THE UNIVERSITY OF MELBOURNE

2015 South Asian Regional Forum

FROM EVIDENCE TO EFFECTIVE IMPLEMENTATION

Improving the prevention and control of diabetes and other NCDs in South Asia

FORUM REPORT

Brian Oldenburg, Allison Byrnes, Fabrizio D'Esposito, Kremlin Wickramasinghe, Teresa Hall, Lakshman Gamlath and Richard F. Southby

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ISBN: 978 0 7340 5189 9

First published December 2015

This Report is only available electronically. A PDF of the Report and a 4-page Summary Report are available for download from the Centre for Equity at: http://mspgh.unimelb.edu.au/centres-and-institutes/centre-for-health-equity/non-communicable-disease-unit/ncd-forum

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Managing Editor: Jane Yule @ Brevity Comms

Design: Inprint Design

Photographs: Fabrizio D'Esposito

Front cover photo: Forum delegates outside the NIHS offices in Kalutara

Title page photo: Forum delegates visiting a community health centre in Kalutara district

Back cover photo: Staff at a community health centre in Kalutara district

For citation: Oldenburg, B., Byrnes, A., D'Esposito, F., Wickramasinghe, K., Hall, T., Gamlath, L. & Southby, R. F. 2015, *From Evidence to Effective Implementation: Improving the Prevention and Control of Diabetes and other NCDs in South Asia – Forum Report*, Centre for Health Equity, The University of Melbourne, Melbourne.

FOREWORD

This important Forum on non-communicable diseases (NCDs) took place in an excellent location, Sri Lanka – a country that is showing the world that even with limited resources a lot can be done to tackle NCDs.

The theme of the Forum is relevant to the significant challenges we face in the South-East Asia Regional Office and in all countries in Asia in relation to NCDs. Increasing evidence exists on what works in the prevention and control of NCDs. Indeed, at the World Health Organization (WHO) we have published extensively on the most cost-effective interventions and the so-call 'best buys'.

Although we can learn a lot from global best practices and the available evidence, mostly from high-income countries, it is critically important to understand how to turn this evidence into practice in settings, contexts and with populations in low- and middle-income countries that are very different from where the original research was undertaken. Asking the right research questions, carrying out robust research, and publishing the findings are all vital elements of the research cycle. However, the most critical step is to translate the evidence into locally relevant policy and practice.

Meetings like this South Asian Regional Forum are important opportunities to identify both relevant research based on programmatic needs, as well as key policy and programmatic actions that must follow from the evidence generated. This is an opportune and critically important time for addressing the knowledge–implementation gap in relation to the NCD agenda, which has been neglected for too long. With the United Nations Political Declaration in 2011, and the incorporation of NCD-salient targets into the upcoming Sustainable Development Goals in September 2015, the challenge of achieving the ambitious global targets that have been set by the World Health Assembly in 2013 becomes even more important.

Most crucially, this Forum brought together many eminent policy makers, research funding organisations, program implementers, senior and mid-career researchers who were able to make recommendations about how to improve the prevention and control of NCDs throughout Asia. With such collaboration, we should remain optimistic and seize the opportunities that will follow from meetings such as this in the coming years.

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Looking across the water towards Kalutara

TABLE OF CONTENTS

ACKNOWLEDGMENTS

The Forum was co-organised by the ASian Collaboration for Excellence in Non-communicable Disease (ASCEND) program and the Sri Lankan National Institute of Health Sciences (NIHS).

Forum presenters and delegates are listed in the Forum Program (see Appendix A).

ASCEND is funded by the Fogarty International Center at the United States of America's (USA) National Institutes of Health, under Award Number D43TW008332 (ASCEND Research Network). The contents of this report are solely the responsibility of the authors, and do not necessarily represent the official views of the National Institutes of Health.

Additional funding support to hold the Forum was provided by the World Diabetes Foundation.

LIST OF ACRONYMS

ASCEND	Asian Collaboration for Excellence in Non-communicable Disease
ASEAN	Association of Southeast Asian Nations
CMC	Christian Medical College (Vellore, India)
CVD	Cardiovascular disease
HICs	High-income countries
LMICs	Low- and middle-income countries
K-DPP	Kerala Diabetes Prevention Program
NCD	Non-communicable disease
NCD APA	Non Communicable Disease Asia Pacific Alliance
NGO	Non-governmental organisation
NIHS	National Institute of Health Sciences (Sri Lanka)
PHFI	Public Health Foundation of India
RCT	Randomised controlled trial
SCTIMST	Sri Chitra Tirunal Institute for Medical Sciences and Technology (India)
USA	United States of America
US NIH	National Institutes of Health (USA)
WDF	Word Diabetes Foundation
WHO	World Health Organization

EXECUTIVE SUMMARY

This report provides a summary of the objectives, proceedings and recommendations arising from the 2015 South Asian Regional Forum – 'From evidence to effective implementation: Improving the prevention and control of diabetes and other NCDs in South Asia' – held in Kalutara, Sri Lanka from 28–30 May 2015.

The meeting was hosted by the Sri Lankan National Institute of Health Sciences, the premier public health training institute of the Ministry of Health in Sri Lanka, and a WHO Collaborating Centre for Public Health Workforce Development.

NCDs are the leading cause of death globally, with more than 80 per cent of NCD deaths now occurring in low- to middle-income countries (LMICs). There is an urgent need to implement the existing evidence in the field effectively, in order to address the burden of chronic diseases in LMICs and achieve the targets set out in the 2013 World Health Assembly 'Global Action Plan for the Prevention and Control of NCDs 2013–2020' (hereafter 2013 Global Action Plan).

The aim of the Forum was to bring together experts and organisations from counties in South Asia and elsewhere in the world to discuss approaches and strategies, and identify how to improve the implementation of evidence for NCD prevention and control in this large and diverse region. The ultimate intent of the Forum was to create a clear set of recommendations to encourage and support governments and other stakeholders to achieve the voluntary targets set by the 2013 Global Action Plan.

The Forum was attended by more than 100 health professionals, researchers, program implementers, decision makers, policy makers, and funding organisations from the region and globally. Delegates travelled from India, Bangladesh, Nepal, Malaysia, China, Thailand, Indonesia, Australia, United Kingdom, the USA and Denmark, and from within Sri Lanka.

PROCEEDINGS

Forum delegates discussed some key challenges and opportunities relating to the effective implementation of evidence for the prevention and control of NCDs, and proposed important recommendations for curbing the NCD epidemic.

The Forum recognised some of the important efforts that have already been made in the region in relation to the prevention and control of NCDs over the last two decades. Included were many of the significant policies and initiatives that have been implemented to date in countries such as Sri Lanka, India, Bangladesh and Nepal. However, the Forum highlighted that there are still many barriers to the effective prevention and control of NCDs in each of these countries, and that stronger and more focused efforts are needed if NCD targets are really to be achieved by 2025.

