, S, Quazi, SZ, Gaidhane, A, Sawleshwarkar, S, Khaparde, S. National AIDS control organisation's human resources capacity building initiatives for better response to HIV/AIDS in India. *Australas Med J*. 2011; 4:638-44.

Shukla, R, Shatrugna, V, Srivatsan, R. Aarogyasri Healthcare Model: advantage private sector. *Econ Polit Wkly*. 2011; 46:38-42.

Siegel, KR, Kishore, SP, Huffman, MD, Aitsi-Selmi, A, Baker, P, Bitton, A, Ding, EL, Feigl, AB, **Khandelwal, S**, Mwatsama, M, Rapkin, N, Seligman, B, Vedanthan, R. Trans-disciplinary education and training for non-communicable, chronic disease prevention and control. *Global Heart*. 2011; 6:191-3.

Singh, K, Reddy, KS, Prabhakaran, D. What are the evidence based public health interventions for prevention and control of NCDs in relation to India? *Indian J Community Med*. 2011; 36:S23-31.

Singhal, D, **Saxena, DB**. Inferences from targeting CYP450 modulation to decrease the risk of induced cataract in the experimental model? *Indian J Ophthalmol*. 2011; 59:403.

Steinhardt, LC, Aman, I, Pakzad, I, **Kumar, B**, Singh, LP, Peters, DH. Removing user fees for basic health services: a pilot study and national roll-out in Afghanistan. *Health Policy Plan*. 2011; 26 Suppl 2:ii92-103.

Sullivan, R, Kinra, S, Ekelund, U, Bharathi, AV, Vaz, M, Kurpad, A, Collier, T, **Reddy, KS, Prabhakaran, D**, Ben-Shlomo, Y, Davey Smith, G, **Ebrahim, S**, Kuper, H. Socio-demographic patterning of physical activity across migrant groups in India: results from the Indian Migration Study. *PLoS One*. 2011; 6:e24898.

Taylor, FC, **Satija, A**, Khurana, S, Singh, G, **Ebrahim, S**. Pepsi and Coca Cola in Delhi, India: availability, price and sales. *Public Health Nutr*. 2011; 14:653-60.

Theodoratou, E, Zhang, JS, Kolcic, I, Davis, AM, Bhopal, S, **Nair, H**, Chan, KY, Liu, L, Johnson, H, Rudan, I, Campbell, H. Estimating pneumonia

deaths of post-neonatal children in countries of low or no death certification in 2008. *PLoS One*. 2011; 6:e25095.

Thomsen, S, Hoa, DT, Malqvist, M, Sanneving, L, **Saxena, DB**, Tana, S, Yuan, B, Byass, P. Promoting equity to achieve maternal and child health. *Reprod Health Matters*. 2011; 19:176-82.

Vashist, P, **Singh, S**, Gupta, N, Saxena, R. Role of early screening for diabetic retinopathy in patients with diabetes mellitus: an overview. *Indian J Community Med*. 2011; 36:247-52.

Waters, D, Jawad, I, Ahmad, A, Lukšić, I, **Nair, H**, Zgaga, L, Theodoratou, E, Rudan, I, Zaidi, AKM, Campbell, H. Aetiology of community-acquired neonatal sepsis in low- and middle-income countries. *J Glob Health*. 2011; 1:152-68.

Yadav, P, Jaykaran, Chaudhari, M, **Saxena, DB**, Kantharia, ND. Clinical trials registered in clinical trial registry of India: A survey. *J Pharmacol Pharmacother*. 2011; 2:289-92.

Academic Programmes



OVERVIEW OF EDUCATION PROGRAMMES AT PHFI

PHFI: Institutional Presence

Four interlinked Indian Institutes of Public Health (IIPH) have been launched and operationalized under the aegis of the Public Health Foundation of India: one each in Gandhinagar (Gujarat), Hyderabad (Andhra Pradesh), Delhi, and Bhubaneswar (Odisha). These IIPs are envisioned as the hub of teaching, training, research, sharing knowledge and experience in the evolving discourse of public health. Besides these, a partnership for similar activities has been established in Gwalior (Madhya Pradesh) with the state government.

Current Courses

A brief description of the academic programmes being delivered at the Indian Institutes of Public Health - Gandhinagar, Hyderabad, Delhi and Bhubaneswar in the academic year 2011-12 is provided below:

Regular Programmes

Post Graduate Diploma in Public Health Management (PGDPHM): The programme was offered at Indian Institutes of Public Health, Delhi, Gandhinagar, Hyderabad and Bhubaneswar, and at the SIHMC, Gwalior (with technical support by PHFI) in the academic year 2011-12. The course fee for self-sponsored candidates was Rs. 2 lakhs and for Government nominated candidates is Rs. 2.5 lakhs. The PGDPHM programme was offered between August 2011 and July 2012.

Post Graduate Diploma in Biostatistics & Data Management (PGDBDM): This one year, full time programme was offered at IIPH, Hyderabad, for the fourth consecutive year. The course fee was Rs. 2 lakhs, per participant. The programme was offered between August 2011 and July 2012.

Post Graduate Diploma in Health Economics, Health Care Financing & Health Policy (PGDHEP): This programme was continued for the fourth consecutive batch at IIPH, Delhi. The course fee was Rs. 1.75 lakhs per participant. This programme was offered between mid-August 2011 and mid-May 2012.

Post Graduate Diploma in Clinical Research (PGDCR): This one year, full time programme was offered at IIPH Delhi for the third consecutive year. The course fee was Rs. 2 lakhs per participant. This programme was offered between August 2011 and July 2012.

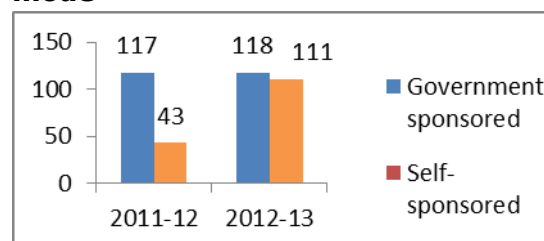
Distance Education Programmes

Post Graduate Diploma in Public Health Nutrition - Distance Learning (PGDPHN-DL): The one year course commenced in January 2011, in distance mode through e-learning. The course fee for Indian candidates was Rs. 15,000/- plus an additional exam fee of Rs. 2000/- per student, and for international candidates the fee was USD 900 plus an additional exam fee of USD 100 per student.

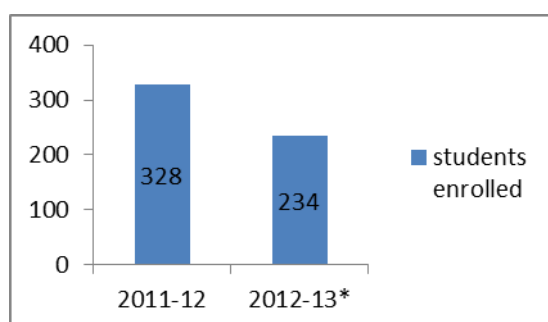
Post Graduate Diploma in Epidemiology - Distance Learning (PGDEPI-DL): The first batch of Post Graduate Diploma in Epidemiology was launched in 2012, at the IIPH, Delhi. The course fee was Rs. 25,000 per participant (inclusive of complementary reading material, exclusive of recommended textbooks and journal articles).

Post Graduate Diploma in Health Promotion with Specialization in Tobacco Control - Distance Learning (PGD HPTC-DL): PHFI started this one-year Post Graduate Diploma in Health Promotion with an applied focus on Tobacco Control in the academic year 2011-12, in distance mode through e-learning under Project STEPS (Strengthening of Tobacco Control Efforts through innovative Partnerships and Strategies). The course fee for the 2011-12 batch was Rs. 20,000. This programme commenced from November 2011.

Academic programmes offered in regular mode



Distance Learning programmes offered at IIPHs



*Admissions for 2012-13 courses on reproductive health and research methodology are still on-going

Direction for Academic year 2012-13

Brief details about the additional academic programmes proposed for the academic year 2012-13 are provided below:

Certificate Programme in Research Methodology (Distance Learning): This distance-learning programme aims to train the enrolled students in quantitative and qualitative research methodologies in the public health context. This programme is designed to address a long-standing need among young public health researchers, health practitioners and teachers from governmental and non-governmental organizations for effectively designing and participating in public health research. This program will commence in November 2012 from IIPH-Gandhinagar.

Post Graduate Diploma in Management of Reproductive and Child Health Programmes (Distance Learning): The course will equip the potential students to apply the principles of management relevant to RCH programmes in their practice. The duration of the course will be one year and the contents will be organized into 10 modules. These are being written by a team of 40 eminent authors and reviewers from various sectors- academia, research organizations and development sectors. The course will be delivered online with lectures and interactive sessions built in. The quality and content offered by the course will enhance competencies related to programme management specific to maternal and child health areas. This programme will be launched in January 2013.

Scholarships: PHFI offered a total of 33 need-based and merit-based scholarships in the

academic year 2011-2012. One student received a full scholarship and 32 were provided with partial scholarships that covered part of the tuition fee.

Scholarships offered to students enrolled in PHFI Academic Programmes during academic year 2011-12

Programme	IIPHD	IIPHH	IIPHG	IIPHB
PGDHEP	3	NA	NA	NA
PGDBDM	NA	2	NA	NA
PGDCR	6	NA	NA	NA
PGDPHM	10	3	7	2
TOTAL	19	5	7	2

NA: Not applicable

Academic Advisory Council of PHFI

The Academic Advisory Council of PHFI has been constituted. The first meeting of the Council is scheduled for October 17, 2012.

Name	Affiliation
Dr Abraham Joseph (Chair)	Director, Karigiri Leprosy Hospital & Formerly Head, Community Medicine Department, CMC, Vellore
Dr Shalini Bharat	Professor, Centre for Health and Social Sciences School of Health System Studies, Tata Institute of Social Sciences
Dr. Tim Evans	Dean, James P. Grant School of Public Health, BRAC University, Bangladesh
Dr. Pat Doyle	Professor, Department of Non-communicable Disease Epidemiology, London School of Hygiene and Tropical Medicine
Dr. Amarjeet Singh	Joint Secretary, Teacher Education, Ministry of Human Resource Development, Government of India
Dr. P Padmanabhan	Advisor, NHRSC, Ministry of Health and Family Welfare, Government of India

Dr. S. Shanbhag	Former President, Health Care Initiatives, Reliance Foundation
Dr. Anurag Agrawal	Institute of Genomics and Integrative Biology
Dr. H. Sudarshan	Karuna Trust
Dr. Gita Sen	Professor, Indian Institute of Management, Bangalore

Indian Institute of Public Health, Gandhinagar

Governing Council

Name	Affiliation
Shri Mukesh Ambani (Chair)	Chairman & MD, Reliance Industries
Shri Rajesh Kishore	Principal Secretary, Health, Government of Gujarat
Shri P. K. Taneja	Commissioner, Health, Government of Gujarat
Shri Hasmukh Adhiya	Principal Secretary, Higher Education, Government of Gujarat
Ms. S. Aparana	Secretary (EA), Government of Gujarat
Prof. K. Srinath Reddy	President, PHFI
Ms. Mirai Chatterjee	
Shri Gautam Kumra	Director, McKinsey & Company
Prof. Dileep Mavalankar (Member secretary)	Director, IIPH-G

About the Institute: The Indian Institute of Public Health – Gandhinagar (IIPH-G) was born on World Health Day – 7th April 2008. It began its operations in full swing in July 2008 with the launching of the Post Graduate Diploma in Public Health Management. The institute has a huge talent pool of academicians and researchers from diverse public health related backgrounds. Presently, IIPH-G has 13 fulltime faculty from diverse backgrounds related to public health. Students from various parts of Gujarat, Madhya Pradesh, Chhattisgarh, Andhra Pradesh and Punjab have been professionally trained at the Institute. IIPH-G has also been providing research based health policy advice to Government of Gujarat. The faculty members are on various government committees, NGO boards and international advisory committees. In addition, the IIPH-G has been catering to the training needs of the in-service government staff / managers in the public health departments of various states. The Institute's activities have received funding support from NRHM/ Ministry of Health and Family Welfare, and Medical Council of India, Council of Scientific Innovation and Research National Bank for Agriculture and Rural development, the

Karolinska Institute, Natural Resources Defense Council (NRDC) Institute of Public Health, Bangalore etc. They also help in teaching programmes and conducting workshops at other IIPHs and other academic institutions. The faculty members are involved in several research grants/projects in the areas of maternal and child health, disease surveillance, nutrition, micro-finance, monitoring health programmes and advocacy, heat stress and health due to climate change etc. In addition, IIPH-G has developed research and academic collaborations with the Karolinska Institute, Sweden, Aberdeen University, UK, NRDC, USA, Boston University, and Columbia University, USA.

A total of 119 participants took part in trainings conducted over last five years, between July 2009 and August 2013. The trainings were conducted for the state governments of Gujarat, Andhra Pradesh, Madhya Pradesh, Punjab and Chhattisgarh, for local NGOs, and a few were Self Sponsored trainings

Details of PDGPHM participants by state and Sponsorship

State	2008	2009	2010	2011	2012
	-	-	-	-	2
	2009	2010	2011	2012	2013
Gujarat	14	18	15	4	3
Chhattisgarh	2	NA	NA	NA	NA
Andhra Pradesh	5	NA	NA	NA	NA
Madhya Pradesh	0	8	10	2	0
Punjab	NA	1	NA	NA	NA
NGO	NA	NA	NA	5	10
Fellowships					
AMC*	0	0	0	2	2
Nomination					
Open (Self Sponsored)	1	4	0	6	7
TOTAL	22	31	25	19	22

*AMC – Ahmedabad Municipal Corporation; NGO-NGO Fellowship

Distance Learning: IIPH-G is in the process of developing a six-month training programme in Research Methodology shortly. This is going to be delivered through the distance learning mode in a technology platform that PHFI has already established for its other programmes. It will be taught by a multi-disciplinary team from IIPH-G,

with colleagues from other IIPs and PHFI. The programme will support health, medical, management and social science students, research scholars and professionals involved in research as a part of their academic requirements or professional engagement. The course is envisaged to have a batch size of 50 to 60 participants with a course fee of Rs. 10,000, inclusive of programme fee, reading materials and online access. This programme is planned to be launched in October 2012.

Research activities

Completed

Title of the Project
Human resource actions and Work Force Objectives among Female Health Workers in a district in Gujarat - An Exploratory Study carried out at the behest of the Mission Director, National Rural Health Mission, Gujarat State through the Faculty Development Fund Performance Assessment of Rashtriya Swasthya Bima Yojana Programme In Gujarat
Willingness to Pay for Health Insurance Among HIV Positive Patients in India
Large Scale Innovative Pro-Poor Programmes Focused on Reducing Maternal Mortality in India: A Proposal for Impact Evaluation (MATIND) funded by the European Union.
Evidence for policy implementation for achieving MDGs - In collaboration with the Karolinska Institute, Sweden
Documentation of 'Safe Motherhood and Child Survival' Project activity of Deepak Foundation in Vadodra District since 2005.
Mother and Child tracking system (including analysis of death audits)
Effective training and utilization of Accredited Social Health Activist (ASHA) in Reproductive and Child Health service delivery
Evolution of Village Health and Sanitation Committees and their participation in the health of their communities
An innovative way to deliver Comprehensive Emergency Obstetric Care in remote areas
Evaluation of Nutrition Initiatives of the Government of Gujarat under the Integrated Child Development Services. In partnership with PHFI. Funded by Global Alliance for Improved Nutrition
Climate Change and Heat Health Research. In partnership with the Natural Resources Defense Council - USA.

Title of the Project
"Study of the factors influencing private sector participation in Chiranjeevi Yojna (CY) in Gujarat, India"- UK based research fellowship (under PHFI - Wellcome Trust Capacity Building Programme).

Total number of new research Proposals submitted and proposals approved/funded during the current year 2011-12

Sr. No	Status	Numbers
3	New projects sanctioned	11
4	New project proposal concept notes accepted	2
5	New proposals submitted	4

Training programmes conducted

Broad Area of Training	Subject of Training	Numbers
Research Methods	Qualitative Research Methods	3
	Quantitative Data Analysis Using SPSS	3
Monitoring and Evaluation	Monitoring and Evaluation of Public Health Programmes	3
Others	Regional Dialogue on strengthening Health System	1
	Linking Health and Microfinance in India: Improving Incomes and Promoting Universal Health Care Access for the Poor	2
	Tobacco Control (STEP Project)	1
	Joint Annual Conference of Indian Association of Preventive and Social Medicine-Gujarat Chapter (19th) & Indian Public Health Association Gujarat Chapter (1st)	2
	Sensitization Workshop on Health Effects of Heat in Relation to Climate Change	1
Others	Network Meeting on tracking of MDGs in India-Under EPI4	1
	Social Epidemiology & Social Determinants of Health	5
	Fundamentals of Health Economics and Health Financing	4

Broad Area of Training	Subject of Training	Numbers
	Consultation on Strengthening RSBY: Experiences from Gujarat	1
Health Systems Strengthening		1
Universal Health Care Access		1

These trainings were aimed at building capacity of government medical officers, students and faculty members from government and private medical colleges, public and private research institutions, NGOs, social science & management students and agencies such as UNICEF. So far, 706 participants have undergone such trainings this year.

