

Exchange Auditorium

11:00

**Global Health: Policy and Practice**

Global Health Policy into Practice

Professor Mukesh Kapila, University of Manchester

Dr Nick Banatvala, WHO

Health in the post-2015 United Nations development agenda

A full intergovernmental process will decide on the framework and goals of the post-2015 United Nations development agenda. Much of the discussion will be conducted by foreign affairs ministries and the permanent missions to the United Nations in New York. The expectation is that these discussions will culminate in a Heads of State/Government Summit in September 2015. Ensuring that health ministries keep their national representatives informed and well-briefed, with a coherent narrative on the role and importance of health, will be crucial to the successful conclusion of this process. The position of health is so far well established: (i) "The future we want" (Rio+20); (ii) the UN System Task Team's report, Realizing the Future We Want for All; (iii) the report of the High-level Panel of Eminent Persons on the Post-2015 Development Agenda; and (iv) the September 2013 UN Special Event on progress towards achievement of the MDGs, all highlight the important of health in the post-2015 development agenda. Health was also the topic of one of the global thematic consultations held between September 2012 and March 2013. The narrative on goals that is emerging is inclusive, based on maximizing health at all ages with universal health coverage either as a means and/or as an end itself. How, or even whether, agreement on targets will be reached is less clear at this stage. The prime concern at this stage should be to support an approach that allows a wide variety of interests within the health sector to be accommodated as part of a single framework. This strategy reduces competition between different health conditions, different health interventions and different population groups.

Exchange Auditorium

11:00

## Global Health: Policy and Practice

Global Health Policy into Practice

Professor Mukesh Kapila, University of Manchester

Antony Duttine, Handicap International, USA

An age-old challenge: Is global policy reacting to new health trends

The era of the Millennium Development Goals is drawing to a close and the past 15 years have seen significant changes to the international development landscape and within global health. Goals 4, 5 and 6, which pertained to health, have seen varying degrees of success. The goals largely focussed on reduction of deaths and disease prevalence - morbidity rates seem to be the standard by which success in health is judged.

Measuring deaths, however, only gives a partial picture of the health of a population. The 2010 Global Burden of Disease report emphasized the clear signs that global health is shifting from a pattern of deaths caused by communicable diseases to longer life and disability caused by non-communicable diseases such as diabetes, musculo-skeletal disorders and mental health. In short, the world is ageing and low and middle income countries are beginning to see the same issues of chronic disease and complexities of providing care to older populations with a broader range of health needs than 15 years ago. Even the MDG focussed health areas are seeing changing patterns and requirements for health systems and services.

However, whilst the data seems to be clearly identifying these changing patterns of the world's health, there seems to be little tangible reaction to ensure services within the health system adapt to meet these emerging needs.

Within high income countries, rehabilitation and allied health services such as physiotherapy, psychology or prosthetics/orthotics have been integrated for decades and are seen as a fundamental part of a health system. In low and middle income contexts, however, rehabilitation services have historically been demanded – and funded – in conflict or post disaster contexts where the need has been most visible. This has often meant, however, that rehabilitation services have been seen as parallel to – rather than a part of – the global health sector.

Antony Duttine will describe HI's recent shifts to attempt to better engage with the global health sector and align rehabilitation with the emerging health trends. He will explain the success – and challenges – at attempting to promote rehabilitation services at international, national and local levels and HI's processes in advocacy for rehabilitation services during the non-communicable disease and post-MDG discussions.

Based on experiences of working as a physiotherapist in an array of low and middle income contexts – as well as within the UK National Health Services – and in his current role he will pose a number of key questions for the future of global health and argue that rehabilitation services must be a part of a shift in thinking to better address the health needs of a changing and ageing population. Ultimately this makes not just moral, legal and political sense, but also has potential economic advantages too.

Exchange Auditorium

11:00

## Global Health: Policy and Practice

Global Health Policy into Practice

Professor Mukesh Kapila, University of Manchester

Dr Sally Theobald, Liverpool School of Tropical Medicine, UK

Opportunities and challenges for channelling humanitarian energy for gender equity in health system reform

Policy makers and donors are turning their attention to health system interventions in fragile and post conflict contexts, where key questions include how to ensure that humanitarian engagement and post conflict reconstruction strengthen national capacity, how to finance and sustain a universal package of basic services, and if and how health system interventions can build stronger, more resilient states. While research has been undertaken on health system interventions in fragile states, this research has not yet examined these interventions with a gender lens.

The Stockholm International Peace Research Institute (SIPRI) working group on gender (led by Prof Valerie Percival at Carlton University, Canada) and the ReBUILD research programme consortium (focused on rebuilding health systems in post conflict) have partnered to conduct a body of research to explore the opportunities and challenges for building gender equitable and responsive health systems in post conflict, or conflict-affected contexts. Our research has included reviewing the literature on gender and conflict/peace building; analysis of selected Consolidated Appeals (CAPS) within humanitarian settings; examining health systems literature; and carrying out desk studies of the reconstruction of four countries: Timor Leste, northern Uganda, Mozambique and Sierra Leone. The results from this collaboration, presented here, represent an initial attempt to highlight the gaps, challenges and opportunities for addressing gender equity in post-conflict health reform.

Key findings include:

- The focus on gender at the international political level, as reflected in UNSCR 1325, is to encourage the participation of women within peace negotiations and within elected assemblies; however, there is little focus on equitable representation of men and women within senior decision-making positions in various social sectors, such as health, where the impact of gender inequity is most sharply felt.
- The overwhelming focus of humanitarian actors on sexual violence and maternal health outcomes, while necessary and including interventions that are evidence-based, is insufficient to address the broader causes and consequences of gender inequities. Moreover, these programs enable donors and policy makers to 'check' the gender box, without planning more robust, comprehensive health systems strategies that more fully address gender inequalities within these societies.
- The humanitarian and post conflict period is characterized by poor data, and there is a need to better understand the health requirements of different groups of women and men (by age, location, dis/ability etc.)
- Health systems research is largely gender blind, without sufficient detail on how the package of health system reform measures impacts on gender roles and norms. Therefore, there is little guidance or evidence base for those engaged in health system reform on how these interventions could exacerbate or alleviate gender inequity.

Building gender equitable health systems is important to meet the health needs of different groups of women and men. Building gender equitable health systems also has important social benefits beyond improving health. States with higher degrees of gender equality are generally more peaceful, and the empowerment of women can be an important predictor of successful international peacebuilding efforts. The failure to incorporate gender equity into health system reconstruction misses an important opportunity to contribute to gender equality.

Exchange Auditorium

11:00

## Global Health: Policy and Practice

Global Health Policy into Practice

Professor Mukesh Kapila, University of Manchester

Jonty Roland, APPG Global Health, UK

Connecting Communities: Why and how we should support overseas volunteering from the NHS

British health volunteers have for many years played a major role in improving health for people in other countries. Whether as individuals or as part of larger schemes, they have transferred vital knowledge and skills whilst at the same time bringing back valuable experiences to the UK. Their work has helped to build strong international relationships and spread Britain's influence around the globe. In a rapidly changing world, the role of these individuals and institutions is becoming ever more important.

The world has changed fundamentally in recent years – in health as in everything else. We are now all connected and interconnected at every level: facing the same risks from pandemics and non-communicable disease, relying on the same health workers, and sharing the same commitments to tackling illness among the poorest peoples of the world.

This interdependence means that it is vitally important that the UK health sector in general, and the NHS in particular, develops and maintains relationships with partners throughout the world.

Volunteering schemes have a tremendously important role to play in this regard. They are helping to advance health globally and facilitate knowledge and skills exchange between the NHS and our overseas partners.

This presentation will outline a few of the key themes from the APPG on Global Health's recent report *Improving Health at Home and Abroad: How overseas volunteering from the NHS benefits the UK and the world including:*

- How low and middle income countries benefit from the input of NHS staff volunteering with them
- How the NHS benefits from having staff spend time developing overseas links
- How the growing field of health partnerships and international links needs to develop in the coming years
- How national, regional and local policy can be used to support this change

In addition, an update will be given on the progress the APPG have made in getting their policy recommendations into practice.

# Friday 7th March

## Exchange Auditorium

14:00

### Global Health: Policy and Practice

#### Global Health Case Studies

Professor Tony Redmond, University of Manchester, UK

Professor Claudine Storbeck, Director: Centre for Deaf Studies, University of the Witwatersrand

Co-authors: Alys Young

Paediatric hearing loss in developing countries: challenging underestimates of the global burden of disease and supporting action for change

Best estimates conclude that almost 10% of the global population have a hearing loss with 90% of children with a hearing loss living in the developing world. As the most prevalent chronic disability it is the third largest global contributor to the loss of healthy life as a result of disability (WHO, 2009) & one of the 20 causes of the global burden of disease on the DALY index. As hearing loss is invisible it has been largely overlooked in the global health focus on programme & rehabilitative support service developments, which has led to a lack of globally coordinated initiatives particularly in developing regions such as Sub Saharan Africa, which accounts for more than 80% of the hearing loss disease burden. Despite the fact that hearing loss is not directly life-threatening it has significant & far reaching implications, particularly with respect of deafness at birth & in early childhood. These include barriers to the acquisition of language, life-long deficits in language development, literacy & communication skills, associated impediments in cognitive development, & poor social & emotional skills (Yoshinaga-Itano, 2003). These consequences impact in turn on educational attainment, employment, economic status, social exclusion & citizenship. In environments where resources are scarce deafness & hearing loss therefore create significant threats to survival & quality of life (Young & Storbeck, 2014). In the developed world, early identification of deafness from birth has created a profound revolution in the life chances of deaf people with comprehensive early intervention programmes beginning within the first months of life. In the majority of low resource countries neither newborn hearing screening nor family & child support intervention in the first years of life are considered a priority. Structurally embedded health interventions for hearing & language development are not routine, thus perpetuating the invisibility of the problem. In this presentation we will focus on one donor-funded early intervention programme for families with deaf children from birth to 3 years old in South Africa. We will present data on the programme, its users and its effects over a 5 year period in which 532 children have benefited & the changes in early language development that have been achieved. We will draw attention to its costs & the impact of the lack of structurally assured funding which places it outside of the mainstream of government mandated early health initiatives. We will reflect on the implications of deaf & hard of hearing people being trained as early support workers & the significance of rigorous data collection in developing the evidence base for effective action on pediatric hearing loss in the developing world. Implications will be drawn for the global health burden of pediatric hearing loss in the developing world more widely from the perspective of distributive justice & actions that the global health community might take as whole.

# Friday 7th March

## Exchange Auditorium

14:00

### Global Health: Policy and Practice

### Global Health Case Studies

Professor Tony Redmond, University of Manchester, UK

Mr Obi Ojimiwe, Graduate Teaching Assistant, University of Manchester

#### Nigeria: Performance-Based Funding and the Emerging Discourse of Seriousness

Performance-based funding is the favoured approach to development assistance in public health by the Global Fund to Fight Aids, Tuberculosis and Malaria (the Global Fund). According to the Fund, this approach ensures that funding decisions are based on a transparent assessment of results against time-bound targets. It promotes accountability and serves as an incentive for the state and its public health bureaucracy to deploy funds in a way that optimizes results. While the state fully subscribes to this approach and is able to commit its public health bureaucracy to it, ethnography shows that many frontline officials harbour private discontent while retaining a bureaucratic commitment to achieving defined targets through the state's preferred approaches. In a series of interviews I conducted in 2011 at the National Malaria Control Programme (NMCP) in Nigeria, there was a perceptible detachment of the leadership cadre from the worries expressed by lower ranking officials about the way the country's malaria control is conducted. The private sector is even more dissatisfied. The major problem is that negotiating donor-recipient relations on the basis of who's 'serious' and who's not instrumentalizes seriousness to the degree that the state diverts its energy and focus to meeting externally set targets even to the detriment of economic performance at home. This paper proposes that the instrumentalization of seriousness in this way is possible because of the idealization of modernity; and the hegemonic control of the global health reporting process. It is also reinforced and maintained by the strategic deployment of language.

## Exchange Auditorium

14:00

### Global Health: Policy and Practice

#### Global Health Case Studies

Professor Tony Redmond, University of Manchester, UK

Dr Elizabeth Kimani-Murage, Associate Research Scientist, African Population and Health Research Center

Co-authors: Wekesah F, Schofield L, Mohamed S, Ettarh R, Mberu B, Egondi T, Kyobutungi C, Ezech A

Double burden of malnutrition in urban

**Background:** Food and nutrition security is critical for economic development due to the role of nutrition in healthy growth and human capital development. Slum residents, already grossly affected by chronic poverty, are highly vulnerable to shocks arising from political instability among others. This study describes the food security situation among slum residents in Nairobi, with a particular focus on vulnerability during security crisis, highlighting the case of 2007/2008 post-election crisis in Kenya which greatly affected slum settlements. **Methods:** The study was undertaken in two slums in Nairobi Kenya; Korogocho and Viwandani and was nested within the Nairobi Urban Health and Demographic Surveillance System (NUHDSS), a system that follows about 70,000 individuals within about 30,000 households in the two slums. The study used a triangulation of qualitative and quantitative data collection methods. The qualitative study, conducted in November 2010 involved ten focus group discussions with community members; and 12 key-informant interviews with opinion leaders. The quantitative data collection, involving questionnaires was done in three cross-sectional surveys between March 2011 and January 2012 and involved a pooled sample of 3210 households, randomly sampled from the NUHDSS. Food security was defined using the Household Food Insecurity Access (HFIA) criteria. **Results:** The study indicates high prevalence of food insecurity; 85% of the households were food insecure. While most of the households purchased raw food most of the time (87%), the other households consumed foods prepared on the streets (13%). The qualitative narratives highlighted household vulnerability to food insecurity as common-place but critical during times of crisis. Respondents indicated that residents in the slums generally eat for bare survival, with little concern for quality. The narratives described heightened vulnerability during the post-election violence in Kenya in late 2007 to early 2008. Food prices for stable food like maize flour doubled, and simultaneously household purchasing power was eroded due to worsening unemployment conditions. Both quantitatively and qualitatively, respondents indicated use of negative coping strategies to food insecurity such as reducing the number of meals, reducing food variety and quality, scavenging, and eating street foods. **Conclusions:** This study describes the deeply intertwined nature of chronic poverty and acute crisis in urban slum settings. Households are extremely vulnerable to food insecurity, particularly during periods of crisis, and frequently employ negative coping strategies. Effective response to address vulnerability to household food insecurity among the urban poor should focus on both the underlying vulnerabilities of households due to chronic poverty and the impacts of acute crises on these households.

# Friday 7th March

## Exchange Auditorium

14:00

### Global Health: Policy and Practice

#### Global Health Case Studies

Professor Tony Redmond, University of Manchester, UK

Mrs Anne Dorothee Slovic, PhD Candidate, School of Public Health - University of São Paulo

Co-authors: Helena Ribeiro

Impacts of air pollution public policies in urban areas in the context of global environmental health:  
Sao Paulo, New York, Paris

Atmospheric pollution is today one of the major environmental health challenges facing urban populations. In urban areas, one of the primary sources of atmospheric pollution is car emissions; emphasizing the need for local government to implement public policies that aim to cope with its impacts. To do so, this project seeks to study the relationship between air pollution and its derived effect on the urban environment and global health. It focuses on vehicle emissions as a primary source of atmospheric urban pollution and looks into the different levels of pollutants derived from it including nitrogen, ozone and particulate matter. The project will compare the policies that aim to reduce atmospheric pollution in the metropolitan areas of São Paulo, Paris, and New York such as related to A) vehicle circulation restriction B) public and alternative transportation and C) fuel and fleet standards. The project provides an overview of these three cities and the development of tools that will allow comparison of the impact of these policies on the indices of health and environment in each region. It presents data collected from air pollution in the last ten years for nitrogen, ozone and particulate matter as well as secondary health data for the three cities, when available. Special attention will be given to the urban center of São Paulo due to its high level of vehicular emissions, emerging economy and public transport system considered under developed. Preliminary results have identified that New York and Paris, despite extensive public transportation, present challenges similar to São Paulo with respect to air pollution from vehicle emissions and urban mobility. The specific topics mentioned above will be presented in the context of the air pollution policies for the three cities, highlighting similarities and challenges. The long-term goal is to identify air pollution control policies for the city of São Paulo, Paris and New York that have most contributed to urban health and its environment.

# Friday 7th March

## Exchange 1

11:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title    EURO URHIS 2: Urban Health Impact Assessment (URHIA)

Chair    Hilary Dreaves

Hilary Dreaves, University of Liverpool, International Health Impact Assessment Consortium  
Department of Public Health and Policy Institute of Psychology, Health and Society University of  
Liverpool Liverpool L69 3GB, United Kingdom.

#### EURO URHIS 2: Urban Health Impact Assessment (URHIA) workshop

As part of the EURO URHIS 2 DG Research funded four year study on health outcome indicators, work package 7 synthesised and produced a screening instrument for use in Health Impact Assessment (HIA) at local urban area level, as part of a new urban HIA methodology (URHIA), strengthened by the use of health outcome indicators and summary measures researched elsewhere in the study. The screening tool (URHIST) was tested for its utility with policy makers at workshops held in Brussels and the methodology presented at the final conference in Amsterdam, 2012. This workshop gives a brief introduction to HIA and the URHIA methodology, with an opportunity for delegates to apply the screening instrument to a topic of their interest.

## Exchange 1

12:40

### Transdisciplinarity in urban health

Session title ABSTRACT PRESENTATIONS

Chair Dr Paula Whittaker

Ms Denise van der Klaauw, Research Scientist, TNO Netherlands Organisation for Applied Scientific Research

Co-authors: Jantine Slinger; Luuk Engbers; Pepijn van Empelen

Policy or community? Lessons on intersectoral collaboration in nine urban pilot projects to increase physical activity-friendliness of neighbourhoods

Introduction: More and more, municipalities combine urban spatial planning in neighborhoods with the introduction of social activities to increase safety, social cohesion and health of citizens. This environmental restructuring requires the collaboration of various sectors. Thus far, effective strategies are lacking on how to effectively promote and manage such collaborations. Objectives: The objective was to study the process of intersectoral collaboration in nine pilot projects directed towards the realization of physical activity-friendly neighborhoods in different parts of the Netherlands. Methods: A multi-method approach was conducted using interviews with stakeholders, a survey to monitor the collaboration (n = 23) and evaluation of documents in every pilot project. The data were analyzed using a framework on intersectoral collaboration, which consists of four broad categories: input variables (context and collaboration structure), process, and performance (i.e. output). Results: Some projects realized especially changes in the physical environment (e.g. playing fields and walking and cycling tracks combined with social activities), whereas others invested in building community capacity (e.g. mobilization of schools and sports organizations and establishing trust among stakeholders). Two main results were derived considering the process of intersectoral collaboration. First, two types of collaboration structures were distinguished. The first was a policy-approach, which was top-down and team-based structured. The team was focused on departments of the municipal government. Citizens were consulted and informed in this approach, but did not participate in planning, organizing or funding of activities. Continuation of the projects following this approach was secured in policy. The second was a community-approach, in which diverse stakeholders participated, such as schools, sports associations and the neighborhood population. This approach was characterized by a network-structure, in which central project leaders worked on attracting new people for the execution of tasks and continuation of the network. The second result of this study was that the process of intersectoral collaboration in all pilot projects highly depended on the project leader. Effective leadership was based on the competencies of the project leader to recognize opportunities and on stakeholder management. Conclusions: The framework for intersectoral collaboration appeared to be useful to understand the process of intersectoral collaboration. Based on the results, we emphasize the importance to assess the type of collaboration structure and the role of the project leader, being both important determinants of an effective collaboration process.

## Exchange 1

12:40

### Transdisciplinarity in urban health

Session title ABSTRACT PRESENTATIONS

Chair Dr Paula Whittaker

Ms Annemarie Ruijsbroek, Researcher, National Institute for Public Health and the Environment

Co-authors: Mariël Droomers

Change in neighbourhood social safety and health in The Netherlands: preliminary results

**Introduction:** Since the nineties, many studies have examined the physical neighbourhood environment in relation to health and health related behaviour. Research on the social characteristics of the neighbourhood and its effect on health and behaviour are less common. One social characteristic that has gained some attention in relation to health is the social safety of the neighbourhood. Social safety has two components; crime and feelings of safety. Crime and feelings of (un)safety are potentially important determinants of health and wellbeing. They can be considered as social environmental stressors that may impact health negatively. Most studies on crime and safety feelings are cross-sectional. In this study we want to examine changes in social safety in order to gain more insight in a possible causal relation between social safety and health. Furthermore, we want to investigate whether other social characteristics of the neighbourhood, such as social cohesion, play a role in the relation between social safety and health. **Aims:** To examine if and in what way neighbourhood social safety is important for health and to explore if the social characteristics of the neighbourhood modify the relation between social safety and health.

**Methods:** Neighbourhood data from the Dutch Integral Safety Survey 2009 and 2011 are combined with data from the Dutch Housing Survey 2012, which contains information about the self-perceived health and physical activity of almost 50.000 Dutch adults. Generalized linear mixed regression models and linear regression models are used to investigate the relation between neighbourhood crime and neighbourhood safety feelings, self-perceived health and physical activity. Furthermore, the moderating effect of social cohesion in the relation between neighbourhood crime and neighbourhood safety feelings, and ultimately health, will be investigated. **Findings:** the result will be presented at the conference. **Conclusion:** we anticipate that the results will improve insights in the positive and negative effects of the social characteristics of the neighbourhood on health and lifestyle in The Netherlands.