The Forum also provided excellent examples of capacity building programs, research, health interventions and networks that have been making inroads in the effective implementation of evidence for the prevention and control of NCDs in the region.

Finally, the Forum provided a platform for more than 30 early- and mid-career researchers funded by the US NIH under the ASCEND Research Network, to share findings from their research and careers and to put forward new research topics for consideration.

KEY RECOMMENDATIONS

The Forum yielded the following important recommendations for the effective implementation of evidence for the prevention and control of NCDs in the future:

1. To improve inter-sectoral and cross-border collaboration.

2. To continue to build the capacity of NCD researchers to carry out implementation research.

3. To build the capacity of stakeholders in private, public and government sectors, including in non-health related fields (such as agriculture, food, corporate industries), to utilise the evidence that will inform decisions around NCD prevention and control.

4. To generate contextualised evidence to inform implementation.

5. To increase and/or create new opportunities for community engagement in the knowledge translation and implementation process for the prevention and control of NCDs.

6. To integrate new technologies in the prevention and control of NCDs.

7. To encourage a life-course approach to the prevention and control of NCDs.

8. To improve monitoring and surveillance systems and encourage sharing of data to inform policy and practice within and between countries.

INTRODUCTION

NCDs currently account for almost two-thirds of deaths globally, with nearly 80 per cent of these deaths occurring in LMICs. These deaths can be attributed to four main NCDs, namely cardiovascular disease (CVD), cancer, chronic respiratory disease, and diabetes. These NCDs share risk factors including tobacco use, unhealthy diet, physical inactivity, poor mental health and harmful use of alcohol.

In 2013 The World Health Assembly endorsed the 'Global Action Plan for the Prevention and Control of NCDs 2013–2020' to achieve a number of key targets by 2025, including a 25 per cent relative reduction in premature mortality from NCDs. Among other objectives, the 2013 Global Action Plan calls on stakeholders:

- To promote and support national capacity for high-quality research related to the prevention and control of NCDs in order to increase the knowledge base for national regional and global action.
- To promote and support the translation of high-quality NCD research into practice.

Too little evidence has been collected about how to implement programs that can change unhealthy behaviours related to diet and exercise, and, ultimately, how to alleviate human suffering related to NCDs. Countries in the South Asian region have become increasingly vulnerable to the impact of NCDs, and the rising burden of chronic conditions constitutes one of the major challenges for development faced by the region.

> Too little evidence has been collected about how to implement programs that can... alleviate human suffering related to NCDs.

The Global Status Report on Non Communicable Diseases was published by the WHO in 2014. It shows that while some countries are making progress, the majority are not on course to meet the global voluntary NCD targets, and that their institutional and human resource capacities require strengthening for NCD prevention. The report also shows that we do not have data on the number of countries with evidence-based national guidelines/protocols for NCDs approved by government authorities. These shortcomings highlight the need for capacity building both in NCD research and policy development.

Forum objectives

The aim of the Forum was to identify how to improve the implementation of evidence for NCD prevention and control in this large and diverse region so as to achieve the targets set by the 2013 Global Action Plan. During the Forum approaches and strategies currently used were examined, challenges highlighted and the best approaches for the future identified.

> Delegates discussed the key challenges and opportunities, and put forward a number of excellent recommendations for curbing the NCD epidemic.

The Forum brought together senior researchers as well as key representatives from government, NGOs, funding agencies, and community-based organisations from within the region and around the globe.

Attendees travelled from India, Bangladesh, Nepal, Malaysia, China, Thailand, Indonesia, Australia, United Kingdom, United States and Denmark, and from within Sri Lanka. Delegates discussed the key challenges and opportunities, and put forward a number of excellent recommendations for curbing the NCD epidemic.

Sunset over Kalutara

FORUM PROCEEDINGS

The Forum program consisted of six sessions spanning two and a half days. An overview of the proceedings and recommendations from each of the sessions is provided herein, and an abridged Forum Program included in Appendix A, with a List of Delegates in Appendix B.

In addition to the six sessions, two field trips were arranged just prior to the Forum to observe Sri Lankan NCD community public health programs and services being delivered in urban settings. These included primary school nutrition programs, maternal and child health and other public health programs in Colombo and the Kalutara district.

SESSION 1

NCD prevention and control in countries in South Asia. Are they on track to meet NCD targets by 2025?

In 2011, NCDs were the cause of 13.8 million premature deaths among people between the ages of 30 and 69 around the globe, with more than 85 per cent of these deaths occurring in developing countries. These numbers are far greater than premature deaths from injuries, communicable diseases, maternal, perinatal or nutritional conditions, with three out of every five deaths per year estimated to be due to NCDs. Achievement of the Millennium Development Goals, established in 2000 to reduce extreme poverty, has been undermined by the high occurrence of NCDs in the world's poorest people.

Indeed the United Nations General Assembly in 2011 acknowledged that 'the global burden and threat of NCDs constitutes one of the major challenges for development in the 21st century'.[1] Consequently, the WHO 2013 Global Action Plan aims to 'reduce the preventable and avoidable burden of morbidity, mortality and disability due to NCDs by means of multi-sectoral collaboration and cooperation at national, regional and global levels'.[2] However, progress towards achieving the goals set out in the Action Plan was deemed insufficient at the 2014 General Assembly, hence renewed efforts are crucial to achieving a widespread and sustainable reduction in NCDs.

Aim

The aim of this opening session of the Forum was to learn more about the current status quo of NCD prevention in the region – specifically in Sri Lanka, India, Nepal and Bangladesh – by assessing:

(i) What has been achieved so far?

(ii) What still needs to be done?

(iii) What are the major challenges for achieving the NCD targets by 2025?

Achievements

Presenters from the aforementioned countries outlined examples of key policies, initiatives and achievements that have been implemented for NCD prevention and control in their countries to date, including:

Sri Lanka

- Signed the WHO Framework Convention on Tobacco Control 2003
- Free and accessible health care
- Guideline for management of NCDs in primary health care 2012
- Dedicated NCD Directorate at Ministry of Health
- National Authority on Tobacco and Alcohol
- NCD Steering Committee
- National Cancer Advisory Group
- National NCD Working Group.

[1] See *The Future We Want*, a report from the RIO+20 United Nations Conference on Sustainable Development, Rio De Janeiro, Brazil, 20–22 June 2012 (A/RES/66/288). Available at: *http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/476/10/PDF/N1147610.pdf?OpenElement.*

[2] See the *Global Action Plan for the Prevention and Control of NCDs 2013–2020.* Available at: *http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf?ua=1.*

India

- National Action Plan and Monitoring Framework for NCDs was prepared in 2013–2014, with 10 NCD targets and 21 indicators identified
- Multi-sectoral action plan for prevention and control of NCDs is currently being finalised
- Technical resource group on alcohol control
- Steering Committee on health-related issues on air pollution
- Inter-ministerial Committee to review and develop a comprehensive policy on tobacco and tobacco-related issues.

