

PHESA Newsletter

Public Health Evidence South Asia

December 2013

Volume 1, Issue 2

Public Health Evidence South Asia (PHESA)



Dr. N. Sreekumaran Nair
Director, PHESA

Dear Friends,

It is a great pleasure to bring out the second issue of the Public Health Evidence South Asia (PHESA) Newsletter. PHESA (www.phesa.manipal.edu) includes the South Asian Satellite of The Cochrane Public Health Group (www.ph.cochrane.org), aiming to meet the public health evidence needs of the

South Asian Region. Long term goals of PHESA are to build capacity to address Public Health evidence creation, synthesis and advocacy need of the region.

PHESA is just completing the year of infancy and the major task during the year has been to build a working structure, establish goals and to obtain resources including infrastructure and funding.

Manipal University provided a launching pad for PHESA in terms of two years basic funding and infrastructure support. We are fortunate to get collaborators like Public Health Foundation of India, Indian Institutes of Public Health, Centre for Chronic Disease Control, Madras Diabetic Research Foundation and many more. A committed team of mentors, enthusiastic mentees from across the country, identification of few priority review topics relevant for South Asian Region, involvement of promising young Statisticians and methodological innovation to understand the complexity of public health interventions were the achievements of this year.

With kind regards,

Dr. N. Sreekumaran Nair

VISION OF PHESA

To facilitate the synthesis, production and dissemination of high quality evidence of effect of Public Health interventions relevant to South Asian Region.

OBJECTIVES OF PHESA

1. Capacity Building:

Mentoring reviewers and methodologists in South Asian Region for conducting and appreciating systematic reviews of public health importance.

2. Evidence Building:

Producing systematic reviews of public health interest relevant to South Asian Region.

3. Networking:

With institutions and individuals across the region.

4. Primary Research:

Including methodological development for knowledge synthesis and translation.

5. Knowledge dissemination and advocacy.

"The launch of PHESA is a landmark event in the history of India's public health. I am proud to have been present today to see it happen"

- Prof. K. Srinath Reddy, President, PHFI

PHESA INAUGURATION

PHESA was formally inaugurated on 11th May 2013 by Prof. K. Srinath Reddy, President of Public Health Foundation of India, at Manipal University, Manipal.

Prof. N. Sreekumaran Nair, TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Statistical Editor - CPHG welcomed the gathering and gave the overview of PHESA.

The inaugural address was delivered by Prof.K.Srinath Reddy and he also unveiled the plaque. Prof. H. Vinod Bhat, Pro Vice Chancellor of Manipal University officially launched the website of PHESA (<http://www.phesa.manipal.edu/>).

Prof. K. Ramnarayan, The Vice Chancellor, Manipal University released the Newsletter Volume I, Issue I and gave the presidential remarks.

Over 60 invitees attended the inaugural ceremony including faculty, members of PHESA, students and well wishers.

Inaugural address by Prof. K. Srinath Reddy

It is an honor, a pleasure and privilege to be here. I started my day with a visit to the other facilities in the Manipal University. My amazement and accomplishments as well as the admiration for the remarkable body of educational institutions that have grown up here, has grown by the minute. I believe if you want to put a confidence interval on that, you will find a high level of precision. As far as Public health is concerned, my own journey from being a clinical



Inauguration of the plaque by Prof. K. Srinath Reddy



Release of News Letter Volume I, Issue I



Release of Website

Inaugural address by Prof. K. Srinath Reddy



**Prof. K. Srinath Reddy, President,
Public Health Foundation of India**

Cardiologist, to being an Epidemiologist and Public Health advocate has taught me that you cannot confine any consideration of health only to the clinical domain but you have to extend it far beyond not only into community but into the wider societal dimension. We require the transformation in health whether at the level of individual patient or at the level of the broader community will require evidence informed actions at the level of both policy and programmes. Indeed, till yesterday morning till I returned from Boston, I was teaching at the Harvard University where I am a visiting Professor and the last engagement I had was to attend a WHO consultation that was being held there on research to policy translation. So the whole idea of having evidence informed policy guiding health systems as well as health policy is being accorded the highest