## Exchange 1

12:40

### Transdisciplinarity in urban health

Session title ABSTRACT PRESENTATIONS

Chair Dr Paula Whittaker

Abraham Haim

#### Artificial Light at Night in the Urban Space as a Novel Health Risk

In most of the industrialized countries most of the human populations inhabit the Urban- Spaces. Urban designers need to cope with health and wellbeing of the city inhabitants. As energy saving is an important environmental and economical issue connected with increased efficiency on the one hand and reducing city expenses on the other, municipal decision makers are changing street illumination and that of public places into so called "energy saving illumination" which is based on short wavelength illumination (SWI). Illumination in the Urban-Space serves the local populations in increasing security, safe driving, finding your way, sports and cultural entertainments and an important function for illumination is advertizing. No doubt, cities worldwide are becoming more and more illuminated, much more than the basic necessities for illumination. Results of studies carried out in our laboratory, reveal that exposure to SWI can be the cause for the increase in breast cancer (BC) incidences and the earlier age in which young women are BC-patients. Using animal models in our laboratory we can show that exposure to longer wave illumination can be more human friendly and sustainable, as growth rates of the tumor are lower with no metastases when compared with LED or florescent illumination SWI, which suppresses melatonin production in the pineal gland. The main attitude of municipalities is to show saving on energy and reducing electrical bills today, a tempting approach. As incubation of BC is a long process of 10 years or more, who is going to pay for it tomorrow? Therefore, a question to be asked: is SWI an environmental friendly and sustainable on the long term?

## Exchange 1

12:40

### Transdisciplinarity in urban health

Session title ABSTRACT PRESENTATIONS

Chair Dr Paula Whittaker

Dr Amelia Augusta Friche, Professor, Federal University of Minas Gerais

Co-authors: Lúcia Maria Miana Mattos Paixão, Eliane Dias Gontijo, Dário Alves da Silva Costa, Waleska Teixeira Caiaffa

Accidents that are not really accidents: factors associated with deaths in traffic accidents

Objectives: To describe deaths by traffic accident and identify explanatory factors of such deaths in the city of Belo Horizonte, Brazil. Methodology: Data merging of two databases from the Municipality; the 2010 Traffic Information System (BH10) and 2010-11 Mortality Information System (SIM). The similarity of the databases was tested using the 2 goodness-of-fit test, and univariate and multivariate Poisson regression and odds ratios estimation were used to test association between risk factors and traffic death. Results: The linked database included 306 records and showed underreporting of 64 deaths (21%). It was dissimilar to the original databases; age distribution differed to BH10 ( $p=0.001$ ) and road-user distribution to SIM ( $p=0.015$ ). Victim profiles were characterized by males (82%), young adults (51%), single/divorced (68%), low educational attainment (47%) and, non-white (60%). Pedestrians (49%) and motorcycle riders (31%) presented highest death rate. In the final multivariate model, being a motorcycle rider (OR: 1.81; 95%CI: 1.29-2.55), male (OR: 1.24; 95%CI: 1.079-1.44), single/divorced (OR: 1.27; 95%CI: 1.07-1.53) were the factors with the highest association to death when compared to their counterparts. The largest number of deaths was among young adults (OR: 1.75; 95%CI: 1.33-2.29) and the elderly (OR: 1.60; 95%CI: 1.24-2.06). There was a higher rate of deaths at the place of the accident (OR: 1.39; 95%CI: 1.12-1.74) than at a hospital. Conclusions: The study demonstrated the analytical benefits provided by merging different databases in the description and analysis of death by accident. The victims profile, mostly men, indicates increased vulnerability of young motorcycle riders and the elderly pedestrian. Considering the highly chance of death in the site or within 24 hours, the study points to the severity of the event claiming that only an integrated and intersectoral sustained actions will be able to change the scenario of violence in the traffic in Brazilian cities. Key-words: Traffic accidents, mortality, information systems, epidemiologic factors, database merging, Poisson regression.

# Friday 7th March

## Exchange 1

14:00

### Healthy Ageing

**Session title** Staying Well: Using GP registers to systematically identify adults 65+ at risk of developing future health and social care need

**Chair** Professor Arturas Razbadauskas

Munisha Savania, Targeted Prevention Manager, Public Health, Bolton Council

Mark Cook, Public Health Intelligence Analyst, Bolton Council

Shan Wilkinson, Public Health Research Officer, Bolton Council

Staying Well: Using GP registers to systematically identify adults 65+ at risk of developing future health and social care need

*No abstract available*

# Friday 7th March

## Exchange 1

14:00

### Healthy Ageing

**Session title** Staying Well: Using GP registers to systematically identify adults 65+ at risk of developing future health and social care need

**Chair** Professor Arturas Razbadauskas

Professor Arturas Razbadauskas on behalf of Dr Natalja Istomina, Vice-Dean for Development, Klaipeda University

### Healthy Aging and the University of the Third Age at Klaipeda

Context. During the last decades, life expectancy has been steadily increasing in many countries, and there are no signs that the trend is slowing down. The knowledge on the aging individual has grown markedly. The changing age structure in a society with a majority of older people living longer than in previous generations means that health, education and social care services as well as economics are facing challenges. Rationale. Healthy older people need to be active society members.

Optimizing health and well being of elderly requires some kind of investment. Klaipeda University started the studies for older people at the Faculty of Health Sciences in 2010. Description. The studies for the students of the Third Age University begun from November 2010 and will continue till November 2012. The duration of studies are 2 years and free of charge. There are about 1000 older people participating in the programme. All topics of lectures are related to health care, healthy life-style and oriented to deep, narrow and broad the students' knowledge in health science.

Achievements. The knowledge and skills in health care of older people were increased after started the studies at the University of the Third Age at Klaipeda university as perceived by students. The seniors positively evaluated the changes in their life: they are more physically active, have new relations with other elderly and young students, their social and psychological status has been changed positively. Conclusion. The studies at the University of the Third Age in Klaipeda had positive input in the well-being of older people and need to be continuing as a big benefit for healthy and active aging.

# Friday 7th March

## Exchange 1

14:00

### Healthy Ageing

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|---------------|---|
| Session title | Staying Well: Using GP registers to systematically identify adults 65+ at risk of developing future health and social care need |
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| Chair | Professor Arturas Razbadauskas |
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Caroline Egesa on behalf of Ms Hilda Akinyi, Student, University of Southampton

#### Long Term Care for Older People in Sub-Saharan Africa: A comprehensive review

The population of older people in sub-Saharan Africa is gradually increasing. Despite the region being majorly youthful, the share of older people is projected to increase from 5 percent today to 19 percent by the end of the century. In the same time span, the absolute number of the older population will grow from 43 million to 644 million, a sharper increase compared to any other world region or age group. Accompanying these demographic shift are rapid socioeconomic and cultural trends that, to a larger extent, have threatened normative prescriptions governing the provision of care for the elderly. Increased participation of women in the labor market has punch marked deficiencies in the care mechanism considering that it draws out many women who traditionally, have undertaken care responsibilities for other family members including older relatives. Access to formal education for the younger generation has also increased migration and the adoption of individualistic attitudes making them less compelled to honor norms surrounding respect, and by extension, provision of care to elders. Population ageing places considerable challenges upon the family upon whom the burden of care still largely rests. In effect, the adequacy and quality of care extended to the older generation, particularly in regard to long term care, is questionable especially since little public or privately organized systems of formal care exist in this region to cushion or replace the family as the central source of care. These trends signify a growing need for long term care for the older populations. This paper provides a comprehensive literature review on the increased prevalence of long term care need in the older population in sub-Saharan Africa and the capacity of the informal care system (the family) to address these needs. This paper is a review of published and grey literature relevant to long term care for older people in sub-Saharan Africa. In undertaking the review, searches for academic literature were conducted on AFRAN and Age. Articles were categorized around a guiding conceptual framework (i) formal care, to include a description of structural arrangements and content of care and normative underpinnings within policy frameworks (ii) informal care, to include a description of structural arrangements and content of care, quality of care, adequacy and inadequacy of care, impacts on caregiver, care recipient and the family and normative underpinnings in the pathways to care, and (iii) areas for practice-research interface to include interventions and outcomes in long term care provision. In sum, the clear line between long-term care policies and family care patterns provides evidence that care patterns are not simply a result of choices by family members to observe some normative obligations as some of the policies maintain. Rather, these patterns of care emerge as a consequence of prevailing limitations in the alternatives available to family members.

# Friday 7th March

## Exchange 2

11:00

### Transdisciplinarity in urban health

Session title      Urban health challenges, zoonoses and transdisciplinarity

Chair      Professor Rainer Fehr

Professor Roderick Lawrence, Director of the Global Environmental Policy Programme, University of Geneva

Added value of Transdisciplinarity for Urban Health Challenges

No abstract available

# Friday 7th March

## Exchange 2

11:00

### Transdisciplinarity in urban health

Session title      Urban health challenges, zoonoses and transdisciplinarity

Chair      Professor Rainer Fehr

Dr Sohel Ahmed , Post-doctoral Research, University College London

Professor Eric Fevre, Chair of veterinary infectious diseases, University of Liverpool

Co-authors: Alarcon P, Madé L, Davila JD, Haklay M, Tacoli C, Allen A, Ruston J

Forces of urbanisation that drive zoonoses emergence in global South

Between 2011 and 2050, the world population will rise to 9.3 billion- a gain of more than 2.3 billion. Much of this gain can be attributed to rapid urbanization in the Global South, particularly in African and Asian cities, as over this period the world will witness a 72% increase in urban populations. It is argued that rapid urbanization results in not only more people in urban areas (particularly in informal settlements), but also encroachment into agricultural and pristine land and natural resources, and multi-scaled complex interactions of people, animals, food, trade, policy and practices that change the dynamics of social-ecological processes surrounding them. These interactions create favourable grounds for the emergence or re-emergence of infectious diseases, including those coming from animals (zoonosis), food and the environment. We have undertaken a desk study to explore the key question – ‘what are the principal urbanization related drivers behind emergence, re-emergence and prevalence of relevant zoonoses in the cities of the Global South?’ This provides a preliminary insight not only into the pertinent drivers, but also helps in shaping the configuration and characterisation of the conceptual framework being adopted. It was found that within the specificities of urbanization, - poverty and inequality of infrastructure service provision and resources, - increased movement of people and animals, - changes in land-uses - along with the absence of ‘holistic approaches’ and ‘pro-poor policies’ are factors identified as being associated with increased prevalence or emergence of zoonoses. This paper situates these within the conceptual framework of a human-animal-food-environment-disease nexus. Using a livestock value chain approach, movement of people, animals and animal-derived food products that exist at multiple scales in urban and peri-urban areas of Nairobi (Kenya) are being investigated. Currently, spatial and non-spatial data are being collected 1) for active nodes along the value chains (e.g. livestock traders, formal and informal retailers, markets etc.), 2) for evidence of disease burden of certain vulnerable groups (e.g. children with diarrhoea in informal settlements), as well as 3) for the physical and environmental characteristics of neighbourhoods and communities. Some of the data and preliminary results from a five-year study will also be presented.

# Friday 7th March

## Exchange 2

14:00

### Transdisciplinarity in urban health

**Session title** Building bridges across disciplines in European countries

**Chair** Professor Rainer Fehr

Professor Rainer Fehr, Former Director of WHO Collaborating Centre for Regional Health Policy and Public Health, University of Bielefeld

Co-authors: Sabine Baumgart; Claudia Hornberg; Wolfgang Schlicht

Initiative for promoting Urban Health in Germany

Acknowledging the role which human health played in history for city planning and development, there are efforts in Germany to establish an updated culture of urban health. The paper presents a transdisciplinary initiative involving spatial planning sciences, public health / medicine, ecology, and economy. Research groups involving doctoral students and senior researchers are selected in a criteria-based procedure and funded for 3 years each. The groups include:- 'CityLandscape and health' (2011-2013) – 'City as a healthy place, independent of social inequality' (2012-2014), and – 'The age-friendly city - 'Autonomy and sustainable mobility in times of climate change' (2013-2015). A supplementary project explores the applicability of results from transdisciplinarity research to this initiative, and to urban health at large. Joint academic teaching across programs and universities takes place, providing opportunities to combine research orientation and practice. Dedicated annual conferences contribute to a sustained discussion. Interest in the topic is very pronounced. The future will tell how much innovation the different disciplines and sectors will dare to explore, test and integrate into routine work.

# Friday 7th March

## Exchange 2

14:00

### Transdisciplinarity in urban health

**Session title** Building bridges across disciplines in European countries

**Chair** Professor Rainer Fehr

Professor Gérard Salem, Director of Master's Programme in Medical Geography, University of Paris-Nanterre

A systemic approach of urban health dynamics – Experiences from French as well as international urban health studies

*No abstract available*

# Friday 7th March

## Exchange 2

14:00

### Transdisciplinarity in urban health

Session title Building bridges across disciplines in European countries

Chair Professor Rainer Fehr

Ms Catalina Chamorro, Coordinator of the Catalan Healthy Cities Network

Co-authors: Albert Abaurrea; Magda Bertran; Sònia Chavero; Anna M. Font; Manel Herrer; Eloi Juvillà; Lorena Perona.

Promoting healthy places and cities. The experience of the Barcelona Provincial Council

The Barcelona provincial Council (Diputació de Barcelona) is a local government institution that essentially provides technical, economic and technological support to the 310 councils of the Barcelona Region. Our organization co-ordinates municipal services and organises public services on a supramunicipal basis, especially to medium sized and little villages. In Catalonian, municipalities have responsibilities in Public Health, including health promotion, food and drinks control, and the management of environment and water pollution risks and plagues. Public Health is one of the priority areas of the Diputació de Barcelona. We are currently developing a project for integrating public health and urban planning approaches to promote better community environments at local level in Barcelona region. The last two years, from "Board for Urban Improvement", a forum for communication, cooperation and joint work, also recognized as a Best Practice by Un-Habitat, about 50 people, from our areas of Planning, Infrastructure and Housing, Social Welfare, Commerce, Education, Sports, Equality and Citizenship, Environment and Public Health, have been working together in the project 'Entorn urbà i salut' (Urban environment and health). Its aim is to promote urban environments that encourage people to live healthily, while minimizing the environmental factors that may constitute a risk to health. This project includes the online guide 'Entorn urbà i salut' (<http://www.diba.cat/web/entorn-urba-i-salut>) , which is based on scientific evidence of the impact of housing and the built environment on health and wellbeing. The guide is planned as a tool for professionals working in planning, designing and creating urban environments. It includes: - Data on existing evidence, which relates the characteristics of the physical environment in which people live and certain health indicators. - Proposals and recommendations to be considered at any stage of the planning process or design elements of the urban environment. - References/experiences which are being implemented, proposals/recommendations offered or similar features. - Legal references and index. This guide has the recognition of academic and scientific institutions, such as the Polytechnic University of Catalonia, CREAL (Centre of investigation in environmental epidemiology) and IDES (Institute of security studies).

# Friday 7th March

## Exchange 2

14:00

### Transdisciplinarity in urban health

Session title Building bridges across disciplines in European countries

Chair Professor Rainer Fehr

Professor Carlo Signorelli, Director of Post-Graduate School in Hygiene and Preventative Medicine

Dr Maddalena Buffoli, Research Assistant and Lecturer at Polytechnic University of Milan

Co-authors: S Capolongo, D D'Alessandro, GM Fara, A Rebecchi

The professional and scientific interaction between medical doctors and architects. The 20-year experience at the Politecnico di Milano

The various educational, scientific and professional collaborations in the past 20 years between Politecnico and the health sector are presented and discussed. These have included collaboration with Schools of Medicine, NHS and enterprises involved in health related problems. The most relevant initiatives are: - A Research Centre (CLUSTER in Health) at the Politecnico di Milano; - Courses of Environmental health and Urban Health in the Schools of Architecture and Urban planning (Politecnico) entrusted to professors of Public Health in collaboration with architects; Courses of Urban Health and Hospital building in medical Post-graduated Schools, Masters and Undergraduate degrees for health personnel entrusted to Architects; A Master's Degree in Planning and design of hospitals and health and social systems (now in its 5th edition; An annual international conference (now in its 3rd edition); Joint research projects between the health experts and architects and interchange for PhD projects; Participation in studies and research projects with Italian and foreign universities Our experience has shown the usefulness and appreciation of these transdisciplinary initiatives but also a lot of difficulties for different scientific and cultural references and the different careers. In the future we will further make any effort to promote these interactions with research projects, international network and the development of interprofessional issues (sustainable mobility, sustainable energy strategies, healthy houses, smart cities, smart hospitals, etc.)

# Friday 7th March

## Exchange 3

11:00

**Maternal and Child Health**

**Session title** **Fat, fads and fertility hormones - a day in the life of endocrinology**

**Chair** Dr Leena Patel

Dr Leena Patel, Senior Lecturer in Child Health & Clinical Lead for Paediatric Endocrinology, University of Manchester

The escalating trends in childhood obesity

*No abstract available*

# Friday 7th March

## Exchange 3

11:00

**Maternal and Child Health**

**Session title** **Fat, fads and fertility hormones - a day in the life of endocrinology**

**Chair** Dr Leena Patel

Dr Mars Skae, Consultant Paediatric Endocrinologist, Royal Manchester Children's Hospital

Vitamin D Deficiency for Urban Populations

*No abstract available*

# Friday 7th March

## Exchange 3

11:00

**Maternal and Child Health**

**Session title** **Fat, fads and fertility hormones - a day in the life of endocrinology**

**Chair** Dr Leena Patel

Dr Phil Murray, Clinical Lecturer in Paediatric Endocrinology, Royal Manchester Children's Hospital

The influence of everyday chemicals on hormones in our body

*No abstract available*

# Friday 7th March

## Exchange 3

12:40

### Health Protection / Screening and Prevention including vaccs and imms

Session title ABSTRACT PRESENTATIONS

Chair Ms Samantha Crossfield

Dr Sneha Siddhan on behalf of Mrs Rashmi Shirhatti, City Coordinator, Plan India

Co-authors: Dr.Sainath Banerjee, Dr.Sneha Siddham, Manoj Bhavsar, Dr.Anjali Sabane

Strengthening of MNCHN services through Urban Health and Nutrition Day (UHND) at the urban slums through Public private initiative in Pune (Maharashtra), India

Pune is the eighth largest metropolis in India, the second largest in the state of Maharashtra. There are 564 slums in Pune city of which 353 are declared and 211 are undeclared. With growing economic activity in Pune, the slum population has been increasing at a tremendous rate. This increase in the slum population has been exerting pressure on the city's infrastructure services. Health facilities are poor in majority of the communities. There is a limited access to MNCHN services and people have to depend largely on private health providers. There is a need to Public Private Partnership in delivering the health services to the unserved people. Methodology: Urban health and Nutrition Day (UHND) are initiated to track and render the health, nutrition and WASH (water, sanitation and hygiene) services to the target population from an identified point through convergent mechanism. Health of the Urban Poor, Plan India has partnered with the Pune Municipal Corporation (PMC) Urban Local Body and Integrated child development services (ICDS) Ministry of Women and Child Development to plan and implement the UHND in each month at 10 different slum clusters. HUP with the public private initiatives developed an annual roster plan with the consensus and endorsement of PMC and ICDS. The Local ICDS -Anganwadi centres within the slum clusters are utilized for rendering the services. The HUP field staff prepares the checklist and due list of the beneficiary and counsel each of the household for catering services. Aims: The study aims to analyze the effectiveness and utilization of UHND for availing maternal, nutritional and immunization services by the urban poor. Design: The study has utilized and analyzed the monthly MIS data of the UHND for the period of November 2012 to October 2013. Results: Total 106 UHNDs have been conducted in the 10 clusters of the HUP Pune city project during the period of November 2012 to October 2013; 1288 (68%) pregnant women out of the 1887 have availed the services of the UHND; 642(75%) lactating women out of the 862 have availed the health services in terms of Post partum complication and breast feeding difficulties through the UHND; 2044(85 %) infants (0-1 years) out of the 2393 have availed the services of Immunization e.g. BCG, DPT, OPV, Measles etc. through the UHND; 2121(85%) children between 1-5 years of age out of 2490 have availed the immunization services through the UHND; 479(48%) currently married women (15-49 Years of age) out of the 981 have availed the services for family planning, health & hygiene components; Totally 6576 (76%) beneficiaries out of 8613 availed the services through the UHND. Conclusions: The study revealed that the elaborate process and meticulous planning and structured guidelines to organize the UHND through public & private initiative helps the improved reach of maternal, nutritional and child health care services to unserved and underserved urban poor population. This has also resulted in the improvement in the Maternal, Nutritional and Child Health (MNCH) indicators e.g. ANC check up, TT injections, IFA consumption, Institutional delivery &PNC check up etc. The UHND mechanism also paved way forward for replicating and scaling up of separate UHNDs for the Non communicable diseases.

# Friday 7th March

## Exchange 3

12:40

### Health Protection / Screening and Prevention including vaccs and imms

Session title ABSTRACT PRESENTATIONS

Chair Ms Samantha Crossfield

Dr Adenike Idowu, Lecturer, Covenant University

Co-authors: Dr. Egharevba Matthew

Working conditions and maternal health challenges in Lagos State, Nigeria

The paper examines the influence of working condition on maternal health in the face of poor provision of amenities and infrastructural decay ravaging developing countries particularly sub Saharan Africa. Endemic maternal health has been major concern in Nigeria as she has one of the highest maternal and infant/child mortality rate in the world. Various studies have increasingly pointed out that urban health conditions are not as rosy as many people may assume. The fast pace of urban growth has affected different groups of people in different ways. The plight of women in urban centre in Nigeria using Lagos state was investigated using probability sample of 1,362 women. Data for the study were obtained from a survey conducted in Lagos in 2011/2012 using structured questionnaire and key informant interviewing. Issues relating to working condition were measured by the nature of work, time for rest, means of transportation, whether the respondents commenced maternity leave as at when due, and relationship with their boss. Logistic regression was adopted for the analysis of variables identified. The findings from the survey indicates the overwhelming effect of socio-environmental condition such as gender biases, combined with poverty, poor transportation system, stressful work environment, and poor quality of life, force many women into sickness, poor nutrition, and repeated pregnancies thereby exacerbating maternal mortality. The paper concludes that adverse working conditions is negatively related to maternal health complications which calls for urgent policy intervention to address work related pressure on maternal health. The paper ends with the submission that employers must develop humane health friendly policies that favour maternal well-being during pregnancy in the working place.