Publications: IIPH-G faculty members have published papers, case studies, books, chapters and monographs and working papers in reputed national and international journals and through prominent publishing agencies. A summary of publications for the current year is mentioned below:

Nature of Publication	Numbers
Published papers	48
Papers under review	4
Publication of IIPH-G students	3
Book chapters	6
Conference presentation	12
Reports and periodicals	10

Faculty: IIPH-G has a multi-disciplinary team of 12 faculty members with qualifications in the fields of public health, management and social sciences. All faculties have significant years of experience in teaching, research, or public health practice. The faculty members have either PhD or MD degrees or Master's Degree in Public Health from both Indian and foreign universities. Some faculty were trained as part of the Future Faculty Programme of PHFI. The faculty and students are supported by six administrative staff members.

Designation	Numbers of staff members
Director	1
Additional Professor	1
Associate Professor	2
Assistant Professor	4
Senior Lecturer	3
Lecturer	1

Administrative staff members	6
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Faculty Engagement and Development

Besides the listed activities related to research and training, faculty members are engaged in activities that allow them to collaborate with the wider public health community and actors such as, the state government, NGOs, national and international universities and organizations.

Strengths and Challenges

Strengths

- Multi-disciplinary, committed fulltime faculty with varied backgrounds and experience
- Good relations with state government.

Challenges

- Construction of permanent campus delayed
- Students nominated by Government reducing over the years.
- Rented space is insufficient and limits the expansion of programmes

Planned activities for 2012-13

Several teaching, training and research activities are planned in the current year:

Forthcoming Activities

- Training of Student Peer Leaders, Teacher coordinators, students of 480 schools in six focus districts have been planned under the STEPS project.
- Training of Paramedics in six focus districts have been planned under the STEPS project.
- Research studies and proposals in the areas of health information systems/telemedicine.
- Certificate Programme in Research Methodology is being planned and prepared and will be started from September 2012.

Short term trainings proposed

- Health Communication and Health Promotion
- Second Batch of Short Term Programme "Quantitative Data Analysis Using SPSS"
- First Batch of Short Term Programme "Quantitative Data Analysis Using STATA"
- Wellcome Trust Capacity Building short term training on Health Economics
- Workshop on Digital Libraries using open source software " K
- Short Term Training Programme on Geographical Information System
- Short Term Training Programme on Occupational Health

Indian Institute of Public Health, Delhi

Governing Council

Name	Affiliation
Shri J.V.R. Prasada Rao	Special Advisor to Executive Director, UNAIDS, India Office (Former Health Secretary, Ministry of Health and Family Welfare, Govt. of India)
Shri P.K. Pradhan	Health Secretary, Ministry of Health & Family Welfare, Govt. of India, New Delhi
Shri Rajan Gupta	Finance Commissioner & Principal Secretary, Health & Medical Education Department, Govt. of Haryana, Chandigarh
Prof. K. Srinath Reddy	President - Public Health Foundation of India, New Delhi
Prof. N.K. Sethi	Professor & Head, Department of Planning & Evaluation, National Institute of Health & Family Welfare, New Delhi
Prof. Arvind Pandey	Director - National Institute of Medical Statistics (Indian Council of Medical Research), New Delhi
Prof. Rama V. Baru	Professor - Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi
Dr. David Heymann	Chairman - Health Protection Agency, London, UK
Prof. B. S. Garg	Director - Dr. Sushila Nayar School of Public Health and Dean-Mahatma Gandhi Institute of Medical Sciences, Sewagram, Wardha
Prof. Sanjay Zodpey	Director - Indian Institute of Public Health-Delhi

About the Institute: The Indian Institute of Public Health – Delhi (IIPH-D) commenced its operations in November 2008 with the launch of the Post Graduate Diploma in Health Economics, Health Care Financing and Health Policy. Since then, IIPH-D has expanded its activities and launched the following courses: Post Graduate Diploma in Public Health Management, Post Graduate Diploma in Clinical Research, Post Graduate Diploma in Public Health Nutrition (Distance Learning), and Post Graduate Diploma in Epidemiology (Distance Learning).



The key objective of the institute has been to implement the vision of the Public Health Foundation of India by linking together public health advocacy, teaching, research and practice. With this objective, various short term training programmes, workshops, research activities and publications are being taken up by the Institute.

IIPH-D has successfully conducted many short term training programmes and workshops in various fields related to public health, and it will continue to do so. The vibrancy of the Institute is reflected in the multi-speciality research activities undertaken in collaboration with numerous national and international partners.

IIPH-Delhi has a rich tradition of pursuing academic excellence and value-based education, and it provides an environment conducive to overall skill development. Through its activities, IIPH-D strives to create a public health workforce that responds to the felt needs of the country.

Academic programmes: Three full time academic programmes are being offered at IIPH-D, Post Graduate Diploma in Public Health Management (PGDPHM), Post Graduate Diploma in Health Economics, Health Care Financing and Health Policy (PGDHEP) and Post Graduate Diploma in Clinical Research (PGDCR). Additionally, two distance learning programmes, Post Graduate Diploma in Public Health Nutrition (PGDPHN-DL) and Post Graduate Diploma in Epidemiology (PGDEP-DL) are also being currently offered from IIPH-D.

Current courses

Regular Programmes

(August 2011-July 2012)

Programmes	No. of Students (graduated)	
	Govt. Nominated	Self - Sponsor ed
Post Graduate Diplomas in Public Health Management (PGDPHM); Health Economics, Health Care Financing and Health Policy (PGDHEP); Post Graduate Diploma in Clinical Research (PGDCR)	24	17

Distance Learning Programmes

(January 2011 – December 2011)

Programme	No. of Students (graduated)	
	Govt. Nominated	Self- Sponsored
Post Graduate Diploma in Public Health Nutrition – Distance Learning (PGDPHN-DL)	None	61

Direction for next year

Regular Programmes

(August 2012 - July 2013)

Name of the Programme	No. of Students enrolled* (As on 19.9.2012)	
	Govt. Nominated	Self - Sponsored
Post Graduate Diplomas in Public Health Management (PGDPHM); Health Economics, Health Care Financing and Health Policy (PGDHEP); Post Graduate Diploma in Clinical Research (PGDCR)	12	30

Distance Learning Programmes

(January 2012 – December 2012)

Name of the Programme	Duration	No. of Students enrolled	
		Govt. Nominated	Self- Sponsored
Post Graduate Diploma in Public Health Nutrition – Distance Learning (PGDPHN-DL)	One year	None	73
Post Graduate Diploma in Epidemiology – Distance Learning (PGDEPI-DL)	One year	11	78

Distance Learning Programmes proposed

(January 2013 – December 2013)

1. Post Graduate Diploma in Public Health Nutrition – Distance Learning (PGDPHN-DL)
2. Post Graduate Diploma in Epidemiology – Distance Learning (PGDEPI-DL)
3. Post Graduate Diploma in Management of Reproductive and Child Health Programmes – Distance Learning (PGDMRCH – DL)

Training programmes

Public Health Development Programmes (PDP): IIPH-D offers a wide range of public health development programmes (PDPs) in form of workshops encompassing fields of epidemiology, biostatistics, health social sciences, health management/administration, occupational and environmental health and research methods, with a mandate to enhance public health competencies across India. These training programmes are attended by professionals, researchers, clinicians, nutritionists, medical and social science students, faculty members from academic institutes from all over India and also outside the country. Hosting this variety of academic events has been a rewarding experience in terms of providing a public health boost in the country.

Trainings/ Workshops	No. of Train ings	Participant s Trained	Trainin g Days	Person Days
Planned and Organized by IIPH-D	20	418	121	2396
IIPH-D in Collaboration with PHFI	14	364	95	2465
Planned by Other Organizations with Participation of IIPH-D Faculty	3	219	5	319
Capacity Building Programmes for faculty	8	139	23	443

IIPHD has successfully contributed to 45 trainings and workshops in various fields of public health between April 2011 and March 2012, in which 1,140 candidates across India as well as abroad have participated. These training programmes have been designed and aligned considering the needs of various stakeholders. Some of these PDPs have received support and funds from both national and international organizations. Owing to their short durations, these training programmes do not demand long absences from the primary work of the candidates. The courses have been attended by the candidates who aim to improve their knowledge and skills to broaden their professional standards.

Consultations

IIPH-D has completed the following consultations from April 2011 to March 2012

Title
<ul style="list-style-type: none"> Realizing Potential of Digital Technologies for Public Health Content National Consultation on MPH Programme Development in India National Consultation on Development of Intensive Professional Programme in Sexually Transmitted Infections and HIV (IPP-STI & HIV) in India Consultation for the Post Graduate Diploma in Management of Maternal and Child Health

Programmes

- Consultation on Development of Short Course on RCH Programme Management
- Consultation on 'The Ante Natal and Child Health Care in Urban Slums Project' (ANCHUL)
- Consultation on Leadership in Public Health: Challenges in South Asia
- Teaching Colloquium: Reflections – Education at Public Health Foundation of India

Research

The Research Administration and Development Cell at IIPH-D:

IIPH-Delhi encourages its faculty members to undertake need-based and India relevant public health research. The vibrant research atmosphere at IIPH-D has enabled faculty members to undertake 38 research projects (27 completed and 11 ongoing) since its inception in 2008. Additionally, our researchers also collaborate with colleagues from PHFI, other IIPDs and multiple national and international academic institutes in research activities. The Research Administration and Development Cell (RAD) was conceived to streamline research related activities, ensure centralized and updated documentation of research activities and help enhance our institutional research capacity. The cell has facilitated the creation of institutional frameworks and Standard Operating Procedures guiding research administration and development. The cell also facilitates communication with the Research Administration Team at PHFI in streamlining the proposal submission process from all IIPH-D researchers and their record maintenance. The Institute has a strong research base with several projects funded/ supported by the Government, with 35 percent faculty salary recovered from projects and 73 journal publications in 2011-12.

Project statistics

(April 2011 – March 2012)

Particulars	Number
Ongoing Projects at IIPH-D	19
Completed Projects at IIPH-D	8

Particulars	Number
IIPH-D Faculty as Co-Investigator in Ongoing Projects with PHFI / IIPhs /COEs	7
IIPH-D Faculty as Co-Investigator in Completed Projects with PHFI / IIPhs /COEs	6
Total	40

On-going Projects

(April 2011 – March 2012)

Title	Funding Agency
Assessment of Navjaat Shishu Suraksha Karyakaram	Ministry of Health and Family Welfare, Government of India
Effect of Heating on the Trans-Fatty Acid Content of Commonly Consumed Indian Edible Oils and Fried Snacks in South Delhi	Department of Science and Technology, Ministry of Science and Technology, Government of India
Role of Single Photon Emission Computed Tomography (SPECT)-Myocardial Perfusion Imaging (MPI) and Coronary Computed Tomography (CT) Angiography in the Assessment of Patients at Intermediate Risk of Coronary Events - A Pilot Randomized Controlled Trial (IAEA)	International Atomic Energy Agency
A Scalable Approach to Improve the Coverage, Quality and Impact on MNCH Care in the Urban Slums of Delhi: Developing a Package of MNCH Care Facilitated through an Urban Community Health Worker: The ANCHUL (Ante Natal and Child Health Care in Urban Slums)	World Health Organization
Challenges to Accessing and Remaining on ART	Wellcome Trust Capacity Building

Title	Funding Agency
in India: Perspectives of Mothers and Children Living with HIV	Programme
Increasing Health Care Access among Migrants through Improved Delivery of Government Health Care Services	Indian Council of Medical Research (ICMR)
Improving Management of Facility Based Newborn Care in Bihar	The United Nations Children's Fund (UNICEF)
An Evaluation of the Post Graduate Diploma Programme in Public Health Management	Wellcome Trust Capacity Building Programme
Baseline Data Collection Related to Married Adolescents Reproductive Health in Selected NIPI Focus Districts in India	World Health Organization
Trans fats in the food supply in India: a pilot study to align policy options with the population consumption pattern	Wellcome Trust Capacity Building Programme
Bringing the SAFE Child Protection Tools to Practice: Partnerships for Data Collection, Analysis and Implementation Research in India and Haiti	Oak Foundation
Evaluation of Effectiveness of District Extender Model of Supporting Vitamin-A Supplementation (VAS) Programme in Selected States of India	Micrunutrient Initiative India - The United Nations Children's Fund (UNICEF)
Strengthening the Capacity Building Initiatives of the State Institute of Health Management and Communication (SIHMC)-II	Government of Madhya Pradesh
Intensive Professional Programme in Sexually Transmitted Infections and HIV (PSLP)	Australian Agency for International Development (AusAID)

Title	Funding Agency
Post Graduate Diploma in Management of Reproductive and Child Health Programmes	The United Nations Children's Fund (UNICEF)
Develop/Adapt and Field Test Capacity Building Package for Reproductive and Child Health (RCH) Programme Managers	World Health Organization
Strengthening Public Health Workforce Capacity in India by Establishing New Institutes of Public Health, Undertaking Research, Advocacy, Policy Information Activities, Strengthening Existing Institutions and Facilitating Establishment of Standards in Public Health Education	Pfizer Inc
Reaching Everyone: Strengthening Public Health Education	AusAID through The Nossal Institute for Global Health (The University of Melbourne)
Cross-Country Comparison of Master's and Doctoral Level Public Health Programmes with a Focus on Competency-Driven Curriculum	China Medical Board

Completed Projects

(April 2011 – March 2012)

Title	Funding Agency
Give2Asia Grant for IIPH Delhi	Give2Asia Via Deshpande Foundation
Strengthening the Capacity Building Initiatives of the State Institute of Health Management and Communication	Government of Madhya Pradesh

Title	Funding Agency
(SIHMC)-I	
Workload and Knowledge, Attitude, Behaviour and Practices (KABP) Analysis of Integrated Counselling and Testing Centre (ICTC) and Anti-Retroviral Therapy (ART) Counsellors	AIDS Prevention and Control - Voluntary Health Services (APAC-VHS)
Technical Assistance to Government of Jharkhand to Develop Human Resource Strategy for the Department of Health and Family Welfare	The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR), United States Agency for International Development (USAID)
Community Based Maternal Death Audit (MDA) in one District of Uttar Pradesh	The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR), United States Agency for International Development (USAID)
Global Health Course in Master's Programme in Sustainable Development Practice at TERI University	The Energy and Resources Institute (TERI) University
Development of Module on Gender Equity in Health for Post Graduate Diploma in Public Health Management	The Maternal and Child Health Sustainable Technical Assistance and Research (MCH-STAR), United States Agency for International Development (USAID)
Ferrous Sucrose in Pregnant Anaemic Women in India	World Health Organization, India

Title	Funding Agency
(FeSPAW)-A Randomized Open Label Study, Phase-I	

through teaching and training programmes, programme and policy relevant research and advocacy on key public health concerns facing the country. Based upon experience we face the challenges related to academic programmes, which are briefly described below:

Faculty at the Institute

Total faculty: 31

Administrative staff: 14

Strengths and Challenges

Human Resources

- 31 faculty members, with a multi-disciplinary background (during 2011-12). Several faculty have additional qualifications and have been trained abroad
- Research staff- 14 research staff assist faculty members in their project activities (during 2011-12)

Administrative staff

- Dedicated programme officers for Distance Learning, regular programmes, training activities were appointed
- New vertical – Human resource, library

Infrastructure

- Well-equipped library with access to physical/digital reading material
- Sufficient space to accommodate all staff in one building
- Facilities for videoconference
- Separate training rooms for courses and trainings

- University status: Demand for academic programmes is limited due to lack of University status. Prospective students typically prefer University affiliated master's programmes.
- Accreditation of programmes: Accreditation process for recognition of our academic programmes is equally challenging. Most prospective students have queries on affiliations and accreditations of the programmes offered.
- Demand for public health professionals – Though, there is a need for public health professionals in the country, with evidence of acute manpower shortage, there are currently limited job opportunities available in both public and private health care sectors. The job opportunities for non-medical public health professionals are even more limited, thereby creating barriers to entry into this profession.