Bangladesh

- Ministry of Health and Family Welfare
- Ministry of Local Government Rural Development Cooperatives
- Reduction of the burden of NCDs are a priority objective in a new five-year health sector program
- Developed strategies for responding to cancer, injury prevention, deafness, eye care and mental health
- Framework Convention on Tobacco Control ratified.

Nepal

- Multi-sectoral action plan for prevention and control of NCDs 2014/2015 developed – 12 thematic areas
- Tobacco Product Control and Regulation Act 2011
- Awareness raising for NCDs prevention and control
- Development and implementation of low-cost and evidence-based culturally appropriate interventions urgently needed.

The Future

During this first session presenters and delegates highlighted a need for the following in the region:

- New methods and approaches focusing on the enhanced involvement of multi-sectoral stakeholders
- Development of sustainable, low-cost and culturally appropriate interventions
- Strengthening of health systems and population-based surveillance systems
- Scaling-up' of effective prevention models and methods.

A multi-sectoral, collaborative approach between academia, ministries of health, professional organisations, the community, primary care physicians, health services and the private sector is required. This reflects the need to recognise the relevance of broader social determinants of health than it is typically the case at the moment.

There is also a need for more contextualised research, particularly that incorporating social determinants of health. In addition, the introduction of affordable technologies for screening, surveillance, integration of care and improvement of self-management in the prevention and control of NCDs are important.

If these recommendations are to be implemented effectively, and on an ongoing basis, policy makers and practitioners need to be involved in interagency leadership development programs. An inter-sectoral approach will also be better suited to consider shared risk factors for NCDs and their upstream determinants.

Common barriers to the effective prevention and control of NCDs across these countries appear to be the retention of human resources, a lack of evidence-based strategies, poor urban and/or rural coverage of NCD health services, poor NCD surveillance systems, and challenges in engaging industry, the private sector and the community. Greater emphasis on prevention of NCDs is also required.

SESSION 2

Building capacity for evidence development and implementation in countries in the region – Case studies

During this session, examples of networks, institutes, training programs and initiatives that are building capacity at the country and/or regional level were presented.

Aim

Each presenter considered:

(i) What does the network/institute/program aim to achieve?

(ii) What have been the achievements to date?

(iii) How could the initiative be more successful, sustainable and scalable in the future?

Examples of relevant networks, institutes and programs and their achievements to date

Collaborative capacity-building – ASEAN Institute for Health Development

The ASEAN Institute for Health and Development, Thailand, works to build research capacity in the region through a collaborative effort that brings together a number of academic, government and other agencies, and which supports the global vision of 'health for all'. The ASEAN Institute's strategies are:

1. To create the excellence of the research model development on the effective primary health care in all regions of the world.
2. To reform the education and academic services for changing the innovative development ideas of primary health care in order to solve global health problems.
3. To develop the network of cooperation in education, research and academic services at the national and international levels.
4. To develop the system of organisation management both to be a learning organisation for members of the Association of Southeast Asian Nations (ASEAN) and world class.
5. To strengthen the quality of staff and responsibility to society.

The ASEAN Institute offers postgraduate programs, holds local publication workshops and actively promotes multi-sectoral and international training and research collaboration.

Additional information about the ASEAN Institute for Health Development can be found at: *www.aihd.mahidol.ac.th*.

The Public Health Foundation of India (PHFI)

The PHFI is one of India's leading research institutions. Some of PHFI's achievements in relation to the prevention and control of NCDs include the development of novel and effective approaches to the prevention and control of hypertension and diabetes, heart disease and many other chronic conditions. Overall, the approaches used by PHFI include the strengthening of health systems through task shifting and the use of inexpensive technology, emphasising the role of structured behaviour change using front-line health care workers, the integration of chronic care, and the implementation of settings-based interventions.

Examples of this include a trial that evaluated a sustainable health care delivery model for the management of hypertension and diabetes at community health centres, and the SIMCARD Trial that aims to develop, pilot-test and evaluate the feasibility and effectiveness of a simplified, but guideline-based, CVD management program delivered by community health workers or community health volunteers at a community level. The PHFI encourages the development of a localised evidence base and new methodologies (e.g. adaptive designs), and the creation of an environment that is universally supportive of primary and secondary prevention – including the drafting, implementation and surveillance of appropriate, contextualised guidelines and policies.

Additional information about PHFI can be found at: *www.phfi.org*.

ASian Collaboration for Excellence in Non-communicable Disease – Building research capacity of individuals, institutes and countries

The ASCEND Research Network, funded from 2010–2016, has provided high-quality research training to early career researchers and/or health professionals from India, Sri Lanka, Malaysia and other countries in the Asian region, with the aim of strengthening NCD research capacity across Asia and building a regional and international network of researchers and institutions. The program's ultimate goal is to improve NCD control and prevention in Asia.

Over the course of six years, the 18-month program has been delivered to 48 trainees via a blended format of face-to-face teaching blocks and online lectures and webinars. Each trainee has pursued a 'real world' research project in their home country with support from supervisors and international mentors. ASCEND trainees have been given financial support to undertake their own individual research projects, to present at conference and to publish their research findings. The program is currently being evaluated at a program and trainee level.

Additional information about ASCEND can be found at: *http://www.med.monash.edu.au/ascend/.*

GACD – Uniting agencies from around the globe in the fight against chronic disease

The Global Alliance for Chronic Diseases (GACD) funds, develops and facilitates innovative research collaborations in NCD research in both LMICs and in targeted populations in high-income countries (HICs) to build the evidence base for hypertension, diabetes prevention and management, and other chronic conditions. The GACD comprises member organisations from 30 countries, with approximately 300 researchers undertaking 30 projects. Six programs are currently operating in the South Asian region, with the aim of focusing on innovative collaborations and partnerships for the creation of an evidence base to inform policy makers.

Additional information about the GACD can be found at: *http://www.gacd.org/.*

World Diabetes Foundation (WDF) – Promoting access to care, prevention and advocacy for diabetes

The WDF works to combat diabetes through access to care, prevention and advocacy, stakeholder engagement, networking, building partnerships and providing local support in order to achieve innovative and sustainable solutions. Currently the WDF has 191 active programs in 78 countries with 12 advocacy/strategic platforms and 10 fundraising activities in the areas of diabetes mellitus and its complications, and co-morbid conditions including communicable diseases such as tuberculosis.

Additional information about the WDF can be found at: http://www.worlddiabetesfoundation.org/

Christian Medical College Vellore (CMC) – Scaling-up diabetes care in India

CMC in Vellore, India, received funding from the WDF to lay the foundations for a program that aimed to:

1. Set up model diabetes clinics in Semiurban/rural parts of the country
2. Train and monitor educators, doctors and foot care technicians for these clinics
3. Maintain and enable the clinics to run in a self-sustainable state and figure as suitable secondary care diabetes centres.

