# 5.4 TRANSLATING EVIDENCE INTO POLICY IN LOW AND MIDDLE INCOME COUNTRIES: OPPORTUNITIES AND CHALLENGES

Chair: Dr Babu L Verma, India Co Chair: Dr. Ravindra Pandey, India

05-4.1 INDIACLEN EXPERIENCE OF TRANSLATING RESEARCH IN TO POLICY AND PROGRAM

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IndiaCLEN as one of the seven regional networks of the International Clinical Epidemiology Network (INCLEN), has done number of policy relevant multi centric research in India. The notable among these projects are Assessment of Injection Practices in India; Vit A / IFA supplementation, Several rounds of pulse polio program evaluation, etc. The findings of these research have lead to changes in policy and program in the country. During the session, the challenges, solutions, design, research findings and how these findings lead to the change in policy and program, will be presented.

### 05-4.2 FROM NCD RESEARCH TO POLICY AND PROGRAM: EXPERIENCE IN PAKISTAN

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Non-communicable diseases (NCD) have become the leading cause of morbidity and mortality in the population in Pakistan, leading to an estimated loss of US \$3.5 billion annually just from productive life years lost. The prevalence of hypertension has increased exponentially, with trends data suggesting reversal of the social gradient over the last decade tilting a heavier burden on the disadvantaged population. Pakistan has the sixth highest number of people in the world with diabetes, every fourth adult is overweight and the condition is rapidly escalating in children, cigarettes are cheap, antismoking regulations are poorly enforced, and mixed public-private healthcare system provide suboptimal care. Unfortunately, the unstable geo-political situation in Pakistan has retarded economic and social development in the country. Despite these challenges, evidence also indicates that reconfiguration of the health systems framework using the existing physician and non-physician workforce can yield promising results with economically efficient, affordable, and sustainable programs for NCD prevention and control. A National Commission on NCDs has also been proposed for recommendations on programs and policies. Successful implementation of these efforts is urgent and essential for translation of evidence to improved NCD outcomes in this high risk population.

### 05-4.3 MANAGEMENT OF NON-COMMUNICABLE DISEASES IN THE GAUTENG PROVINCE IN SOUTH AFRICA

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**Background** In South Africa, the burden of Non-communicable diseases (NCD) is staggering (37% in terms of Initial Burden of Disease, 2000 report). The NCD include cardiovascular disease,

stroke, diabetes mellitus, asthma and respiratory diseases, epilepsy and cancer. In line with its vision, the Public Health Directorate have decided to be proactive in managing this problem by setting up a surveillance system based on WHO stepwise model for improvement of management of the NCD at the provincial health facilities. **Objectives** The purpose of this project is to improve the burden of NCD in the Province. The objectives of this project include evaluation of health facility data on NCD; Development of an intervention strategy for improving NCD in the Health Districts; Implementation of the intervention plan; and Setting-up a surveillance site for the continuous monitoring and evaluation of noncommunicable disease in this District.

**Results** The study found a significant burden of NCD (such cardiometabolic diseases, cancer) in the Province in comparison to the rest of South Africa and other countries of Africa. This burden in addition to burden of communicable diseases (such as tuberculosis and HIV/AIDS) would require significant resource allocation for effective management. An integrated approach to healthcare is necessary to address this.

### 05-4.4 TRANSLATING EVIDENCE INTO POLICY IN CHINA: OPPORTUNITIES AND CHALLENGES

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Research and evidence are critical for informing policies and practices in support of population healthcare and equity. In the past 2 decades, ChinaCLEN's roles and responsibilities promote evidence-based policy-making in China. Evidence-based policy has become a major part of governments' approaches for policy making and the machinery of government. In this presentation I will mainly focus on the transformation of national government healthy policy and strategies according to the expansion of evidence-based medicine in China, as well as the opportunities and challenges in the future. During the symposium following aspects in China will be discussed: 1. Organisation on the Evidence Based Health Care; 2. Impacts on Government Healthy Policy Decision-Making; 3. The prioritised research agenda special focus on clinical research identified and advocated for key research needs in 2011–2015; 4. Contributions on evidence based public health safety policy and practice; 5. Standards for scientific review of the clinical efficacy of Chinese traditional medicine; 6. Establishing integration system of traditional Chinese medicine and clinical research; 7. Improving accessibility and availability of sound evidence; and, 8. Future Opportunities and Challenges.

#### 5.5 SOCIAL POLICY

Chair: Dr Patricia Buffler, USA

05-5.1 DOES HEALTHCARE SPENDING IMPROVE HEALTH OUTCOMES AND REDUCE HEALTH INEQUALITIES?

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Health systems around the world are struggling to cope with increasing healthcare costs and rising demand due to an ageing population. There have been several financial initiatives in the NHS to motivate improved performance.

The aim of this study is to examine the link between healthcare expenditure in both primary and secondary care and health outcomes and whether this relationship varies with levels of deprivation.