Challenges: In response to accomplishing the mandate of PHFI, IIPH-D is engaged in capacity-building initiatives for public health professionals

Indian Institute of Public Health, Hyderabad

Advisory Council

Name	Affiliation
Prof. Shanta Sinha (Chair)	Chairperson, National Commission for Protection of Child Rights
Shri K.R. Kishore, IAS.	Principal Secretary, Health Medical and Family Welfare Dept., Government of Andhra Pradesh
Sri V. Bhaskar, IAS.	Principal Finance Secretary to Government, Finance Department, Government of Andhra Pradesh
Shri.Rajeev Sadanandan, IAS.	Principal Secretary, Health & Family Welfare Department
Dr. E. V. Ramana Reddy, IAS.	Secretary (H&FW), Health and Family Welfare Department, Government of Karnataka
Dr.Ch. Mohan Rao	Director, Centre for Cellular & Molecular Biology, Hyderabad
Sri Gullapalli N Rao, MD	Chairman, L V Prasad Eye Institute, Hyderabad
Prof.K.C.Reddy	Vice Chairman – REECAP and Chairman – REEMAP
Prof.Geeta K. Vemuganti	Dean, School of Medical Sciences, University of Hyderabad, Central University
Dr. P. Raghava Reddy	Vice Chancellor, Acharya N.G. Ranga Agricultural University
Dr .C. Venkata S. Ram	CEO, MediCiti Institute of Medical Sciences (MIMS) Campus
Dr. Raghunath A. Mashelkar	CSIR Bhatnagar Fellow, National Chemical Laboratory
Mr. Raj Mitta	Chairman, Essential Value Associated
Dr. A. K. Shiva Kumar	Advisor, UNICEF
Prof. K. Srinath Reddy	President, Public Health Foundation of India
Prof.G.V.S.Murthy (member secretary)	Director, Indian Institute of Public Health- Hyderabad



About the Institute: On April 7, 2007, (World Health Day), PHFI laid the foundation stone for its first institute in Hyderabad, in partnership with the Government of Andhra Pradesh. The occasion was graced by the then Chief Minister of Andhra Pradesh, Dr. Y S Rajasekhara Reddy, Union Minister for Health & Family Welfare Dr. Anbumani Ramadoss, and Deputy Chairman, Planning Commission, Mr. Montek Singh Ahluwalia.

The Indian Institute of Public Health Hyderabad (IIPH-H) commenced its activities on July 1, 2008, with a mission to deliver public health education, pursue research and advocacy and support policy development. It lays strong emphasis on pursuing public health policy, practice, training and research, positioning its programmes according to the public health priorities of the state and the nation. The Institute has brought together a highly qualified and diverse faculty of nationally and internationally trained and extremely motivated public health academics and practitioners. It aims to create an environment that supports excellence in instruction, research and practice.

IIPH-H's goals involve training public health professionals through long- and short-term courses each year. The flagship courses of IIPH-H are the Post Graduate Diploma in Public Health Management and the Post Graduate Diploma in Biostatistics and Data Management. Short-term courses include training in research methods, statistics, disease surveillance, and change management. In addition, the Institute collaborates with various academic, research, and administrative organizations to conduct workshops and conferences, and to undertake public health research and evaluation. IIPH-H also assists in the implementation of national programmes, such as the National Rural Health Mission as well as state and regional level public health initiatives.

Academic Programmes

- **Post Graduate Diploma in Public Health Management:** The admissions for the 2012-13 batches have been completed and 29 candidates have enrolled, including 21 candidates as government nominees from the States of Karnataka and Andhra Pradesh.
- **Post Graduate Diploma in Biostatistics and Data Management:** The admissions for the 2012-13 batches are in progress with a total of 19 government nominees and three self-sponsored candidates expected to enrol.

Research and training activities

S. N	Status	Numbers
1	Completed Research projects	23
2	On-going Research projects	14
3	Completed Training Programmes in 2011	20
4	Completed Training Programmes in 2012	25

Research projects

On-going

S. N	Name of the Project	Funding Agency
1	Monitoring and Evaluation of the RS10 Road safety Intervention plan in Hyderabad, India	Johns Hopkins Bloomberg School of Public Health
2	Validation of INCLEN Neuro Developmental Screening Tool (NDST)	NIH; National Trust; Autism Speaks; INCLEN International
3	Technical Assistance for Operationalization of Maternal Death Review in the State of Andhra Pradesh	United Nations Children's Fund (UNICEF)
4	Assessment of the need for training in quantitative analysis methods in health	Self-funded
5	South Asian Hub for Advocacy, Research and Education on Mental Health (SHARE)	NIH
6	Hyperglycemia in Pregnancy and adiposity in Infants. A pilot study to establish feasibility of a large cohort study	Wellcome Trust

Completed

S.N	Name of the Project	Funding Agency
1	Rajeev Aarogyasree Evaluation	Department of Medical, Health & Family Welfare, Govt. of A.P.
2	Rapid Response Team - Training	Disease Surveillance Project, Directorate of Health Services, Govt. of A.P.
3	HMDA - Survey on Transportation	Hyderabad Metro Development Authority, Hyderabad
4	Systemic Evaluation of Integrated Disease	Disease Surveillance

S.N	Name of the Project	Funding Agency
	Surveillance Programme to Assess the Impact of SMS Based Reporting in Andhra Pradesh IDSP - SMS	Project, Directorate of Health Services, Govt. of A.P.
5	Rapid Evaluation of Medak project - Implemented by the Academy of Nursing Studies	Department of Medical, Health & Family Welfare, Govt. of A.P.
6	IDSP - NRMH workshop	NRHM, New Delhi
7	Developing a Training Curriculum and Programme on Food Safety and Standards	Food Safety & Standards Authority of India, New Delhi
8	NGRI workshop of climate change	National Geographic Research of India, Hyderabad
9	Nice Workshop	Nice Organization, UK
10	Epidemiological Profiling of Districts Using Data Triangulation as a Part of Mid-Term Review (MTR) of NACP-III in A.P.	India Health Action Trust BMGF, Bangalore
11	DFID Workshop on Health & Climate change	DFID
12	NHS Project (Project Value GBP 6,999)	NHS Institute, UK
13	FHI-ASCI Patient Safety	ASCI Hyderabad
14	FHI-ASCI leadership Change Management	ASCI Hyderabad
15	FHI-ASCI Short film on Management	ASCI Hyderabad
16	Baramati Self Help Group - Peoples Health in People's Hands	VIIT, Baramati
17	HPA - Disaster Management	HPA Trust, UK
18	PHC Management of PHC Medical Officers	Harvard School of Public Health,

S.N	Name of the Project	Funding Agency
19	WHO - Strategic Directions to improve Health of the Urban Poor	Boston. WHO
20	Impact assessment of HIV prevention programming in Andhra Pradesh and Karnataka: the CHARME-India II project	Bill & Melinda Gates Foundation /Public Health Foundation of India

Training conducted: IIPH-H organized short term training programmes, workshops, and conferences in 2011 across wide-ranging expertise areas, with 489 participants. The trainings were organized in the following areas:

Core Area	No. of participants
Biostatistics/Research Methodology	3
Disaster Management	74
Disease Surveillance/Epidemiology	22
Management/Project Management	25
Non-Communicable Diseases	126
Public Health Disability	123
Public Health Disability/Blindness	22
Public Health Disability/Hearing Impairment	38
Research Methodology	40
Road Safety	16

In 2012, IIPH-H has continued to organize trainings in different core areas and through the sessions, the faculty has trained 603 participants to date

Core Areas	No of participants
Adolescent Health	313
Disease Surveillance	69
Epidemiology/Research Design	28
Health Education	26
Health Policy	23
Healthcare quality	47
Non-Communicable Diseases	20
Project Management	8
Research Methodology	69

Faculty: Total Faculty at IIPH-H consists of 28 members and the administrative and research team consists of 26 persons. Five faculty members

are in Fellowship programmes and seven are doing their PhD through National/ International institutes.

Publications

S N	Nature of Publication	Number
		s
1	Published papers in journals	44
2	Commissioned Reports	26
3	Presentations at Conferences / Symposiums	18
4	Books chapters	3

Strengths and challenges

Strengths

- Experienced teaching faculty in various subject specialities in Public Health
- Strong research experienced faculty
- Numerous publications in previous years (46 articles in 2011, 35 in 2012 to date)
- Varied experience to conduct different short term training programmes
- Good infrastructure and facilities

Challenges

- Affiliation of courses is still in progress
- Placements for self-financed candidates limited
- Marketing of courses limited
- Land Acquisition from Government of Andhra Pradesh caused delay, after court litigation.

Planned activities for 2012-13

Short term trainings planned in 2012-2013 are the following:

Name of the short course	Proposed Dates
Data Management & Analysis using MS-Excel	24 – 26 December, 2012
Research Methodology at IIPH-H wing of Bengaluru	08 – 10 January, 2013
Scientific writing – A rapid course in improving skills in writing at IIPH-H wing of Bengaluru	22 – 24 January, 2013
Epidemiology for Public Health professionals at IIPH-H wing of Bengaluru	05 – 07 February, 2013

Name of the short course	Proposed Dates
Epidemiology for nutritionists and social sciences	08 – 12 October, 2012
The what, how, why and when of "Operational Research" in	05 – 09 November, 2012
The art of doing a "systematic review and meta-analysis" (<i>Last date of registration: November 25, 2012</i>)	03 – 07 December, 2012
Advanced methods in clinical trials and drug registration process in India	Dates to be confirmed
Survival Analysis in Medical Research	19-21 September, 2012
Data Management & Analysis using Epi-info	03 – 05 December, 2012
Fundamentals of Data Quality Assurance and Quality Control	16 – 18 January, 2013
Advanced Regression methods using MS-Excel and STATA	February-13



Indian Institute of Public Health, Bhubneshwar

Advisory Council: The Advisory Council of IIPH-Bhubaneshwar (IIPH-B) has been constituted. The first meeting of the Council will take place later in 2012.

Name	Affiliation
Prof. Surabhi Banerjee	Vice Chancellor, Central University of Koraput
Shri P.K. Hota	Director, NIPI
Dr. Abhay Bang	Director, SEARCH
Dr. PratapBhanu Mehta	President, Centre for Policy Research
Ms. Mirai Chatterjee	Coordinator- Social Security Self Employed Women's Association (SEWA)
Dr. Tim Evans	Dean, James P Grant School of Public Health
Shri Ashok Alexander	Director – Avahan India AIDS Initiative
Shri Amarjeet Sinha	Principal Secretary (Health & FW), Department of Health & Family Welfare, Government of Bihar
Shri Sanjay Mitra, IAS	Principal Secretary (H&FW), Department of Health & Family Welfare, Government of West Bengal
Shri Ajay Singh (IAS)	Principal Secretary, Dept. of Health & Family Welfare, Govt. of Chhattisgarh,
Shri J.K. Mohapatra	Principal Secretary (Finance), Finance Department, Government of Odisha
Shri K. Vidyasagar IAS	Principal Secretary (Health), Health, Medical Education & Family Welfare, Government of Jharkhand

About the Institute: The Indian Institute of Public Health, Bhubaneswar commenced its academic activities from August, 2010. A key objective of the Institute has been to implement the vision of the PHFI by linking together public health advocacy, teaching, research and practice. To this end, the Post Graduate Diploma course in Public Health Management (PGDPHM) was launched on 2nd August 2010. In addition, various short term training programmes, workshops and research activities are being undertaken by the institute.

Academic programmes

At present, the Institute offers a one year PG diploma course in Public Health Management.

The main objective of the programme is to enhance the capacity of the public health managerial workforce through the conduct and delivery of a specially designated diploma course in public health management. The programme is a multi-disciplinary course both in content and teaching.

Details of students enrolled in the PDDPHM Course

Year	Students enrolled
2010-11	20
2011-12	21
2012-13	30

Research projects

Completed

Title	Funding agency
• Supportive supervision in routine immunization: post training assessment	UNICEF
• Awareness to action through multi-channel advocacy for effective tobacco control in India.	Bloomberg Initiative administered through HRIDAY-SHAN and PHFI
• Improving Health Care Capacity at Rural Level: A research based study for improving health outcomes in India. (Ganjam and Adilabad Project)	Pfizer through PHFI
• Assessment of Factors Contributing to and Affecting Availability and Retention of Health Workforce In Rural and Remote Areas of Odisha	TMST-DFID

On-going

Title	Funding agency
An assessment of health system readiness to implement the policy transitions in malaria control in the state of Odisha	PHFI-UK Consortium, Wellcome Trust Supported Capacity Development Programme
Implementation and Monitoring of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) and Routine Immunization in selected Districts of Odisha - An Action Research	UNICEF
Career Pathways for Doctors Working in Government Health System in Odisha: Current Scenario and Future Opportunities	PHFI-UK Consortium, Wellcome Trust Supported Capacity Development Programme
Intensify multi-sectoral efforts for effective enforcement of tobacco control measures in two Indian States	HRIDAY-SHAN, New Delhi supported by Bloomberg initiative.
Impact of Decentralization on health systems performance of maternal and child health services in Odisha: PhD Study	Self-Sponsored

Grants approved

Title	Funding agency
Prevalence, Pattern and Correlates of multi-morbidity in primary care setting: an explorative study in Odisha, India.	PHFI-UKC Wellcome Trust Capacity Building Programme
Gender, Religion and Reproductive Health among Muslims and Hindus in India	PHFI-UKC Wellcome Trust Capacity Building Programme
Community participation in rural primary health care- Andhra Pradesh India	PHFI-UKC Wellcome Trust Capacity Building Programme

Submitted Proposals for grants

Title	Funding agency
Model City Health Plans of Bhubaneswar, Jaipur and Pune	Population Foundation of India
Capacity Building of supervisory level government functionaries of ICDS in Malkangiri on Infant and Young Child Counselling (IYCF)	World Food Programme
Process documentation of Best Practices and lessons learnt in nutrition intervention in the state of Odisha over the last two years	UNICEF
Motivation and job satisfaction among health service providers in public sector: A Cross-sectional Analysis in the State of Odisha	ICMR
Caseload prevalence of co-infection of TB with Malaria among patients attending primary health care in Tribal Odisha	ICMR
Strategies to improve the performance of health workers through strengthened supervision, increased motivation and improved local decision making to deliver quality health care services in Odisha, India	WHO

Workshops and trainings conducted

Description	Number of Participants	Funding Agency
Strengthening Human Resources for Health Through Career Pathways of Government Doctors in Odisha, A Consultation Workshop	40	PHFI-UKC Wellcome Trust Capacity Building Programme
Art of Scientific Writing	40	ICMR

Description	Number of Participants	Funding Agency
Eastern Regional Workshop on Case Studies of Innovations in Maternal and Newborn Health for Teaching and Advocacy	40	MacArthur Foundation
People for Health workshop: An initiative to strengthen human resource for health in Odisha by engaging civil society	50	European Union
IMNCI Training of Trainers	20	UNICEF

Publications

Sr. No	Nature of Publication	Numbers
1	Published papers	20
2	Papers under review	4
3	Publication of IIPH-B students	3
4	Books chapters	6
5	Research presentations	4
6	Reports and periodicals	10

Staff strength

- Faculty: 09
- Project team: 07
- Administrative team: 10

Strengths and Challenges

Strengths

IIPH-B has a multi-disciplinary team of faculty with both medical and non-medical backgrounds specialized in technical areas such as health systems, financing, policy formulation, project management, health policy, access, equity, epidemiology, biostatistics, nutrition, demography, MDGs, M&E, health promotion, social sciences, STI/reproductive health, infectious diseases, international health, human resources, agriculture, food security, chronic diseases. The team has

expertise in conducting both quantitative and qualitative research.

At present the team is engaged in providing technical inputs and handholding support to strengthen the public health delivery system and development of the public health cadre in the state of Odisha. The study on human resources in health is being used as an advocacy tool and strategy to influence policy making. Faculties at IIPH-B have been supporting the PHFI training division by providing trainers to facilitate various workshops and training programmes. IIPH-B is actively involved in doing advocacy and providing technical inputs for development of the public health cadre in the government health system, which would help in the systematic public health capacity building of the state.

Challenges

- Research focus:** In the 26 months since the Institute's work started in July 2010, a total of twelve research projects have been undertaken involving all faculties at IIPH-B. The focus has been on small research projects of one to two years duration mainly on health systems strengthening, human resources, maternal and child health, disease control and programme management. There is need for more research projects encompassing key domains of public health for giving comprehensive inputs in policy development, system strengthening and improving programme management. There is also need for larger long-term implementation research projects.
- Funding:** At present, the major sources of funding for research and training activities of IIPH-B are from the Government of Odisha, Government of Chhattisgarh, UNICEF and THE Wellcome Trust Programme. However, we aim to diversify these funding sources in next two to three years period to tap the corporate sector, and efforts have already been started in this direction.
- Infrastructure:** At present there are seven faculties who are involved in teaching, training, research and community engagement activities. There is a need for more faculty members in order to strengthen the PGDPHM programme and to launch new courses on the campus in future. There is an

urgent need to recruit a behavioural scientist and a bio-statistician, which would enhance the resource pool of the Institute and thereby increase our ability to compete for larger grants. At present the Institute is functioning in a rented accommodation. It needs to build its own campus in coming years. The Government of Odisha has graciously allotted land for construction of the Institute. Land acquisition is under process.