CMC has since developed and established a landmark integrated model for the prevention of diabetes and the delivery of diabetes care in Vellore and surrounds, and has trained doctors, nurses, foot care technicians and shoemakers from hundreds of hospitals across India. The Diabetes Clinic Model implemented at CMC in Vellore enables staff to care for diabetes patients not just from the region but from all over India as well as integrating the care provided by physicians, orthopaedic specialists, diet counsellors and physical therapists. It is supported both by on-site laboratory and manufacturing (shoes) infrastructure, and by awareness and outreach campaigns in the community.

Additional information about CMC can be found at: *www.cmch-vellore.edu.*

The Future

A greater focus on building capacity is required, particularly for the evaluation of programs, the development of impact indicators and the development and use of registries.

There is a need to work more closely with governments to promote a sharing of knowledge among stakeholders. Teamwork is also important, as is the development of effective outreach programs and empowering diabetes educators and other health workers in the field of NCD prevention. The need for good laboratory quality control and easy availability of pharmaceuticals were also identified.

Prevention should be the focus of health promotion strategies (for NCDs and other conditions). In addition, community strengthening, human resources development and retention, research evaluation and monitoring, and ensuring the sustainability of programs were identified as key areas that require renewed efforts and focus for the prevention and control of NCDs in the region.

Staff at a community health centre in the Kalutara district

SESSION 3

Addressing the challenge of implementation – Examples of evidence development

Delegates presented and discussed case studies of real-world implementation and evaluation of programs. In particular, delegates looked at strategies that inform and evaluate the contextualised implementation of programs and policies, and reported on lessons learned from their experiences.

Aim

Each presenter considered:

(i) A 'real-world' case study of program implementation and/or an evaluation of implementation.

(ii) What did or did not work well.

Case studies of real-world program implementation

Thailand

Implementation of screening and concurrent brief intervention of conjoint hazardous or harmful alcohol and tobacco use in Thailand. This study was based on evidence highlighting the importance of addressing multiple versus single risk behaviours. Evaluation measures included the change in the Alcohol, Smoking and Substance Involvement Screening Test or ASSIST scores between baseline and follow-up, and results from a 'timeline follow-back interview'. The study yielded promising results, but further research is required to assess the effectiveness of such an intervention over a single drug intervention.

Sri Lanka

Improving NCD prevention by implementing evidence through health promotion strategies. This program aimed to understand what works and what does not work in the phases of the implementation of a health promotion strategy for NCD risk factors in a rural community. Approaches used include community-based interventions, process initiation, understanding determinants, empowering communities, and promoting monitoring of the program by community members themselves. A key learning was that a focus on maternal and child health – and the early years of life – leads to other potential health benefits for adult NCDs, and that the empowerment of communities and individuals to create their own tools that are appropriate to them leads to success. Two such successful tools were the 'Happiness calendar' for family mental wellbeing and the 'Feeding 5 senses' tool.

Sri Lanka / United Kingdom

Integrating Nutrition Promotion and Rural Development (INPARD) in Sri Lanka. This program focused on capacity building, curriculum development, and training for multi-sectoral stakeholders.

The program was established with support from the World Bank's South Asian Food and Nutrition Security Initiative, and it initially had an economic focus. Workshops were held with village officers to seek feedback and to develop strategies that would improve inter-sectoral collaboration, and the program was then extended to encompass health and health research. The ensuing expanded team included members from the public health, medical, agricultural, education and community sectors. The program was provided to 120 villages and selected 4310 people as a random sample for the evaluation. Measurements included diet and anthropometric measures at an individual level, and food prices, food availability and school nutrition environment at an area level. Learnings included the importance of utilising community-driven development organisations to link development and NCD prevention, and involving stakeholders outside the health sector so as to enhance opportunities. For successful implementation, there is a need to promote action-oriented research, to provide training for village-level stakeholders, and to support individuals and organisations that link poverty reduction and NCD prevention.

India: The Kerala Diabetes Prevention Program (K-DPP)

Adapting evidence-based program for effective implementation in LMICs. K-DPP is a community-based model for diabetes prevention that has been adapted from earlier implementation trials conducted in the USA, Finland and Australia by Professors Thankappan and Oldenburg with their international collaborators. K-DPP is now the first comprehensive community-based, cluster randomised controlled trial (RCT) of a peer-led diabetes prevention program in India, and one of the first in the world. The program targets individuals at risk of developing diabetes but who have not yet developed the disease. These individuals then attend monthly, peer-led, small group sessions in their local community over

the course of one year. During these sessions, educational and socio-behavioural strategies are used by the peer leaders to help the group participants make sustainable lifestyle changes and reduce their risk of diabetes progression. K-DPP's program uptake, implementation and community engagement have all been extremely positive, and there have also been good improvements in most clinical and behavioural outcomes for those study participants receiving K-DPP. This has been particularly so for those who have attended two-thirds or more of the K-DPP RCT sessions, compared to those individuals from communities who did not receive the K-DPP program.

Indonesia: Noncommunicable Disease Asia Pacific Alliance (NCD APA)

Connecting countries and creating solutions for the prevention and treatment of NCDs. The NCD APA is dedicated to leading the regional fight against non-communicable diseases by facilitating and enhancing regional coordination of activities, multi-stakeholder engagement, and action across sectors at the local, national, regional and global levels. The NCD APA has 54 alliance partners and 163 collaborators – academia, NGOs, implementers and Ministries of Health – in 25 countries to inform implementation. The NCD APA uses a systematic approach to the evaluation of implementation and sustainability of NCD prevention and control interventions and policies. Firstly, a formative evaluation is conducted to define the problem at hand and identify or develop potential solutions (e.g. an innovation), the innovation's implementation, impact and outcomes are then concurrently evaluated, prior to dissemination of findings and ongoing monitoring of the problem targeted by the innovation. Successful interventions include the diabetes passport – an app that can support patients in self-managing the condition – towels with waistline measurements and SMS reminders for smoking cessation. It was highlighted that an emphasis should be placed on building partnerships and collaborations with the private sector, as this is a largely untapped resource with a number of 'un-touched' corporations and companies presenting potential opportunities for developing public health and NCD prevention and management strategies.