- Evidence informed policy guides health system and health policy at the level of global organization.
- Involving a Public Health dimension of population based interventions will have a wide impact in health systems.

priority at the level of global organizations. Health system which was considered to be a bit of black box with very little understanding of what it entailed and sometimes even being started about a decade ago has now become buzz word in global health policy parlours. People are not talking about how to strengthen the health systems because it is been recognized that vertical programs however well designed cannot be force fitted into a weak health system. However when we are trying to advance policies and programmes in the health systems particularly involving a public health dimension of population based interventions or even policy interventions which have a population wide impact though they are non personal interventions.

We are required to present fairly strong evidence that this is the correct type of policy to be adopted. Unfortunately many of our policies are sometimes devoid of that level of evidence. We are used often in particularly in the clinical setting not to evidence based decision making but eminence based decision making or emotion based decision making. But we have to shift now to evidence based decision making or rather evidence informed decision making because we recognize that evidence collected from scientific research is possibly the major stream of information but there are other types of information

which also need to be netted in such as experiential system and passive knowledge acquired from communities. So we realize that in a complex system like health system you have to integrate multiple sources of knowledge. So we are actually now moving in terms of terminology from evidence informed policy to knowledge based policy or knowledge informed policy because knowledge as an most purely research based evidence as a additional dimension. In terms of scientific research we are trained to try and reduce uncertainty to the lowest possible p values. On the other hand when you are dealing with complex systems like health systems, you have to deal with higher levels of uncertainty and that is where knowledge becomes little more extended area as compared to pure scientific evidence, which is absolutely critical. The purpose of research is to provide evidence based but also context specific, resource sensitive, culturally compatible and equity promoting recommendations for policy and practice. So there are additional dimensions that we need to build in and this becomes evident in public health context. Where as in the clinical setting we are often looking at linear

- **Adopt policy based in strong evidence and fit evidence to context.**
- **Integrate multiple sources of knowledge in a complex system like health system and move towards knowledge informed policy.**
- **The purpose of research is not only to provide evidence based but also context specific, resource sensitive, culturally compatible and equity promoting recommendations for policy and practice.**

- **South Asian arm of Cochrane Collaboration is very important because gathering evidence in our context is essential for sustainable health interventions.**
- **The PHESA, South Asian arm of Cochrane Collaboration Public Health Group which is looking at evidence not merely in the clinical context but in the public health context is really reassuring from the point of view of India's public health.**
- **Public Health Foundation of India will be delighted to collaborate in whatever manner deemed appropriate and be part of this very exciting new initiative, which I am sure is going to bring both rigor and vigor to India's policy making.**

interventions and trying to remove the effect of all other possible variables. Where as in public health we are dealing with multiple variables acting in concert and often in variable combinations and therefore the context often becomes rather important. While we cannot look at part dependency as the sole problem, there is certain degree of generalizability that we have to try and achieve. Nevertheless one has to try and fit the evidence to the context. And that is where the South Asian Collaboration or the South Asian arm of the Cochrane Public Health Group becomes very important because in order to look at the public health challenges that we face and also recognizing the kind of interventions that we may have to adopt and test and evaluate before we scale up, we have to try and gather this evidence in our context. We will have to try and even adapt knowledge that has been gathered from elsewhere but test it out for its feasibility as well as its effectiveness impact in our settings. Before we recommend scale up, we also have to access