D. Capacity strengthening: At present the institute runs the flagship course - PGDPHM for which nominations are sought from Government of Odisha and Chhattisgarh. Additional states could be tagged with IIPH Bhubaneswar (Jharkhand, West Bengal) so that more deserving candidates could be enrolled into the programme. A few more courses, based on the needs of Odisha and the neighbouring States could be initiated at IIPH-B campus. Web based online and distance education courses could also be taken up as a complementary strategy to strengthen academic activities. Accreditation of the courses is crucial for demand generation and long-term sustainability and therefore this issue needs to be addressed as a priority. There is a need for strategic planning and collective action in system strengthening across IIPHS. Based on this a focus can be made on prioritizing research and training areas that are context specific and actionable.

E. Policy engagement : The Institute plans to get engaged in policy research and advocacy with an aim to a) inform and empower State Policy Makers and Programme Managers for strategic action; b) generate an evidence base for policy recommendations; c) initiate proactive engagement with stakeholders and develop an advocacy platform for key public health issues and actions. At present the Institute is closely working with the central and state governments and international agencies. There is need for creating more networks and partnerships with other stakeholders like civil society, NGOs, and community groups.

Plans for the Future

Proposed Academic Programmes

1. Regular Study Programme

- Post Graduate Diploma in Tribal Health

2. Distance Learning Programme

- Diploma course in good laboratory (clinical and public health) practice
- Diploma course in public health service management (public health practice)
- Certificate course on participatory learning and appraisal (PLA) in public health
- Certificate course on teaching methodology (Health Professional Education - HPE)
- Diploma course in rural health management

Proposed short term courses and trainings

Theme	Expected number of participants	Funding source	Proposed period
Project Management	30	Govt. along with self-sponsored	Nov 2012
Data Analysis and Management	25	Govt. along with self-sponsored	Dec 2012
Qualitative Research Methods	20	Govt. along with self-sponsored	Dec 2012
Proposal writing for grants	30	Self-sponsored	Jan 2012
Primary Care Research	20	WTP	Feb 2012
Statistical Analysis using SPSS	20	Self-sponsored	Mar 2012



Training, conferences & workshops



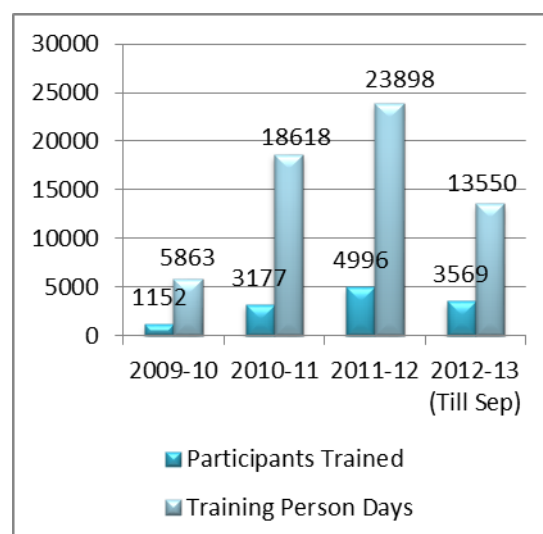
Training programmes

Long Term Mission and Strategic Direction

The Training Division of the Public Health Foundation is offering a one stop solution to all the training needs of stakeholders. Our long term mission is to be the preferred training provider for governments. The Training Division aims to focus on the following activities in the next year:

1. Developing a balanced training portfolio:
 - a. Organize short term training programmes on critical public health issues in collaboration with central and state governments, national and international public health institutions and funding agencies;
 - b. Provide consultancy services to other agencies as and when requested.
2. Building linkages with stakeholders:
 - a. Collaborate with States' Training Institutes (State Institute of Health and Family Welfare) for capacity building initiatives;
 - b. Develop linkages with the Government of India and the state governments for support and capacity building.
 - c. Collaborate with multilateral and bilateral agencies as well as international organizations for development of the training portfolio.
3. Collaborating extensively with IIPHs across the country.
4. Coordinating with the IIPHs for developing and delivering the locally and centrally allocated short term trainings.
5. Conducting monitoring and evaluation of training programmes and Training Needs Assessments.
6. Promoting the concepts of Continuing Medical Education and e- learning among health practitioners.

Growth of Division: Trainings conducted by the PHFI family have shown an exponential increase over the years. In 2011-12, with the support of all IIPHs, 92 training programmes have been conducted, signifying a growth of 56 percent as compared to the previous year. The division has been engaged by the Government of India and the State governments of Assam, Meghalaya, Arunachal Pradesh and West Bengal and has trained 4,996 participants in Fiscal Year 2011-12.



Strengths/Core Competencies of Division: In terms of core competencies, the Training Division has a number of unique technical, management and leadership competencies and practices that set it apart in this field. The Division calls upon more than 100 nationally and internationally trained faculty members across PHFI and the IIPHs and conducts targeted assessments to develop adapted, need-based trainings. The Division applies "Continuous Quality Improvement" principles in the cycle of development, implementation, evaluation and revision of its training activities. The Training Division and the IIPHs boast of a variety of technical competencies. This breadth of technical competencies allows the Training Division to serve as a one-stop solution for training needs in public health.

Certificate Course in Evidence Based Diabetes Management (CCEBDM)

The Certificate Course in Evidence Based Diabetes Management (CCEBDM) is a uniquely designed once-a-month training programme for primary health care physicians. The CCEBDM awards a joint certification by PHFI and Dr. Mohan's Diabetes Education Academy, Chennai, delivered by PHFI and supported with an unrestricted educational grant by MSD Pharmaceutical Pvt. Ltd. India. The course is spread across a year with 12 training modules, the training sessions for which are held once a month, only on a Sunday to better suit the schedule of busy physicians. The teaching method is two-way, similar to a class room setting with a presentation accompanied by discussions on case studies. The training is delivered by a group of Regional Faculty at either a single centre (one faculty) or merged centre (two faculties). The

aim of the course is to develop core skills and competencies in primary care physicians for the practice of evidence based diabetes management, as well as to establish networks between primary care physicians and existing specialized diabetes care centres in India, for improving patient outcomes in diabetes care. Cycle I of the programme has successfully trained 1,208 general physicians with up-to-date and advanced Diabetes Management skills and currently 1,568 physicians are undergoing training. A formal announcement of the third cycle of the programme has already been made. It's expected launch is in early 2013.

Besides this, the Training Division conducts programmes in the following public health areas:

Quality Assurance	Disease Surveillance
Hospital Management	Environmental Health
Public Health Management	Public Health Nutrition
Public Health Research Monitoring & Evaluation (partnership with University of North Carolina)	Chronic Diseases GIS Application in Public Health (partnership with University of North Carolina)
Health Communication	Health Sector Reforms and Policy
National Rural Health Mission & National Health Programmes	Data Management & Use for Action

Management and Leadership Competencies:

The Training Division's core team of 13 staff members brings extensive public health programme management and administrative experience. Leadership competencies of the Training Division include mentoring and decentralized empowerment of staff, which supports and encourages staff to identify potential new products and strategies to address client needs. Professionalism, transparency and dedication are key values and are internalized by staff; individual team members are given a large degree of autonomy in the conduct of their specific responsibilities. Leadership practices centre on open, effective, positive communications designed to support and strengthen individual and team performance.

Trainings and Workshops are funded by the central and state governments.

Training / Workshop	No. of Participants	Funding Agency
IDSP FETP	22	IDSP, Ministry of Health and Family Welfare, GoI
Induction Training of District VBD Consultants on Kala-azar	21	National Vector Borne Disease Control Programme, GoI
Short-term Training in Qualitative Research Methods in Health & Medical Research	11	ICMR & Fees
Short Term Training on Monitoring & Evaluation of Public Health Programmes	19	ICMR, CSIR & Fees
Short Term Training in Programme Management in Assam (6 batches)	180	NRHM - Govt. of Assam
Short Term Training in Programme Management in Arunachal Pradesh (2 batches)	53	NRHM - Govt. of Arunachal Pradesh
Training on Public Health Management (2 batches)	50	NRHM - Meghalaya
Sensitization Workshop On NRHM for Chief Medical Officers (Govt. of West Bengal Health & Family Welfare)	25	Govt. of West Bengal

Training and Workshops funded by International & National Funding Agencies

Training / Workshop	No. of Participants	Funding Agency
Introduction to Qualitative Research Methods	27	Wellcome Trust Grant
Public Health Emergencies and Disasters : Management and Preparedness (2nd batch conducted as part of HPA project)	45	Health Protection Agency, UK
Burden of Disease and Cost-Effectiveness Methods	23	The University of

Training / Workshop	No. of Participants	Funding Agency
		Queensland
Field Epidemiologists Training Programme under IDSP Training (5 batches)	100	NCDC (IDSP), New Delhi
ToT on GIS	21	Measure Evaluation
Project Management Training Programme	25	LEPRAParticipants were from LEPR and SERP
Master Training Programme for District Level Trainers	40	Conducted as part of STEPS project
Certificate Course In Evidence Based Diabetes Management (2 cycles)	2776	MSD Pharmaceuticals (Pvt.) Ltd.
STATA training for faculty supported by Wellcome Trust Capacity Building Programme	21	PHFI-UKC Wellcome Trust Capacity Building Programme
Public Health Emergencies and Disasters : Management and Preparedness (3rd batch conducted as part of HPA)	29	Health Protection Agency, UK
Applied Biostatistics Using MS Excel for Health and Medical Research	10	As part of Biostatistics and Data Management Workshop Series 2011-2012
IMNCI ToT (two batches)	40	UNICEF
Social and Behaviour Research	3	WHO (Partial)
Data Management & Use for Decision Making	40	UNICEF
Field Epidemiology and Communicable Disease Control (two batches)	18	WHO (Partial)
A Study on Alternate Cropping Pattern for	20	As part of STEPS

Training / Workshop	No. of Participants	Funding Agency
Growing Tobacco in India		project
Short Course on RCH Programme Management (two batches)	52	WHO
Short Term Course on Tobacco Control	36	Bill and Melinda Gates Foundation
IMNCI ToT	32	The Nossal Institute for Global Health through The Melbourne University
Teaching Colloquium	32	The Nossal Institute for Global Health through The Melbourne University

Self-sponsored Trainings and Workshops Organized at Indian Institutes of Public Health

Training / Workshop	No. of Participants
Workshop on Pharmacovigilance	38
Project Management in Health Programmes	24
Conduct and Reporting of Systematic Reviews of RCTs	15
Capacity Building of STATA (internal training)	10
Economic Evaluation of Health Care Programmes	26
Medical Writing	26
Regional Workshop on Monitoring and Evaluation of Population, Health and Nutrition Programmes	29
Qualitative Research Methods in Public Health	32
Research Methodology in Health Sciences	24
Advanced Skills in MS Excel for Health Researchers	3

Training / Workshop	No. of Participants
Multilevel Modelling for Health Research	5
Gender & Social Inclusion Tools for application in proposal development and research	20
Public Health Approach to Disability	27
Gender & Social Inclusion Tools for application in proposal development and research	16
Gender & Social Inclusion in Advocacy (Orientation Workshop - GSI Tools for application in advocacy, PHFI/IIPH-D)	7
Short course on Public Health Planning for Hearing Impairment	38
Biostatistics - Basics and Beyond using STATA	21
Randomized Controlled Trials- Design, Analysis and Reporting	26
Randomized Controlled Trials- Design, Analysis and Reporting	25
Workshop on Quality Assurance for Improved Health Services	17
Case Control Studies: Basics and Beyond	14
Qualitative Research Methods for Physicians	16
Pharmacovigilance	21
Training on GIS in Public Health	20
Consultation on Leadership in Public Health: Challenges in South Asia	30
Statistical Analysis using STATA	30

Conferences

UHC Consultations and Meetings:

1. High Level Expert Group Meeting on Universal Health Coverage (November 27-28, 2011)
2. Union Health Ministry uptake (9 December, 2011): HLEG-PHFI Secretariat invitation to present the UHC Report to Dr. Ghulam Nabi Azad, Minister of Health and Family Welfare
3. Advocacy Strategy Meeting (9 March, 2012)
4. National Advisory Council (NAC): Invitation to present the report to the NAC (21 March 2012)
5. Prime Minister's Office (30 March 2012): HLEG chair Prof. K. Srinath Reddy and member Dr. A .K. Shiva Kumar invited to present at the Prime Minister's Office.
6. National Conference on 'Universal Health Coverage in India: Advancing the Agenda and Addressing the Challenges' (11-12 April, 2012)
7. Regional consultation on 'Emerging policy options for UHC' Organized at Tata Institute of Social Sciences, Mumbai (10 and 11 May, 2012)
8. High Level Expert Group (HLEG) meeting (9 August 2012): To review the draft chapter on health in the 12th Five Year Plan document.

PHFI Research & Training Team

1. The First Global Forum on Bacterial Infections: Balancing Treatment Access and Antibiotic Resistance; Prof. Ramanan Laxminarayan (3-5 October 2011)
2. PHFI Research Symposium; IIPH-Hyderabad (15-16 March 2012)
3. Joint Conference on Universal Health Coverage in India: Prospects and Challenges Ahmedabad; IIPH-Gandhinagar (17 March 2012)
4. Developing a Hunger Reduction Commitment Index for India: Consultative Workshop to rollout the Agenda; Prof. Ramanan Laxminarayan (2-3 May 2012)

5. Regional Consultation on "One Health in South Asia"; Dr Manish Kakkar (31 July – 1 August 2012)
6. India Health Report Meeting: Focus on Nutrition; Prof. Ramanan Laxminarayan (7-8 August 2012)
7. Workshop on "Women's perception of quality and satisfaction with maternal health services"; Dr Sangeetha Bhattacharya, (17 August 2012)
8. Orientation cum Brainstorming Workshop on Mainstreaming Tobacco Control into Health Systems; Conducted as part of STEP Project
9. Regional Consultation on Human Resources in Public Health; Packard Foundation
10. Safety 10 Andhra Pradesh: Two day training workshop on Data Collection and Record Keeping; John Hopkins School of Public Health
11. Regional dialogue on strengthening health system; PHFI & Packard Foundation
12. Workshop on Developing Training Module on Gender and Social Inclusion for Post Graduate Diploma in Public Health; PHFI and United States Agency for International Development (USAID) through MCH- STAR
13. Supportive Supervision for Routine Immunization; UNICEF
14. Regional Workshop on GIS Application in Public Health; MEASURE Evaluation
15. Systematic Reviews and meta-analysis for internal faculty; Wellcome Trust
16. Regional Workshop on M&E of Population Health and Nutrition Programmes; MEASURE Evaluation
17. Network Meeting-Evidence for policy and implementation for achieving MDG 4, 5, and 6; EPI4 Project
18. Workshop on Uncovering Patterns in Complex Data Structures: Multivariate Data Analysis; Conducted as part of Biostatistics and Data Management Workshop Series 2011-2012

19. Regional Workshop on Monitoring and evaluation of HIV/AIDS Programmes; MEASURE Evaluation & Self-Funding

Organized by IIPH-Hyderabad, SACDIR:

1. Public Health Approach to Disability – 25-29 July 2011
2. Project Management Training Programme – 8-11 August 2011
3. Master Training Programme for District Level Trainers – 12 August 2011
4. Public Health Emergencies and Disasters: Management and Preparedness (3rd batch conducted as a part of HPA) – 26-29 September 2011.
5. Applied Biostatistics Using MS Excel for Health and Medical Research – 28-30 September 2011
6. Short Course on Public Health Planning for Hearing Impairment – 10-14 October 2011.
7. Training on "Neurodevelopment Disabilities among Children in India" – 22-25 November 2011
8. Law Enforcement Training Programme-26 November 2011
9. Law Enforcement Training Programme-30 November 2011
10. Symposium on Disability – 21 December 2012
11. A Study on Alternate Cropping Pattern for Growing Tobacco in India – 7 January 2012
12. Workshop of District Surveillance Unit Officials for Review on IDSP performance; Desk Evaluation of DSUs & Epidemic Investigation Methodology – 3 February 2012
13. Workshop of District Surveillance Unit Officials for Review on IDSP performance; Desk Evaluation of DSUs & Epidemic Investigation Methodology – 7 February 2012
14. Workshop on Regression Methods using MS Excel & STATA – 9-11 February 2012
15. Workshop on Uncovering patterns in Complex Data Structures: Multivariate Data Analysis – 14-16 February 2012
16. Workshop on Good Clinical Practices in Clinical Trials – 12-14 March 2012
17. Symposium on Systematic Reviews in informing Healthcare & Policy – 28 May 2012