China

Dutch–China CVD Prevention Program. The objective of the Dutch–China CVD Prevention Program was to adapt implement and evaluate an approach to prevent CVD and related conditions in China. As the program was adapted from an operational program in the Netherlands to the Chinese context, it therefore provides a good example of program adaption to particular target populations. The program was aimed at people aged 35 or older with a high risk of CVD. A pilot study led the way for a scale-up of the program to three cities in 17 communities (2011–2013), with 9067 participants recruited. Program implementation followed a clear four-step process, including self-assessment risk estimation, preventive consultation, lifestyle classes and peer-group activity. An evaluation found that the tools were reliable and easy to use, the three-step program was feasible for future scale-up in China and the approach was innovative and effective. However, insufficient funding for the continued follow-up of the program, and difficulty in generating awareness, were a challenge. From the program perspective, it was clear that community-based interventions and improved health literacy and knowledge awareness is required. The program highlights the importance of adapting and refining research findings from other countries and not simply repeating studies.

Global: World Diabetes Foundation (WDF)

Primary prevention – A programmatic approach. Ten per cent of total WDF funding targets primary prevention programs. These include school, workplace, community and household interventions, and a focus on gestational diabetes. Teachers have been trained in spreading health promotion messages to children, and parents are also reached via health camps – community events attended by members of the local community during which screening and other activities are carried out. Tools for impact assessment include communication for behaviour impact, and planning, implementation and monitoring, and evaluation tools for behaviour change. The WDF believes an enhanced understanding of prevention is required, and that the Communication for Behavioural Impact or COMBI approach is key. Important steps for the design of a prevention program include: 1) specify the behavioural objective, and 2) market segmentation and analysis – who can we convince and how? Implementation can be approached by a variety of combined strategies involving administrative, community, advertising, personal selling and point-of-service approaches. Impact indicators used by the WDF include reduction of BMI (Body Mass Index), weight, waist circumference, blood pressure and lipids, and improved knowledge, among others.

The Future

The intersection between NCD prevention and control programs and other public health initiatives such as maternal and child health programs highlights the opportunity to utilise a life-course approach for NCD prevention, and to align the NCD agenda with the United Nations Sustainable Development Goals. The inclusion of NCDs in these goals will give them greater political support that should lead to new policy initiatives.

The benefits of engaging a breadth of stakeholders in the NCD research and implementation processes are vast, and should involve not only health and policy leaders, but also those in the private and government sectors, and be promoted in various settings such as schools and communities.

Private sector

The agricultural and food industries, private funding agencies and other large, private corporations that may not typically be approached for collaborations in this field should be considered for involvement in NCD research, implementation and evaluation. Their collaboration may be useful for the collection and collation of contextualised data, funding and the roll-out of programs, as well as program sustainability. The capacity of NCD researchers should also be built so they are better able to understand and manage their role in these collaborations, and avoid any potential conflicts of interest that may arise.

Government sector

Non-health sectors also require capacity building to learn how to engage with NCD prevention activities. The lessons from existing programs highlight the need for staff from outside the health sector to be adequately trained and informed, particularly with increased collaborations between individuals and organisations from the non-health and research sectors. The establishment of multi-sectoral leadership programs may be an effective way to further this collaborative approach.

In addition, community engagement and ownership of NCD prevention and control programs is important. To enhance engagement, findings from community-based programs should be translated into approaches that suit the community. These programs should then be evaluated in their new contexts.

Rigorous evaluation is needed to build the evidence for both effective programs and further evaluation. Systematic integration of the evaluated implementation, behavioural and clinical outcomes is also required in the roll-out of all NCD prevention and control innovations.

New mothers and carers at a maternal and child health centre in the Kalutara district

SESSION 4

How to improve research training, evidence development and implementation

Thirty trainees from the capacity-building ASCEND program presented posters on their research projects and career progress, and one trainee presented on their attendance at the 2015 US NIH Fogarty Conference on Global Health. Groups then discussed and presented on key recommendations for achieving the 2025 NCD targets.

Aim

This session provided an opportunity for trainees of the US NIH ASCEND program to present findings from their research and for delegates to consider:

(i) How trainees from the ASCEND Program have made a difference over the past three years?

(ii) How to improve research training, evidence development and implementation in the future?

Overview of trainees' presentations

LMICs not only have a high burden of disease but also a shortage of human resources for health research. Research training is often delivered in academic institutions, and typically targets health workers. Inter-sectoral and inter-country programs as well as networks and partnerships have been developed within the South Asian region to improve training in health research. However, further adaptation to local contexts within countries or sub-regions could lead both to dramatic improvements in resource-constrained settings and to more systematic and context-relevant scale-up.

Strategies for investment in health research capacity building have not been systematically investigated and this is an area that requires more attention. Sustainability of capacity building programs is also problematic, with many such programs often not continuing due, perhaps, to a reliance on funding support from HICs, which is common for such initiatives. Blended-delivery capacity building programs that provide both face-to-face workshops and electronic platforms – such as the ASCEND program – could increase the potential for more widespread adoption.

Barriers to the implementation of the ASCEND program itself have included:

- The difficulty for trainees in managing workloads and ASCEND training
- Insufficient funds to support individual research projects fully
- Difficulties in coordinating meetings and lectures across different countries and time-zones
- Needing to account for cultural, educational and training differences.

Finding a way to provide ongoing support for trainee research and to make the program financially sustainable is key.

Poster presentations by 30 of the ASCEND Program trainees were part of this session, with the posters providing insights into the trainees' research outputs and plans, as well as some career highlights. The presentations were grouped into one of six topic interest areas and delegates given an opportunity to participate in the discussions around one of these topics. The major themes for improvement of training and capacity building from these groups are summarised in Table 1.

> Finding a way to provide ongoing support for trainee research and to make the (ASCEND) program financially sustainable is key.

One of the ASCEND trainees also provided an overview of their recent attendance at the 2015 US NIH Fogarty Conference on Global Health, which involved US NIH partners including the US National Institute on Deafness and Other Communication Disorders and National Institute of Mental Health, and the National Institute of Environmental Health Sciences, panel discussions and poster sessions. Challenges in implementation science were discussed, with recommendations including the need to recognise research from various real-world settings, the inclusion of different sectors and research methods, and the importance of training and mentoring.