# Friday 7th March

## Exchange 3

12:40

### Health Protection / Screening and Prevention including vaccs and imms

Session title ABSTRACT PRESENTATIONS

Chair Ms Samantha Crossfield

Ms Samantha Crossfield, Research Lead, University of Leeds and TPP

Co-authors: Chris Bates

#### Centralised Health Records: Closing the Gap between Public and Personal Health

I explore how we can use 'big data' from connected clinical systems in surveillance, research and analytics to inform clinical practice through the development of system support. Health and care information, ranging from demographic to pathology data, is increasingly being shared in clinical practice. I outline current and future practices that can use this shared data for public health protection, research and health service delivery, and suggest the need for partnership between the private sector and academic community. There may be many benefits from using the larger volume and variety of timely data that may be acquired from centralised clinical systems. Research has shown that the data items selected for health surveillance and research, such as symptoms or prescribing trends, impact on the detection of events and outcomes. For health surveillance, I explore this by comparing prescribing and diagnostic data regarding the global H1N1 pandemic, and see how the centralised system can lend itself to tracking natural disasters and non-communicable disease in a similar manner. Using the example of measles, I show how centralised surveillance may extend into the pro-active outbreak risk profiling of populations, which for example may inform the targeting of immunisation campaigns. For health research, this centralised data is pseudo-anonymised and used in retrospective cohort analysis and randomised control trials, with the outcomes leading to changes in the clinical system that support evidence-based practice. I explore how five million patient records, shared across ten different organisation types (e.g. GP Practice and Palliative Care) have informed the identification of deficits for a frailty indicator, and are being used in survival analysis for clinical trials in oncology. The derived conclusion is that a process has been developed to enable research and surveillance on centralised, shared clinical records data. This is a globally applicable model, developed through cross-discipline collaboration.

## Exchange 3

12:40

### Health Protection / Screening and Prevention including vaccs and imms

Session title ABSTRACT PRESENTATIONS

Chair Ms Samantha Crossfield

Dr Hui-Jing Shi, Associate Professor, Public Health School of Fudan University

Co-authors: Zhe Zhang, Xiao-Xiao Jiang, Meng-Na Li

The Relationship between the Prior School Bullying/Victimization Experiences and Current Mental Health of University Students in Shanghai

**Aims:** School bullying is the most prevalent form of low-level violence that exists in both boys and girls. In recent years, increasing number of notorious school violent events in China has drawn a lot of public attention. However, to date there has been limited evidence of population based quantitative researches on childhood bullying and victimization versus later health problems. The purpose of this study was to investigate the relationships between prior bullying/victimization experiences and current mental health status among university students in Shanghai. **Study design:** Cross-sectional survey among university students by using self-administered questionnaire to obtain their past experiences of school bullying/victimization during elementary, junior and senior high school periods in various forms, and their current status of mental health were measured by SCL-90. **Setting and Participants:** The study was conducted in two universities of different academic levels in Metropolitan Shanghai in 2012. By using multi-stage cluster sampling strategy, 2430 students were approached at first. Finally 1964 questionnaires were finished and 1935 were valid, with 1015 males and 920 females aged from 19-23 years old. **Results** Of all participants, 38.4% respondents (43.1% in boys and 33.1% in girls) suffered from at least one form of bullying during primary or middle school periods, and elementary school stage was mostly reported by 31.4%, followed by junior (23.8%) and senior (15.1%) high school. Meanwhile, 25.7% of all participants (30.5% in boys and 20.4% in girls) had ever bullied others before entering the university, especially when studying in elementary school (20.9%). Malicious teasing, threaten and intimidate were the most frequently reported forms of bullying. After controlling for potential confounders as school type, gender, grade, parents' educational level, family economic level, stressful life events and social support, those who have been victimized were more likely to have a mean score of  $\geq 2$ , using  $< 2$  as the reference, for somatization, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety, with the adjOR(95%CI) being 1.16(1.07-1.92), 1.83(1.42-2.36), 1.63(1.25-2.14), 1.69(1.28-2.23), and 1.57(1.19-2.08), respectively. The independent associations between past bullying behaviors and higher scores of most SCL-90 subscales were also found. **Conclusions:** School bullying and victimization experience during primary and middle school is highly reported by university students, and is independently related to their current mental health status. While Shanghai is rapidly developing into multi-cultural metropolis and is undergoing great social and economic change, children both from internal migration schools and local public schools are more likely to experience lifestyle and socioeconomic difference and even conflicts. Effective intervention strategy to cope with school bullying is crucially needed.

## Exchange 3

14:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Dr Isil Ergin

Miss Hannelore De Grande, Doctoral Researcher, Interface Demography

Co-authors: Prof. Dr. Hadewijch Vandenheede, Prof. Dr. Patrick Deboosere

Evolution of social inequalities in young-adult mortality in Belgium: a comparison of large urban areas and less urbanized areas over time

Aims. This study probes into the evolution in social inequalities in mortality among adolescents and young adults according to urbanicity level. In Belgium, substantial regional differences in life expectancy have been found. Yet, little information exists on the rural-urban divide in young-adult mortality. Previous research in the Brussels-Capital Region (BCR) identified a large drop in mortality among the young in the 1990s compared to the 2000s, and showed persisting social inequalities, especially among men. This study expands this research, by adding a comparison with the other Belgian large urban areas, and identifies if the drop in mortality in the BCR is a general phenomenon in Belgium or specific for a metropolitan context. Design & Setting. Individual record-linked data between the Belgian censuses of 1991 and 2001 and register data on death and emigrations is used. Five large cities can be identified: Brussels, Antwerp, Ghent, Liège and Charleroi. Age-standardised Mortality Rates (ASMR) and the Relative Index of Inequality are measured. Participants. Analyses were restricted to young adults aged 19 to 34 years at baseline. The young population comprised 2,458,637 persons in 1991, and 2,174,384 in 2001. Results. There is a positive evolution towards lower mortality among the young, with the strongest declines in large cities, especially in the BCR and Liège (e.g. ASMR BCR men 1991= 34.9 [95%CI 32.5-37.4]; 2001: 20.4 [18.6-22.3]). Mortality remains highest in the Walloon Region, while the highest social inequalities have been found both in smaller urban areas. In most large cities declines were similar in all educational groups, resulting in a small but statistically non-significant decline in relative social inequalities over time (e.g. RII Antwerp 1991= 3.60 [2.30-5.61], RII 2001=3.30 [1.83-5.98]). The case of Charleroi stands out, with only a small decline in mortality over time and increasing social inequalities. Conclusions. This study showed that young-adult mortality declines are strongest in large cities, except one highly-deprived large city, and that social inequalities are steady or less strong over time compared to smaller urban areas. With these results we hope to contribute to research that does not only look at the urban health penalty, but also shows the advantages of living and growing up in large urban areas.

## Exchange 3

14:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Dr Isil Ergin

Dr Isil Ergin, Associate Prof, Ege University, Department of Public Health

Co-authors: Anton Kunst

Inequalities in self rated health and disability in the younger and older generations in Turkey: Do regional and urban/rural comparisons contribute less than socioeconomic factors?

Background: Turkey is a large country with many socioeconomic and cultural contrasts between regions and also between urban and rural areas. Inequalities for maternal and child health indicators mark these contrasts. However, the geographic distribution of general health and disability as well as the inequality patterns is unknown. This mapping and evaluating its variations for younger and older generations are vital as these will enable to understand the change of the effects of disadvantage in time (lifespan) and place. Aim: The aim of this study is to define the substantial regional or rural/urban differences in general health and disability in Turkey among young and old populations in Turkey. Methods: The 2002 World Health Survey data for Turkey were analyzed on 10791 adults above the age of 20, for Self Rated Health and Disability measures. The people's perception of their health ranging from "very good" to "very bad" in five categories, have been used to define Self Rated Health. For Disability, the questions on the inabilitys in five areas (mobility, self care, cognition, interpersonal activities, vision) within the last 30 days were used. The inability score in each question ranging from 1 to 5 (1: none, 5: extreme) were added to define the Disability score. Multilevel logistic regression was used to estimate differences for these two dependent variables according to residence, region, education and wealth. Younger and older age groups (-50 and =50) and two sexes were separately evaluated. Results: After controlling for socioeconomic factors (education and wealth), urban/rural differences did not exist and regional differences arose only for older women in the East, Black Sea and Middle. Elderly women in these regions have poorer health/more disability, even after control for socioeconomic factors. Educational inequalities were in the forefront with increasing effect over time. The effect of wealth, which arose in younger generations, lost its power towards older ages, yet persisted. Conclusion: The study results show that in Turkey, substantial regional differences do exist, but they can mostly be explained by differences in socioeconomic factors. The situation for elderly women can be explained with their higher fertility rates, low access to health services and low socio-economic development marked for these regions. The indifference between urban/rural and regions for older generations signal the diminishing protective role of traditions. Considering the limited role of geographic differences in general health when compared to the large socioeconomic inequalities, not regional inequalities, but the more fundamental socioeconomic inequalities, should be the key public health concern also in Turkey.

## Exchange 3

14:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Dr Isil Ergin

Mr Zelalem Adugna, Director of Public Health, John Snow, Inc.

Co-authors: Worku Berhe

Harnessing the potential of technology for public health in urban Ethiopia: How FM radios and mobile phones could be a 'game changer' for pro-health behavior change and communications interventions in urban communities.

**Background:** Recent available data reports that Ethiopia's populations are more likely exposed to radio than any other media. FM radio is attracting urban populations and flourishing throughout Ethiopian cities. Radio is a very cost effective way to reach a large population with a specific message. Previous studies have shown an association between radio exposure and pro-health and pro-social behavior adoption. **Objectives:** The objective of this paper is to illicit the potential of modern technologies for public health in urban Ethiopia by presenting and discussing the experience from Hawassa city. **Methods:** A community survey and focus group discussions were conducted with pregnant women and mothers who had recently delivered. The community survey was administered using a structured questionnaire to determine reach of a radio spot developed to promote maternal health, with a primary objective of institutional delivery. Using a multi-stage sampling design, 489 pregnant women and mothers who delivered in the last three months before the survey were interviewed using structured questionnaire. The data were entered into, cleaned and analyzed using SPSS V.17. Exposure to mass media was assessed by asking respondents whether they had access to a radio and/or mobile phone in their household, whether they have used a mobile phone and/or radio at the household to listen to FM radio programs and whether they have heard the radio spots. **Results:** The survey found that 68.3% (334/489) of the mothers had a radio in their household. Interestingly, mobile phone possession was higher than radio possession. High proportion of survey participants, 420 (85.7%) of the mothers had a mobile phone of whom 38.8% listened to radio using a mobile phone. Among the respondents who had a radio at the household as many as 92.2% (318/344) listened to DebubFM radio. Among those who had a radio 80.1% (226/334) heard the radio spot developed to target urban mothers for increasing maternal health services. One of the indicators used to measure the reach and penetration of the radio spots was to measure the source of information where mothers learned about maternal health. Urban Health Extension professionals (community nurses) and the radio spot on Debub FM were the most common source of information related to ANC, birth preparation and an institutional delivery. Discussions with mothers in the FGD (Focus Group Discussion) complemented the findings from the quantitative data, finding that the radio spots were a very important tool for birth preparations, ANC and institutional deliveries.

**Conclusion and recommendation:** The proportion of mothers with radio at household and mobile phone is high which could indicate similar ownership/access patterns for other cities of Ethiopia. Furthermore, the reach and penetration of the radio spot is high. Modern technologies (FM radio and mobile phones) could be harnessed in urban communities of Ethiopia for public health interventions.

# Friday 7th March

## Exchange 3

14:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Dr Isil Ergin

Mr Zelalem Adugna, Director of Public Health, John Snow, Inc.

Co-authors: Marc Cunningham; Sophia Magalona

Determinants of healthcare seeking for childhood illnesses and vaccination in urban Ethiopia

**Background:** Antenatal care (ANC) and the presence of a skilled birth attendant (SBA) during delivery have been demonstrated to improve maternal and perinatal health outcomes. In urban areas of Ethiopia, which have better service coverage and use than rural areas, only 50% of pregnant women received the recommended four or more ANC visits; and only 51% pregnant women had an SBA present at delivery. **Objectives:** To guide policy makers and public health managers in developing targeted maternal health program improvements, we examined the socio-demographic factors affecting maternal health service utilization (ANC and SBA) in urban Ethiopia to identify inequities in service use. **Methods:** Using descriptive and bivariate analysis methods in SPSS V.19, we investigated the associations between women's use of maternal health services (ANC and SBA) and their socio-demographic determinants including household wealth, maternal age, and maternal educational attainment using data from the 2011 Ethiopian Demographic and Health Survey (2011 EDHS). With our focus on disparities in the urban environment, we subset our analysis to urban women surveyed ( $n = 1496$ ). **Results:** Wealth, maternal age and education independently affected ANC service use. Women in the top wealth quintile were more likely ( $OR=6.0, P<0.001$ ) than those in the poorest quintile to attend at least one ANC visit. Younger women (age 20 years or less) were more likely to receive the recommended four and more ANC visits compared to women who are more than 35 years old ( $OR =3.0, p<0.001$ ). Educated women were more likely to attend ANC at least once ( $OR=4.3, p<0.001$ ) than uneducated women. Ninety-three percent of those who attended secondary education had at least one visit compared with only 59% of those with no formal education. Similar patterns were seen for skilled birth attendance. Household wealth predicted presence of SBA during delivery with the top three wealthiest quintile more likely to delivery with SBA than the lowest two wealth quintiles ( $OR=7.2, p<0.001$ ). Nearly 19% of the poorest quintile of urban mothers had delivered with SBA compared to 87.2% of the wealthiest quintile. Younger women (age 30 years or less) were likely to delivery in the presence of SBA than older women aged 30 years or older ( $OR=1.44, P<.001$ ). Educated women were more likely ( $OR= 4.0, P<0.001$ ) to have an SBA at delivery than those not educated. Majority of births from women with secondary education were attended by SBA (84%) compared with few births (29%) from women lacking education. **Conclusion:** Inequalities in wealth, education and age are shown to affect maternal health service utilization in urban Ethiopia. Targeted programs should focus on the poor and less educated segment of urban population to ensure improved maternal and child health outcomes.

## Exchange 3

14:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Dr Isil Ergin

Dr Md. Mobarak Hossain, Assistant Professor, University of Bielefeld

Co-authors: MMH Khan, MAA Azim, HMT Hasan, A Kraemer

Evaluation of the physical structure of pharmacies and their quality of healthcare services in Bangladesh

**Background and aims:** Privately owned pharmacies (run by drug sellers) are the leading source of healthcare services for common health problems in Bangladesh because of easy accessibility by short distance and short waiting time and affordability due to low treatment cost. However, qualities of pharmacy services are often unsatisfactory. Considering the disparities of services between rural versus urban as well as between actual versus reported practice, we formulated two research questions namely (i) Is the overall quality of pharmacy services between rural and urban areas different? (ii) Are actual practices in pharmacies similar to reported practices? To address these questions, we compared several quality dimensions of pharmacy services including physical structure of pharmacies.

**Design:** Two methods namely simulated client method (SCM) and interviews were used. Pre-formulated and pre-tested scenarios for childhood diarrhoea, skin disease, breathing difficulty and burning during urination were presented in the pharmacies by trained simulated patients.

**Setting:** Study areas covered some part of Dhaka city (Mirpur area) and adjacent rural area, Bangladesh.

**Participants:** 630 drug sellers (SCM = 315, interviews = 315) in rural areas (n=314) and urban Dhaka (n=316) were studied.

**Results:** The mean age, years of education and duration of profession (based on interviews) were approximately 38, 12 and 11 years, respectively. The mean number of patients and amount of Taka (1 dollar 78 Taka) for selling medicines per day was 46 and 4,871, respectively. About 80% of the drug sellers received some kind of short professional training. Education, number of daily patients, amount of Taka and possession of training differed significantly between rural and urban areas. The overall physical structure of pharmacies (based on size, location, availability of medicines, inside cleanliness, ventilation, having refrigerator and so on) were good to very good for 41.9% (rural = 48.1%, urban = 35.8%), medium for 52.5% (rural = 46.8%, urban = 58.2%) and bad to very bad for 5.6% (rural = 5.1%, urban = 6.0%). The overall rate of professionally correct behaviour/attention was 81.4% (rural = 89.5%, urban = 73.4%). Overall counselling (yes = 24.4%) and advice (proper = 36.2%) were also low in both rural and urban areas. The referral to doctor/hospital was significantly higher in urban (yes = 36.4%) than rural (25.5%) areas. All quality dimensions were significantly different between two methods. SCM provided less satisfactory results than interviews.

**Conclusion:** The overall performance of pharmacies in both urban and rural areas is disappointing and needs to be improved. Rural services were of higher quality than urban services for some dimensions of healthcare services. Finally, we underscore the necessity of developing strategies based on the results of SCM method, because these results are more realistic than the results from interviews.

# Friday 7th March

## Exchange 3

14:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Dr Isil Ergin

Dr Danny Ruta, Director of Public Health, London Borough of Lewisham and Kings College London

Creating an urban public health collaborative founded on the principle of co-production

*No abstract available*

# Friday 7th March

## Exchange 4

11:00

### Policymaking and political leadership for action on urban health

**Session title** Local governments promoting health through intersectoral action

**Chair** Ms Riikka Rantala

Ms Riikka Rantala , Technical Officer, World Health Organization Centre for Health Development, Kobe, Japan

Intersectoral action for health at the local government level

Mr Andrew Hull, Director of Stakeholder Engagement , Liverpool Clinical Commissioning Group Liverpool, UK

Intersectoral action for health in urban settings – Liverpool Active City

Dr Kimberly Libman, Adjunct Faculty, Queens College, City University of New York, New York, USA

Intersectoral responses to childhood obesity in New York City, London and Cape Town

*No abstract available*

# Friday 7th March

## Exchange 4

12:40

### Policymaking and political leadership for action on urban health / Governance

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Brynn Warren on behalf of Ms Stephanie Martin, Community Engagement and Communications Manager, McCreary Centre Society

Co-authors: Stephanie Martin, Brynn Warren, Ange Cullen, Ewa Monteith-Hodge

Voices from the inside: Engaging youth in policymaking and service development within the criminal justice system

AIMS: To replicate the 2007 'Next Steps' workshop series, which successfully engaged youth in survey data to provide feedback and recommendations for policymaking and service development within the youth justice system. DESIGN: In 2012 McCreary Centre Society surveyed youth in custody in British Columbia. The survey (previously conducted in 2000 and 2004), asked youth about their health, experiences in custody and in the community, and about their plans for the future. Results were shared with youth through a series of Next Steps workshops. The 2013 Next Steps was a two-part workshop series. The first workshop engaged youth in responding to results from the survey. They shared their experiences of living in custody, and provided recommendations to improve policymaking and service development within Youth Custody Services, and to help them successfully transition back into the community. In the second workshop, youth identified priority issues and created stop-motion animation films about these issues which were shared with senior policy makers and service providers. SETTING: Youth Custody Services Centres in three urban centres in British Columbia, Canada PARTICIPANTS: 114 youth (aged 12-19) completed the 2012 survey. Around 50 of these youth participated in the 2013 Next Steps workshop series. RESULTS: Youth openly discussed the barriers they face in the community including poverty, substance abuse, challenges with the government care system and unstable family structures. They also discussed the challenges of being in custody such as victimization, violence, and issues with confidentiality. Despite these significant barriers, they had positive aspirations for the future and concrete ideas of how to improve the lives of young people facing these challenges. Similar to 2007, youth offered meaningful feedback on what would help to make their time in custody more constructive and prevent them from re-offending. Priority issues identified included ensuring youth have access to job training and skill-building opportunities; promoting positive relationships between youth and staff; and addressing rates of youth going to bed hungry in the custody centres. Senior managers are ensuring the process leads to direct changes to policies, programs and services within the custody centres. Action already taken includes the implementation of trauma-informed practices, the addition of an evening snack and the initiation of union negotiations to address shift changes around meal times. CONCLUSION: Youth in custody experience challenging life circumstances. In order to support youth to successfully transition from custody back into their communities, it is important to include their perspectives and experiences in policymaking and service development. The presentation will consider the impact of increased youth engagement within custody centres in BC and the extent to which systemic changes may still be required.