Organized by IIPH, Bhubneshwar

1. Strengthening Human Resources for Health Through Career Pathways of Government Doctors in Odisha, A Consultation Workshop;

- 31 July 2012; PHFI-UKC Wellcome Trust Capacity Building Programme
2. Art of Scientific Writing; 8-9 September 2012; ICMR
3. Eastern Regional Workshop on Case Studies of Innovations in Maternal and Newborn Health for Teaching and Advocacy; 27-28 September 2012; MacArthur Foundation
4. People for Health workshop: An initiative to strengthen human resource for health in Odisha by engaging civil society; May 2012; European Union
5. IMNCI Training of Trainers; Mar 2012; UNICEF

Organized by IIPH, Gandhinagar

1. Regional Dialogue on Strengthening Health System; 16 June 2011; PHFI & Packard Foundation
2. Linking Health and Microfinance in India: Improving Incomes and Promoting Universal Health Care Access for the Poor; 26-27 July 2011; Johnson & Johnson, SIDBI, NABARD, CSIR, Ananya Finance for Inclusive Growth
3. Network Meeting-Evidence for Policy and Implementation for Achieving MDG 4,5, and 6; 17 January 2012; EPI4 Project
4. Workshop on "Role of Media in Tobacco Control"; 20 January 2012; STEP Project, PHFI
5. Joint Annual Conference of Indian Association of Preventive and Social Medicine-Gujarat Chapter (19th) & Indian Public Health Association Gujarat Chapter; 16-17 March 2012; Fees, GOG, ICMR, WHO, STEP Project, JTZ, PHFI
6. Sensitization Workshop on Health Effects of Heat In Relation to Climate Change; 16 March 2012; NRDC
7. Social Epidemiology and Social Determinants of Health; 2-6 April 2012; PHFI-Auspices of the Wellcome Trust Capacity Building programme
8. Vigilante Reporters Training- STEP Project; 30 April 2012; STEP Project, PHFI
9. Review Meeting With NGO Partners; 02 May 2012; STEP Project, PHFI
10. Consultation on Strengthening RSBY: Experiences from Gujarat; 30 May 2012; RSBY Project

Organized by IIPH, Delhi

1. Realizing Potential of Digital Technologies for Public Health Content; 16-17 May 2011
2. National Consultation on MPH Programme Development in India; 15-16 June 2011
3. National Consultation on Development of Intensive Professional Programme in Sexually Transmitted Infections and HIV (IPP-STI & HIV) in India; 6-7 July 2011
4. Consultation for the Post Graduate Diploma in Management of Maternal and Child Health Programmes; 13 July 2011
5. Consultation on Development of Short Course on RCH Programme Management; 5 September 2011
6. Consultation on 'The Ante Natal and Child Health Care in Urban Slums Project' (ANCHUL); 12 September 2011
7. Consultation on Short Course on RCH Programme Management; 19-20 January 2012
8. Consultation on Leadership in Public Health: Challenges in South Asia; 26-27 March 2012
9. Teaching Colloquium: Reflections – Education at Public Health Foundation of India; 29-30 March 2012

Health communication & advocacy



Division Focus: Health communication and health literacy efforts that engage and empower communities, providing individuals and populations with evidence-based options for positive action that can lead to better health are critical for improved health outcomes. The Health Communication Division at PHFI approaches Behaviour Change Communication (BCC) in communities in the form of technical support, strategic communication and multi-stakeholder engagement for inculcating health literacy that is widespread and sustainable (see illustrative figure below that graphically represents PHFI's Health Communication theory of change). The health communication effort has a two-pronged strategy, aimed at building capacity for effective BCC action and a strengthened public health policy environment for better health outcomes.

Given PHFI's role in building public health capacity and strengthening the knowledge base through public health research in India, our work focuses on the following components:

- **Communication:** using theoretical and pedagogical principles for communicating health messages to the rural and urban masses through various mass media channels, including traditional and mid-level media by working with partners in the field
- **Research:** to focus on strategic communication that can bring positive impact
- **Capacity Building:** to develop in-country capacity to deliver effective BCC programmes on the ground through short and long term training and education
- **Enhancing Communication Resources:** to improve the quantity and quality of tools and techniques currently available and used for effective planning, implementation, education and evaluation of communication efforts

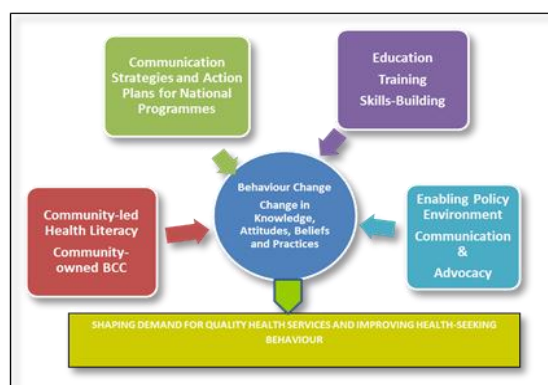


Figure 1: Health Communication Division: Theory of Change

The Division is involved in activities at diverse levels, such as teaching public health communication and promotion, education and advocacy, training and capacity building, and research and knowledge mobilization, in

consonance with National and State Health programmes and community needs. Another focus is to catalyze direct outreach by developing and delivering strategic health communication programmes and initiatives that motivate and promote health-seeking behaviour through community-inclusive outreach programmes.

The guiding principles of work at the Health Communication Division are to develop communication that works for people:

- Evidence-based information on what works and what needs to change to empower decision-making by policy-makers, programme implementers and communities. Strengthening knowledge to action pathways.
- Strategic advocacy, up-stream, mid-stream and down-stream, based on sound knowledge and factual information can make a significant impact on catalyzing positive change.
- Participatory and people-centred approaches to encourage health-seeking behaviour taking cognizance of cultural, social and economic diversity.
- Ownership and participation in the processes of change and generating greater demand for health services of high quality and sufficient quantity may be achieved through sustained advocacy.
- The public health response can be strengthened if strategic health communication and promotion efforts are formalized as a major aspect of public health education and training, with an additional focus on in-depth planning and implementation mechanisms.

Funding: The division has a diverse donor base including the Ministries of Health and Family Welfare of the central and state governments, UNDP, the World Bank, WHO, UNICEF, the Packard Foundation, the Bill and Melinda Gates Foundation, UNFPA through the National Human Rights Commission, the World Justice Project, and the European Union. The total amount of external funding is approximately INR 4 crores for 2012-13.

Staff: The Division has seven core staff members of whom three also hold adjunct faculty positions, complemented by one or two interns and active expert consultant support on occasion, based on project funding support.

Capacity Strengthening: Strengthening professional capacity for health communication and advocacy through short and long term training and educational programmes is central to the

Division's efforts. Some of our efforts toward strengthening professional public health capacity (with a specific focus on ability to carry out effective BCC) are:

- Education: A 10-day Health Communication and Promotion module as part of the one-year Post Graduate Diploma in Public Health Management at the Indian Institutes of Public Health; guest faculty for Lady Irwin College, Delhi University and AJK Mass Communication Research Centre, Jamia Millia Islamia
- Work with apex training bodies at the centre and state level (National Institute of Public Cooperation and Child Development, State Institutes of Health and Family Welfare)
- BCC Skills-building Workshops for BCC/IEC/Media specialists under the National Rural Health Mission

Policy engagement: Advocacy to strengthen the enabling environment is seen as closely aligned to in-depth health communication efforts. Policy analyses, applied research and advocacy efforts are aimed at raising the discourse around key public health issues in India, framing relevant evidence for suitable action by key stakeholders and highlighting core advocacy priorities that may contribute to tackling some of India's major public health challenges. Advocacy capacity and knowledge mobilization to strengthen Maternal and Child Health action, Human Resources for Health, Nutrition and Universal Health Coverage reflect the Division's core mission. Key audiences reached out to include policy-makers, bureaucrats, academia, development partners, public health practitioners, civil society organizations and communities.

Strategic planning to integrate formal principles of health communication into health systems processes and policy is another major cornerstone of the work at the Division. Several efforts have focused on developing strategic knowledge mobilization plans for improved nutrition outcomes; inputs to inform the on-going scheme for popularizing use of sanitary napkins among adolescent girls in rural India and recommendations for a national BCC Campaign on Mental Health (included in the Project Report on the Pilot Awareness Campaign on Mental Health 2010-2012).

Engagement with stakeholders: PHFI strives for multiple stakeholder engagement: Government officials at national and state level (bureaucrats, technical officers, programme implementers); political leadership (national and state-level); non-governmental organizations as partners, target groups and stakeholders; health communication

and education experts and technical partners (national and international); health workers and health professionals (at various levels); and direct and indirect engagement with communities and civil society. Engagement with the Planning Commission and various apex training, academic and research institutions across the country for knowledge exchange and sharing research findings.

Achievements: Redesign of the Healthy India website www.healthyindia.org.in; recipient of regular financial support from MoHFW for five consecutive years

- Technical partner to National Mental Health Programme; path-breaking pilot awareness campaign to break the stigma around mental illness in India (upscale proposed)
- Through the People for Health initiative creation of a knowledge base on Human Resources for Health, skills-building through human resource management capacity enhancement and advocacy with civil society organizations to offer solutions to critical health workforce issues at the national level and through pilots in Madhya Pradesh and Kerala
- Review of nutrition-related policies and guidelines and stakeholder research at the national level and in Madhya Pradesh to understand the knowledge landscape towards accelerated reduction in maternal and child under nutrition in India as part of POSHAN (Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition)
- Offering a module on health communication and advocacy under the Post Graduate Diploma Programme in Public Health Management
- Rapidly cementing partnerships with key stakeholders and institutions with a similar mission and mandate
- Health communication and advocacy work carried out in seven states

Challenges: In India there is a definite gap in the strategic capacity building for health communication meant for community empowerment and public action. The cultural, economic, and social diversity in India offers challenges that require a directed and specific response.

- At a time when contemporary communication involves the use of latest technology, keeping in perspective the wealth of information and

resources available with the community and community needs is critical

- Mainstreaming health communication, promotion, health literacy work into the broader realm of public health and acknowledging this as a formal discipline
- Ensuring culturally appropriate efforts in regional languages
- Long term funding for sustaining initiatives as behaviour change does not happen overnight, nor does the impact of advocacy show in the short term; and
- Advocacy with government (national and state) to fully utilize all IEC budgets, optimally utilize knowledge mobilization opportunities with efficiency and impact; and build technical expertise in the field for BCC at all levels.

Plans for the Future

- Strengthening multiple efforts that apply a wide range of culturally appropriate communication mechanisms, from information communication technologies to grassroots community information-sharing, the Division bases its health literacy work on the foundation of the differing needs of diverse peoples.
- Providing an impetus to health communication education by offering application-oriented distance learning health communication courses shall enable in-country institutional capacity strengthening of the health workforce.
- Undertaking communication research with a specific focus on Indian contexts and local needs.

Completed

AWARENESS TO ACTION THROUGH MULTI-CHANNEL ADVOCACY FOR EFFECTIVE TOBACCO CONTROL IN INDIA: CAPACITY BUILDING IN FIVE INDIAN STATES

Geographical Location: BIHAR, HARYANA, KARNATAKA, ODISHA AND UTTARAKHAND

The project intends to continue the momentum generated by HRIDAY's continued effort in strengthening tobacco control through the implementation of policies, appropriate

amendment and effective enforcement of tobacco control legislation, enhancement of civil society engagement and capacity building of stakeholders and legal activism. The project aims to further strengthen and augment ongoing tobacco control advocacy in India and bolster government-NGO partnership at all levels, to enable a politically, legally and socially conducive environment to strengthen effective enforcement of existing tobacco control legislation, through development of mechanisms to monitor enforcement and report violation. Simultaneously, the project will also involve vigorous advocacy for strengthening weak provisions and call for effective enforcement of existing legislation.

Objectives: 1) Build capacity of state and district level enforcement officials for effective enforcement of existing legislation and encourage civil society to partner and complement governmental efforts in monitoring progress and reporting violations; 2) Advocate for appropriate amendments in the law to improve enforceability, reduce scope for the tobacco industry to exploit infirmities and make it fully compliant with Framework Convention on Tobacco Control (FCTC); 3) Provide legal assistance to governments, NGOs and partners to tackle challenges in effective enforcement of the law; 4) Expand the NGO network under the Advocacy Forum for Tobacco Control (AFTC) and promote improved coordination for identification of advocacy issues and strategy planning; 5) Develop knowledge and information resources to keep multiple stakeholders abreast of past and current international, national, regional and local developments in the field of tobacco control policies, advocacy and litigations.

The agreement has been signed between IIPH-B and HRIDAY in April, 2011 and the project was officially launched on 2nd May, 2011 in collaboration with Government of Odisha, Health & Family Welfare Department at a state level meeting with the Secretary-Health. Recruitment of a State Project Officer has been done. For field level data collection, seven surveyors have been selected and trained. Data collection for pre-intervention status has been completed in June 2011 and from July to date, advocacy and capacity building workshops were organized in five intervention districts. Bhadrak, on 5th November 2011, and Bhawanipatna, on 23rd December 2011, were declared "smokefree" by the respective district administrations, following a

mass rally and pre-declaration compliance. The project aims to strengthen its ongoing work in selected districts with a possible phase II or addition of a few more new activities.

Project duration: APR' 11 to DEC' 11

This project was supported by Health Related Information Dissemination Amongst Youth (HRIDAY) and was led by Dr BHUPUTRA PANDA

INDIA INTERNATIONAL TRADE FAIR 2011

Geographical Location: DELHI

On behalf of the National Mental Health Programme, Ministry of Health and Family Welfare, Government of India, PHFI has completed the implementation of a Pilot Awareness Campaign on mental health to break the silence and reduce stigma in ten selected districts of India. An exhibit was showcased at the India International Trade Fair (IITF) 2011 (14-27 October 2011) in New Delhi, as part of this initiative, to sensitize visitors and share basic information on mental health. Selected works from the 'Faces-Phases' Exhibition in October 2011 at the MF Hussain Art Gallery, by students of Anwar Jamal Kidwai Mass Communication Research Centre (AJKMCR) and the Faculty of Fine Arts, Jamia Millia Islamia were curated for display. Guidance and advisory services were also made available in partnership with the Institute of Human Behaviour and Allied Sciences, New Delhi. To address the information needs of a large number of visitors at the IITF, production of information, education, communication (IEC) materials in large quantities was initiated.

IEC materials developed under the Pilot Awareness Campaign on Mental Health have been produced for wider display and dissemination. This includes 20,000 pamphlets, five standees, 10,000 badges and 10,000 pens. PHFI is awaiting confirmation on the specifications for production of the notebook.



Project duration: NOV' 11 to NOV' 11

This project was supported by Ministry of Health and Family Welfare and was led by Dr SUBHADRA MENON

Ongoing

CHANGE HEALTH BEHAVIOURS AND IMPROVE COVERAGE OF HEALTH SERVICES BY ACTIVATING SOCIAL PLATFORMS FOR THE POOR IN UTTAR PRADESH

Geographical Location: UTTAR PRADESH

This is a programme intervention to deliver proven health behaviour change communication messages to women via women's selfhelp groups (SHG) in selected districts of UP, to reduce neonatal and maternal mortality and morbidity. The Project involves the Rajeev Gandhi Charitable Trust, Boston University, Community Empowerment Lab at Shivghad and Population Council as partners.

Project duration: JAN' 12 to OCT' 15

This project is being supported by Bill and Melinda Gates Foundation and is led by Dr DILEEP V MAVALANKAR

POSHAN - PARTNERSHIPS AND OPPORTUNITIES TO STRENGTHEN AND HARMONIZE ACTIONS FOR NUTRITION IN INDIA

Geographical Location: DELHI

POSHAN (2011-2015) is an initiative that PHFI is involved in as a collaborator with the International

Food Policy Research Institute (IFPRI) which is the lead agency in India and the Institute of Development Studies, Sussex, with support from the Bill & Melinda Gates Foundation. The overall goal of POSHAN is to improve and support policy and programme decisions and actions to accelerate reductions in maternal and child undernutrition in India, through an inclusive process of evidence synthesis, knowledge generation, and knowledge mobilization.

POSHAN has two major objectives: 1) Analyze direct and indirect nutrition-relevant interventions to generate knowledge on optimal approaches to address major bottlenecks to improve maternal and child nutrition outcomes in India; 2) Mobilize evidence-based and actionable knowledge to inform policy formulation and support programme planning for nutrition at the national level and in three to four key states.