Key recommendations for capacity-building and training topic areas

Community-based surveys and life-course epidemiology	• Undertake more research needed to identify the socio-economic determinants of NCDs • Monitor and evaluate NCD programs and policies • Take a life-course approach in the prevention of NCDs • Develop sustainable primary and secondary prevention strategies to tackle NCDs • Identify and empower agents of change from the community • Empower PHC providers to deliver preventive NCD services
Effectiveness of interventions	• Improve training • Train a multidisciplinary team for lifestyle modification • Train health professionals to advocate on NCD risk factors • Train health professionals on the role of 'peer support' mechanisms • Improve evidence development • Ensure a baseline profile of the study population • Develop culturally and gender-tailored interventions • Use mixed methods to determine 'why' it didn't work and 'how' to improve • Address environmental determinants for sustainability • Understand how to measure the impact of non-health interventions • Develop skills to evaluate multi-sectoral interventions
Policy/practice uptake	• Include NCD risk factor awareness in school curriculums • Involve stakeholders in program development • Engage the public sector and policy makers in all processes
Capacity building and training	• Include exit assessments and integrate into existing curricula • Evaluate programs and training • Qualitative feedback required from all stakeholders • Introduce continuous professional development • Increase awareness of guidelines and CPD opportunities • Develop cross-sectoral, beyond the health profession, programs and training • Use the existing database • Develop simple tools and indicators acceptable to all stakeholders • Build the capacity of researchers to speak policy language • Build capacity to identify challenges and manage influential groups such as lobby groups, industry, etc. • Explore how to work and build partnerships with industry

Epidemiology (hospital or worksite based study)	• Recommend that the ASCEND Program continue • Introduce similar platforms for capacity building • Generate local and regional evidence • Evaluate potential for future collaboration • Implement online platform for constant interaction and support • Strive to achieve leadership positions in our countries to make environment conducive for research
Health services research/health economics	• Empower patients and care-givers in help-seeking behaviour • Introduce a diabetes health education program • Develop clinical practice guidelines • Make available the essential drugs for chronic diseases • Ensure efficient procurement, distribution and monitoring • Diabetes retinopathy needs effective screening and treatment therapies • Polypill needs to be cost effectiveness • Cardiac rehabilitation services have low accessibility and affordability despite availability. Need to understand the barriers to accessing these services, and physicians should focus on lifestyle modification

Forum delegates discuss NCD research with the ASCEND Trainees during the poster session

SESSION 5

How to implement the evidence?

During this session, in which speakers led discussion about a broad range of issues, two parallel presentations were held:

1. Implementation and evaluation of mental health policy and programs.
2. Implementation and evaluation of NCD programs.

Aim

This session aimed to provide a detailed understanding of the development and implementation of programs from a number of different countries in the fields of NCDs and mental health, and to discuss:

(i) What was well implemented?

(ii) What was not satisfactorily implemented?

(iii) Lessons learnt.

Parallel Session 5.1: NCD prevention and control case studies

Well implemented

Findings from the implementation of a Malaysian program that aimed to empower adolescents to prevent gender-based violence and teen pregnancy showed that programs taking community needs and priorities into account could be more effectively implemented. Findings also showed that building sustainable relationships with the private, public and NGO sectors is vital for the effective and sustainable implementation of programs.

In Sri Lanka, the outstanding outcomes of the National Initiative to Reinforce and Organize General Diabetes Care (NIROGI) highlighted the importance of setting up and implementing an integrated and coordinated approach to diabetes prevention and control that brings together stakeholders from different levels of the health care system with communities, and which strengthens infrastructure and fosters health promotion. It also provided a successful model of a partnership with the private sector to develop special shoes for amputated patients. The success of NIROGI indicates that approaching programs with a service- rather than research-orientated approach can be useful, and that advocacy is an important way to gain awareness about particular issues.

Programs such as the Know Diabetes Project in Kerala demonstrated that using a life-course approach to the prevention and control of NCDs is crucial to effect change in the community. For example, children can act as catalysts for change and childhood is considered the best time to influence long-term attitudes to healthy lifestyle.

Using a mixed methods evaluation approach was seen to be the most effective for assessing implementation and clinical outcomes.

Not satisfactorily implemented

Renewed efforts are needed to tailor approaches to the implementation of evidence-based programs to new settings (e.g. urban, rural or semi-rural). Programs are often not implemented to their full potential and in a sustainable way because of the current funding paradigm, which favours short-term 'traditional' research programs.

Facilitators and barriers

Funding was identified as a major barrier to the implementation of successful, long-term programs. Strategies to identify sustainable funding opportunities, economic feasibility and the benefits of low-cost models were discussed.

Delegates also discussed barriers to scale-up, namely an inability to compare health systems, problems, cultural settings or organisational capacity between different contexts (sometimes even within the same country). Marginal populations are generally more difficult to reach and, therefore, may not be involved in programs. This warrants placing a particular focus on the development of effective strategies to target specific underserved populations when implementing a new program. When scaling up programs, in any context, it is important to ensure that large-scale projects do not 'crowd' out other providers of health care.

Learnings

- Feasible, sustainable and economically viable solutions for long-term funding of programs are urgently needed for both current and future programs.
- Cost savings can be made by utilising novel systems, such as different Information Technology platforms, and by patenting innovations. Treating innovations as important discoveries, and subsequently patenting them, can allow for institutional ownership and income, scientific advancement and the prevention of Intellectual Property theft. The promotion

of patenting can potentially stimulate further research and innovation.

- Public–private partnerships offer an important opportunity for building the evidence base and implementing sustainable programs.
- Adapting concepts, strategies and learnings from programs already implemented in different regions and countries is a viable method of contextualising programs to different settings, and can often be the basis of a successful, long-term program implementation.

Parallel Session 5.2: Implementing mental health policy in Sri Lanka: What has been successful, what has not been successful and why?

Well implemented

This session focused on the National Mental Health Policy for Sri Lanka 2005–2015 and the accompanying action plan, with expert speakers from the Mental Health Directorate within the Ministry of Health, consultant psychiatrists and academics.

Overall, the presentations pointed to the impressive nature of the existing Mental Health Policy, especially when considering that it was developed and adopted directly after the 2004 tsunami and before the end of the civil war in 2009. Specifically, the speakers commented on the dramatic expansion over the past decade in the available human resources for mental health; for example, that the 30 psychiatrists operating in Sri Lanka in 2005 grew to 78 by 2015. Another gain was the overhaul of the Angoda Mental Hospital to become the National Institute of Mental Health – a thriving centre for treatment and rehabilitation, as well as capacity building activities including training and research.

Finally, the task shifting of mental health care functions to different categories of health care workers – psychiatric social workers, psychiatric nurses and occupational therapists – has enabled a greater outreach within the community.

Not satisfactorily implemented

Despite the expansion of the mental health system under the existing National Mental Health Policy, a significant gap remains in mental health care provision to rural areas, particularly in the northern and eastern provinces that were most affected by the civil war.

Strategies for recruitment and retention of mental health staff to these areas have not been adequately developed. In addition, the focus of the implementation of the policy has been on hospital-based treatment to the detriment of community-based and rehabilitation services.

Facilitators and barriers

The enthusiasm and focus of stakeholders and political interest in hospital-based services have facilitated the implementation of the existing Mental Health Policy. On the other hand, the misconceptions and stigma related to mental health seen in the general population have also affected policy makers such that mental health is given a lower priority compared to other general adult services in the country. Accordingly, the lack of operationalised policy objectives, funding and psychiatric knowledge have obstructed policy implementation.

> Public–private partnerships offer an important opportunity for building the evidence base and implementing sustainable programs.