sustainability. There are number of issues that we have to look at, right from cost effectiveness and affordability to scalability and sustainability of interventions and all of that has to be really looked at from the public health lines of seeing how best we can transform this knowledge into policy and practice. But we cannot avoid the need to have that level of evidence, quite often we are tempted to make policy decisions in the absence of evidence and sometimes policy makers are forced to do that. However we have to try and gather evidence as much as possible and even where policies have been initiated in the absence of firm and credible evidence, those policies will have to be evaluated to gain fresh evidence of what their success and impact has been. Therefore this is the fairly iterative process in which we start gathering evidence, feed it into the policy pipe line and then evaluate once again to see what the impact has been to inform what the design of fresh interventions needs to be. Clearly we need to maintain that level of critical appraisal of whatever we do and that is of course the strength of statisticians to keep constantly challenging the assumptions that clinicians and research scientists make and subjecting into the rigor of statistical evaluation. Therefore the fact that the PHESA, South Asian arm of Cochrane Collaboration Public Health Group which is looking at evidence not merely in the clinical context but in the public health context is really reassuring from the point of view of public health and we in the Public Health Foundation of India will be delighted to collaborate in whatever manner deemed appropriate and be part of this very exciting new initiate which I am sure is going to bring both rigor and vigor to India's policy making. As we conduct research and as we undertake advocacy to convert the results of our research into policy and programmes, the importance of systematic reviews cannot be under

rated because quite often researchers are in love with their own results so you can have your one single study and swear this is the best possible study that could ever be done and this should transform the world but we know for sure even on statistical basis by chance alone one study could turn out to be positive and therefore you need multiple studies not only for replication but in a meta analysis to provide more precise estimate of the effect size and therefore it is very important for us to gather evidence from different centers, different regions of India, different collaborating institutions and then try and see how best we can conduct a systematic review and then derive from that what would be the best possible evidence to be presented to the policy makers and program managers. Therefore I would only leave you with the thought that Louis Pasteur left his research students with **“keep your enthusiasm but let strict verification be its constant companion”**.

Thank you

Manipal University linked with Cochrane Collaboration

Students, faculty will be mentored in evidence-based medicine

Renuka Phadnis

MANIPAL: Students and faculty of Manipal University will soon be mentored in evidence-based medicine, following the university's linking with the Cochrane Collaboration, B. Unnikrishnan, professor and head of Community Medicine, Kasturba Medical College Mangalore, told *The Hindu*.

He was speaking after the inauguration of the Public Health Evidence South Asia (PHESA), a satellite centre for the Cochrane Collaboration, at KMC, Manipal, on Saturday.

The Cochrane Collaboration (www.cochrane.org/), named after Archie Cochrane (1909-1988), a British epidemiologist, is an international network across 100 countries whose members place updated evidence from medical research online for the use of healthcare providers, policymakers and patients. In evidence-based healthcare, a decision is made for the care of a patient or health services are implemented based on current best evidence sourced from up-to-date valid research, patient values and clinical expertise. PHESA South Asia will work towards public health interventions in populations of south Asia.

Srinath Reddy, president, Public Health Foundation India and the World Heart Federation, who inaugurated PHESA, said it was important to carry out multiple studies for more precise estimates so that the best evidence could be presented to policymakers. Quoting Louis Pasteur, he told students to temper enthusiasm while getting evidence with "strict verification as their constant companion." Dr. Unnikrishnan said Manipal University had identified 10 to 15 faculty members and 15 students from the KMC in Manipal and Mangalore to be mentored in evidence-based medicine so that they could be part of the Cochrane Collaboration. The mentors are medical doctors and statisticians with experience in evidence-based public health.

Sreekumaran Nair, professor and head, Department of Statistics, Manipal University, and director, PHESA, said that the network consolidates research to see what works and what does not work at the population level (not at the individual level) and brings the best evidence to the table of policymakers. It works at influencing policy and studies policy already implemented such as whether the policy on banning tobacco or using unleaded petrol has indeed improved the health of people.

In the process, the Cochrane network could establish a platform for constructive dialogue between the research community to update policymakers with products of research.

News Report - The Hindu

MENTORING AND PRODUCTION OF REVIEWS

Reviews in Childhood Obesity: Evidence of prevalence, risk factors, interventions to prevent and control of Childhood Obesity

Review Titles:

1. Prevalence of obesity in children in South Asian Region.
2. Risk factors for obesity in children – evidence from South Asian Region.
3. Interventions for preventing obesity in children in South Asian Region.
4. Interventions for controlling obesity in children.