PHFI is currently engaged in activities focused on Objective 2 with the mandate of understanding the nutrition policy landscape from the lens of evidence use, and analyzing the stakeholder landscape through stakeholder research - towards the development of a knowledge management strategy for POSHAN in year two to four of the initiative.

Project activities were initiated through a review phase that included an effort to map the use of evidence for policy formulation through a national policy review and a Stakeholder Mapping Exercise undertaken in January (jointly with IFPRI) that included orientation of project staff from the PHFI Health Communication Division.

A review of major health and nutrition policies that impact the first 1,000 days following birth has been completed. This includes a brief overview of undernutrition in India as a major public health problem, presents a snapshot of the various Five Year Plans (FYPs) and synthesizes direct and

indirect nutrition interventions and strategies being introduced through the FYPs. After obtaining protocol clearance from the Institutional Ethics Committee of PHFI for Stakeholder Research, the team began a round of national level stakeholder interviews on policy process, the use of evidence in policy and the need to identify patterns related to the use of information and knowledge. National-level interviews were conducted along with partner organizations with a target audience of senior bureaucrats, civil society representatives, nutrition experts, lawyers, National Advisory Council representative, media, and Supreme Court Commissioners. Data analysis and reporting of research results is underway. The three partners on POSHAN are in the process of initiating state level interviews and data analysis that will inform a Knowledge Mobilization strategy for the project, with the aim to strengthen partnerships and opportunities to tackle undernutrition in India.

Project duration: DEC' 11 to DEC' 12

This project is being supported by International Food Policy Research Institute and is led by Dr SUBHADRA MENON



Health System Support



Aims and Objectives: The aims and objectives of the Health Systems Support Unit (HSSU) are:

- To establish strategic partnerships with the central and state governments and other stakeholders in the arena of strengthening Health Systems;
- To initiate programmatic and research activities relating to strengthening health systems, including Emergency and Disaster preparedness in hospitals and related communities;
- To carry out operational research, operational improvement and quality improvement activities with private and public agencies on health services including hospital services; and other themes of public health relevance;
- To handhold and partner with non-governmental organizations to work on health services;
- To promote alignment of educational programmes of PHFI with present and future National Health Programme needs; and
- To engage in setting up of monitoring and management frameworks in public health systems.

Activities and Achievements: The main focus of the Health Systems Unit is to engage with the health machinery of the central and state governments and associated stakeholders such as developmental partners, professional associations, the industry and non-governmental organizations among others; in order to achieve closer participation in health policy design, programme implementation, service delivery and management support. Some illustrative activities include training to scale up family planning and reproductive health services, quality assurance and improvement in health facilities, healthcare waste management, hospital information systems and monitoring & evaluation.

The Unit's strengths and core competencies include policy & planning; review & evaluation, hospital management, health system support and technical assistance to partner organizations on different thematic areas like nutrition,

immunization, family planning, maternal & child health.

Achievements of HSSU in 2011-12

- Successful completion of the sub-group report under the High Level Expert Group on Universal Healthcare for India.
- Presentation of the final recommendations to the Ministry of Health and Family Welfare on Augmenting the National Allied Health Workforce Capacity.
- Global dissemination and scale up of the programme for improving Hospital Infection Control and Patient Safety.
- Successful completion and scale up planning for Hospital Disaster Preparedness.
- Recommendations for the Operational Turnaround of the Red Cross Hospital, Delhi.
- Improving Provider enthusiasm and Efficiency.
- Technical Assistance to the Government of Himachal Pradesh to draft the Programme Implementation Plan for their NRHM division on selected thematic areas.
- Active partnering as part of Common Review Mission of the National Rural Health Mission.
- Evaluation of nutrition rehabilitation centres (NRCs) and prospects of children after rehabilitation in Madhya Pradesh.
- Study the perceptions of caregivers about the management of Severe Acute Malnutrition (SAM) children at Malnutrition Treatment Centres (MTC) and prospects of children after rehabilitation in Jharkhand.
- Evaluation of Nutrition Initiatives of the Government of Gujarat under the Integrated Child Development Services (ICDS) Scheme.
- Improvement of maternal, neonatal and child health (MNCH) outcomes through better designed nutrition policies and programmes in Uttar Pradesh.

Sources of funding and Staff: The core secretariat of the HSSU was entirely supported by the PHFI corpus for the first several months, post establishment. However, the HSSU team has grown to procure funding for projects to fully offset its operating costs.

The major donors and partners include the Ministry of Health & Family Welfare, Europe Aid, DFID, World Bank, GAIN, MCH-STAR, Government of Gujarat, Government of Madhya Pradesh and Government of Jharkhand.

The Unit now has a strength of 12 research staff and is co-located under the leadership of the Training Division.

Main Programmes in 2011-12

New Projects

1. Evaluation of Nutrition Rehabilitation Centres (NRCs) and Prospect of Children after Rehabilitation in Madhya Pradesh:

The project was undertaken with the objectives of assessing the management of severely malnourished children in the NRCs, evaluate on-going activities in the centre as per existing protocols, and identify factors that constrain or enhance anthropometric and functional recovery in children. Further, the project sought to understand perception of service providers and caregivers of admitted children about NRC operations and identify factors that promote or inhibit utilization of NRC services. The study will be conducted in all ten administrative divisions of the state. A total number of 150 caregivers were included in cross-sectional study and 100 caregivers in prospective study. Weight, height and mid-upper arm circumference (MUAC) measurements were undertaken along with the administration of a semi-structured questionnaire.

2. Centrally Sponsored Scheme for the establishment of one National and eight Regional Institutes of Allied Health Sciences:

This project of the Government of India aims to augment the supply of skilled paramedics and promote the quality of care through standardization of paramedic (allied health) education and curricula across the country. This is expected to be achieved through the establishment of one national and eight regional institutes of paramedical sciences that would be responsible for conducting 26 undergraduate and seven post graduate courses for allied health professionals.

The project will potentially provide a strategic framework to augment availability of skilled paramedical manpower by a standardized methodology of teaching and inputs in education and training of paramedical streams including infrastructure, equipment, training

materials, training human resource (HR) and pedagogy.



The project also will initiate the development of standardized protocols for certification of courses and quality control (evaluation) of desirable skill sets and for building national standards and benchmarks for accreditation of paramedical institutions and their regulation by the proposed National Institute.

A proposed interim board for allied health will be the first of its kind in the creation of a regulatory body for allied health professionals.

Allied Health Workforce shortfall-National estimate

Allied Health Workforce Category	Demand	Supply	Gap	
			Unadjusted	Efficiency-Access Adjusted
Ophthalmology related	1,45,236	17,678	1,27,558	1,36,039
Rehabilitation/other related	18,62,584	40,265	18,22,319	18,41,637
Surgical intervention technology	2,05,088	7,215	1,97,873	2,08,618
Medical lab technology	76,884	15,214	61,670	70,603
Radiography and imaging technology	23,649	4,352	19,297	20,971
Audiology/speech language pathology	10,599	3,263	7,336	8,901
Medical technology	2,39,657	3,587	2,36,070	2,37,791
Dental assistance related technology	20,48,391	6,243	20,42,148	20,45,143
Surgery and anesthesia related technology	8,62,193	4,050	8,58,143	8,60,086
Miscellaneous	10,74,473	1,81,511	8,92,962	9,80,045
Total			62,65,376	64,09,384

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Plans for PHFI's future engagement include development of course curriculum for the 48 proposed courses to be started in nine government institutions (one national institute of allied health and eight regional institutes of allied health) providing support in the capacity of technical partner to the Government of India for the project implementation phase, and strategic road mapping engagement of a similar nature with Nursing services.

3. Europe Aid/129196: Investing in People

– Good health for all: Engaging civil society organizations to support human resources for health: A partnership project between SWASTHI, EU and the Communications Division at PHFI, the HSSU is working as a technical advisory and will be the implementing partner in the establishment of Human Resource training cells as strategically determined, during the course of the project.

Approved projects

1. DFID RH Framework project: for Improved Family Planning and Reproductive Health services in India awarded to Public Health Foundation of India (PHFI) along with Futures group, John Hopkins University (JHU) and Hindustan Latex Family Planning Promotion Trust (HLFPPT) as implementing partners.

The project will be geographically focused in the states of Bihar and Odisha. The main thrust area of the project is to rapidly scale up family planning and reproductive health services for under-served areas and populations through private sector channels. The project aims to increase the penetration of social marketing and franchising so that communities can have better access to the means for family planning. This will reduce the unmet need as well increase the contraceptive prevalence rate. The target for establishing the social franchising for both the states is approximately 280. It is expected that the private medical practitioners at sub-district and village level, who are the essential contact points for the community, will be trained for advocacy and prescribing the appropriate family planning methods for the eligible couples.

The role of PHFI is to identify the private medical practitioners (PMPs) at the grassroots level and organize a comprehensive training on the family planning practices. PHFI will develop a consolidated module on family planning in local languages for the PMPs. The training will be imparted by 28 experienced gynaecology and obstetric specialists (identified from both the states) at district level, supported with hands-on training. Recently, PHFI has signed a MoU with The Federation of Obstetric and Gynaecological Societies (FOGSI) who will support PHFI in developing the module and facilitate

programme implementation with the help of 10 renowned national faculty. PHFI will also support its partners in establishing the social franchising network in the vicinity of the PMPs for better utilization of the family planning products.

The project started in September and will continue for next 36 months in both the states. PHFI will establish a national level project management unit and state programme secretariat for smooth implementation of the programme.

2. **Technical Assistance to the Director General Medical, Health & Family Welfare under Health and Family Welfare Department, Government of Uttar Pradesh for the Uttar Pradesh Health Systems Strengthening Project:**

The Department for Medical & Health, Government of Uttar Pradesh, is in the process of preparing a second Uttar Pradesh Health Systems Strengthening Project (UPHSSP) in the state to be supported by the World Bank. The Government of Uttar Pradesh (GoUP) is preparing to launch its Health Systems Strengthening and Quality Improvement Project (2012-17), which will provide the opportunity to prioritise the use of resources and to address the major weakness in institutional capacities and systems. The key areas for the Department of Health, UP are to improve access to quality of health care services delivery and strengthen governance and management systems in health, as well as regulate the private health sector service providers. Institutional development, strengthening systems and accountability including financial management and, generating demand side accountability, and introducing incentives for performance and piloting alternative delivery models, including public private partnerships (PPPs) are some key interventions under the Project.

PHFI is a member of the Technical Assistance Provider (TAP) team along with ECORYS, IMACS, TRIOS and ZON Healthcare to provide technical support to achieve the overall objective of UPHSSP to strengthen the organizational performance of the state's health sector, to enable improved efficiency and quality of public service delivery and

ensure better engagement with the private sector.

TAP Support Team will provide, technical inputs, contract and management expertise on: Health Policy & Strategic Planning; Health Financing and Health Insurance; Quality Assurance and Improvement in Health Facilities; Healthcare Waste Management; Social Development issues, including equity and gender; Health and Hospital Information Systems by IT solutions; Public Private Partnerships and Monitoring & Evaluation.

The project is expected to start in December and will continue for 36 months.

Completed projects

- **Disaster Management:** In January 2011, HSSU faculty successfully culminated a capacity building initiative with the Aga Khan Foundation hospitals in Mumbai to train the entire senior and middle management staff and volunteers of more than 1,000 people on disaster preparedness and response. Highlights of the project included the establishment of a Hospital Disaster Management Team, the successful completion of a full-scale hospital evacuation drill, fire response coordinated in conjunction with all local stakeholders such as the fire department of Maharashtra, police and the community and finally, the inculcation of the Incident Management System (IMS) as a formal management tool in disasters.

Expected system impact: The National Disaster Management Authority has expressed a keen interest in the findings and module curriculum and wishes to actively engage with PHFI in scaling up efforts to multiple states. Several private sector facilities aspiring for JCI accreditation are also keen to train their staff to international standards of safety and emergency response.

The hospital services unit proposes to leverage the success of its practical workshops and handholding on a wide range of hospital-management-related topics and expand these to relevant technical and industry partners. Efforts are also underway to partner closely with the research division in developing and implementing health systems strengthening proposals.

- **Active leadership as part of the 4th Common Review Mission of the National Rural Health Mission:** PHFI was a key participant and contributor to the fact finding and review process, the analysis and overall evaluation report writing of the 4th CRM that concluded in January 2011. Several senior leaders from PHFI contributed their public health expertise to the reform review agenda. This overall engagement with the Ministry and the National Health System Resource Center was handhold by the HSSU.
- **Programme for improving Infection Control & Patient Safety:** An international faculty from SHARE, BD and national experts were inducted to conduct a hands-on workshop on effective Infection Control practices in ten Delhi and ten Andhra hospitals, under the aegis of the respective state government Ministries of Health and Family Welfare. The programme received excellent feedback. Close to 70 senior leaders from 20 public hospitals were exposed to international tools and techniques in infection management and made to create a measurable annual road map through a participative team-building approach. Expected system Impact: Talks are currently on to partner with BD, AIIMS, and Fortis and other large private and public sector hospitals and diagnostic manufacturers to highlight Infection control issues under the reputed National Patient Safety Initiative (NIPS) launched by the MoHFW. This could well be the beginning of structured, measurable, realistic progress in India's attempt to reduce Hospital Acquired Infections. The Unit is also exploring possibilities for collaboration with the research team including the setup of a data repository within PHFI for managing peer-reviewed infection control data and other quality metrics nationally.

MoUs



MoUs and Collaboration Agreements signed for the period starting from October, 2011 till August, 2012

1. The Public Health Foundation of India through the Indian Institute of Public Health, Hyderabad & Govt of Karnataka, Dept of Health and Family Welfare Services.
Purpose: To share a common interest in establishing an on-going forum of interactions, discussion, training, research and other activities related to all aspects of health, healthcare and health service systems.
Date: 15.10.2011
2. South Asia Centre for Disability Inclusive Development and Research, a centre for excellence of the Public Health Foundation of India and International Clinical Epidemiology Network Trust.
Purpose: To improve the health of the population of developing countries by promoting healthcare based on the best evidence of effectiveness and the efficient use of resources.
Date: 09.11.2011
3. Nossal Institute for Global Health, University of Melbourne, Australia and the Public Health Foundation of India.
Purpose: To jointly conduct technical activities to support the All Task Force on tobacco control.
Date: 01.12.2011
4. MCH STAR INITIATIVE and the Public Health Foundation of India.
Purpose: To jointly increase PHFI's capacity to integrate gender and social inclusion consideration into proposal development, research methods, and policy analysis and advocacy activities as a regular practice.
Date: 20.01.2012
5. McMaster University Hamilton, Ontario, Canada and the Public Health Foundation of India.
Purpose: To promote academic collaboration research, education, and community service in Canada and India.
Date: 27.01.2012
6. Global Alliance of Improved Nutrition and the Public Health Foundation of India.
Purpose: To strengthen their relationship and commitment towards enhancing the delivery and quality of public health nutrition education in India and provide technical assistance to the Government at the national and state levels for effective policy formulation, programme design and implementation of nutrition interventions.
Date: 01.03.2012
7. UNICEF and the Public Health Foundation of India through the Indian Institute of Public Health, Hyderabad.
Purpose: UNICEF collaborated with PHFI/IIPH-H in connection with a series of activities that formed part of the UNICEF INDIA PROGRAMME.
Date: 14.03.2012
8. Population Health Research Institute, through Hamilton Health Sciences Corporation and the Public Health Foundation of India.
Purpose: To strengthen, promote and develop co-operation between each other in the field of public health.
Date: 12.03.2012
9. Indo-US Science and Technology Forum for PHFI-IUSSTF Research Fellowships and the Public Health Foundation of India.
Purpose: Statement of joint interest of both parties in launching and facilitating the IUSSTF-PHFI Research Fellowships for Indian Researchers.
Date: 21.03.2012
10. SANGATH and the Public Health Foundation of India.
Purpose: PHFI is one of the collaborators with SANGATH for PRIME (Programme for Improving Mental Health Care in Low Income Countries) Project.
Date: 29.03.2012
11. Art and Global Health Center, University of California and the Public Health Foundation of India.
Purpose: To foster growth in knowledge aimed at the improvement in public health outcomes through arts-based health

communication, research, training, teaching and advocacy.

Date: 01.04.2012

12. The Public Health Foundation of India and Federation of Obstetric and Gynecological Societies of India.

Purpose: The Parties proposed creating a training programme on comprehensive maternal health management under this MoU.

Date: 09.05.2012

13. The Public Health Foundation of India and Primary Health Solutions.

Purpose: Both parties agreed to identify possible areas, projects and programmes in the primary health care arena, develop, design and pilot solutions, identify best practices and take up or facilitate scaling up of such successful initiatives.

Date: 09.05.2012

14. World Food Programme and the Public Health Foundation of India.

Purpose: Both parties entered into this MoU for Endline Evaluation of the Wheat Flour Fortification Project, Madhya Pradesh.