Learnings

- Insist on an ambitious vision for policy because even in the most difficult of settings, remarkable progress can be made
- Important to coordinate between the Ministry of Health and other non-health government agencies (including Social Affairs, Education and Justice), and NGOs (including community service providers, the Royal College of Psychiatrists, consumer groups)
- Crucial to develop both community-based and specialised services (including child and adolescent, forensic and substance misuse services) in addition to inpatient general services
- Vital to work in multidisciplinary teams for maximising public health outcomes – equal focus on rehabilitation and treatment.

SESSION 6

Conclusions and Forum Recommendations

During this closing session the delegates drew together the learnings from the Forum proceedings and made some important recommendations for the effective implementation of evidence for the prevention and control of NCDs.

1 To improve inter-sectoral and cross-border collaboration. The Forum recognised that the effective implementation of evidence for the prevention and control of NCDs in the region and globally requires the identification of, and active collaboration between, all relevant stakeholders. This includes between different ministries at the country level as well as inter-sectoral collaboration (e.g. between research, community organisations, government, private sector) to support implementation research activities. Multi-sectoral collaborations should also foster knowledge exchange and cross-sectoral capacity building – this could take the form of multi-sectoral leadership programs. The Forum also recommends the formation of new NCD and implementation research networks to pool resources to support the operationalisation of the NCD implementation research agenda.

2 To continue to build the capacity of NCD researchers to carry out implementation research. The Forum identified capacity gaps for the effective implementation of evidence in NCD prevention and control, and recommends developing and disseminating strategies that provide ongoing long-term training for NCD and implementation researchers in LMICs. Delegates also recommend that capacity-building programs should increase researchers' ability to translate and disseminate their knowledge more effectively.

3 To build the capacity of stakeholders in the private, public and government sectors, including in non-health related fields (such as agriculture, food, corporate industries), to utilise the evidence that will inform decisions around NCD prevention and control. Strategies need to be identified to build the capacity of stakeholders in the private, public and government sectors, in both health and non-health related fields (such as agriculture, food, corporate industries), to set and promote appropriate and prioritised agendas for the prevention and control of NCDs and to allocate resources effectively, including for implementation research.

4 To generate contextualised evidence to inform implementation. There is a wealth of evidence on effective innovations in HICs' health programs and policies for the prevention and control of NCDs, which urgently needs to be translated and adapted for implementation in LMICs including in the South Asian region. Importantly, translation of knowledge should also extend to the adaptation and contextualisation of implementation approaches.

5 To increase and/or create new opportunities for community engagement in the knowledge translation and implementation process for the prevention and control of NCDs. Community engagement has played a crucial role in appropriately translating and adapting NCD prevention and control programs from HICs into LMICs. It has also contributed to creating greater ownership of existing programs and is fundamental for their ongoing and sustainable delivery. Accordingly, the Forum recommends that appropriate community organisations and members are engaged in all stages of implementation of evidence, from interpretation of data to the translation of programs, their implementation approaches and ongoing delivery.

6 To integrate new technologies in the prevention and control of NCDs. The use of new technologies is becoming increasingly common, not only in HICs but also in LMICs including in the South Asian region. Such technologies can support and facilitate the implementation of evidence for the prevention and control of NCDs, from surveillance systems through to the delivery of care, as well as in the provision of resources and supports for self-management. There is, therefore, a need for additional research and feasibility studies into novel technologies that can support this work.

7 To encourage a life-course approach to the prevention and control of NCDs. The Forum provided excellent examples of the effectiveness of integrating NCD prevention and control strategies into existing health care delivery structures across different life-stages. There is, therefore, a need to investigate and evaluate strategies that are able to leverage existing services for the provision of NCDs prevention and control innovations.

8 To improve monitoring and surveillance systems and encourage sharing of data to inform policy and practice within and between countries. Effective surveillance of NCDs and their risk factors could provide invaluable insights as to their prevention and control. However, the Forum acknowledged that surveillance systems are often inadequate in LMICs and that there are limitations in the way available data are shared and utilised. Accordingly, delegates recommend that improvements are made to measurement and validation tools that assess some of the important risk factors and diseases, and that registries be harmonised with standardised and more accurate data to allow for cross-regional comparisons and translations of findings. They also recommend that new cost-effective and feasible strategies for identifying those at risk for NCDs be investigated, along with strategies to facilitate the sharing of surveillance data among NCD researchers and across sectors.

APPENDICES

APPENDIX A

Forum Program

TUESDAY 26TH MAY & WEDNESDAY 27TH MAY Field visits organised by National Institute of Health Sciences, Sri Lanka	
THURSDAY 28TH MAY (FORUM DAY 1)	
8:30am	**Forum Registration: Administrative Building, NIHS**
9:00am	**Forum Opening and Inauguration** **Cultural ceremony and welcome address** Dr Lakshman Gamlath, NIHS Director Mr Anura Jayawickrama, Secretary of Health Hon. Dr Rajitha Senarathne, Minister of Health
10:15am	**MORNING TEA**
11.00am	**SESSION 1** **NCD prevention and control in countries in South Asia** *Chairperson:* Dr Prasad Katulanda, University of Colombo, Sri Lanka **Achieving the Global NCD Targets by 2025 – The Big Challenge** Prof Brian Oldenburg, The University of Melbourne, Australia
11.30am	**Questions to be addressed by speakers for each country** (15 min. each) What has been achieved so far? What still needs to be done? What are the major challenges for achieving NCD targets by 2025? *Speakers:* Dr Samarage, WHO, Sri Lanka Dr Prashant Mathur, Indian Council of Medical Research, India Dr Aliya Naheed, Centre for Equity and Health Systems, Bangladesh Dr Rawal Lal, BRAC University, Bangladesh
12.30pm	**SESSION 1 DISCUSSION** *Discussant:* Prof Prabhakaran, Public Health Foundation of India, India
1.00pm	**LUNCH**

THURSDAY 28TH MAY (FORUM DAY 1 – CONTINUED)	
2.00pm	**SESSION 2** **Building the capacity for evidence development and implementation in countries in South Asia** Dr Sailesh Mohan, Public Health Foundation of India, India **Exemplars of networks, institutes, capacity building and training programs.** **Questions to be addressed by speakers** (15 min. each) What does the network/institute/program aim to achieve? What has it achieved in terms of policy and practice impact? How could it be more effective in the future? *Speakers:* Prof Prabhakaran, Public Health Foundation of India, India Prof Harry Minas, The University of Melbourne, Australia Ms Dorothea Kanthack-Chan, Global Alliance for Chronic Diseases, UK Prof Supa Penpid, ASEAN Institute, Mahidol University, Thailand Dr Anders Deejgard, WDF, Denmark Dr Nihal Thomas, Christian Medical College, Vellore, India
3.30pm	**AFTERNOON TEA**
4.00pm	**SESSION 2 (Continued)** Prof Brian Oldenburg, The University of Melbourne, Australia **SESSION 2 DISCUSSION** *Discussants:* Prof WahYun Low, University of Malaya, Malaysia Prof KR Thankappan, SCTIMST, India Dr Indika Karunathilake, University of Colombo, Sri Lanka Prof Richard Southby, The George Washington University, USA
5.30pm	**FINISH**
Evening	**WELCOME RECEPTION**