The study is done in Dorset PCT, which has one of the highest proportion of over 75 year olds in England. The dataset in the study is  $\frac{1}{2}$ 

based on routinely collected data from financial, programme budgeting as well health datasets (incidence, mortality, morbidity, and hospital activity data). We examined the relationship between the various financial initiatives like Payment by Results for secondary care, and Quality and Outcomes framework for primary care and associated disease specific outcomes within each programme category.

For each deprivation quartile, activity, cost and outcome indicator distributions will be examined using box-plots and any differences evaluated for significance. Effects of covariates on years of life lost will be assessed with a 2-step model and a generalised linear model. Using a years of life lost as a measure of health outcomes, the expenditure required to save a year of life for different age groups will be estimated.

The results from this study will be used to help improve decision making at the local level, which is particularly important in the current economic climate.

Results will be presented at the conference.

#### 05-5.2

## EVIDENCE-BASED PUBLIC HEALTH POLICY: MYTH OR REALITY? A MIXED METHOD STUDY OF PUBLIC HEALTH DECISION-MAKING IN THE UK

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**Introduction** The potential power of public health policies emphasises the need for sound decision-making. Using research evidence to underpin public health policy has been strongly promoted; however, its implementation has not been straightforward. This study explores the use of research evidence in public health decision-making.

**Methods** We systematically reviewed empirical studies on the use of research evidence in public health policy (18 studies included). The identified gaps were explored through an in-depth qualitative study involving 40 interviews and three focus group discussions with senior public health decision-makers.

**Results** Decision-making for public health is complex. This reflects the wide determinants of health, the extensive associations between long-term conditions, and the necessity to work across sectors. A vast range of types of research evidence are used in decision-making. However, this evidence competes with many other influences. Barriers to the use of research evidence are well-described and include: decision-makers' negative perceptions of research evidence; the gulf between researchers and decision-makers; the political process of decision-making; practical time and resource constraints and limited capacity.

Ways of overcoming these barriers are less well known, and include: changing the culture of decision-making; targeting research at the needs of decision-makers; clearly highlighting key research messages; and capacity building.

**Conclusion** A broader conception of evidence is required to underpin public health decision-making. Achieving evidence-informed public health policy requires action by both decision-makers and researchers, in order to address the barriers identified in this study.

### 05-5.3

## PHYSICAL AND MENTAL HEALTH, SOCIAL RELATIONSHIPS, SOCIAL CAPITAL, AND HAPPINESS AMONG JAPANESE OLDER ADULTS

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**Introduction** The purpose of this study was to examine the roles of physical and mental health on determining happiness for Japanese

older adults, accounting for other individual and psychosocial factors.

Materials and Methods We used the data of Aichi Gerontological Evaluation Study, undertaken in adults aged ≥65 years who were not certified as Certification of Needed Long-Term Care. The number of participants was 29 546. In our 2-stage regression approach, we first estimated self-rated health using multiple variables for physical health status, including disease diagnosis, functional capacity, history of medication, body mass index, biting force, smoking, and alcohol intake, using a sex-separated ordered probit model. We then modelled happiness, measured using the PGC Morale Scale, with the estimated self-rated health and other independent variables representing mental health, socio-demographic characteristics (marital status, income, age, etc), psychosocial factors (hobby, social support, etc), and regional and individual social capital.

**Results** Among women, factors determining their happiness were physical health, mental health, income, age, frequency of going out, hobbies, trust of people from the local community, and general trust. Among men, factors determining their happiness were physical health, income, trust of people from the local community, and general trust. Physical health in these explanatory models was statistically significant but its effect was not large.

**Conclusion** Happiness may be a function of not only physical health but also mental health, as well as many individual social characteristics, including social participation and social capital. The contribution of mental health to happiness may be large.

#### 05-5.4

## MATERNAL DEPRESSIVE SYMPTOMS DURING TODDLERHOOD, CHILDCARE AND CHILD BEHAVIOUR AT AGE 5½ YEARS

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**Introduction** Disentangling the effects of maternal depression in toddlerhood from concurrent maternal depression on child behaviour is difficult from previous research. Childcare may modify any effects of maternal depression on subsequent child behaviour, but this has not been investigated widely.

**Methods** We examined the influence of maternal depressive symptoms during toddlerhood on children's behaviour at age 5½ years, and investigated if formal or informal childcare during toddlerhood modified any relationship observed.

**Results** Data were available from 438 mothers and their children (227 girls, 211 boys) who completed questionnaires during children's infancy, toddlerhood and at age 5½ years. Recurrent maternal depressive symptoms in toddlerhood was a significant risk factor for internalising, externalising and total behaviour problems when children were aged 5½ years. Formal childcare at age 2 years modified the effect of recurrent maternal depressive symptoms on total behaviour problems at child age 5½. Neither intermittent maternal depressive symptoms nor informal childcare in toddlerhood significantly affected child behaviour problems.

**Conclusion** Recurrent, but not intermittent, maternal depressive symptoms when children were toddlers had a longer term effect on child behaviour problems at child age 5½ years. As little as half a day in formal childcare at age 2 years significantly modified the effect of recurrent maternal depressive symptoms on total behaviour problems. Formal childcare for toddlers of depressed mothers is a pragmatic, supportive strategy that may have positive short and longer-term benefits for affected mothers and their children.