Mentees:

1. Dr. Baby S Nayak, Professor of Child Health, Manipal College of Nursing, Manipal.
2. Dr. Prasanna Mithra. P, Associate Professor, Community Medicine, Kasturba Medical College, Mangalore.
3. Mrs. Preethy D'souza, Research Scholar, Manipal College of Nursing, Manipal.
4. Dr. Judith Noronha, Professor, Manipal College of Nursing, Manipal.
5. Ms. Anusha Mujja, Research Assistant, TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal University.

Mentors:

1. Dr. N.Sreekumaran Nair, Professor and Head, Department of Statistics, Manipal University.
2. Dr. B.Unnikrishnan, Professor, Community Medicine, Kasturba Medical College, Mangalore.

• *“Concept note was accepted by ICMR and full review proposal has been submitted for funding”*

Conference Presentations:

The methodology and the interim results of reviews namely; Interventions for preventing obesity in children in South Asian region and Prevalence of obesity in children in South Asian Region were presented at **“International Conference on Inequity in Maternal and Child Health: Situations and Solutions”**, held at Indian Institute of Public Health, Gandhinagar (IIPHG) on 30th November to 1st December 2013 by Mrs. Preethy D'souza and Dr. Baby S Nayak respectively. Mrs. Preethy D' souza was awarded second prize for the best research paper.



Mrs. Preethy at IIPHG



Dr. Baby at IIPHG



Dr. Unnikrishnan



Dr. Judith



Dr. Baby



Mrs. Preethy



Dr. Prasanna



Ms. Anusha

Reviews in Cardio Vascular Diseases

Review Title - I:

Effectiveness of community based interventions targeting diet and physical activity for primary prevention of cardiovascular risk factors in adults.

Mentees:

1. Dr. Dorothy Lall, Centre for Chronic Disease Control (CCDC), New Delhi.
2. Dr. Shailendra Dandge, Centre for Chronic Disease Control (CCDC), New Delhi.
3. Dr. Piyali Purkayastha, Centre for Chronic Disease Control (CCDC), New Delhi.
4. Dr. Binukumar Bhaskarapillai, Centre for Chronic Disease Control (CCDC), New Delhi.
5. Dr. Joe Varghese, Centre for Chronic Disease Control (CCDC), New Delhi.

Mentor:

Dr. N. Sreekumaran Nair, Professor and Head, Department of Statistics, Manipal University.

- Submitted the title registration form
- Protocol completed



CCDC group

Review Title - II:

Effectiveness of worksite interventions for prevention and control of cardiovascular risk factors.

Mentees:

1. Dr. Chythra R. Rao, Associate Professor, Community Medicine, Kasturba Medical College, Manipal.
2. Mr. Abraham Samuel, Assistant Professor, Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal.
3. Mr. Sundar Kumar, Ph.D Scholar, Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal.
4. Mr. Stephen Samuel, PhD Scholar, Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal.
5. Ms. Susan Mathais, JRF, Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal.
6. Ms. Melissa Glenda Lewis, Research Assistant, TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal University, Manipal.

Mentor:

Dr. N. Sreekumaran Nair, Professor and Head, Department of Statistics, Manipal University.

Protocol completed



Dr. Chythra



Mr. Abraham



Mr. Sundar



Mr. Stephen



Ms. Susan



Ms. Melissa

Reviews in Diabetes

Mentees:

1. Dr. Anjana, Vice President, Diabetology, Madras Diabetes Research Foundation (MDRF), Chennai.
2. Dr. Pradeepa, Senior Scientist & Head, Research Operations, MDRF, Chennai.
3. Dr. Poongothai Subramani, Senior Scientist & Head, Clinical trials, MDRF, Chennai.
4. Dr. Shanthi Rani, Senior Consultant, Epidemiology, MDRF, Chennai.
5. Dr. Shobana Shanmugam, Senior Research Associate, Foods Nutrition and Dietetics Research, MDRF, Chennai.
6. Ms. Mookambika Ramya Bai, Nutritional Biochemist, Foods Nutrition and Dietetics Research, MDRF, Chennai.
7. Ms. Amutha, PhD Scholar, Epidemiology, MDRF, Chennai.
8. Dr. Ranjani Harish, Scientist & Head, Translational Research, MDRF, Chennai.
9. Dr. Gokul, Biochemist, Biochemistry, MDRF, Chennai.
10. Dr. Bodhini, Research Associate, Molecular genetics, MDRF, Chennai.