FRIDAY 29TH MAY (FORUM DAY 2)	
9:00am	**SESSION 3** **Implementing evidence to improve NCD prevention and control in countries in South Asia** *Chairperson:* Dr Anders Deejgard, WDF, Denmark **Each speaker will present a case study of 'real world' implementation of a program and/or an evaluation of implementation to improve policy** (15 min each) What strategies were used to inform implementation in the particular context? How was implementation and sustainability evaluated? What did or did not work well? *Speakers*: Dr Kremlin Wickramasinghe, University of Oxford, UK Dr Xuefeng Zhong, Anhui Centre for Disease Control, China Dr Karl Pelzer, ASEAN Institute, Mahidol University, Thailand Dr Manoj Fernando, Rajarata University, Sri Lanka Mr Jakob Madsen, WDF, Denmark
10.30am	**MORNING TEA**
11.00am	**SESSION 3 (Continued)** Dr Rawal Lal, BRAC University, Bangladesh Dr Rodrigo Rodriguez-Fernandez, NCD Asia–Pacific Alliance, Indonesia Prof KR Thankappan, SCTIMST, India
12.00pm	**SESSION 3 DISCUSSION** **Two discussants will reflect on and discuss the lessons arising from these projects for future sustainability and scalability to achieve NCD targets by 2025** Prof Ajay Mahal, Monash University, Australia Dr Lakshman Gamlath, NIHS, Sri Lanka
12.30pm	**LUNCH** **Special meeting of ASCEND Trainees**

FRIDAY 29TH MAY (FORUM DAY 2 – CONTINUED)	
1:30pm	**SESSION 4** **How to improve research training, evidence development and implementation?** *Chairperson:* Prof Brian Oldenburg, The University of Melbourne, Australia Trainees and faculty from the US NIH-funded ASCEND program will present findings and discuss how these have 'made a difference' over the last 3 years **View and discuss posters with ASCEND Trainees and ASCEND Program Directors & Faculty**
2:15pm	**Small group discussion** There will be breakout groups for this session to discuss the learnings. Each small group will identify up to 6 key recommendations for research training, evidence development and implementation for improving NCD prevention and control to achieve 2025 NCD targets.
3.00pm	**AFTERNOON TEA**
3:30pm	**What I learnt from attending NIH Fogarty Conference on Global Health** Praveen Pradeep (ASCEND Research Trainee, All India Institute of Medical Sciences) will present on what he learnt from attending US NIH meeting. **SESSION 4 DISCUSSION** **Each group will present their 6 recommendations in 1–2 slides** *Discussants:* Prof Prabhakaran, Public Health Foundation of India. India Prof WahYun Low, University of Malaya, Malaysia Dr Prasad Katulanda, University of Colombo, Sri Lanka Prof Supa Penpid, ASEAN Institute, Mahidol University, Thailand
5.00pm	**FINISH**
Evening	**DINNER HOSTED BY NATIONAL INSTITUTE OF HEALTH SCIENCES**

SATURDAY 30TH MAY (FORUM DAY 3)	
9:00am 9.30am	**SESSION 5** **What kind of evidence might help countries achieve their NCD targets by 2025?** Prof Brian Oldenburg, The University of Melbourne, Australia **How to improve NCD Program Implementation, Evaluation and Monitoring in countries in South Asia?** Case examples of projects to improve NCD prevention and control. There will be two parallel sessions of presentations on: (1) Implementation and evaluation of mental health policy and programs and (2) Implementation and evaluation of NCD programs
9:45am	**Parallel Session (1)** **Implementing mental health policy in Sri Lanka: What has been successful, what has not been successful and why?** *Chaired by* Prof Harry Minas, The University of Melbourne, Australia Prof Richard Southby, The George Washington University, USA
9:45am	Dr Rasanjalee Hettiarachchi – Sri Lanka Mental Health Policy 2016 – 2025
10:00am	Dr Rasanjalee Hettiarachchi – Implementing governance arrangements: Management at a national and provincial level
10:15am	Dr Jayan Mendis – Organisation of service: Hospital-based services
10.30am	**MORNING TEA**
11:00am	Dr Pushpa Ranasinghe – Organisation of service: Community-based services
11:15am	Dr Thilini Rajapaksa – Organisation of service: Specialised services
11:30am	Drs Ganesh & Jayan Mendis – Organisation of service: Rehabilitation and psychosocial support services
11:45am	Dr Harischandra Gambeera – Human resources for mental health
12:00 – 12:30pm	Moderator: Prof Harry Minas – Discussion Each speaker to consider the Mental Health Policy for Sri Lanka 2005–2015 and the accompanying Action Plan. In relation to the policy area for action on which each speaker is presenting seek to concisely answer the following questions: 1. What has been well implemented? 2. What has not been satisfactorily implemented? 3. What are the factors that have contributed to successful implementation or have resulted in failure to implement? Discussion

SATURDAY 30TH MAY (FORUM DAY 3 – CONTINUED)	
9:45am	**Parallel Session (2)** **NCD Prevention and Control Case Studies** Dr Kremlin Wickramasinghe, University of Oxford, UK Prof Guo Yan, Peking University, China
9:45am	Mrs Leena Simon – Diabetes awareness to the community through the students: kNOw Diabetes Project
10:00am	Dr Ratnayake – Implementation of a NCD prevention program by hospital staff
	Prof Nihal Thomas – Strategies to improve sustainability of long-term educational training programmes
11:00am	Prof WahYun Low – Community-based intervention project: Empowering youths in the prevention of gender-based violence and teen pregnancy
11:15am	Dr Prasad Katalunda – National Diabetes Days and other ways to mobilise populations and the media to improve the prevention and control of NCDs in LMICs
11:30am	Dr Palitha Karunapema – Lessons learnt from the Nirogi Lanka project
11:45am	Ms Tinapa Himathongkam – Reducing diabetic foot amputation through foot care and footwear personnel training
12:00pm	Prof Ajay Mahal – Scaling up: Some ideas about the way forward
12:15pm	Discussion – Learnings from the case studies
12.30pm	**LUNCH**

SATURDAY 30TH MAY (FORUM DAY 3 – CONTINUED)	
1:30pm	**SESSION 6** **Applying the forum learnings to improve future NCD prevention and control in South Asia** During this final session, a set of conclusions and recommendations from the forum will be drafted. A panel of invited speakers will present their ideas followed by contributions from all delegates.
3.00pm	**FORUM CLOSE**

APPENDIX B

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