# Friday 7th March

## Exchange 4

12:40

### Policymaking and political leadership for action on urban health / Governance

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Mr Abdoul Doumbia, Enseignant-chercheur, Institut Supérieur de Formation et de Recherche Appliquée (ISFRA), Bamako/Mali

Espace urbain, action publique et inégalités de santé: Bamako au cœur du plan cancer au Mali

Espace urbain, action publique et inégalités de santé: Bamako au cœur du plan cancer au Mali Communication orale Abdoul Karim DOUMBIA Doctorant Anthropologie de la santé Institut Supérieur de Formation et de Recherche Appliquée (ISFRA)/Université de Bamako/Mali Adoumbia2000@yahoo.fr Mots-clés : dynamiques urbaines, action publique, inégalités de santé, plan cancer, Mali. Résumé Ce projet d'article analyse les liens entre dynamiques urbaines et enjeux sanitaires à Bamako à partir du plan national de lutte contre le cancer au Mali. Il vise à montrer comment la politique nationale de lutte contre le cancer telle qu'elle est actuellement mise en œuvre au Mali participe de la reproduction des inégalités de santé entre les populations des zones rurales et urbaines d'une part et à l'intérieur de Bamako entre les quartiers du centre et ceux de la périphérie. La reconnaissance du cancer comme problème de santé publique au Mali, s'est accompagnée de l'élaboration et de la mise en œuvre d'un plan stratégique de lutte contre la maladie, avec Bamako comme espace privilégié pour prévenir, diagnostiquer et traiter la maladie. À travers ce choix de la ville de Bamako où se concentre l'ensemble du dispositif de lutte contre le cancer au Mali, se lit également une tendance à renouer avec une tradition qui remonte à l'époque coloniale. À partir d'une démarche s'appuyant sur l'analyse documentaire et qui allie approches historique et anthropologique, nous avons observé/suivi et mené de entretiens auprès d'un échantillon de patients tirés au hasard à partir des registres disponibles dans les trois structures sanitaires dédiées à la prise en charge au Mali. En plus des patients, d'autres acteurs ont également été approchés afin de recueillir leurs opinions et leur éventuelle participation à la mise en œuvre du plan, à savoir : autorités sanitaires, personnel soignant des structures concernées, ONG d'aide à la prise en charge du cancer, associations de patients et élus municipaux. Il ressort qu'après Chef-lieu de la colonie française du Soudan (actuel Mali), Bamako fut d'abord le siège de l'Administration Centrale Coloniale qui, éprouvée par le besoin de se doter d'un système sanitaire pour prévenir et traiter les Européens des épidémies et autres maladies infectieuses (notamment la peste) qui sévissaient alors au Soudan, mit en œuvre une politique sanitaire qui prévoyait, outre l'hôpital militaire du Point G réservé aux Européens, la construction à travers la ville d'autres établissements sanitaires comme le dispensaire général de l'Aide Médicale Indigène (AMI), l'Institut Central de la Lèpre (ICL) et le Lazaret. Elle traduisait la volonté de l'autorité coloniale d'organiser l'espace selon des critères hygiéniques mais aussi sociaux qui, tout en plaçant les Européens au sommet des collines surplombant la ville fixaient les Indigènes dans la plaine. Devenue capitale de la république du Mali suite à l'indépendance en 1960, Bamako est érigée, en 1978, en une unité administrative composée de six (6) communes, appelée District. Et c'est dans les limites de cet espace que sont aujourd'hui déployés l'ensemble des moyens (service d'hémato-oncologie, unité d'oncologie pédiatrique de l'hôpital Gabriel Touré, centre de radiothérapie, vaccination?), mis œuvre pour prévenir et traiter le cancer. Le choix porté sur l'espace urbain que représente Bamako contribue à ré-produire aujourd'hui une situation d'inégalités d'accès aux soins (déjà connue par le passé) entre populations rurales et celles de Bamako d'une part et à l'intérieur de la ville de Bamako entre les quartiers périphériques et ceux du centre d'autre part. Une situation qui, contrairement à la période coloniale, trouve son explication dans la crise dont souffre l'action publique au Mali en général et en particulier des problèmes liés à la gouvernance en matière de gestion et de fourniture de services publics de santé notamment pour la prise en charge du cancer.

## Exchange 4

12:40

### Policymaking and political leadership for action on urban health / Governance

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Dr Egharevba Matthew, Senior Lecturer, Covenant University

Co-authors: Dr. Eshter Idowu Adenike

#### Governance and urban health challenges in Nigeria: The case of Lagos

Analyzing the role of governance and government policies on urbanization process and how it affects the socioeconomic and healthcare needs of the people is essential to the provision of effective and workable urban health development. While Nigeria is unarguably the most urbanized among African countries and Lagos represent the largest city in Sub-Saharan Africa and one of the seventh largest in the world. Urbanization has been proceeding without the requisite economic growth and increased prosperity that historically accompanied the growth of cities in other regions across the globe. The paper argues that the failure of government to see urban development as an integral part of national development has created a situation where urbanization and its attendant challenges has caught her unaware in spite of the rapid rate of urban growth. The British Broadcasting Corporation (BBC) report (2013) which indicates that 75% (11 million) of the population of Lagosians live in slums despite the urban renewal and city beautification programmes of the government goes to buttress the lack of proper planning, inappropriate policy making, monitoring and coordination in addressing social and environmental challenges associated with urban growth. Consequently, the inability of government at all levels to rise up to the challenges of creating better quality of life for its current urban population as well as bequeathing a healthy environment to the next generations reflects the realities of the country's present state of urban decay. This fact is clearly manifested in the country's human development challenges of increasing poverty, infrastructural decay, poor sanitation, healthcare, housing conditions, crimes, congestion, over stressed facilities and services, incessant flooding, environmental deterioration, poor transportation, unemployment etc. Similarly, Lagos presents a vivid picture of all that is good and bad about urbanization, in that while it creates the vista for vitality, opportunities and openness to new ideas, it is also characterized by the increasing urbanization of poverty, inequality, poor services and infrastructure, and the dehumanizing misery of the urban poor. Using secondary sources of data collection and content analysis, as well as the adoption of multiple sociological theories of development and urbanization, the paper seeks to interrogate the role of government in attaining the Millennium Development Goals (MDGs) targets which has serious implications for addressing urbanization challenges such as creating access to pipe-borne water, sanitation, healthcare, education, housing and infrastructure that can enhance the quality of life of the citizenry. The paper ends with the submission that expanding investment in the urban development coupled with good planning, management of resources, active public participation, accountability and transparency are critical tools for controlling the growth and impact of urbanization on the environment.

## Exchange 4

12:40

### Policymaking and political leadership for action on urban health / Governance

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Dr Ayansina Ayanlade, Researcher, OAU Ife

Co-authors: Oluwatoyin 'Seun Ayanlade

Examining the spatial distribution of Meningitis epidemic: Geo-information approach towards a population health policy in Sub-Saharan Africa

This study aims at examining and mapping the spatiotemporal distribution of meningitis epidemic as a result of climate variability/change, using GIS and Remote Sensing techniques. Nigeria is used as a cased study. Data on meningitis epidemic were obtained from the achieve of National Population Commission Abuja, Nigeria for the periods between 1998 and 2008 (10 years).The data were updated with collection from Nigeria Demographic and Health Survey (NDHS). Also, Nigerian Ministry of Health has compiled consistent statistics on meningitis incidence for the periods. A meningitis distribution map was derived from an environmentally-driven form of predicted probability of epidemic experience as it is in International Research Institute for Climate and Society (IRI) Database.The results showed that seasonality of rainfall and temperature are important determinants of Meningitis Epidemic incidence in the northern part of Nigeria. The distribution of the epidemics has a strong association with the environment especially climate variability. Although meningitis surveillance systems in Nigeria have improved, they still fall short of the sensitivity required to demonstrate incidence changes in vaccinated and non-vaccinated cohorts and complementary approaches may be needed to demonstrate the impact of the vaccines. There is a need, however, for an integrated GIS, and other environmental modeling system, to allow health practitioners as well as policy makers for better management, productivity and profitability.

# Friday 7th March

## Exchange 4

14:00

### Environmental Urban Health

Session title Positive effects of natural environment for human health and wellbeing (PHENOTYPE)

Chair Professor Roderick Lawrence

Professor Roderick Lawrence

Policy implications

Chris Gidlow

Short term effects of green space

Hanneke Kruize

Mechanisms of green space

*No abstracts available*

# Friday 7th March

## Exchange 5

11:00

### Health Protection / Screening and Prevention including vaccs and imms

**Session title** The Vaccs of Life

**Chair** Dr Peter Elton

Dr Peter Elton, Clinical Director for Strategic Clinical Networks for Greater Manchester, Lancashire & South Cumbria

Mrs Angela Spencer, Research Assistant, University of Manchester

Cervical Cancer Prevention: A Study of Mothers and Daughters

*No abstract available*

## Exchange 5

11:00

### Health Protection / Screening and Prevention including vaccs and imms

Session title The Vaccs of Life

Chair Dr Peter Elton

Dr Danielle Ompad, Research Associate Professor, New York University, United States

Co-authors: Sally Guttmacher, Diane Cooper, Ilza Friedman

South Africa is a major transit hub for heroin in sub-Saharan Africa and is a stop for Pakistani heroin on its way to Europe. We are conducting a series of key informant interviews with drug abuse researchers as well as HIV and drug treatment providers in the Cape Town metropole, 12 have been conducted to date. These interviews suggest a well-established population of methamphetamine (known as tik locally) users and a growing population of heroin users. The limited epidemiological data for illicit drug use in South Africa supports these perceptions. Treatment admissions data from the South African Community Epidemiology Network on Drug Abuse (SACENDU) documented an increase in the proportion of treatment seekers reporting heroin as their primary drug of choice in the Western Cape between 2007 and 2011. The consensus was that most heroin users smoke rather than inject or snort. Heroin users are more likely to be from the coloured or white communities, although some key informants reported black heroin users and this is growing among young users. Methadone and suboxone are available for detoxification in public and private clinics. However, methadone maintenance is not free of charge and is only available if one can pay out-of-pocket; key informants noted that methadone is much more expensive than heroin. Most drug treatment programs used the Matrix model, as they were treating mostly methamphetamine users. Drug counselors tended to speak English or Afrikaans, with several key informants noting a need for counselors who spoke Xhosa and other languages. Key informants indicated a need for data about drug users, and particularly heroin users. Little is known about the natural history of heroin use in the South African context. Moreover, there is a lack of data with regard to the utility and cost effectiveness of long-term pharmacotherapy and harm reduction strategies in the South African context. Such data would help guide prevention and intervention efforts and provide evidence to policy makers.

## Exchange 5

12:40

### Maternal and Child Health/Healthy Ageing

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Kimani-Murage

Miss Rosette Mugumya, Long Term Fellow, Makerere University School of Public Health

Co-authors: Joseph KB Matovu, Nazarius M Tumwesigye, Rhoda K Wanyenze

Antenatal Care (ANC) Attendance and Health Facility Delivery among HIV-Positive Women: a cross-sectional survey among clients at HIV clinics in Uganda

**Introduction:** Virtual elimination of mother-to-child transmission of HIV requires a comprehensive approach that combines multiple interventions including antenatal care (ANC) attendance and health facility delivery among HIV-positive women. However, while remarkable progress has been made in ANC attendance and health facility deliveries among women in the general population, few studies have explored the proportions and predictors of ANC attendance and health facility delivery among HIV-positive women. We assessed the predictors of ANC attendance and health facility delivery among HIV positive women in Uganda. **Methods:** We analysed data for 213 HIV-positive women who had ever been pregnant since their HIV diagnosis, as part of a larger study to evaluate the sexual and reproductive health needs of HIV positive individuals. These women were drawn from an overall sample of 659 HIV positive women interviewed at 12 HIV clinics in three districts in Uganda. We conducted multivariate analyses for predictors of utilization of ANC services and facility delivery. **Results:** Nearly half (49.8%, 106 of 213) of the women had the recommended 4 or more ANC assessments during the last pregnancy while 79.3% (169 of 213) delivered at a health facility. At multivariate analysis, the odds of attending all the required 4 ANC visits were higher among the married and the divorced/separated/widowed women than the single women (OR 2.19, 95%CI 1.02-4.70 and OR 2.84, 95%CI 1.16-6.93, respectively). For health facility delivery, further assessment is needed to determine its predictors as this study doesn't yield enough knowledge on it. **Conclusion:** ANC attendance and facility delivery rates in this population are higher than the rates in the general population. However, these rates are still too low to support the realization of virtual elimination of mother-to-child transmission in Uganda. These findings highlight the need for increasing of ANC services and facility delivery among the HIV positive women in Uganda.

## Exchange 5

12:40

### Maternal and Child Health/Healthy Ageing

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Kimani-Murage

Dr Elizabeth Kimani-Murage, Associate Research Scientist, African Population and Health Research Center

Co-authors: JC Fotso T. Egondi; B. Abuya; P. Elungata1; A.K. Ziraba; C. Kabiru; N. Madise

Trends in childhood mortality in Kenya: is the urban advantage sustained?

**Background:** Rapid urbanisation in sub-Saharan Africa has occurred in a context of limited economic growth. This has meant that the majority of urban residents in sub-Saharan Africa now live in slums where living conditions and lack of access to health and social services affect residents' health and wellbeing adversely. Slum health indicators are likely to influence urban and national indicators. This study describes trends in childhood mortality in Kenya and the urban-rural differentials. **Methods:** The study uses two data sources: Kenya Demographic and Health Surveys (KDHS) and data from the Nairobi Urban Health and Demographic Surveillance System (NUHDSS) conducted in two slums in Nairobi. Using data from KDHS conducted between 1993 and 2008, we estimated infant mortality rate (IMR), child mortality rate (CMR) and under-five mortality rate (U5MR) by cohort and urban-rural place of residence at birth from a total of 63,987 live births; 53,013 in rural areas and 10,974 in urban areas. We further analysed urban-rural differences in the key determinants of childhood mortality including adolescent child-bearing, breastfeeding, immunization, childhood morbidity and health seeking, using Measure DHS Stats Compiler. From the NUHDSS data, we limited analysis to an open cohort of 36,952 individuals observed between 2003 and 2010. **Results:** Between survey years, there was a general downward trend in childhood mortality, and a narrowing of the gap in urban-rural differentials. There was a relative change in IMR and U5MR between urban areas and rural areas between 1993 and 2008, with rural areas showing lower rates in 2008, mainly due to a more rapid decline in rural areas. The study also shows that there has been a reduction or reversal in the ratio of various determinants of childhood mortality including adolescent childbearing, median duration of exclusive breastfeeding, child immunization, diarrhoea morbidity and health seeking for childhood illnesses between urban and rural areas all in favour of rural areas. The findings from the two slums also illustrate the downward trend in childhood mortality, although the rates in urban slums remain higher compared to other non-slum counterparts. **Conclusions:** The study shows a decline in childhood mortality overall, and a narrowing gap between urban and rural areas. The narrowing gap between urban and rural areas may be attributed to the fact that most urban residents in Kenya now live in slum areas; with very poor living conditions. To achieve the fourth Millennium Development Goal aimed at reducing child mortality, it is important to address the factors influencing child survival in both rural and urban areas, and to place additional emphasis on the situation of children in urban slums.

## Exchange 5

12:40

### Maternal and Child Health/Healthy Ageing

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Kimani-Murage

Mr Martin Lawless, PhD Candidate, University College Dublin

Co-authors: Dr Mary Codd, Dr Conor Buggy

#### Educational influences on early retirement through disability in Ireland

**Background.** This study examined the relationship between educational attainment and early retirement through disability in the Third Age. **Aims.** To identify and analyse the potential impact of education on decisions to retire early through disability in the 50+ age cohort of the Irish Labour force. **Methods.** Analysis was undertaken of educational attainment of both respondents and their parents using The Irish Longitudinal Study of Ageing (TILDA). The group of interest were those aged 50-75 who had retired early. The sample (n=1,179) was dichotomised on disability. Examination of interviewer-recorded information on background influences determining early retirement decisions included the following factors; age, gender, education, family and socio-economic circumstances. **Results.** Analysis suggests that there were significant influences established in factors examined, with higher frequencies of females retiring earlier. Men with lower educational attainment and from a non-professional background were more likely to retire early through disability. Differences between education groups in those with and without disability in the early-retired cohort showed higher frequencies of early retirees with lower educational levels (40% vs 25%). Non-professional disabled respondents with less week-educated parents had lower educational attainment than non-disabled respondents (56% vs 41%). **Conclusion.** Among TILDA participants, educational attainment appears to influence early retirement decisions regardless of disability. Previous employment sector and income were also significant factors. Behaviour, lifestyle and employment choice is influenced by educational level and this may also limit cognitive ability to process health information. Factors affecting the education-disability relationship could include parental education, employment status and socio-economic characteristics.

# Friday 7th March

## Exchange 5

12:40

### Maternal and Child Health/Healthy Ageing

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Kimani-Murage

Dr Janice Tan, Foundation Doctor, Royal Bolton Hospital

The Assessment and Prevention of Falls in Elderly People- An Audit

*No abstract available*

# Friday 7th March

## Exchange 5

14:00

### Health Protection / Screening and Prevention including vaccs and imms

**Session title** Infection Prevention and Control: Now wash your hands!

**Chair** Mr Peter Morgan

Mr Peter Morgan, Infection, Prevention and Control Lead-nurse, Bridgewater Community Healthcare NHS Trust

Rick Catlin, Aintree University Hospital NHS Foundation Trust

*No abstract available*

# Friday 7th March

**Exchange 6**  
**11:00**

## **Transdisciplinarity in urban health**

|                      |  |
|----------------------|--|
| <b>Session title</b> | Urban Life Support System: are cities fit for purpose?   |
| <b>Chair</b>         | Dr David Haley, Senior Research Fellow, Director - Ecology in Practice, Manchester Metropolitan University |

Dr David Haley, Senior Research Fellow, Director - Ecology in Practice, Manchester Metropolitan University

Urban Life Support System: are cities fit for purpose?

*No abstract available*

# Friday 7th March

## Exchange 6

12:40

**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Hedayat Javidi and Hella Buchmann

Miss Rebecca Salt, Student, University of Manchester

Patient Participation Groups: How can they make a difference in health service provision?

Patient Participation Groups (PPGs) have been running since 1972 despite many changes of the structure of primary health care provision. The aim of the PPG is to consult regularly with patients who use primary care facilities for feedback and suggestions in order to improve and tailor primary care to suit the population it serves. As a third year student of the University of Manchester I have been asked to undertake a project entailing a literature review to examine this subject, and creation of a lay document using patient input with a view to improving the efficacy of the PPG at the GP practice I have been assigned to.

# Friday 7th March

## Exchange 6

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Hedayat Javidi and Hella Buchmann

Miss Wan Ru Shue and Konstancja Tadrak, Students, University of Manchester

Audit on Lithium Maintenance Therapy

Background - Lithium is widely used to treat mania and for the prophylaxis of bipolar disorder. At times, it is also used as adjuvant therapy for depression resistant to other therapeutic modalities. Lithium has been shown to effectively prevent the risk of relapse of bipolar, manic, and depressive episodes relative to a placebo, by 20%, 10% and 7% respectively. Despite its effectiveness, lithium has a narrow therapeutic window of serum levels between 0.4-1.0mmol/L. Therefore, it is essential to monitor patients to prevent lithium toxicity of serum levels above 1.0mmol/L. High serum lithium levels have a toxic effect on thyroid and renal functions, thus these parameters have to be regularly tested in conjunction with serum lithium levels. Standard - The expected standard for this audit was set at 100% as non-compliance may have severe repercussions on patients' co-morbidities, including increased risk of mortality. The NICE Guideline CG38 Bipolar Disorder set the criteria for this audit. Section 1.6.2.10 'Monitoring Lithium' of the guideline includes the monitoring of serum lithium, thyroid function, and renal function. Methodology - This audit was carried out at The Vallance Centre (Cunningham, Barrett and Shroff GP surgery) in Manchester. A computer search was performed on the medical records of all patients within the practice. Medical records of patients who were undergoing lithium maintenance therapy were scrutinised for standard tests that had to be done to monitor lithium. Deviation from the set standard of tests in 1 year with respect to each patient was plotted onto a graph. Percentage adherence of patients to tests done for the set criteria was deduced. Results - 5 patients were identified to have been undergoing lithium maintenance therapy at the Vallance Centre at the time of the audit in early January 2013. 4 of them (80%) had their renal function monitored as per set criteria. However only two (40%) of the patients were followed up adequately with respect to their thyroid function tests and only one (20%) was followed up appropriately in terms of serum lithium levels. Action plan - In view of these results, we concluded that the standard for the audit was not met. We propose to introduce joint bookings for all the blood tests on a single day in order to improve structure and establish a more systematic manner of monitoring these patients. Furthermore, we recommend that this audit should be performed every 6 months.

# Friday 7th March

## Exchange 6

12:40

**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Hedayat Javidi and Hella Buchmann

Francis Collett-White, Student, University of Manchester

Comparing health inequalities in Manchester: mid-19th century and 21st century

*No abstract available*

## Exchange 6

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Hedayat Javidi and Hella Buchmann

Hedayat Javidi and Hella Buchmann, Student, University of Manchester

The role of Shared Care in the management of drug users

Objectives: The significant economic and social cost of drug misusers to the UK makes their treatment pivotal to the Government's drugs strategy. Recent guidelines on the clinical management of drugs misuse emphasise a central role for GPs, and the principle of 'Shared Care' is advocated as the mechanism by which this role may be fulfilled. Our objectives were: (1) To review the evidence base for the effectiveness of Shared Care and (2) to evaluate the potential barriers to its implementation as well as possible solutions. Methods: The criteria for conducting this review included: - Types of participants: Adult patients (19 years old or over) with opiate addiction. - Intervention: Shared care Drug service involving GP, Pharmacists and Community Drug and Alcohol Team. - Comparison: Treatment provided solely by secondary care service. - Types of Outcome Measures: Methadone reduction/discontinuation, The databases used to identify relevant literature include: - Medline 1946 to July Week 1 2013; - Embase 1980 to 2013 Week 27 The search terms that were used in the search strategy include: - Shared Care or GP Shared Care or General Medical Practitioner Shared Care or Shared Primary Care; - Opiate or Drug misuses or Drug users or Drug addicts Substance misuses The search was limited to adults aged 19 years and over. The Shared Care model was also examined in Rochdale and Manchester in order to suggest barriers to its universal implementation in addition to potential improvement strategies. Results: The search yielded 43 results, the titles and abstracts of which were analysed to identify relevant studies. Only 3 of these studies were found to address the aforementioned criteria. The first study used questionnaires to qualitatively assess the efficacy of Shared Care. The results showed a modest increase in the number of patients treated with methadone (15.7%) during a 2 year period. In terms of methadone dosage reduction, it was shown that physicians thought 20.1% of patients on the program had discontinued their methadone usage as opposed to pharmacists who deemed this figure to be just 5.8%. The other 2 studies demonstrated the poor uptake of Shared Care with just 26 out of 120 health authorities having Shared Care arrangements in place. Conclusion: This review has shown that despite the general consensus that Shared Care poses more advantages than disadvantages and has been shown to reduce methadone usage in 1 study, the general uptake has been quite poor nationally. However, given the limited and outdated nature of the literature and the reforms that have since been introduced to the Health Care system a more up-to-date, in depth report is needed to evaluate the current efficacy of Shared Care.