Mentor:

Dr. N.Sreekumaran Nair, Professor and Head, Department of Statistics, Manipal University.

- *Identification of review title in progress*



MDRF group

Reviews in Down Syndrome

Review Title:

Effective intervention for rehabilitation of motor dysfunctions in children with Down Syndrome.

Mentees:

1. Dr. John Solomon. M, Associate Professor, Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal.
2. Ms. Preetha R, Lecturer, Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal.
3. Ms. Pratiksha Rao, PhD Scholar, Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal.

Mentor:

Dr. N. Sreekumaran Nair, Professor and Head, Department of Statistics, Manipal University.

Data extraction in progress



Ms. Pratiksha



Dr. John



Ms. Preetha

Reviews in Oral health

Review Title:

Effectiveness of outreach programmes in improving Oral health.

Mentees:

1. Dr. Rajesh, G, Associate Professor , Public Health Dentistry, Manipal College of Dental Sciences (MCOADS), Mangalore.
2. Dr. Almas Binal, Assistant Professor , Oral Medicine & Radiology MCOADS, Mangalore.

Mentors:

1. Dr. N. Sreekumaran Nair, Professor and Head, Department of Statistics, Manipal University.
2. Dr. B. Unnikrishnan, Professor, Community Medicine, Kasturba Medical College, Mangalore.



Dr. Rajesh G



Dr. Almas Binal

WORKSHOPS

Workshops were carried out in different regions with a view to encourage researchers in producing systematic review.

Indian Institute of Public Health Gandhinagar (IIPHG)

Workshop on systematic review and developing Cochrane Systematic Review Protocol, held on 28-29 June 2013 at IIPH Gandhinagar.

Partnered with "International conference on inequity in maternal and child health : Situations and Solutions" held on 30th November to 1st December 2013.



Workshop on Developing Systematic Review protocol Manipal 16 - 19 July



RESOURCE PERSONS FOR THE WORKSHOPS

1. Dr. N. Sreekumaran Nair, Professor and Head, Department of Statistics, Manipal University.
2. Dr. B. Unnikrishnan, Professor, Community Medicine, Kasturba Medical College, Mangalore.
3. Dr. Suma Nair, Associate Professor, Department of Community Medicine, Kasturba Medical College, Manipal.

NETWORKING WITH INSTITUTIONS AND ORGANIZATIONS

The PHESA has developed a network with National and International Organizations;

1. Cochrane Public Health Group (CPHG).
2. University of Melbourne.
3. Nossal Institute for Global Health, Australia.
4. Robert Gordon University, UK. (MOU)
5. Population Services International, New Delhi.
6. Indian Institute of Public Health, Ahmedabad. (MOU)
7. Indian Institute of Public Health, New Delhi.
8. Public Health Foundation of India (PHFI), New Delhi.
9. Centre for Chronic Disease Control (CCDC), New Delhi.
10. Madras Diabetes Research Foundation (MDRF), Chennai. (MOU)

METHODOLOGICAL DEVELOPMENT FOR KNOWLEDGE SYNTHESIS AND TRANSLATION

Evidence building requires a strong Statistical foundation. Hence PHESA is undertaking several initiatives to achieve proficiency in Statistical techniques.