Date: 23.05.2012

15. The Public Health Foundation of India and Ministry of Health and Family Welfare.

Purpose: To implement activities to strengthen the immunization programme.

Date: 28.05.2012

16. The Public Health Foundation of India and the University of Bonn.

Purpose: To outline the collaboration between the parties.

Date: 02.09.2012

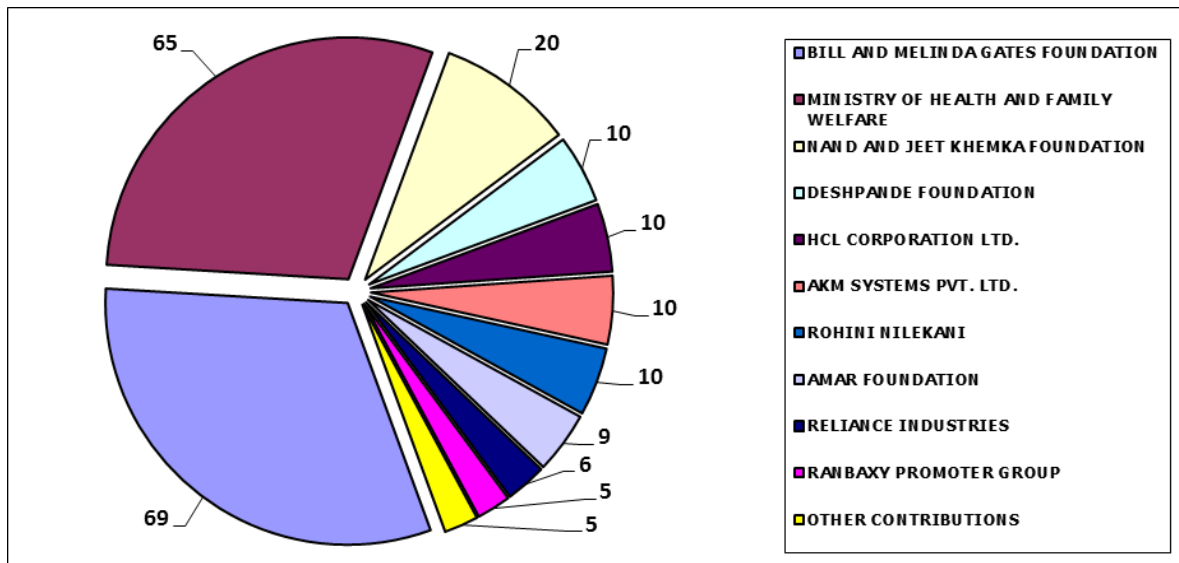
17. The Public Health Foundation of India and FICCI Aditya Birla CSR Centre for Excellence, New Delhi.

Purpose: to collaborate to promote public health in India.

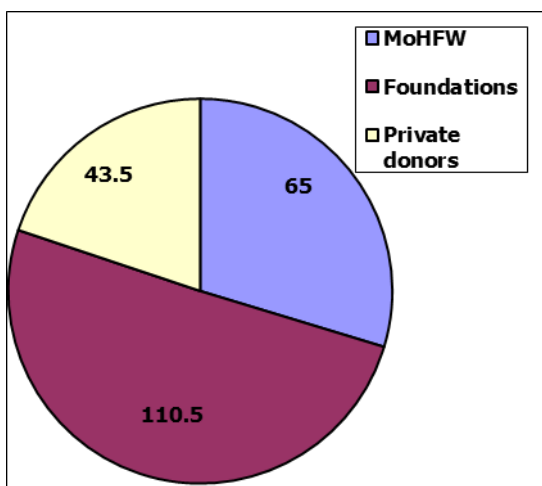
Date: 01.10.2012

Finance

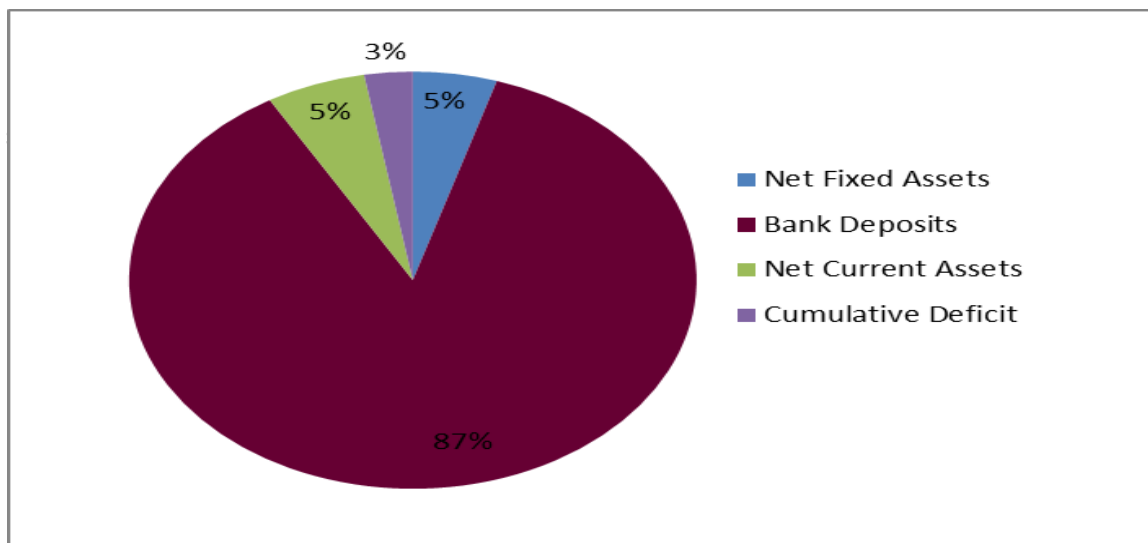
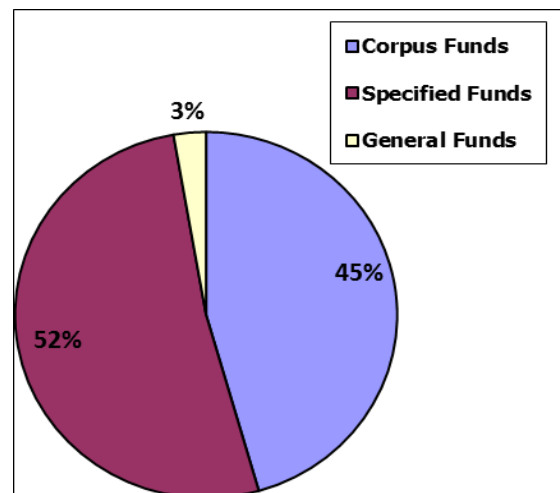




Distribution of Organization, key Contributions made to PHFI (n= INR 219 Crores)



Key Contributions made to PHFI (n=INR 219 Crores)



Status of Funds deployed (n=INR 219 Crores)

BSR & Co.

(Registered)

Chartered Accountants

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DLF Cyber City, Phase - II
Gurgaon - 122 002 (India)

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Auditors' Report

To the Members of the Governing Council of
Public Health Foundation of India

We have audited the attached Balance Sheet of Public Health Foundation of India ("PHFI" / "the Foundation") as at 31 March 2012 and also the Income and Expenditure Account of the Foundation for the year ended on that date, annexed thereto. These financial statements are the responsibility of the Governing Council of Public Health Foundation of India. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statements presentation. We believe that our audit provides reasonable basis for our opinion.

In our opinion, and to the best of our information and according to the explanations given to us, the financial statements give a true and fair view in conformity with the accounting principles generally accepted in India.

- a) in the case of the Balance Sheet, of the state of affairs of Public Health Foundation of India as at 31 March 2012; and
- b) in the case of the Income and Expenditure Account, of the excess of expenditure over income for the year ended on that date.

For BSR & Co.
Chartered Accountants
Firm's Registration No: 101248W



Vikram Advani
Partner
Membership No.: 091765

Place: GURGAON
Date: 22 SEPTEMBER 2012

Public Health Foundation of India
Balance Sheet as at 31 March 2012
(All amounts are in Rupees)

Sources of Funds	Schedule	As at 31 March 2012	As at 31 March 2011
Corpus fund	1	99,73,83,182	79,87,79,034
Specified fund	2	1,01,25,48,367	1,03,12,17,303
Project funds held in trust	3	92,18,38,693	38,36,90,685
Capital assets fund	4	10,49,22,453	8,83,99,241
General fund	5	1,48,87,117	3,94,48,243
Total		3,05,15,79,812	2,34,15,34,506
Application of Funds			
Fixed assets			
Gross block	6	14,65,86,046	11,52,79,304
Less : Accumulated depreciation		(8,49,87,877)	(4,51,13,377)
Net block		6,15,98,169	7,01,65,927
Capital work in progress		4,33,24,285	1,82,33,311
		10,49,22,454	8,83,99,238
Current assets, loans and advances	7		
Cash and bank balances		2,82,27,37,087	2,17,01,64,911
Loans and advances		21,30,61,190	13,48,53,744
Other current assets		7,38,96,985	3,21,40,470
		3,10,96,95,262	2,33,71,59,125
Less: Current liabilities and provisions	8		
Current liabilities		(14,71,13,593)	(7,61,07,846)
Provisions		(1,59,24,311)	(79,16,011)
		(16,30,37,904)	(8,40,23,857)
Net current assets		2,94,66,57,358	2,25,31,35,268
Total		3,05,15,79,812	2,34,15,34,506

Significant accounting policies and notes to the accounts

12

The schedules referred to above form an integral part of the Balance Sheet.

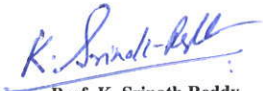
As per our report of even date attached

For B S R & Co.
Chartered Accountants
Firm registration No.101248W


Vikram Advani
Partner
Membership No. : 091765

Place : BUNGALOW
Date : 22 SEPTEMBER 2012

For and on behalf of
Public Health Foundation of India


Prof. K. Srinath Reddy
President

Place : NEW DELHI
Date : 22 SEPTEMBER 2012


Amit Chaturvedi
Head Finance

Place : NEW DELHI
Date : 22 SEPTEMBER 2012

Public Health Foundation of India
Income and Expenditure Account for the year ended at 31 March 2012
 (All amounts are in Rupees)

Income	Schedule	For the year ended 31 March 2012	For the year ended 31 March 2011
Grants Income		75,63,07,431	50,93,66,132
Add: Grant transferred from Specified Fund (to the extent of expenses incurred)		4,53,45,941	-
		<u>80,16,53,372</u>	<u>3,95,59,970</u>
			54,89,26,102
Interest income	9	10,53,63,715	7,71,09,588
Fee from activities		4,51,97,688	2,51,84,707
Other income		29,96,192	1,42,91,278
Liabilities written back		5,77,368	-
		<u>95,57,88,335</u>	<u>66,55,11,675</u>
Expenditure			
Personnel expenses	10	5,88,04,176	6,56,33,554
Program expenditure (includes sub-grant expenses of Rs.227,393,414(previous year Rs.132,881,441))		82,11,35,399	55,76,80,590
Administrative expenses	11	10,04,09,890	8,72,84,853
		<u>98,03,49,465</u>	<u>71,05,98,997</u>
Expenses before depreciation during the year			
Depreciation during the year		3,98,74,501	2,64,61,671
Total expenses during the year		<u>1,02,02,23,966</u>	<u>73,70,60,668</u>
(Deficit) / surplus for the year		<u>(6,44,35,629)</u>	<u>(7,15,48,993)</u>
Depreciation transferred to Capital assets fund		3,98,74,501	2,64,61,671
(Deficit) / surplus transferred to General fund		<u>(2,45,61,128)</u>	<u>(4,50,87,322)</u>


Significant accounting policies and notes to the accounts

12

The schedules referred to above form an integral part of the Income and Expenditure Account.

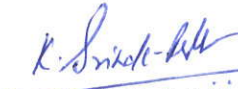
As per our report of even date attached

For BSR & Co.
 Chartered Accountants
 Firm registration No.101248W


Vikram Advani
 Partner
 Membership No. : 091765

Place : Gurgaon
 Date : 22 SEPTEMBER 2012

For and on behalf of
Public Health Foundation of India


Prof. K. Srinath Reddy
 President


Amit Chaturvedi
 Head Finance

Place : NEW DELHI
 Date : 22 SEPTEMBER 2012

Place : NEW DELHI
 Date : 22 SEPTEMBER 2012

Public Health Foundation of India
Schedules forming part of the financial statements
(All amounts are in Rupees)

	As at 31 March 2012	As at 31 March 2011
Schedule 1 : Corpus fund		
Opening balance	79,87,79,034	79,87,79,034
Add:		
- Additions during the year	19,86,04,148	-
	<u>99,73,83,182</u>	<u>79,87,79,034</u>
Schedule 2 : Specified fund		
Opening balance	1,03,12,17,303	1,06,26,66,276
Add:		
- Interest income from designated investments (refer schedule 9)	5,10,93,317	6,24,98,872
- amount transferd from IIPH Hyderabad @	1,81,95,350	-
Less:		
- Transferred to Project fund	(6,11,549)	-
- Transferred to capital asset fund	(4,20,00,113)	(5,43,87,875)
- Transferred to Income and Expenditure account (Deficit) / surplus for the year	(4,53,45,941)	(3,95,59,970)
	<u>1,01,25,48,367</u>	<u>1,03,12,17,303</u>
@ Refer note E of schedule 12		
Schedule 3 : Project funds held in trust #		
Opening balance	38,36,90,685	46,03,66,192
Add:		
Grants received	1,19,28,41,664	41,39,82,431
Grants receivable	7,34,36,324	2,24,84,172
Interest income (refer schedule 9)	4,61,86,162	1,70,70,408
Transferred from Designated funds	6,11,549	-
Less:		
Revenue expenditure	(72,96,40,641)	(45,55,69,429)
Capital expenditure	(1,43,97,602)	(2,33,61,148)
Less:		
Surplus transferred to General Fund	(1,26,91,538)	(3,90,40,077)
Grants refunded	(1,81,97,910)	(1,22,41,864)
	<u>92,18,38,693</u>	<u>38,36,90,685</u>
# Refer note D of schedule 12		
Schedule 4 : Capital assets fund		
Opening balance	8,83,99,239	4,26,56,168
Add:		
Transferred from specified funds	4,20,00,113	5,43,87,875
Transferred from project funds	1,43,97,602	2,33,61,148
Less:		
Depreciation for the year	(3,98,74,501)	(2,64,61,671)
Sale / adjustment during the year	-	(55,44,279)
	<u>10,49,22,453</u>	<u>8,83,99,241</u>
Schedule 5 : General fund		
Opening balance	3,94,48,245	8,45,35,567
Add:		
- (Deficit) / surplus of income over expenditure	(2,45,61,128)	(4,50,87,322)
	<u>1,48,87,117</u>	<u>3,94,48,245</u>



Public Health Foundation of India
Schedules forming part of the accounts
(All amounts are in Rupees)

Schedule 6 : Fixed Assets

Description	Gross Block					Accumulated Depreciation			Net Block		
	As at 1 April 2011	Additions during the year	Pursuant to merger #	Total additions during the year	Deletions during the year	As at 31 March 2012	As at 1 April 2011	For the year	Deletions during the year	As At 31 March 2012	As At 31 March 2011
Tangible fixed assets											
Leasehold improvements	5,23,48,894	-	-	-	-	5,23,48,894	1,99,13,514	2,15,64,823	-	4,14,78,337	3,24,35,380
Computers	2,59,17,461	59,98,414	2,31,192	62,29,606	-	3,21,47,067	1,64,76,446	86,15,929	-	2,50,92,375	9,44,105
Office equipments	1,49,91,186	1,71,74,629	9,09,118	1,80,83,747	-	3,30,74,933	28,22,978	44,14,418	-	72,37,396	1,21,68,208
Furniture and fixtures	70,19,743	3,02,742	63,642	3,66,384	-	73,86,127	21,33,506	10,22,382	-	31,55,888	48,86,237
Vehicles	31,84,588	-	8,17,643	8,17,643	-	40,02,231	15,09,080	5,06,339	-	20,15,418	16,75,508
Medical Equipment	81,02,916	35,25,406	-	35,25,406	-	1,16,28,322	7,66,752	20,30,452	-	27,97,204	73,36,164
Intangible fixed assets											
Software	37,14,516	22,83,956	-	22,83,956	-	59,98,472	14,91,101	17,20,159	-	32,11,260	22,23,415
Current year	11,52,79,304	2,92,85,147	20,21,595	3,13,06,742	-	14,65,86,046	4,51,13,377	3,98,74,501	-	8,49,87,877	7,01,65,927
Previous year	5,01,18,988	7,92,48,895			1,40,88,579	11,52,79,304	2,71,96,006	2,64,61,671	85,44,300	4,51,13,377	2,29,22,982
Capital work in progress* *including capital advances	1,82,33,311	1,98,82,204	58,17,167		6,08,398	4,33,24,285				4,33,24,285	1,82,33,311