## Exchange 6

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Hedayat Javidi and Hella Buchmann

Benedicte Brynsrud Sjøflot, Student, University of Manchester

Living with HIV in a Poor Urban Environment: a Case Report from the Slums of Bangkok

**Background:** This case report describes a patient's experience of living with HIV in a Bangkok slum, barriers to treatment, and how these were overcome with help from a local NGO. In Thailand, all Thai citizens are entitled to free ARV treatment, but there are still important barriers to the treatment and management of HIV, especially in slum communities. Working with the Human Development Foundation (HDF) in the Khlong Toey slums of Bangkok, I met a 45 year old man (Mr B), who had lived with HIV for about 25 years. The information obtained in this case report comes from an interview conducted in his home on 04/04/2013. **History:** Mr B became infected with HIV at around the age of 20, working as a bartender. He had multiple sexual partners and abused alcohol and drugs, not thinking about HIV risks. By the end of the 1990s, he noticed frequent lung infections, fevers, headaches, and skin lesions. He started to lose his eyesight. As a result of his disability, fatigue, and frequent illness, B had to leave his job. He was diagnosed in 1999, but access to healthcare was limited due to difficulty getting to hospital, the cost of treatment and the perceived stigmatisation by health personnel. His wife, also HIV positive but asymptomatic, worked to maintain some income for the family. His home, a shack near a canal, started to deteriorate. Although he thinks his neighbours could have helped, he had little instrumental support as he tried to hide his condition. **Interventions:** In 2004, B's wife heard about HDF through friends. HDF is a multi-focused organisation based in the Khlong Toey slum, working within education, emergency response, and health for Bangkok's poor. The HDF helped Mr B in many ways. Medical support included help with access to treatment (transport to hospital, registration for the ARV programme, advice on taking medication), and monthly checkups by HDF staff with physical examination. He received instrumental support in the form of food donations and home repair, and emotional support in terms of counselling with HIV+ staff. **Outcome:** Nine years after beginning treatment with ARV and receiving help from HDF, Mr B has a steady CD4 count, and symptoms of secondary conditions are being treated. He is almost completely blind, and is often tired. **Main lessons:** For Mr B, additional support was needed for adequate access and adherence to treatment and preserving quality of life. Increased funding is needed to expand care beyond a legal right to drug treatment. More research is needed on how to enabling HIV+ individuals to cope with secondary conditions. Although this case report is the story of one person, the mentioned comprehensive approach to facilitate the lives of people with HIV is likely to be applicable to other poor urban environments. **Keywords:** HIV, AIDS, poverty, slum communities, treatment, management, coping, social support, Thailand, Bangkok, Human Development Foundation.

# Friday 7th March

## Exchange 6

14:00

### Maternal and Child Health

Session title Child Abuse: A Tale of Two Cities

Chair Professor Arnoud Verhoeff and Mrs Chris McLoughlin

Professor Arnoud Verhoeff, Department of Epidemiology & Health Promotion, Public Health Service Amsterdam, University of Amsterdam

The Amsterdam child abuse case in day care centers: A study of sexual abuse in very young children

*No abstract available*

# Friday 7th March

## Exchange 6

14:00

### Maternal and Child Health

**Session title** Child Abuse: A Tale of Two Cities

**Chair** Professor Arnoud Verhoeff and Mrs Chris McLoughlin

Mrs Chris McLoughlin, Service Director, Children's Safeguarding & Prevention, Services to People, Stockport Metropolitan Borough Council

Learning from Serious Case Reviews of Child Abuse in day care settings

*No abstract available*

# Friday 7th March

## Exchange 7

11:00

### Citizens' Engagement / Engaging the Public in looking after health

**Session title** Patient and Citizen contribution to their own health through their health-records

**Chair** Dr Brian Fisher OBE

Patients of Haughton Thornley Medical Centre, PPG medical practice

Practice partnerships

# Friday 7th March

## Exchange 7

11:00

### Citizens' Engagement / Engaging the Public in looking after health

**Session title** Patient and Citizen contribution to their own health through their health-records

**Chair** Dr Brian Fisher OBE

Toto Gronlund, Head of Patient and Public Partnerships, NHS CFH

Engaging with the public

# Friday 7th March

## Exchange 7

11:00

### Citizens' Engagement / Engaging the Public in looking after health

**Session title** Patient and Citizen contribution to their own health through their health-records

**Chair** Dr Brian Fisher OBE

Dr Brian Fisher OBE, Director of PAERS

Patient access to medical records System

# Friday 7th March

## Exchange 7

12:40

### Citizens' Engagement / Engaging the Public in looking after health

Session title ABSTRACT PRESENTATIONS

Chair Mr Chris Yianni

Mr Chris Yianni, Senior Lecturer, Manchester Metropolitan University

Run for your health! The civilising process, urban running and charity.

This presentation focuses on my PhD research into sport and social change with an emphasis on running. I will show how the purpose of running has changed with the evolution of Western Civilisation. The increasing popularity of running has seen a proliferation of races / events in all major cities in the UK and these events have become inextricably linked to charitable fundraising. This popularity has fed neatly into the governmental agenda encouraging citizens to maintain healthy lifestyles. I draw the links between these calls that are framed as a citizen's obligation to maintain good health and the seemingly increasing obligation for citizens to donate to charity in order to maintain the welfare system. Aims To trace the history of running and its change in focus To assess the choices runners make when deciding on a particular charity To explore the nature of obligation to health and society To investigate how running contributes to the fulfilment of any obligations Design This largely desk based research was initially informed by twelve short interviews, with runners, that sought to ascertain why they ran, if they raised money for charity and if they did, why they chose their charity. Results All of the interviewees cited concerns with health and fitness as reasons for taking up running. Most had raised money for charity and their choices were largely linked to personal attachment to a particular charity. Conclusions The initial interviews lead to more in depth research into the nature of charitable giving and concepts such as deserving vs. non-deserving recipients of charity. Charity is increasingly visible in today's Western society and increasing health concerns coupled with the phenomenon that everyone should employ the philanthropic characteristics of a "good society" has seen a greater public engagement with activities that will fulfil the duty to maintain good health.

# Friday 7th March

## Exchange 7

12:40

### Citizens' Engagement / Engaging the Public in looking after health

Session title ABSTRACT PRESENTATIONS

Chair Mr Chris Yianni

Dr Sophaphan Intahphuak, Lecturer, School of Nursing, Mae Fah Luang University

Co-authors: Sombat Haesakul, Samuhavitayaa

#### Mechanism of Religion on Community Movement for Management Diseases from Solid Waste

The amount of solid waste increases each year as a result of urbanization. The solid waste left on the ground may be breeding places for rat mosquitoes flies and cockroaches that are the vector of communicable disease such as diarrhea and parasite diseases; however, there was little public cooperation in the segregation of solid waste due to the lack of awareness. This study aims to decrease diseases of the digestive system and encourage all sectors in the community to participate in the development of a suitable model to reduce environmental waste by emerging the cultural context that bares a close relationship with Buddhism through faith and merit-making. Participatory action research was performed in Chiang Mai, Thailand. The monks, involved stakeholder in the entire waste management system, helped publicize the campaign on Buddhist holy days, religious ceremonies and they also taught people to be responsible for the garbage problem in the community. As for the garbage brought for merit-making, they were sold and the money was used to help build the pavilion. It was found that people could separate recycle garbage and the diseases of digestive system slightly decreased. The results obtained suggest that the religion is not only the moral center of the community, it is also the center of community empowerment to consciousness in waste management and their health.

## Exchange 7

12:40

### Citizens' Engagement / Engaging the Public in looking after health

Session title ABSTRACT PRESENTATIONS

Chair Mr Chris Yianni

Mr Duminda Guruge and Dr Manuja Perera, Senior Lecturer in Health Promotion, Health Promotion Unit, Department of Biological Sciences, Faculty of Applied Sciences, Rajarata University of Sri Lanka

Co-authors: S. D. Dharmarathne, W. Gunathunga

A community based health promotion intervention to address determinants of low birth weight: A process evaluation

**INTRODUCTION** For the past three decades, low birth weight prevalence stagnated around 16%-17% in Sri Lanka. Many factors affect the birth weight during pregnancy. Maternal nutritional status, mental wellbeing and exertion; indoor air pollution, exposure to environmental tobacco smoke and household care practices are some modifiable factors. Present study is the stage I process evaluation of a community based health promotion intervention to modify antenatal determinants of low birth weight. Aim of this component of the research was to evaluate the process of intervention.

**METHODS** The household level interventions introduced were self monitoring mechanisms of determinants (Happiness calendars, nutrition diaries, tools to monitor care from the spouse and family), listening to lullabies, baby rooms and increased environmental interactions (bird watching, night sky observation etc.). Evaluation was conducted three months after the initiation of intervention. According to LQAS, 90 households were randomly selected (30x3). Check lists were used to evaluate coverage. In-depth and key informant interviews were used to explore changes at household level and suggestions for improvement. Decision rule tables were used to decide on coverage and qualitative data were analyzed using thematic analysis. **RESULTS** Intervention with the highest coverage was listening to lullabies (60%), followed by preparing baby rooms (55%), monitoring partners' support (50%) and increased interactions with environment (50%). Qualitative interviews revealed self monitoring improved the capacities of mothers to modify determinants of low birth weight. Strengthening the intervention by adding a hotline to provide technical support was suggested. **CONCLUSION** Self monitoring mechanisms incorporated into health promotion interventions enhance household level capacities to modify determinants of low birth weight. Completeness of the process was observed to be marginally higher than 50%.

# Friday 7th March

## Exchange 7

12:40

### Citizens' Engagement / Engaging the Public in looking after health

Session title ABSTRACT PRESENTATIONS

Chair Mr Chris Yianni

Dr Ogunleye Adetona Comfort Iyabo and Setsoafia, C.Y., Lecturer, University of Cape Coast

The Impact of Poor Waste Management Practices of the Residence of Sekondi- Takoradi Metropolis, Ghana

A good sanitary condition is fundamental to human health and economic development. Therefore a healthy urban environment is expected fast track a city's development process. However, improper refuse disposal may create breeding grounds for mosquitoes which easily spread diseases a health risks to people. The Ghanaian governments attempts at managing refuse in Ghana and Sekondi-Takoradi metropolitan area, in order to meet the Millennium Development Goal of a healthy urban environment and development seems elusive. This research was therefore undertaken to examine and explain the persistently poor sanitation conditions and its implications on the residents of Sekondi-Takoradi metropolitan area, Ghana. Three residential areas in the suburb of Sekondi-Takoradi metropolitan area were selected because of their closeness to the Central Business District. 300 copies of questionnaires were administered to residents and non residents in these communities to highlight people's awareness and perception of the sanitary conditions in these communities. The study revealed differences in sanitation behavior among residents from the various suburbs, challenges faced by the waste management providers. Generally, the environmental sanitation condition in the Sekondi-Takoradi metropolis is poor. This may due to expensive and inefficient services provided by the private waste management companies which discouraged majority of the respondents from prioritizing them. The poor environmental conditions is a challenge to social and economic development because people lose time and money to due to ill health, low savings and less investment and even lost of lives. There is a need for intensive public education to promote a positive attitude towards environmental sanitation in the Sekondi-Takoradi. Additionally, the prices charged by the refuse collectors should be reviewed.

# Friday 7th March

## Exchange 7

14:00

### Citizens' Engagement / Engaging the Public in looking after health

**Session title** Community and public engagement

**Chair** Dr Brian Fisher OBE

Dr Brian Fisher OBE, Director of PAERS

Community development and health protection through social capital and promoting public engagement

Colin Miller

Lee Kirby

Lee Kirby's Film with the Bangladeshi men in Hyde

Paul Lee, Fellow, Royal Society Public Health, FRSPH FCIOB FASI MRICS MIOE and Chair, Cornishway Patient Group

Criticism, Listen, Learn, Engage

## Exchange 8

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Mr Michael Bourke

Mr Chee Chung Low, Student, University of Manchester

Co-authors: Dr. Arun Mohindra

Diagnostic electrocardiogram (ECG), blood pressure (BP) review, and thromboprophylaxis in patients with atrial fibrillation

**BACKGROUND:** In 1999, strokes were responsible for over 56,000 deaths in England and Wales. In a year, over 100,000 people suffer a first or recurrent stroke, with a million currently living with the consequences of stroke. As atrial fibrillation (AF) increases the risk of suffering a stroke by 5-fold, measures should be undertaken to mitigate the incidence of stroke in AF patients. This is especially important with the rising trend in the prevalence of AF in the next five decades. **METHOD:** A retrospective audit was conducted on 76 patients on the AF register of the Practice. The audit standard set was at 100%. All of these patients should have had a diagnostic ECG, a BP review in the last 12 months, and should have received appropriate thromboprophylaxis treatment according to their CHA2DS-VASc scores and current clinical guidelines. Data was extracted from the practice's EMIS Web system. **RESULTS:** Out of the 76 registered patients, only 78% (60) of them have had a diagnostic ECG for AF, and 96% (73) of them had their BP reviewed in the last 12 months. Hence, the audit standard was not met for these two criteria. Nonetheless, 100% of registered AF patients received the appropriate thromboprophylaxis based on their stroke risk and clinical guidelines.

**CONCLUSION:** The Practice performed well according to the guidelines with regards to providing the appropriate prophylaxis treatment for the patients. However, measures should be taken to improve the diagnosis of AF in patients, and the Practice should have an organised system to monitor its patients appropriately in terms of stroke risk factors, and this includes BP monitoring. Healthcare professionals in primary care should be aware of the current AF guidelines as this would help reduce the incidence of stroke, and subsequently the morbidity and mortality rate of AF patients across the nation.

# Friday 7th March

## Exchange 8

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Mr Michael Bourke

Miss Katy Ashton, Student, University of Manchester

Do I count? Reflections of an inmate at HMP Manchester

The short poem I have submitted is written from the perspective of an inmate of Her Majesty's Prison Manchester. I visited the prison as part of a community based education programme at the University of Manchester and used this as the focus of an SSC on narrative based medicine and creative writing. I spent most of my time at the prison observing the consultations between the locum GPs and the inmates and I also interviewed a twenty-seven-year-old inmate. It is this person whom the poem is based on. The overall impression I gained from my visit was that inmates were not being listened to. I therefore decided that it was an appropriate context on which to base my assignment for narrative based medicine. The healthcare delivery I witnessed in the prison was not of equal quality to the healthcare I have witnessed in GP practices in the Manchester area. Unlike GP practices where patient's accounts are generally believed to be true and medicines are prescribed accordingly, the prisoner's accounts seemed to be regarded as exaggerated or untrue. Although the prison environment places extra demands on the doctors that work there, empathy and compassion still needs to be shown towards prisoners. Undoubtedly doctors come under additional emotional pressure when dealing with prisoners and it is possible that they need further training to ensure that a more patient centred practice is integrated into the prison healthcare system. Reform to the NHS to provide quality healthcare should take into account all groups in society, including the most marginalised. Prison inmates may not be regarded as a significant social group but those without a voice are the very people that NHS professionals need to show special consideration to.

**Exchange 8****12:40****A Perspective from Fresh Minds****Session title** ABSTRACT PRESENTATIONS**Chair** Mr Michael Bourke

Miss Prasheena Naran, Student, University of Manchester

**The Cost of Living with Rheumatoid Arthritis and Osteoarthritis**

Musculoskeletal disorders (MSD) lead to many problems; not only for the individual affected on a personal level, but also regarding productivity at work. The disabilities and additional problems associated with musculoskeletal disease are the commonest cause of work-limiting health problems, benefit claims for ill health and absence from work in the UK; comprising 55% of all job-related illness. Half of those affected with rheumatoid arthritis (RA) will be declared 'work disabled' within 3 years of diagnosis. Chronic disease is imposing an increasing burden on the UK health care system and this, combined with the unstable economic climate and increasing job instability indicates that the impact of MSD on an individual's employment status is something that needs to be managed effectively, immediately. With more strategic and standardised management we can ensure that MSDs are no longer associated with loss of productivity and a decline in independence; ensuring a higher motivational level to work within this cohort. Disease-modifying Antirheumatic drugs (DMARDs) have changed the course and outcome of RA, and if used alongside a lifestyle modification strategy, outcome could potentially be further improved, and this disease not so 'crippling' on affected individuals and upon society. The costs of these two diseases of those affected will be discussed through this report, with the aim of increasing awareness of the impact of RA and OA on the individual, the economy and the NHS.

**Exchange 8****12:40****A Perspective from Fresh Minds****Session title** ABSTRACT PRESENTATIONS**Chair** Mr Michael Bourke

Mr Michael Bourke, Student, University of Manchester

Co-authors: Paula Whittaker, Arpana Verma

Are dietary interventions effective at promoting increased fruit and vegetable consumption amongst overweight children?

**Introduction:** Childhood obesity is now a global epidemic and the incidence continues to increase. Dietary interventions and nutritional education are possible options to manage childhood obesity. Restrictive diets can result in negative outcomes, and it may be more apt to encourage children to consume more fruit and vegetables, and thereby develop a healthier attitude towards food.

**Method:** Pubmed and Ovid Medline were used to search the literature using keywords. Studies published in English were included. Studies were included if the sample only included overweight children and adolescent and the intervention included a dietary component, a comparison group and measured daily consumption of fruit and vegetables. **Results:** 38 studies were found on the initial search. 4 studies fulfilled the inclusion criteria. One further study was found on cross-checking the references. Total of 5 studies with 7 interventions was included. Only one intervention reported a positive significant increased consumption of fruit and vegetables. **Discussion:** More research need to be carried out in this area before it can be fully evaluated, especially intervention that only target children who are already obese and restrictive diets compared to healthy food promotion diets. This review may highlight that in order to change obesogenic factors such as diet, interventions will need to take a holistic approach and target changes in different aspects of children's lifestyles and their surroundings.

**Exchange 8****12:40****A Perspective from Fresh Minds****Session title** ABSTRACT PRESENTATIONS**Chair** Mr Michael Bourke

Mr Ali Hashmi, Student, University of Manchester

Prisoners and the flu vaccine

Objective: To compare, contrast and identify practice associated with influenza vaccination uptake in the prison environment. Design: We identified the types of vaccines offered, when they were given, what the percentage uptake is, who they were given to, who was excluded and why. Moreover, we explored what health promotion interventions were implemented during the flu vaccination season and any other elements of good and bad practice. The information obtained from the healthcare professionals at the prison medical centers was compared to national figures of flu vaccination uptake for the same time period, that is, the flu vaccination season 2013/2014. The study was conducted in four prisons in the northwest of England. It involved interviewing the chief medical officer, the pharmacist, the GP and the nurses. The information was recorded on a pre-prepared questionnaire and the questions were asked in the same order in each prison. Setting: The medical health center in four prisons in the northwest of England: HMP Forest bank, HMP Manchester, HMP Buckley Hall and HMYOI Hindley. The interviews were conducted just after the flu vaccination season between January 2014 and February 2014. Main outcome measures: Influenza vaccination uptake, the demographic that is offered the vaccine and health promotion during flu vaccination season.

## Exchange 9

12:40

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor Jamie Pearce

Ângela Freitas, Researcher, University of Coimbra

Co-authors: Paula Santana, Claudia Costa, Adriana Loureiro, Ricardo Almendra

Avoidable mortality amenable to health promotion and prevention: 20-year trend

**Introduction:** In the 1970s, Rutstein et al identified a cluster of causes of death that were theoretically avoidable through preventive or curative interventions (respectively, those that were amenable to health promotion or to medical care). Hence, analysis of them enables us to study the effectiveness of health service interventions and their impact upon the health of populations. In recent decades, the number of avoidable deaths amenable to healthcare has declined, but those amenable to health promotion and prevention have increased as a result of unhealthy lifestyles.

**Aim:** This study aims to identify the geographic distribution of AM amenable to health promotion and prevention, and its association with sociomaterial deprivation. **Data and Methods:** A transversal ecological model was used to analyse AM amenable to health promotion, according to Nolte's (2004) list of causes of death. The analysis was carried out at the level of the municipality in three representative five-year periods from the last 20 years. The indicator used was the smooth standardized mortality ratio (sSMR), constructed through the application of the Bayesian hierarchical model proposed by Besag, York & Molliè (BYM). The relative risk associated to sociomaterial deprivation was also calculated and operationalized through the application of a regression model. This indicator was constructed from three census variables relating to education, employment and housing: illiteracy, unemployment and houses without toilets respectively, based upon the Carstairs & Morris method (1991). **Results:** AM amenable to health promotion shows a similar geographic pattern over the last 20 years, with the south and municipalities in the north presenting the highest scores. However, it has increased in the central municipalities of the Metropolitan Areas. In fact, over half the Portuguese population (47%) resides in municipalities whose sSMR increased between the first and third five-year period analysed. The central coastal strip is the region where the indicator has decreased most markedly. At present, there is no urban/rural pattern, although there was greater incidence of these causes of death in urban municipalities in the first period. There is an association between AM amenable to health promotion and prevention, and sociomaterial deprivation in the last 20 years. In the last five-year period (2006-10), the relative risk was 3%, both for the total (IC95%: 1.02-1.05) and for men (IC95%: 1.01-1.04) while it was 4% for women (IC95%: 1.02-1.06). **Conclusion:** This analysis is very important for the preparation of a local health profile, and particularly for the planning of health activities.