1. Students' project:

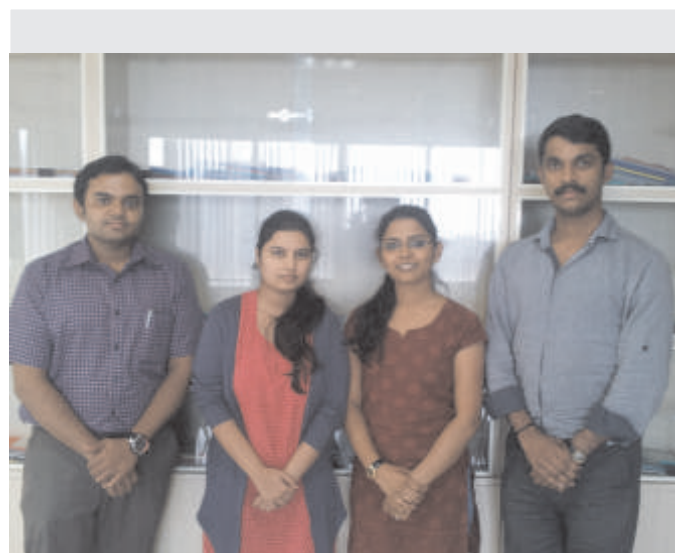
Two masters' students completed a project on "Development of a tool to measure the Complexities in Population, Intervention, Context and Outcome of Public Health Interventions".

2. Doctoral programme:

Two doctoral students working on "A Statistical Methodology to integrate the findings from the Complex Public Health Interventions" and "Game theory and Bayesian modelling".

3. Statistician mentoring:

Young Statisticians are mentored to provide the Statistical support, mainly data synthesis methods required for developing systematic reviews.



Statistician Mentees

CURRENT PUBLICATIONS

1. Research paper on "Development of a tool to measure the Complexities in Population, Intervention, Context and Outcome of Public Health Interventions" presented at "31st Annual Conference of Indian Society for Medical Statistics (ISMSCON)" held on October 24-26 in Christian Medical College, Vellore.

2. Poster on "What is complexity? - Different stakeholders' perspective: A qualitative study" presented at "International Conference on Inequity in maternal and child health: situations and solutions" held in IIPH Gandhinagar on 30th November to 1st December 2013.

3. Research paper entitled “Development of a methodology to measure and adjust for complexities of Population, Intervention, Context and Outcome of Public Health Intervention Studies” presented during “International Conference on Stochastic Modeling and Workshop on Meta-analysis” held in St. Thomas College, Pala, Kottayam, Kerala from January 3-5, 2014.



Presentation at CMC



Presentation at IIPHG



**Prof. K. Srinath Reddy
PHFI, New Delhi**



**Kenneth C. Earhart and
Shaikh Shah Hossain, CDC India**

VISITORS



**Prof. Sanjay Zodpey, IIPH,
New Delhi**



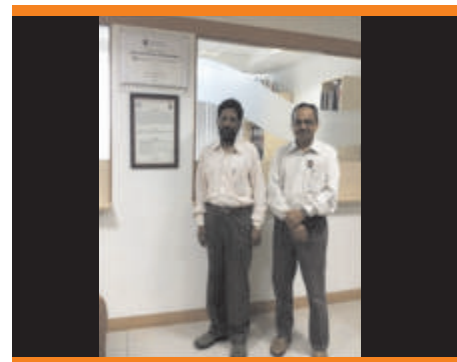
**Dr. H. Raj Mohan, ROHC
Bangalore**



Prof. Inge Hutter,
University of Groningen, Netherlands

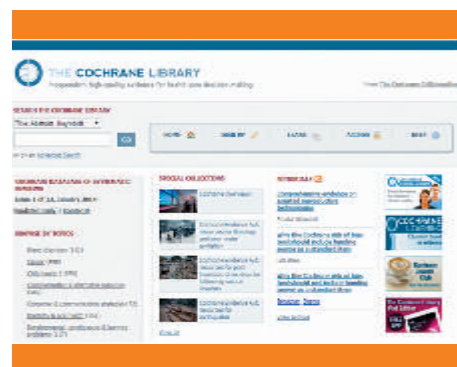


Dr. Ajay Bailey and Dr. Shirish Darak,
University of Groningen, Netherlands



Prof. K.R Thankappan
Sree Chitra Tirunal Institute of
Medical Sciences and Technology

UPCOMING EVENTS



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