Refer note E of schedule 12



Public Health Foundation of India
Schedules forming part of the financial statements
(All amounts are in Rupees)

	As at 31 March 2012	As at 31 March 2011
Schedule 7 : Current assets, loans and advances		
Cash and bank balances		
Cash in hand	2,71,321	40,489
Cheques in hand	37,83,590	5,40,05,754
Balances with scheduled banks		
- in current accounts	5,83,49,608	1,85,92,777
- in savings accounts	4,84,61,952	3,93,25,891
- in deposit accounts	2,71,18,70,616	2,05,82,00,000
	<u>2,82,27,37,087</u>	<u>2,17,01,64,911</u>
Loans and advances (Unsecured and considered good)		
Advances recoverable in cash or in kind or for value to be received	4,96,23,996	5,53,73,514
Security deposits	2,80,64,438	1,89,71,916
Sub-grant advance	1,03,30,638	1,69,34,321
Advance tax	2,25,15,685	1,81,58,576
Grants and fees receivable	9,80,29,036	2,32,29,246
Prepaid expenses	44,97,397	21,86,171
	<u>21,30,61,190</u>	<u>13,48,53,744</u>
Other current assets		
Interest accrued but not due	7,38,96,985	3,21,40,469
	<u>7,38,96,985</u>	<u>3,21,40,469</u>
Schedule 8 : Current liabilities and provisions		
Current liabilities		
Sundry creditors	13,90,34,801	6,70,79,854
Other liabilities	80,78,792	90,27,992
	<u>14,71,13,593</u>	<u>7,61,07,846</u>
Provisions		
Gratuity	95,13,271	53,39,921
Compensated absences	64,11,040	25,76,090
	<u>1,59,24,311</u>	<u>79,16,011</u>



Public Health Foundation of India
Schedules forming part of the financial statements
(All amounts are in Rupees)

	For the year ended 31 March 2012	For the year ended 31 March 2011
Schedule 9 : Interest income		
Interest received from savings bank accounts	17,48,931	8,99,705
Interest received on Income tax Refund	5,11,505	-
Interest received from fixed deposit accounts	20,03,82,758	15,57,79,163
	<u>20,26,43,194</u>	<u>15,66,78,868</u>
Less:		
- Interest income on designated investments transferred to project funds	(4,61,86,162)	(1,70,70,408)
- Interest income on designated investments transferred to specified funds	(5,10,93,317)	(6,24,98,872)
	<u>10,53,63,715</u>	<u>7,71,09,588</u>
Schedule 10 : Personnel expenses		
Salaries and allowances*	5,04,29,715	6,06,87,734
Contribution to provident and other funds	83,74,461	49,45,820
	<u>5,88,04,176</u>	<u>6,56,33,554</u>
*includes prior period expense	-	16,80,620
Schedule 11 : Administrative expenditure		
Future faculty expenses	1,00,55,905	1,04,16,138
Rent	3,95,27,691	1,16,36,443
Professional services (refer note F of schedule 12)	41,79,331	1,75,58,510
Travel and conveyance (includes prior period expenses, refer note G of schedule 12)	76,91,008	82,04,712
Communication, printing and stationery expenses	36,28,385	49,99,286
Books and periodicals	3,61,681	4,61,913
Repairs and maintenance	15,25,430	15,17,399
Conferences, seminars and other program expenses	99,59,876	1,32,13,141
Electricity and water	28,67,549	20,66,464
Insurance	15,16,135	8,28,184
Hostel expenses	30,77,392	54,90,065
Guest house expenses	10,91,409	25,78,120
Office Expenses	79,55,597	38,17,533
Printing and Stationery	17,78,929	15,70,079
Miscellaneous expenses (includes prior period expenses, refer note G of schedule 12)	49,81,923	24,51,828
	<u>10,04,09,890</u>	<u>8,72,84,853</u>



Schedule 12 – Significant accounting policies and notes to accounts

A. Background

Public Health Foundation of India (“PHFI”/ “the Foundation”) was registered under the Societies Registration Act, 1860 vide registration certificate number 54840 dated 8 February 2006.

The Foundation has been granted an exemption under section 12A of the Income Tax Act, 1961, vide letter number DIT(E)/12A/2005-06/P-1044/05/313 dated 16 June 2006. The Foundation has also obtained exemption u/s 80G(5)(vi) of the Income Tax Act, 1961 vide order number DIT(E) 2008-09/ P-1044/1073 dated 26 June 2008 for the period from 1 April 2008 to 31 March 2011. The above exemption under section 80G (5)(vi) of the Income Tax Act, 1961 has been extended from the period 1 April 2011 till it is rescinded vide order number DIT(E) 2011-12/ P-1049/5102 dated 05 December 2011.

The Foundation has been registered under the Foreign Contribution (Regulation) Act, 1976 for carrying out activities of social nature with registration number 231660927 dated 26 September 2008.

The Foundation has been registered as a Scientific and Industrial Research Organisation (SIRO) by the Department of Scientific and Industrial Research under the Scheme on Recognition of Scientific and Industrial Research Organisations (SIROs), 1988 Vide No. 14/482/2008-TU-V dated 23rd April, 2011 for the period from 1 April 2011 to 31 March 2014.

The main object of the Foundation is to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of Public Health. PHFI focuses on broad dimensions of public health that encompass preventive and therapeutic services.

B. Significant accounting policies

i) Basis of Accounting

These financial statements have been prepared and presented under the historical cost convention method on the accrual basis of accounting and in accordance with the Accounting Standards issued by the Institute of Chartered Accountants of India and other generally accepted accounting principles and practices prevailing (Indian GAAP) in India, as applied consistently by PHFI.



ii) Use of estimates

The preparation of financial statements in conformity with Indian GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates. Any revision to accounting estimates is recognised prospectively. Contingencies are recorded when it is probable that a liability will be incurred, and the amount can be reasonably estimated.

iii) Fixed assets and depreciation

Fixed assets

Fixed assets are stated at cost of acquisition including taxes, duties, freight and other incidental expenses relating to acquisition and installation.

Capital work in progress

Cost of assets not ready for use before balance sheet date and any advances paid towards acquisition of fixed asset are disclosed as capital work in progress.

Assets purchased from Specified Funds and Project Funds are charged to the Specified Fund and Project Funds respectively and transferred to Capital Assets Fund. Payment of advances for capital expenditure and amount spent on capital work in progress out of the specified funds and project funds are also charged to the respective funds and transferred to capital asset fund.

Depreciation

Depreciation on fixed assets is charged on the Straight Line method, at the following rates:

Computer and Softwares	33.33%
Office equipments	20%
Furniture and fixtures	14.29%
Vehicles	14.29%
Medical equipment	20%

Leasehold improvements are amortised over the lease term or their useful life.

Assets costing less than Rs. 5,000 per unit are depreciated at the rate of 100% per annum. Depreciation is charged on a pro-rata basis for assets purchased/sold during the year.

Depreciation charged on fixed assets purchased from Specified Funds and Project Funds is transferred to the Capital Assets Fund.



iv) Investments

Investments are classified into long-term investments and current investments based on intent of management at the time of making the investment. Investments, intended to be held for more than one year, are classified as long-term investments. Current investments are valued at lower of cost or market value. Long-term investments are valued at cost unless there is diminution in value, which is other than temporary in nature. Diminution in value of investments is considered other than temporary based on criteria that include the extent to which cost exceeds the market value, the duration of the market decline and the financial health of and specific prospects for the issuer. Diminution in value of long-term investments when considered to be other than temporary is fully provided for and reflected as a provision for depreciation in value investment.

v) Foreign currency

Foreign currency transactions are recorded at the exchange rates prevailing on the date of the respective transactions. Realised gains and losses on foreign currency transactions during the year are recognised in the Income and Expenditure Account. Monetary foreign currency assets and liabilities remaining unsettled at the Balance Sheet date are translated at year end rates and resultant gains / losses on foreign currency translations are recognised in the Income and Expenditure Account.

vi) Retirement benefits

All employee benefits payable/available within twelve months of rendering the service are classified as short-term employee benefits. Benefits such as salaries, wages and bonus, etc are recognised in the Income and Expenditure Account in the period in which the employee renders the related service.

Defined contribution plans: The Foundation's employee provident fund scheme is a defined contribution plan. A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions and will have no obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognised as an employee benefit expense in the Income and Expenditure Account in the year when the employee renders the related service.

Defined benefit plans: The Foundation's gratuity plan is a defined benefit plan. The present value of gratuity obligation under such defined benefit plan is determined based on an actuarial valuation carried out by an independent actuary using the Projected Unit Credit Method, which recognises each period of current and past service as giving rise to additional unit of employee benefit entitlement and measures each unit separately to build up the final obligation. The obligation is measured at the present value of the estimated future cash flows. The discount rate used for determining the present value of the obligation under defined benefit plans, is based on the market yields on Government securities as at the valuation date having maturity periods approximating to the terms of related obligations. Actuarial gains and losses are recognised immediately in the Income and Expenditure Account.



Compensated absences are in the nature of other long term employee benefits. The liability in respect of compensated absences is provided on the basis of an actuarial valuation done by an independent actuary at the year end. Actuarial gains and losses are recognized immediately in the Income and Expenditure Account.

Gains or losses on the curtailment or settlement of any defined benefit plan are recognised when the curtailment or settlement occurs.

vii) Funds

Corpus Fund: "Corpus fund" relates to funds contributed by the founder members at incorporation and donations received with specific directions that they shall form part of the corpus of the Foundation.

Specified Fund: "Specified Funds" are restricted funds received for specified purpose of development of Indian Institute of Public Health and for promotion of public health awareness. These are held in trust until used for the purpose specified and deposits / investments are earmarked against them. Revenue from the restricted fund is recognized during the year in the Income and Expenditure Account to match the related expenditure. The balance amount is carried forward in the restricted fund for use in future periods. Income arising out of the investments in this regard is credited to the fund and is used for the purpose specified in this regard other than for acquisition of fixed asset which is transferred to the Capital Assets Fund.

Capital Assets Fund: "Capital Assets Fund" represents capital assets purchased out of specified/ restricted funds and is represented by the net book value of such funded fixed assets.

Project Fund: "Project Funds" are grants received from various funding agencies to carry out specific activities. These are held in trust until used for the purpose specified and deposits / investments are earmarked against them. Revenue from the restricted fund is recognized during the year in the Income and Expenditure Account to match the related expenditure (including capital expenditure). The balance amount is carried forward in the restricted fund for use in future periods.

General Funds: The Foundation also receives "General Funds" which are unrestricted in nature. The excess of income over expenditure during the year, being general purpose in nature is carried forward for use in future periods.

viii) Leases

Lease payments under an operating lease are recognised as an expense in the Income and Expenditure Account on a straight line basis over the lease term.



C. Expenditure

The Foundation implements its programmes for strengthening training, research and policy development in the area of public health through projects conducted by itself or by other partner organizations to which it disburses grants. Accordingly, "Program expenditure" includes expenditure incurred by partner organisations till the year end. Balance unspent amount of grant with partner organisations at year end has been shown as "Sub – grant advance" under the head loans and advances.

D. "Project Funds held in trust" represent the unexpended portion of funds received from various donors.

E. PHFI had entered into a Memorandum of Understanding (MOU) with State Government of Andhra Pradesh on 7th April 2007 to jointly set up Public Health organisation in the state. Accordingly, Indian Institute of Public Health, Hyderabad ('IIPH, H) was formed as a registered Society with The Office of the Registrar of Societies, Ranga Reddy District, Hyderabad *vide* certificate of Registration no. 3126 of 2007.

During the current year, Governing Council of IIPH,H in its meeting held on 17 October 2011 has passed a special resolution to dissolve the society.

Pursuant to the order of Registrar of Societies *vide* Memo No. 4300/societies/2011 dated 12 January 2012 IIPH,H has been dissolved and balance sheet of IIPH, H as on the date of dissolution has been merged with Public Health Foundation of India on the following basis:-

- the assets and liabilities of IIPH,H on the date of dissolution as per the audited financial statements on that date has been recorded by the PHFI at their respective book value.
- The aggregate of the net assets of IIPH,H as on the date dissolution date (Rs. 18,195,350) has been added to the specified funds. The following is the breakup of net assets of IIPH, H as at 12 January 2012.

Assets	Balances as at 12 January 2012
Net fixed assets	2,021,596
Capital work in progress	5,817,167
Net current assets	10,356,587
	18,195,350



Public Health Foundation of India
Schedules forming part of the accounts
(All amounts are in rupees)

F. Auditors' remuneration*

	For the year ended 31 March 2012	For the year ended 31 March 2011
For statutory audit	8,50,000	650,000
For other tax related services	70,000	50,000

*excluding service tax

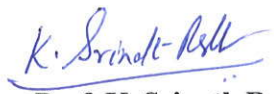
- G.** Miscellaneous expenses in the previous year include service tax paid amounting to Rs.751,999 in respect of fees and grants collected in prior years and its related interest and penalty cost. Travel and conveyance expense include travelling expense amounting to Rs 405,899 related to previous year.
- H.** PHFI had accumulated an amount of INR 823,991,002 for the Assessment Year 2007-08 to be utilized by 31 March 2013 (by virtue of grace period under Section 11(3)(c) of the Act. On account of an injunction order issued by the Hon'ble High Court of Andhra Pradesh an amount of INR 783,050,000 could not be applied during the period 6 March 2009 till 27 June 2011. Consequently, the time period of utilization of funds for the said amount of INR 783,050,000 would be extended to 15 July 2015 in view of proviso to section 11(2) of the Income-tax Act, 1961.
- I.** Previous year's figures have been regrouped/ recast, wherever necessary, to confirm to the current year's classification.

For B S R & Co.
Chartered Accountants
Firm registration No. 101248W

For and on behalf of
Public Health Foundation of India


Vikram Advani
Partner
Membership No.:091765

Place: GURGAON
Date: 22 SEPTEMBER 2012


Prof. K. Srinath Reddy
President

Place: NEW DELHI
Date: 22 SEPTEMBER 2012


Amit Chaturvedi
Head -Finance

Place: NEW DELHI
Date: 22 SEPTEMBER 2012

Distinguished visitors



INTERACTION WITH DISTINGUISHED VISITORS

PHFI received and interacted with several distinguished visitors in the last year. This was in response to the interest evinced by them in visiting PHFI and identifying opportunities for collaboration or through invitations extended by PHFI for their participation in major events. Among these were interactions with:

- His Royal Highness, the Duke of York (Prince Andrew), and the British High Commissioner in India who had an interaction with PHFI on public health challenges in India and the role of PHFI in addressing them (April 2012)
- His Excellency the Minister for Health, Home Affairs and Technology, Government of Switzerland (Federal Councilor Dr. Alain Berset), who led a Swiss delegation which interacted with PHFI on public health in India and delivered a public lecture on 'Swiss Foreign Policy In Health', at an event co-hosted by PHFI along with the Embassy of Switzerland (October 2012)
- Their Excellencies the Ministers for Health of India, Kenya and Ghana, who addressed the International Conference on Microbial Resistance, organized by PHFI in Delhi (October, 2011)
- Mr Jairam Ramesh, Minister of Rural Development, Drinking Water and Sanitation (Govt. of India), who chaired PHFI foundation day lecture (March 2012).
- His Excellency the Minister for Health, Government of Netherlands (Ms. Edith Schippers) who interacted with PHFI on public health in India and the pathways for potential collaboration (May, 2012)
- Secretary Kathleen Sebelius (Secretary, Health and Human Services, USA) who visited PHFI, as head of a high level US delegation to discuss public health issues, with focus on non-communicable diseases, tobacco control and health of young persons (January 2012)
- Members of the Indian Parliament: Dr. Prabhakar Rao Kone, Mr. J.D. Seelam, Mr. P. Goverdhan Reddy and Mr. Jayanta Panda.
- Dr. Drew Faust, President of Harvard University, who interacted with a PHFI team led by Mr. N. R. Narayana Murthy and Prof. K. Srinath Reddy on health challenges and public health response in India (January 2012).
- Dr. Julio Frenk, Dean of the Harvard School of Public Health, who led a high level delegation from HSPH which interacted with PHFI on potential collaboration. Dean Frenk also delivered the PHFI Foundation Day Lecture (2012) on 'Health Professional Education in the 21st century' and also spoke on Universal Health Coverage in Mexico at a symposium on UHC jointly organized by HSPH and PHFI in Delhi (March 2012).





WORKING TOWARDS A HEALTHIER INDIA...

Public Health Foundation of India

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