## Exchange 9

12:40

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor Jamie Pearce

Dr Caroline Kabiru, Research Scientist, African Population and Health Research Center

Co-authors: Robert P Ndugwa, Blessing U Mberu

Documenting progress in attaining MDG 7: A look at changes in the health and wellbeing of young urban slum dwellers in Nairobi (Kenya) between 2000 and 2012

**Aims:** An estimated 60-70% of urban residents in sub-Saharan Africa live in slums. About a third of these slum dwellers are aged 10-24 years. Studies have shown substantial inequalities in health and education between young people living in slums and those in non-slum urban areas. In line with MDG 7, Target 7D, substantial efforts have been made to improve living conditions in urban slums. However, the extent to which these investments have improved the wellbeing of young people is largely unknown, partly due to the lack of relevant data. This study examines changes in educational, sexual and reproductive health (SRH), and behavioral indicators among young people in urban slums in Nairobi (Kenya) between 2000 and 2012.

**Design and setting:** Data are from the Nairobi Cross-sectional Slums Surveys conducted in 2000 and 2012 (NCSS 1 and 2, respectively) and the 2008/09 Kenya Demographic and Health Survey. NCSS 1 was conducted among a randomly selected sample of 3256 women aged 15-49 years and 1683 males aged 12-24 living in slums. NCSS 2 was conducted among a random sample of 4240 women aged 12-49 years and 2377 males aged 12-54. This study reports on data from young people aged 12-24. Descriptive and multivariate statistics are used to examine changes in educational, SRH and behavioral indicators, and to assess associated factors.

**Participants:** In 2000, 3617 12-24 year olds were interviewed (47% male). In 2012, 2765 young people (29% male) were interviewed. **Results:** In 2012, 52% of males and 49% of females had secondary or higher education compared with 34% of males and 28% of females in 2000. However, slum dwellers had lower educational attainment than youth living outside of slums. Data show a delay in sexual initiation and childbearing among young people in slums. For example, in 2000 19% of 15-17 year olds had begun childbearing compared with 9% in 2012. However, the onset of sex and childbearing occurs earlier in the slums compared to Nairobi as a whole. Substantial gains in contraceptive use were noted in 2012 and compared with 2000, fewer young women reported unintended births in 2012. Although there was a decline in the proportion of young people reporting substance use, about one in ten males report drunkenness and illicit drug use in 2012 and substance use was considerably higher among orphaned youth. **Conclusions:** Notable improvements in educational attainment and SRH indicators (particularly contraceptive use), and declines in substance use were observed between 2000 and 2012. These changes reflect, in part, greater investments in improving services and living conditions in slums. However, substantial inequalities exist between slums and non-slum areas and in slums there are pockets of youth with heightened vulnerability (e.g. orphans). Indicators of youth health and wellbeing in urban slums will increasingly drive national indicators as urban populations grow. Thus, existing interventions in slums should be sustained and scaled up.

## Exchange 9

12:40

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor Jamie Pearce

Mrs Natalie Riedel and Heike Köckler, Research Associate, University of Wuppertal

Evaluating noise action planning from a social epidemiological viewpoint

**Background:** According to the EU Environmental Noise Directive (END, 2002/49/EC), noise action planning is intended to enhance environmental health. As highlighted by conceptual frameworks of the environmental justice debate (e.g. [1]), people's health chances are influenced by an interplay of multiple stressors and resources in multiple societal and ecological contexts. However, noise action planning is designed as a sectoral environmental planning instrument insensitive to the social determinants of inequities in health. For this reason, this contribution ventures some strategic thoughts on how to evaluate noise action planning from a social epidemiological viewpoint.

**Approach:** Social epidemiology can inform planners and decision makers about the potential effects their interventions may have on both population health and health inequity. This means interventions are subjected to two criteria ([2]): 1. Does the intervention reduce (or increase) the overall exposure level in the general population? Does the exposure distribution curve shift towards less or more exposure? 2. Does the intervention reduce (or increase) social inequalities in exposure (and health)? Does the exposure distribution curve take on a different shape because changes in exposure level vary by social position? As will be demonstrated by exemplary scenarios in the context of noise action planning, these two criteria may fall apart: Deviations from 'mean' noise exposure levels and 'mean' intervention effects are rather likely as long as there are inequalities in urban societies and unequal constellations of multiple stressors and resources in urban (neighbourhood) contexts. Recurring to social epidemiological arguments on prevention strategies, it appears that the distributive outcome of a political process such as noise action planning is also structured by unequal power relations, accountabilities, and agency among residents, politicians, and planners. **Conclusions:** By integrating the social epidemiological population perspective in 'spatial' environmental planning, sectoral instruments like noise action planning could be transformed into a more socially inclusive planning practice addressing multiple stressors and resources in its target areas. When preparing political decision making, the scenarios could be used to identify environmentally unjust settings, thereby making it easier for planners to convince in political arenas and to spend financial means effectively as well as efficiently. **References:** [1] Gee, G.C. and Payne-Sturges. D.C. 2004. Environmental Health Disparities: A Framework Integrating Psychosocial and Environmental Concepts. In: Environmental Health Perspectives 112 (17), 1645-1653. [2] Benach, J., Malmusi, D., Yasui, Y., Martínez J.M., Muntaner, C. 2011. Beyond Rose's Strategies: A Typology of Scenarios of Policy Impact on Population Health and Health Inequalities. In: International Journal of Health Services 41 (1), 1-9.

## Exchange 9

12:40

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor Jamie Pearce

Professor Jamie Pearce, Professor of Health Geography, Centre for Research on Environment Society and Health (CRESH), University of Edinburgh

Co-authors: Catherine Tisch, Richard Mitchell, Niamh Shortt, Elizabeth Richardson

Environmental justice, air pollution and health inequalities in the European Union

Aims: Recent work has emphasised that an 'environmental justice' framework can contribute to work in the field of spatial health inequalities. This approach offers opportunities for identifying the unequal availability of environmental pathogens and salutogens, the social and political processes underlying this arrangement, and the implications for health and wellbeing. This study adopts an environmental justice framework to examine inequalities in particulate and ozone air pollution across regions of the EU in 2006 and 2010. The implications of these geographical trends for spatial inequalities in health are examined. Design: EU-wide gridded population distribution data as well as short- and long-term indicators of particulate matter (PM10) and ozone (O3) were used to calculate population-weighted average concentrations for NUTS2 and NUTS3 regions for 2006 and 2010. Regions were divided into quintiles according to either (i) the air pollution measure or (ii) an area-level measure of socioeconomic status (GDP per capita, measured as Purchasing Power Standards per inhabitant) and for each quintile summary pollution statistics were calculated. Setting: NUTS regions across the EU Results: There was an overall reduction in mean air pollution concentrations over the period. However, the reduction was not consistent across all NUTS regions - for some areas there was an increase or little change in mean pollution levels whereas for other areas there was a large fall. Geographical inequalities: Between 2006 and 2010 there was a modest reduction in geographical inequalities in PM10; the ratios of the highest to lowest quintile for the two PM10 indicators fell. For O3 the evidence was more mixed; there was an indication that geographical inequalities have tended to increase. Socioeconomic inequalities: Mean PM10 levels were consistently around 30% higher in the most socioeconomically disadvantaged compared to the least disadvantaged areas although this trend was non-linear. Whilst PM10 concentrations reduced between 2006 and 2010 in all socioeconomic quintiles, socioeconomic inequalities have remained consistent. For O3, concentrations were consistently around 30% higher in the most socioeconomically disadvantaged areas for the long-term indicator. Conclusions: Whilst there is encouraging evidence demonstrating reductions in overall levels of air pollution across the EU, these advances have not been shared equally across all regions. Regional air pollution inequalities in the EU have narrowed slightly for short- and long-term PM10, remained constant for short-term O3, and widened for long-term O3. Mean PM10 concentrations and long-term O3 concentrations were higher in the most disadvantaged areas compared to the least disadvantaged areas. This unequal burden may partially account for the well-established social gradient in health across areas and social groups in the EU.

# Friday 7th March

## Exchange 9

14:00

### Urban Mental Health

Session title Mental Wellbeing in Cities

Chair Professor Jutta Lindert

Professor Jutta Lindert, Professor of Public Health, University of Emden

Co-authors: Claudia Stein

Background: The concept of subjective well-being is intended to imply a positive, thriving life and is linked to aspects of health. The attempt to measure wellbeing in cities is relatively recent. Aims: The aim of this review is to give an account of measurement scales with potential use in individuals aged >15 and to evaluate practical (e.g. number of items, time to complete) and psychometric components (e.g. validity, reliability). Methods: Systematic literature searches to identify, map and evaluate instruments according to predefined criteria relating to practical components (number of items, administration time), content components (domains) and psychometric components (validity, reliability, responsiveness, and sensitivity). Results: 427 papers relating to 60 measurement scales met the inclusion criteria. Measurement scales were either multidimensional (n=33) or unidimensional (n=14). Domains assessed were: overall life evaluation, and psychological- social-, behavioral, spiritual, physical, medical and environment evaluation. Practical components varied with 1-100 items; time to complete varied between appr. 1 to appr. 60 minutes. Domains varied between 1 and 12, psychometric components assessed validity but lacked cultural and gender sensitivity assessment. No concurrent evaluation of measures has been done yet. Conclusions: A wide variety of measures for well-being are available for monitoring and research. We found no instrument which fulfilled all quality criteria. The concurrent evaluation of at least three available SWB instruments is recommended as this has not been done, including testing for cultural and gender sensitivity and for the minimum change which is critical to monitor well-being in diverse populations.

# Friday 7th March

## Exchange 10

11:00

### Stratified Medicine, Biomarkers and Population Health

Session title      Ethics, engagement and privacy

Chair      Tim Ward

Professor John Harris, Sir David Alliance Professor of Bioethics and director of the Institute for Science, Ethics and Innovation at the School of Law, University of Manchester, UK

The ethics of knowing your health risk

*No abstract available*

# Friday 7th March

## Exchange 10

11:00

### Stratified Medicine, Biomarkers and Population Health

Session title      Ethics, engagement and privacy

Chair      Tim Ward

Dr Mary Tully, Reader in Pharmacy Practice, University of Manchester, UK

Consent and engagement

*No abstract available*

# Friday 7th March

## Exchange 10

11:00

### Stratified Medicine, Biomarkers and Population Health

Session title      Ethics, engagement and privacy

Chair      Tim Ward

Dr Jane Kaye, Director of the Centre for Law, Health and Emerging Technologies at Oxford: HeLEX, University of Oxford, UK

Threats to privacy

*No abstract available*

## Exchange 10

12:40

### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Christopher Birt

Dr Alexandre Magalhães, Student, INEB- Instituto de Engenharia Biomédica

Co-authors: Elisabete Ramos, Maria de Fátima Pina

How urban environment can determine physical and sports activities in 13 years old teenagers of Porto Community

Introduction: Interest in the influence of the natural and built environment on health and healthy behaviors is increasing. Objective: To examine the association between distances from adolescent's residences and schools to Urban Green Spaces (UGS) and Open Sports Spaces (OSS) with intensity of physical activity (PA) and sport activity(SA). Methods: We evaluated 1333 (53.9% girls) 13-year-old adolescents living and studying in Porto, Portugal (EPITeen cohort). Residences and schools were georeferenced. A road Network Buffer from participants residence and school to each space was created and distances were classified in <=250m (class1), >250m and <=500m (class2) and >500m (class3). Association between distances to spaces with Intensity of PA and SA, adjusted to BMI and parents' education, were measured using odds ratio (OR) and 95% confidence interval (95%CI) by logistic regression. Results: Considering class1 as reference, in girls, the association between intensity of PA with distance from schools to UGS was respectively, 0.76 (0.42-1.37) and 0.82 (0.55-1.12) for class2 and class3, and to OSS was 0.58 (0.22-1.51) and 0.73 (0.29; 1.83). While in boys, an association between proximity to UGS and residences was found, 0.94 (0.50-1.75) and 0.96 (0.58-1.58), and a statistical significant association between the proximity from Schools to OSS, 0.20 (0.06-0.62) and 0.21 (0.07-0.61), for class2 and class3, respectively. Regarding SA and proximity from Schools to UGS, in girls, a positive association was found, 0.89 (0.48-1.64) and 0.81 (0.53-1.22) for class2 and class3, respectively. While in boys, a positive association had been found between proximity from schools to OSS, 0.83 (0.31-2.21) and 0.61 (0.25-1.53) for class 2 and class3, respectively. Conclusion: In general, our data showed that proximity from schools, to UGS/OSS were more determinant for the intensity of PA and SA than proximity to residences, in our adolescents.

## Exchange 10

12:40

### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Christopher Birt

Dr Mohsen Hassani, General Physician, Private Sector

Co-authors: Asiyeh Salehi, Neil Harris, Elisabeth Coyne, Bernadette Sebar

Life style behaviors and wellbeing - A case of young Iranian women

**Introduction and aims:** Living a healthy lifestyle is positively related to health and well being. There is a link between high risk lifestyle factors and physical illness particularly chronic diseases and mental illness. The main aim of this study was to explore the lifestyle behaviors among young Iranian women and examine the relationship between lifestyle behaviors and quality of life domains.

**Methods:** 391 young Iranian women aged 18-35 participated in a cross sectional survey collected by cluster convenience sampling technique. International Health and Behaviors survey was used as indicator variable to measure five different types of lifestyle behaviors such as smoking, eating, sleeping, alcohol consumption and physical activity. Four domains of WHO quality of life (physical, psychological, social and environment QOL) were used as outcome variable. Data was analyzed using SPSS 20. **Results:** Mean age of participants was 27. Lifestyle behaviors identified that 24% of young Iranian women are smoking (including 12% regular smokers and 10% non-regular smokers). 17.5% of participants drink alcohol of which just 0.3% of them consider themselves as a regular drinker and 11.6% of this population had more than one alcoholic drink per day during the two last weeks.

Regarding eating behaviors 46% of participants reported that they do not eat breakfast regularly/every day and 18% of participants eat red meat every day. 42% and 18% of participants mentioned that they do not eat fruit and fiber food per day respectively and 35% of them usually add salt to their meal. Findings showed that 43% and 14% of participants consider themselves as overweight and underweight respectively. 36% of subjects do not avoid eating fat food and 50% do not care about losing weight and 68% also do not care to have an especial diet. Although the present study revealed that about 62% of Iranian young women exercise, just 21% do it regularly. In terms of sleeping 32.5% of participants mentioned that they have either sleep deprivation or over sleeping. Findings showed that physical and psychological QOL had a negative correlation with smoking (p value: 0.05) and physical, psychological and environment QOL had a positive correlation with exercise (p value: 0.01). There was a correlation between eating fruit and breakfast regularly with psychological QOL and also a positive correlation between drinking alcohol with income and a negative correlation between the number of children and alcohol consumption (p value: 0.05). Greater smoking/drinking has been found among participants with lower level of religiosity and greater drinking was found among participants without children. **Conclusion:** There is a protective association between high-risk lifestyle behaviors and a lower quality of life particularly physical and psychological QOL. Therefore improving lifestyles factors such as regular exercise, healthy diet, keeping a normal weight, decreasing alcohol consumption and most importantly, not

## Exchange 10

12:40

### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Christopher Birt

Dr Vivian Omuemu, Lecturer, University of Benin, Benin-City, Edo State, Nigeria

Meal pattern among in-school adolescents in Benin-City, Nigeria.

**Background:** Healthy meal pattern is very important in the maintenance of the highest level of physical, mental and social well-being of an individual, more so during the adolescence period which is characterized by dramatic physical, psychological and cognitive development. **Objective:** This study aimed to assess the pattern of meal consumption among in-school adolescents in Benin-City, Nigeria. **Methods:** This descriptive, cross sectional study was carried out among in-school adolescents in Benin-City, Edo State, Nigeria. The participants were selected using a multi-stage sampling method. The tool for data collection was a pre-tested, semi-structured, interviewer-administered questionnaire. Data was analyzed using SPSS 16.0 and significant level was set at  $p$  less than 0.05. **Results:** A total of 797 in-school adolescents with mean age of  $15.4 \pm 3.6$  years participated in the study. The highest proportion of them were 14-15 years (66.9%) and males (51.8%). Majority of the respondents (71.6%) eat three times a day. Dinner was the meal eaten most often by the highest proportion of them (95.5%), followed by lunch (90.2%) and breakfast (85.9%). Eighty-eight percent of them skip meals and this was significantly higher among the females (90.7%) than the males (86.0%),  $p = 0.041$  and those in the mid-adolescent (14-15 years) age group (92.3%),  $p < 0.001$ . The reasons given for skipping meals include: Staying for after-school activities (45.1%), not hungry (43.4%) and waking up late (11.5%). Six hundred and ninety-three (87.0%) of them are involved in snacking and this pattern was significantly higher among the male adolescents ( $p = 0.037$ ), those in the highest social economic class ( $p = 0.003$ ) and among those in the senior class ( $p < 0.001$ ). Eighty-seven percent of the respondents had consumed soft drinks on a daily basis in the past one week preceding the survey. The prevalence of obesity and overweight among the study population was 2.2% and 1.2%, respectively. **Conclusion:** The study has revealed that meal skipping, snacking and soft drink consumption are common among this adolescent population. School food policies that promote healthy eating habits are recommended.

## Exchange 10

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### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Christopher Birt

Dr Roseli Gomes de Andrade, Post doctoral, UFMG

Co-authors: Amélia Augusta de Lima Friche, César Coelho Xavier, Fernando Augusto Proietti, Ana V. Diez-Roux, Waleska Teixeira Caiaffa

Underprivileged neighborhood and overweight: a multilevel analysis, Saúde em Beagá Study, Belo Horizonte, Brazil, 2008-2009

The prevalence of overweight and obesity has been increasing worldwide over the past 30 years in both rich and poor countries, and in all segments of society, especially among those living in urban areas. Aims: This study aimed to assess individual and environment factors associated to overweight/obesity in urban residents in Brazil. Design: We used data from a multistage (census tracts, households and residents) household survey conducted by the Belo Horizonte Observatory for Urban Health (OSUBH). Weight was dichotomized as overweight - a body mass index (BMI) of 25 kg/m<sup>2</sup> or more and normal weight - BMI less than 25 kg/m<sup>2</sup>. The independent variables were: individual ( family income based on minimum wage, age, poor, regular and good self-rated health-SRH) and, contextual (health vulnerability index-HVI, a geographical informed composite index which enables to classify the census tracts in areas of low, medium, high and very high health vulnerability and ten scales of perceived neighborhood features: 1 - Quality of Services, 2 - Aesthetic Quality, 3 - Walking Environment, 4 - Safety, 5 - Violence, 6 - Social Cohesion, 7 - Activities with Neighbors, 8 - Physical Disorders, 9 - Social Disorders and 10 - Neighborhood Problems). Data was geocoded into census tracts. Men and women were analyzed separately. Multivariate multilevel models were fitted considering the sampling design. Results: Among 3,280 adults interviewed 53.2% was overweight, 44% was living in high HVI and 58.6% were female. In the men final model, age, income, poor SRH and high HVI were associated to overweight; among women, only individual variables were associated to overweight such as age and poor SRH. None scales of perceived neighborhood features were associated to overweight in neither gender models. Conclusions: Living in areas of high vulnerability seems to be an indicator of greater predisposition to overweight among men in a Brazilian urban area. In both sexes, overweight were positively associated to traditional individual variables such as age and worse SRH. These findings may support the importance of addressing the overweight through dynamic processes encompassing both individual and context characteristics that can help further understanding of inequities of energy gap models that shape obesity in underprivileged population. Keyword: obesity, overweight, multilevel models, urban health, neighborhood.

# Friday 7th March

## Exchange 10

14:00

**Policymaking and political leadership for action on urban health**

**Session title** Racism in the NHS - Challenges for political leadership

**Chair** Professor Aneez Esmail

Professor Aneez Esmail, Professor of General Practice & Associate Vice-President (Social Responsibility), Primary Care Research Group, University of Manchester

# Friday 7th March

## Exchange 11

11:00

**Lifestyle and Wellbeing: Obesity, Cancer and Diabetes**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Dr Iveta Nagyova

Dr Iveta Nagyova, President of Chronic Diseases section of EUPHA

# Friday 7th March

## Exchange 11

11:00

### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Iveta Nagyova

Adriana Loureiro, Researcher, University of Coimbra Departamento de Arquitectura, Portugal

Co-authors: Paula Santana, Claudia Costa

The changing geographic distribution of diabetes in Portugal in the last 20 years

Diabetes mellitus is a public health problem that is on the increase throughout the world, including in Portugal, which presents one of the highest mortality rates from it in Europe. The disease is associated to lower socioeconomic groups, and its prevalence and mortality rates are higher in people living in contexts of sociomaterial deprivation. This paper aims to identify the changing geographic pattern of this cause of death in Portugal and its association with sociomaterial deprivation and geographic accessibility. This is a transversal ecological study of the deaths by diabetes (CID9: 250, CID10: E10-E14) in Portuguese municipalities in three periods (1989-1993, 1999-2003 and 2006-2010). We apply a Bayesian hierarchical model proposed by Besag, York & Molliè (BYM) in order to obtain a smooth standardized mortality ratio (sSMR) and the relative risk (RR) of death by diabetes associated to sociomaterial deprivation. This was calculated using the INLA (Integrated Nested Laplace Approximations) method. A sociomaterial deprivation index was constructed, based on three dimensions (illiteracy, unemployment and houses without a toilet, in accordance with the Carstairs and Morris Method) and Municipalities were categorised according to the population living in urban and rural parishes and geographic accessibility to the nearest hospital. In the last 20 years the geographic distribution of diabetes has shifted from the cities to the countryside and from the richest municipalities to the poorest. In 1989-1993, the highest sSMR values were found in coastal urban municipalities (80% of municipalities with sSMRs 60% greater than the Portuguese mainland, of which 60% are urban), especially in the Metropolitan Areas; in 2006-2010, the opposite was found, with the highest sSMR values occurring in rural areas in southern inland regions (76.9% of municipalities with sSMR 60% greater than the Portuguese mainland, of which 69.2% are rural), particularly the Alentejo. Nowadays, half of the population lives in municipalities where the sSMR has diminished in the last 20 years, largely due to the decrease in metropolitan areas, but almost half of the municipalities have a high risk of dying by diabetes (over 67%). The RR of death by diabetes increases with vulnerability associated to social and economic conditions in the area of residence, and is significant in the last two periods (RR: 1.00; IC95%: 0.98-1.02). There is also an association with geographic accessibility in 2011 (RR:1.02; IC95%: 0.96-1.08). Diabetes presents a geographic pattern marked by coastal-inland and urban-rural asymmetry. However, this has been altering over the last twenty years. 48% of the population reside in municipalities where the sSMR has increased in the last twenty years, particularly in the rural areas and municipalities with high deprivation.

## Exchange 11

11:00

### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Iveta Nagyova

Mrs Katrina Stephens, Specialty Registrar - Public Health North West School of Public Health, Mersey Deanery Tameside Metropolitan Borough Council

Co-authors: Amy Ashton, Jan Dawson, Dr Gillian Maudsley

Weighing and measuring children in Early Years day-care settings: an opportunity to identify overweight and obesity in children before Reception-age

Introduction: Obesity in under 5 year olds is a global public health concern. In England, reducing obesity in school-age children is a public health priority. In response to high rates of obesity in Reception-age children, Manchester's Healthy Weight Strategy has focused on work with under 5 year olds. Aim: To investigate current weighing and measuring practice in local authority day-care settings and staff perceptions of their role in supporting children to attain and maintain a healthy weight, to inform weighing and measuring practice in Early Years day-care settings. Design: A mixed methods study design, with exploration of height and weight data, complemented by semi-structured interviews with day-care staff. Setting: The study focused on quantitative data collected by staff from day-care settings in an urban local authority (Manchester, North West England) and interviewed them. Method: Quality of weight and measure data from 20 day-care settings was explored, with descriptive and paired data analysis. Nine semi-structured interviews were conducted with staff from five settings. Thematic codes were generated from and applied to the qualitative data, with 'framework' analysis used to organise and draw out findings. Qualitative and quantitative data were mixed at the level of analysis and interpretation. A multi-agency group was convened to review the findings, and develop and implement a protocol for weighing and measuring children in day-care settings. Results: Six themes emerged overall: data quality; prevalence of healthy weight; cases of, and response to, overweight and obesity in children; weighing and measuring practice; and wider healthy lifestyles work. Quantitative data suggested high prevalence of overweight and obesity in children (80/271, 30%), but day-care staff did not process, interpret, or act on the data. Day-care settings faced challenges in measuring young children accurately, due to unsuitable equipment and inconsistencies in practice between staff. A multi-agency group developed a protocol for weighing and measuring children in day-care settings; 19 day-care settings implemented this protocol (January 2013). Training and equipment were provided to settings adopting the protocol. Of 546 children weighed/measured in March 2013, 89 (16.3%) children were above 91st centile, with 56/89 (62.9%) referred to weight management services or health visitor (none having previously accessed weight management support). Conclusions: Early Years day-care settings can play an important role in promoting healthy lifestyles, and identifying early the children who are not a healthy weight. With provision of suitable equipment and training, it is feasible to weigh/measure children meaningfully in this setting. Further research should explore the prevalence of healthy weight in preschool populations, and identify effective interventions to reduce overweight and obesity in preschool children.

# Friday 7th March

## Exchange 11

11:00

### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Iveta Nagyova

Mrs Roxana Summers, Health Improvement Specialist, Leeds City Council, Office of Public Health

Co-authors: Emma Goodway, Derek Sankar and Dawn Fuller

#### Back to Front: the cultivation of fruits, herbs and vegetables in front gardens

Background: Back to Front (BtoF) promotes the cultivation of fruits, herbs and vegetables (FHV) in Front Gardens (FGs). BtoF operates in ethnically diverse but deprived neighbourhoods with little or no access to public growing space. In 2009, we researched the appetite for using FGs to grow food. With encouraging results we set up the project. Aim: To support residents and tenants of the three main housing providers in the city to use their front gardens to grow food. Methods: We promoted the project at relevant events, organised study days and food growing workshops and delivered an ad hoc training course for volunteer mentors. The project benefited from systems, tenants groups, and communication channels from partner housing organisations. Results We produced a newsletter with seasonal news and advice, developed growing cards based on what local people liked to eat, made short films designed to appeal to a non English speaking audience and developed guidelines as a source of advice. The project worked with 224 families, run 91 food growing and cooking workshops and supported six communal growing sites where people grow food together, share recipes and eat together. The project was described as 'worth its weight in gold' by one community group leader. Vandalism was not a problem but we had two theft incidents. Conclusions This project is about health and wellbeing as much as it is about neighbourhood renewal, community cohesion and the environment. Critical evaluation should include measuring the impact of productive front gardens on a number of areas beyond 'health' gains alone. Next Steps The project will explore: a mental health referral scheme with proactive GPs; the potential of social digital media to gather evidence of success, gather insight and generate ideas; creative fundraising model that does not rely on grant applications

# Friday 7th March

## Exchange 11

11:00

### Lifestyle and Wellbeing: Obesity, Cancer and Diabetes

Session title ABSTRACT PRESENTATIONS

Chair Dr Iveta Nagyova

Dr Shamim Talukder, Chief Executive Officer, Eminence

Co-authors: Karar Zunaid Ahsan, Dr Shams El Arifeen, Dr Peter Kim Streatfield, Shusmita Hossain Khan

#### Hypertension and Diabetes in Bangladesh: A National Policy Direction for the Future

**Background:** Alike many other Similar to other developing countries, Bangladesh is experiencing a shift from infectious diseases to NCDs. For Bangladesh the steady change in population age structure, primarily due to fertility decline and a steady increase in life expectancy will continue to fuel the shift towards these two diseases in the future. **Objectives:** Globally initiatives are in place to make NCDs are a policy issue therefore a national policy directive paper was written for Bangladesh based on the recent demographic and health survey findings on diabetes and hypertension status among Bangladeshi adults. **Policy and Activity Status:** Currently the Bangladesh government has considered NCDs as a major health threat and has emphasized policy formulation for the management of NCDs. In this regard with the technical support from WHO country office the country has formulated Strategic Plan for Surveillance and Prevention of NCDs till 2015. The NCD Control Operational Plan (OP) implements ministry of health's NCD-related activities and the NCD Control (NCDC) unit is primarily responsible for carrying out the initiatives. The major activities of NCDC are to conduct training on NCD screening and management for health care providers, organize pilot screening and management of selected NCDs at the sub district level facilities. **Policy Directions:** With the high rate of diabetes and hypertension prevalence persisting in the country the paper recommended for focused policy directions for identifying hypertension and diabetes as a public health threat. It also emphasized on prevention strategies by building awareness in the community, among health care providers, and among policy. The issue of including mass media to promote healthy diet, physical activity, prevent tobacco and drug use was highlighted. The policy direction emphasized on establishing simple, low-cost screening at the community level through primary health care facilities as well as adequate support for effective and efficient referral system. The issue of raising the quality of care provided by health care workers and in facilities to include effective counselling was also highlighted in the policy document.

# Friday 7th March

## Exchange 11

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Miss Amy Price

Miss Amy Price, Student, University of Manchester

Co-authors: Professor Peter Donnelly, Dr Damien Williams

#### Does Internet Pornography Affect Male Adolescents' and Young Adults' Attitudes Towards Women?

Objectives: The growth of the internet and the resulting development of easily accessible internet pornography has resulted in concerns about the impact this industry is having on today's youth. Males are by far the greatest users of pornography, and as a result pornography content is often male dominant and degrading to women. This has led to increasing anxiety about the effect internet pornography is having on young males' attitudes towards women. Research in this area has yielded conflicting results. The aim of this review was to systematically analyse the literature that examines the relationship between exposure to internet pornography and behaviours and attitudes that are reflective of overall attitudes towards women in male adolescents and young adults, in order to obtain a more balanced understanding of any possible effects. Methods: Seven databases were searched using a single search term. Title, abstract and full text of each paper was screened and papers were selected based on the inclusion and exclusion criteria. Inclusion criteria: participants' mean age 12-25, males analysed separately; internet pornography exposure and a behaviour or belief representative of attitudes towards women included as measures; published between 1997-2013 in English or Spanish; aggregate studies, laboratory studies, sex offender studies and surveys; conducted in developed countries. Results: Of the 843 studies identified, 12 were included in the final analysis. Three studies used an experimental design, eight studies used a correlational survey, one study was a secondary analysis of data obtained from a program for juvenile delinquents. Studies were grouped and analyzed according to their outcome measures. Collective results indicate that pornography increases aggression and violence, levels of sexual harassment and assault; and results in more negative attitudes towards women, notions of women as sex objects and fosters unrealistic sexual expectations of women. Conclusions: Inconsistent methodologies employed by these studies, and failure to take into account numerous confounding variables means further research is needed in order to fully understand this relationship. Future research should also focus on the content and frequency of pornography viewed, as this is likely to be important.

# Friday 7th March

Exchange 11

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**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Miss Amy Price

Shazia Mahmood, Student, University of Manchester

# Friday 7th March

## Exchange 11

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Miss Amy Price

Cal Robinson, Student, University of Manchester

Co-authors: Ewan Goudie, Ivan Brenkel

#### Are They Getting Fatter? The Changing Demographics of Total Knee Arthroplasty.

Introduction: Knee osteoarthritis (OA) is of rising prevalence in the UK, due to advancing patient age and increasing population obesity. This is of particular significance in urban environments where high population obesity reflects excessive food intake and insufficient physical activity. Demand for total knee arthroplasty (TKA) has resultantly increased in recent years, although there is limited research into the changing demographics of those requesting it. Aims: Our objective was to identify trends in TKA techniques and patient demographics by retrospective comparison between two patient cohorts: the first consisting of 686 patients operated on between 1994-1998 and the second consisting of 1408 patients operated on between 2009-2012. Results: Both mean BMI and the proportion of obese patients ( $BMI > 30\text{kg/m}^2$ ) were found to be higher in group two ( $p < 0.01$ ). Although mean age was higher in group two, greater proportions of both 'young' ( $< 60$  years) and 'old' ( $> 80$  years) patients were found ( $p < 0.01$ ). Mean pain/function components of the American Knee Society Score (AKSS) were worse in group one ( $p < 0.01$ ), indicating that modern patients are being operated upon at lower thresholds. The frequency of both bilateral operation and blood transfusion were lower in group two ( $p < 0.01$ ). Conclusion: These findings substantiate associations between the rising prevalence of knee OA risk factors and increasing demand for TKA. They also emphasize the need to shift focus towards preventative measures in the management of knee OA.

# Friday 7th March

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**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Miss Amy Price

Pichaya Chartsakulkajarn, Student, University of Manchester

A Better Shot? The Pharmacy Flu Vaccination Programme Initiative in Greater Manchester

# Friday 7th March

## Exchange 11

12:40

### A Perspective from Fresh Minds

Session title ABSTRACT PRESENTATIONS

Chair Miss Amy Price

Mr James Phelan, Student, University of Manchester

MIND, BODY AND SUGARS: Polycystic Ovarian Syndrome and the Assessment of Long Term Complications

Polycystic Ovarian Syndrome (PCOS) is the most common endocrine disorder in females of reproductive age affecting approximately 5-10% of this population in the developed world. The characteristics of this condition are infertility, oligomenorrhoea, hirsutism and Acne Vulgaris; manifestations that are all highly detrimental to quality of life. Over recent years a greater understanding has been gained of the long-term complications associated with PCOS such as Insulin resistance, Impaired glucose tolerance, Type 2 Diabetes Mellitus and an increased cardiovascular risk profile. Even though PCOS itself is an independent risk factor for T2DM and cardiovascular risk, it appears that not enough is being done in general practice to identify and treat the long-term complications of PCOS on the background of an increased number of obese patients. It was the aim of this audit to investigate the uptake of recommended screening for T2DM and cardiovascular risk in women with a diagnosis of PCOS. All current patients with an active diagnosis of PCOS at a general practitioners surgery in south Manchester were selected and it was identified if such patients had been assessed with a blood pressure measurement, BMI measurement or Fasting blood glucose measurement at any point in time. It was then identified whether this had been performed before, at, or since the diagnosis of PCOS was made. Checks performed prior to the diagnosis are unsuitable, as they are not directly assessing the risk of long-term complications in a PCOS patient. The audit was testing guidance set by the Royal College of Obstetricians and Gynaecologists and by the National Institute of Clinical Excellence. It was discovered that women with a diagnosis of PCOS are not being screened for long-term complications and this has lead to the suggestion of a pro-forma of investigations to be completed upon diagnosis of PCOS.

# Friday 7th March

## Exchange 11

14:00

### Tobacco Control

**Session title** The Tobacco Lifestyle, including eCigarettes - the debate

**Chair** Dr Paula Whittaker

Councillor Pat Karney, Councillor, Harpurhey, Manchester

Dr Paula Whittaker, Clinical Lecturer in Public Health, University of Manchester

Mrs Jennifer Connolly, Specialty Registrar in Public Health

eCigarettes - the debate

# Friday 7th March

## Exchange 11

14:00

### Tobacco Control

**Session title** The Tobacco Lifestyle, including eCigarettes - the debate

**Chair** Dr Paula Whittaker

Brynn Warren and Ewa Monteith-Hodge on behalf of Mr Duncan Stewart, Research Associate, McCreary Centre Society

Co-authors: Brynn Warren, Eva Monteith-Hodge, Ange Cullen

Trends in tobacco use among urban youth in British Columbia, Canada

Introduction: Since 1992, the BC Adolescent Health Survey (BC AHS) has been completed by Grade 7 - 12 students across British Columbia. The survey, most recently conducted in 2013, allows for monitoring of tobacco use among urban youth in BC across the past twenty years. Objective: To identify changing patterns of tobacco use among urban youth, including rates of having ever smoked, age of starting smoking and frequency of smoking. The 2013 BC AHS also included new questions on other ways of using tobacco and attempts to quit smoking. Design: This study used data from the 29, 832 public school students who completed the BC AHS in the spring of 2013. Participants' ages ranged from 12-19 years old. The BC AHS is a 130 item paper-and-pencil survey that asks youth about their health and health risk behaviours. The BC AHS is a cluster-stratified random sample design, sampled at the classroom level. This study also includes comparisons to the data collected in previous cycles of the BC AHS, which is conducted every five years. Results: Provincially, the rate of youth who had ever tried smoking decreased from 56% in 1998 to 26% in 2008, and continued to decrease in 2013. In 2003, females were more likely to have tried smoking. Ten years later, males were more likely to have ever smoked, although they were also more likely to wait until later in adolescence to start smoking. Although in 2013 the rate of ever having tried smoking had decreased, among those who had tried smoking, more youth had smoked in the past month than in previous years. Among the youth who had tried smoking across the province, 23% had successfully tried to quit smoking in the past 12 months, while 13% had tried to quit but had started again. These results will be expanded to include urban specific findings, including differences between urban and rural regions of the province on age of starting smoking and recent tobacco use, and also on successfully quitting smoking, exposure to tobacco smoke in the home, and the use of a variety of tobacco products, including chewing tobacco, hookahs, cigarettes, cigars, electronic cigarettes and products to help stop smoking. Conclusion: Although fewer youth in BC have tried smoking than any time in the past twenty years, recent use among those who have tried smoking has not improved. Some youth were more likely to have started smoking, especially at a younger age, and to have reported recent tobacco use.

## Exchange 11

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### Tobacco Control

**Session title** The Tobacco Lifestyle, including eCigarettes - the debate

**Chair** Dr Paula Whittaker

Dr Ulimiri V Somayajulu, CEO and ED, Sigma Research and Consulting

Co-authors: Tilak Mukherji

#### Tobacco Use and Control in India : Emerging Issues

Tobacco consumption emerges as the single greatest preventable cause of death in the world today, accounting for about six million deaths every year. This number is expected to increase to more than eight million by 2030 in the absence of effective tobacco control measures. Additionally, tobacco is also a risk factor for the four leading non communicable diseases(NCD) - cancer, heart disease, diabetes and chronic respiratory diseases - that account for more than three fifth of global deaths and more than half of the Indian deaths. Tobacco use in India is found to be responsible for more than half of the tuberculosis deaths. Cancer, lung disease and chronic obstructive pulmonary disease account for one fourth of total public spending on health. This paper examines the trends in tobacco consumption in India and its states with focus on urban areas, health implications of tobacco use and policy and programme initiatives towards tobacco control. The paper uses secondary data and reports including the Global Adult Tobacco Survey report and other policy documents. The Global Adult Tobacco Survey (GATS) India Report (2009-2010) indicates that more than one third (35%) of Indian adults (275 million) use tobacco. The data indicates that about one million Indians die each year from smoking alone. Analysis indicates that Tobacco victims die young in India as the number of children chewing tobacco doubled in the last decade, and these children develop oral cancer in teenage. India's demographic dividend is likely to be affected by widespread tobacco consumption and thereby affecting medium and long term strategies for economic development. There is also need to sensitise the people regarding effects of tobacco use on health, morbidity, mortality, household income and poverty. India's history of policy legislations relating to tobacco control dates to the recent past with national as well as state level initiatives aimed at curtailing negative consequences of tobacco consumption. Government of India's public policy response can be considered as positive and significant as India was one of the first countries to ratify the World Health Organization's (WHO) Framework Convention on Tobacco Control . Tobacco control has become a key focus of the Government of India's agenda in recent years. The specific initiatives include passage of Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 , significant allocation for publicity and awareness as a component for tobacco control in the 11th five year plan. As the tobacco products are diverse, affordable, and appealing for each sections of society, the control measures could include promoting effective pictorial health warnings, reducing role of extraneous factors such as brand logos, enticing language and attractive packaging, plain packaging, providing consumers with accurate information about product.

## Exchange 11

14:00

### Tobacco Control

**Session title** The Tobacco Lifestyle, including eCigarettes - the debate

**Chair** Dr Paula Whittaker

Dr Manohar Gemawat, Occupational Physician, Hazira LNG (SIMS)

#### Tobacco Free Environment

Tobacco free Environment (TFE) at workplace (A drive to combat tobacco use at workplace) In India, Tobacco chewing is very much prevalent amongst the people of all age group, even child from age of 7 year started consuming tobacco, although smoking is also very common in college going youngsters and workers. To combat tobacco use at workplace, our company has launch a drive called TFE (Tobacco free environment) with guidance from top management, a drive for tobacco de-addiction has launched for employees and contractor staff. Highlights 1. Aims 2. Participation 3. Mode: Design 4. Counseling and Rewards 5. Conclusion: Achievement 6. Motivation Aims: To improve health awareness about tobacco hazards to users any forms, may be chewing, smoking or snuff. To motivate user to stop (De-Addict) use of tobacco in any form. With involvement of their family members so they can also understand the hazards of tobacco on health. Participation Before launch, A survey has been conducted among contractor staff, total 250 people has participated and out of that 77% are addicted to tobacco chewing, 17% are smokers, 4 % are using toothpaste with tobacco, 2% are dual users ( Chewing + Smoking) Age group line of difference is more than 60 % are in age group of 20- 30 yrs. and remaining are above 30 yrs. of the age group. Mode: Design - Engagement of NGO for awareness programs at Hazira site. - Awareness (Mode of delivery) - Posters display at site and at contractor's camps, - Workshops - NRT (Nicotine replacement therapy). - Contractor HSE engagement - Counseling of Tobacco consumer by NGO - Awareness session for employees - Support and counseling by psychologist for the individuals who has not showing inclination to quit. - Distribution of badges showing message of TFE Counseling and Rewards During workshop and other company organized event, Many users have shown interest to quit, and NRT- Chewing has been distributed to them. With explaining effects of NRT. Finally after successful period of 12 months of tobacco free , champions are rewarded with promotional prizes and projected as role model in next year campaign Conclusion: Achievement Out of 250 person, 50 has quit from day 1 Of camping and 30 more has quit tobacco after 2 months of start of campaign and after continuation monitoring, 90% are maintaining their promise to quit and abide by that, only 5% were dropout. Motivation: Distribution of Badge: Badge distributed in 3 category 1.TFE Promoter: those who counsel people to quit 2.TFE Ambassador: Those has promised to quit 3.TFE Champion: Those have still tobacco free after 6 month of campaign.

## Charter 1

11:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Dr Md. Mobarak Hossain, Assistant Professor, University of Bielefeld

Co-authors: MMH Khan, MAA Azim, HMT Hasan, A Kraemer

Evaluation of the physical structure of pharmacies and their quality of healthcare services in Bangladesh

**Background and aims:** Privately owned pharmacies (run by drug sellers) are the leading source of healthcare services for common health problems in Bangladesh because of easy accessibility by short distance and short waiting time and affordability due to low treatment cost. However, qualities of pharmacy services are often unsatisfactory. Considering the disparities of services between rural versus urban as well as between actual versus reported practice, we formulated two research questions namely (i) Is the overall quality of pharmacy services between rural and urban areas different? (ii) Are actual practices in pharmacies similar to reported practices? To address these questions, we compared several quality dimensions of pharmacy services including physical structure of pharmacies.

**Design:** Two methods namely simulated client method (SCM) and interviews were used. Pre-formulated and pre-tested scenarios for childhood diarrhoea, skin disease, breathing difficulty and burning during urination were presented in the pharmacies by trained simulated patients.

**Setting:** Study areas covered some part of Dhaka city (Mirpur area) and adjacent rural area, Bangladesh.

**Participants:** 630 drug sellers (SCM = 315, interviews = 315) in rural areas (n=314) and urban Dhaka (n=316) were studied.

**Results:** The mean age, years of education and duration of profession (based on interviews) were approximately 38, 12 and 11 years, respectively. The mean number of patients and amount of Taka (1 dollar 78 Taka) for selling medicines per day was 46 and 4,871, respectively. About 80% of the drug sellers received some kind of short professional training. Education, number of daily patients, amount of Taka and possession of training differed significantly between rural and urban areas. The overall physical structure of pharmacies (based on size, location, availability of medicines, inside cleanliness, ventilation, having refrigerator and so on) were good to very good for 41.9% (rural = 48.1%, urban = 35.8%), medium for 52.5% (rural = 46.8%, urban = 58.2%) and bad to very bad for 5.6% (rural = 5.1%, urban = 6.0%). The overall rate of professionally correct behaviour/attention was 81.4% (rural = 89.5%, urban = 73.4%). Overall counselling (yes = 24.4%) and advice (proper = 36.2%) were also low in both rural and urban areas. The referral to doctor/hospital was significantly higher in urban (yes = 36.4%) than rural (25.5%) areas. All quality dimensions were significantly different between two methods. SCM provided less satisfactory results than interviews.

**Conclusion:** The overall performance of pharmacies in both urban and rural areas is disappointing and needs to be improved. Rural services were of higher quality than urban services for some dimensions of healthcare services. Finally, we underscore the necessity of developing strategies based on the results of SCM method, because these results are more realistic than the results from interviews.

## Charter 1

11:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Dr Paramita Sengupta on behalf of Dr Anoop Benjamin, Professor in Community Medicine, Christian Medical College, Ludhiana

Co-authors: Dr Paramita Sengupta, Dr Subhash Batta, Dr Bontha V Babu

Inequities and social determinants of health amongst migrants in urban slums of Ludhiana, North India

**Background:** The Millennium Development Goal-7 targets to halve the proportion of population without sustainable access to safe drinking water and basic sanitation by 2015 and aims to achieve a significant improvement in the lives of at least 100 million slum dwellers by 2020. The slum population of Ludhiana (2001 census) was 314904, comprising 61822 households, 22.5% of the total urban population. With the rise in rapid and unplanned urbanization, cities are hotbeds of health inequities, where the urban poor have considerably less access to resources that contribute to good health. Globally, around 2.4 million deaths (4.2% of all deaths) could be prevented annually if everyone practiced appropriate hygiene and had good sanitation and potable drinking water. **Aims:** To determine the inequalities in accessibility and availability of civic facilities available to the migrant slum dwellers of Ludhiana, North India. **Methods:** Design: Cross-sectional Setting and participants: 3947 newer migrant families residing in Ludhiana for at least 30 days but not more than 10 years were selected from 91 slums by cluster sampling. Information was collected from the head of the families, about civic amenities like housing, electricity, water supply sanitation and health care available to them. Qualitative data was collected through 90 in-depth interviews, 10 focus group discussions and 5 case studies. **Data Analysis:** Data was analyzed in SPSS software for quantitative and Atlas-ti software for qualitative data. **Results:** Most of the migrants hailed from Uttar Pradesh followed by Bihar. The commonest reason given for migration was for better earning. Only 21.4% of the migrants lived in notified slums and 19.9% had own houses. 59.8 % households had electric supply, 15.1% used gas as cooking fuel, 43.0% had closed drainage, 34.9% own toilet and 37.2% piped water supply. 96% of the households did not possess a ration/voter card. Unqualified practitioner (58.5%) was preferred to government hospitals for health care owing to delay in service, distance, lack of essential amenities, as well as discourteous attitude of the staff in the latter. 96.7% had never used government health facility, 65.4% being unaware of any government health facility nearby. They attributed their neglect to their poverty, migrant status, unclean surroundings and indifference of the authorities. **Conclusion:** Majority of the migrant households lacked basic civic amenities like potable water supply, sanitation and electricity, and depended on unqualified practitioners for health care. 96% lacked voter/ration cards, and consequently had neither proof of identity nor means to access social benefits. Governments need to recognize and formalize slum settlements and build them into their maps and public services. **Key Words:** Migrants, urban slums, civic amenities

# Friday 7th March

## Charter 1

11:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Dr Robert Vargas, Scholar in Health Policy Research, Harvard University

Why Uninsured Americans Don't Want Obamacare: Insurance Cynicism and the First Year of Obamacare in Chicago

**Aims:** The Affordable Care Act (known as Obamacare) is the largest allocation of Federal money to low-income urban populations in the U.S. since the 1960's. The health care law 1) mandates that all U.S. citizens purchase health insurance and 2) attempts to provide low-income uninsured individuals with health care by expanding Medicaid or subsidizing their purchase of private health insurance plans. The goal of this study is to understand racial variation in low-income uninsured Americans' decision to acquire health insurance through the Affordable Care Act. **Design:** The study makes use of a qualitative panel dataset. 60 low-income, uninsured, U.S. citizens living in the city of Chicago have been interviewed and will continue to be re-interviewed throughout 2013 and 2014 to monitor their experiences with and perceptions of the Affordable Care Act. The interviews involved questions about respondents' experiences with the health care system, as well as their perceptions of governments and health insurance plans. **Setting:** Data were collected in the city of Chicago. Interviews took place in the homes of respondents or in cafes. In addition, ethnographic observations were conducted with respondents as they attempted to enroll in health care plans. **Observation:** Observation took place in public hospitals and health clinics in Chicago. **Participants:** The sample of low-income and uninsured individuals (N=60) includes 20 whites, 20 blacks, and 20 hispanics. **Results:** Results showed that racial minorities were much less likely to purchase health insurance through the Affordable Care Act because of their deep cynicism toward government provided health insurance programs. Specifically, black and Hispanic uninsured individuals had more previous experiences with the public health care system in Chicago which they described as low-quality with extensive waiting times (over six hours). White respondents had less cynicism toward the Affordable Care Act and were more likely to sign up for health insurance plans because they had much less experience with the public health care system (mostly because they had previously had private insurance). **Conclusion:** Although participants will continue to be monitored over time, these preliminary results suggest that insurance cynicism among the urban poor in the U.S. might be a key mechanism spurring racial inequality in health care access under the newly implemented Affordable Care Act. As the U.S. health care system attempts to transform from a system that neglected the urban poor and uninsured into a system that is attempting the largest expansion of government provided health care coverage in history, studying ways to identify and overcome the barriers of insurance cynicism among U.S. citizens will be critical for the reform's success.

# Friday 7th March

## Charter 1

11:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Dr Andy Liu, Specialty Registrar in Public Health, Mersey Deanery

Co-authors: Maria Guzman Castillo, Simon Capewell, John Lucy, Martin O'Flaherty

Reduction in Myocardial Infarction Admissions in Liverpool after the Smoking Ban: Potential Socio-Economic Implications for Policymaking

Objectives: To analyse trends and trend changes in MI and CHD admissions, to investigate the effects of the 2007 smoke-free legislation on these trends, and to consider the policy implications of any findings. Design: Interrupted time-series analysis using Joinpoint regression to assess changes in age-specific trends on 56,995 CHD admissions from 2004-2012 (by sex and socioeconomic status) with supporting ARIMA analysis. Setting - Liverpool (city), UK. Participants: HES data on all 56,995 admissions for CHD in Liverpool between 2004 and 2012 (ICD codes I20 to I25 coded as an admission diagnosis within the defined dates). Primary and Secondary Outcome Measures: Trend gradient and change points (by trend regressions analysis) in age-standardised MI admissions in Liverpool between 2004-2012; by sex and by socio-economic status. Secondary analysis on CHD admissions. Results: A significant and sustained reduction was seen in MI admissions in Liverpool beginning within one year of the smoking ban. Comparing 2005/2006 and 2010/2011, the age-adjusted rates for MI admissions fell by 42% (39%-45%) (41.6% in men and by 42.6% in women). Trend analysis show that this is significantly greater than the background trend of decreasing admissions. These reductions appeared consistent across all socioeconomic groups. Interestingly, admission rates for total CHD (including mild to severe angina) increased by 10% (8%?12%). Conclusions: A dramatic reduction in myocardial infarction admissions in Liverpool has been observed coinciding with the smoking ban in 2007. Furthermore, benefits were apparent across the socioeconomic spectrum. Health inequalities were not affected and may even have been reduced. The rapid effects observed with this top-down, environmental policy may further increase its value to policymakers.

# Friday 7th March

## Charter 1

11:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Ms Yodi Christiani, PhD Student, , University of Newcastle, Australia

Co-authors: Julie Byles, Meredith Tavener, Paul Dugdale

#### Low Health Insurance Coverage among Women Residing in Indonesian Cities and Its Inequity: A Challenge for Achieving Universal Health Coverage

Background: Access to healthcare is one of the basic human rights. However, in many parts of the world, inequalities in access to health care, including access to health insurance, remains a problem. Indonesia's government firstly endorsed health insurance for the poor scheme (ASKESKIN) targeting people in the 1st and 2nd quintiles to increase access to health care among this sub-group of the population. The strategy was later expanded to become 'Universal Health Coverage Road Map', aims to provide better health access for all the population. Hence, evidence on current health insurance coverage is needed to underpin and evaluate the roll of this health strategy. Objective: To examine the prevalence of health insurance coverage among women resided in Indonesian Cities and inequity between ethnic groups, across cities, and according to migration status, economic and education status. Method: Secondary data analysis of Indonesia Family Life Survey (IFLS) 2007/2008. Data are for 4800 women who live cities within 20 provinces, aged 15 years and above. Predictor variables are ethnic groups (Javanese vs non Javanese), migration status (ever migrated since 12 years old vs currently living in the birthplace city), residential area (major cities vs contrasting cities), education level (none to elementary, high school, diploma or university degree), and economic status. Principle Component Analysis was applied to grouped participants into five quintiles of economic status based on household assets. The association between predictors and health insurance coverage was assessed using multivariable logistic regression. Results: Less than 30% of women residing in cities were the primary holder of health insurance policy, and of those who were covered by ASKESKIN, there were only 66% who were actually entitled for the scheme. Multivariate logistic regression shows that there are significant associations between age, education status, migration status, residential area, and being in 5th quintile of economic status and being covered by any health insurance policy ( $p<0.05$ ). There was no statistically significant association between ethnic groups and health insurance coverage status. Conclusion: Even though access to health care in cities are generally better than rural area, the finding shows a relatively low health insurance coverage among women resided in Indonesian cities, particularly in Jakarta, Surabaya, Medan, and Bandung, migrant women, and women with lower education and economic status. This problem might be related to the implementation of ASKESKIN is not reaching poorer women, particularly those in the informal workforce. There is great challenge in achieving universal health coverage in Indonesia, both in terms of overall coverage and achieving equity. Hence, it is important to not only developing financial strategy of universal health insurance but also to address the social determinant of health that affect access to health insurance.

## Charter 1

11:00

### Health Promotion / Health Equity, Inequalities and Disparities

Session title ABSTRACT PRESENTATIONS

Chair Professor David Vlahov

Mr Joe Doherty, Health and Wellbeing Partnership Manager, Liverpool City Council

Healthy Homes Liverpool

Healthy Homes Programme BACKGROUND Whilst good progress is being made, Liverpool still has among the highest mortality rates, lowest life expectancies and greatest health inequalities nationally. The difference in estimated life expectancy between the most and least deprived areas of the city is 11 years for men and 8.1 years for women. On the basis of national estimates from the Department of Health, poor housing conditions are believed to be implicated in up to 500 deaths and around 5000 illnesses requiring medical attention in Liverpool each year. After leisure activities, the home is by far the most common location for accidents to occur. In 2008, accidents were the 6th highest cause of death in Liverpool. It is estimated that almost 70 deaths occur each year from accidents at home, with approximately 4,000 hospital admissions. Of further concern is that on average, there are 276 excess winter deaths each year. It has also been estimated that for each winter death, there are 8 emergency hospital admissions. There are 148,000 private sector properties in Liverpool: - 44,100 private sector households (28.2%) in fuel poverty - 19,400 (13%) present a health and safety risk to occupants - highest risks relate to Excess Cold, Falls, Electrical Safety and Fire - 19,000 (13%) homes fail energy efficiency requirements of Decent Homes Standard - Highest rates of hazardous housing are in the private-rented sector (18.7%) Liverpool's Joint Strategic Needs Assessments have identified housing quality as a contributor to health inequality, recognising that poor quality housing affects physical, social and emotional wellbeing and causes illness and death through excess cold, increased infection, asthma and other respiratory illnesses PROGRAMME OVERVIEW Liverpool Healthy Homes Programme is specifically designed to tackle health inequalities through reaching out into priority communities, engaging with residents and improving housing conditions and access to health and wellbeing related organisations Visiting 25,000 homes in priority neighbourhoods, residents' housing and health needs are investigated. 4,400 home inspections are carried out by the dedicated team of environmental health officers, securing improvements through personalised home improvement plans, or the use of enforcement powers effecting landlord repairs on grounds of health and safety. Mechanisms set up with a wide range of partner organisations allow health and wellbeing needs to be expediently addressed by mainstream services. The team also run housing related health promotion campaigns such as Winter Survival and Child Accident Safety. Increased awareness of the service in neighbourhood practises and creation of referral mechanisms also means clinicians and partner organisations can take advantage of the service, for example to actively address the causes of some respiratory complaints and other chronic diseases caused by exposure to hazards within homes. The programme ambitiously aims to prevent up to 100 premature deaths, and reduce medical interventions by 1000 when fully implemented. Progress to July 2013 30,000 homes have been visited. 22,200 referrals made to partners to address lifestyle, health and wellbeing. This includes: - 2686 for dentists - 2152 for food and nutrition - 2874 for home fire safety check - 1436 for energy efficiency - 1245 for lifestyle advisor - 1136 for income maximisation - 1077 for jobs and careers advice - 818 smoking

cessation - 976 for fuel poverty - 368 for doctor 4,500 home risk assessments by the team's Environmental Health Officers who have identified 3300 serious housing hazards which have, or are in the process of being remedied. Where the property is rented, they have enforcement powers to ensure that necessary improvements are made by the landlord. Where owner occupied, an outline of improvement works to make the property healthier is provided and assistance explored where necessary. Table showing most common hazards identified by team Hazard No. serious hazards

Health effects Excess cold 1036 <16oC substantially increases risk of respiratory and cardiovascular conditions. Fire 621 Burns, overcome by gas or smoke, death, carbon monoxide poisoning. Falls (stairs, on & between levels) 493 Physical injury such as bruising, fractures, head, brain and spinal injuries. Damp & mould 426 Airborne allergens can trigger rhinitis, eczema, coughing and prolonged exposure can lead to asthma. £4.5million of property improvements secured through Environmental Health team. 30 construction jobs are estimated to be supported through the scale of housing improvements in the city (on the basis that there are approximately 3 employees for every £100,000 spent on construction). £55million of savings the Building Research Establishment have estimated that this initial phase of the Healthy Homes Programme could make to the NHS and wider society over a 10 year period through securing housing improvements. 57% reduction in excess winter deaths city-wide since 2007 (provisional figures). **HEALTHY HOMES ON PRESCRIPTION** Liverpool health professionals are being encouraged to refer patients or clients. Facilitated by the national Health Housing & Fuel Poverty Forum, Scottish Power has provided funding to further develop a mechanism to identify patients particularly vulnerable to cold substandard homes. An alert has been added to the clinical record system of patients with particular vulnerabilities, prompting GPs to ask about the patient's housing. If concern is raised, the health professional can use the referral form loaded on the system to refer into the service. **GENERAL HEALTH PROMOTION/IMPROVEMENT ACTIVITIES** The Programme exploits the opportunity to improve housing conditions by also investigating the individual health needs of residents, engaging them into a wide range of mainstream services to specifically address the social determinants of health. This outreach work therefore addresses a multitude of aspects including: - Housing conditions - Access to medical practitioners (GP and Dentists - high ) - Benefits - Employment advice - Support mechanisms for residents with young children - Support mechanisms for the elderly - Energy efficiency measures - Fuel poverty - Winter survival programme - Access to health and drug support agencies - Exercise and fitness regimes - Healthy eating and nutrition programmes - Other individual needs as they are identified **AWARDS/Recognition (Examples)** - Municipal Journal Award for 'Best Public Protection Programme', 'European Fuel Poverty Award', 'Best fuel poverty programme award from Minister of Corinthia' 'Regional Business Awards (finalist)', 'National Business Awards (finalist)' Articles in: 'Chartered Institute of Environmental Health' Audition Commission

# Friday 7th March

## Charter 1

12:40

### Healthy Ageing

**Session title** Integrated health and social care in an Urban Health Centre 2.0: Healthy and active Ageing

**Chair** Dr Paula Whittaker

Workshop: Integrated health and social care in an Urban Health Centre 2.0: Healthy and active Ageing.

Dr. Paula Whittaker, B.Sc. MB.ChB. MPH MFPH

Toon Voorham, PhD

Elin Koppelaar, PhD

Rens Martijn, RN, MSc

**Background** By 2050, the number Europeans over 65 will double, and over 75 will almost triple. This is associated with a steep increase in demand for care. Care is currently characterised by a professional approach, where health and social care are isolated from each other. European cities pursue a new agenda for meeting the increased needs for integrated care in the social and medical realm of their citizens, especially the ones that are over retirement age and encounter multimorbidity, frailty and disability. Effective approaches have been developed for the management of multimorbidity among elderly people through integrated care pathways, systematic prevention of falls, frailty, and adverse effects of polypharmacy, however, the implementation of these approaches is suboptimal. Programs being implemented in isolation, are relatively costly and fail to reach the most vulnerable elderly. In order to contribute to active and healthy ageing, a sustainable model for an Urban Health Centre 2.0 (UHC2.0) that combines a population-oriented strategy, integration between medical, social and informal services will be developed, implemented and evaluated and effective implementation of current evidence-based protocols to address multimorbidity, frailty, polypharmacy and disability among older European citizens.

**Relevance** the workshop is part of health and welfare professions in transition and ensuring older people are socially and economically included in these innovations

**Aim** The aim of the workshop is to share state of the art, knowledge and experiences with regard to urban healthcare. Reducing social isolation, frailty and systematic prevention of falls and adverse effects of polypharmacy, with assisted technologies to help independent living.

**Methods** During the workshop, a short presentation will be given about the project UHC2.0. Participants will be invited to debate about the demands of an UHC2.0 (healthy ageing, technology integrated care pathways, multimorbidity, frailty, polypharmacy, and disability) and the competence and knowledge of healthcare and social care professional to integrate medical, social and informal services. Participants will be invited to think beyond the limits of their own profession and to think outside the box.

**Expected outcomes** Participants will be able to learn about the demands of possible new UHC2.0 and the results is input data in the qualitative research design proposal.

# Friday 7th March

## Charter 1

14:00

### Urban Health Metrics

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Richardson

Annie Smith on behalf of Mr Duncan Stewart, Research Associate, McCreary Centre Society

Co-authors: Maya Peled, Ange Cullen

Impressions of neighbourhood safety among urban youth in British Columbia, Canada.

Introduction: While the rates of youth crime are decreasing in British Columbia, youth in Canada are fifteen times more likely to have experienced violent victimization than older Canadians (Perreault & Brennan, 2009). For the first time, the 2013 BC Adolescent Health Survey (BC AHS) asked youth across BC measures of neighbourhood and community safety. Aims: To identify how safe urban youth in British Columbia feel in their neighbourhoods and communities and how experiences of violence are related to perceived safety and other elements of youth health. Design: Public school students ranging from 12 to 19 years old completed the fifth BC AHS in the spring of 2013 (n=29,832). The BC AHS is a paper and pencil survey that has been conducted every five years since 1992, and asks youth about their health and health risk behaviours. The 2013 BC AHS included new questions on neighbourhood safety. The BC AHS is conducted every five years, and has a cluster-stratified random sample design. Where appropriate, the findings from the most recent BC AHS were compared back to previous cycles of the survey. Results: In 2008, 23% of urban youth in BC were in a physical fight (33% of males). Nine percent of these youth required medical treatment as result of one of their fights. Seventeen percent of urban youth had carried a weapon at school in the past month, and two-thirds of those who carried a weapon had been in a fight in the past year. These results will be expanded to feature more recent data collected in 2013 and create a profile of the differences between urban and rural youth on measures of neighbourhood safety. This will include how safe urban young people feel in their neighbourhoods, both during the day and at night, how safe they feel on public transit, and if they feel that there are adults in their neighbourhood or community who care about them. This study will also explore urban youth who are at risk for not feeling safe in their neighbourhood and the negative health implications of low levels of neighbourhood safety on both physical and mental health, as well as school-based behaviours, both as victims and perpetrators of bullying or school-based violence. Conclusion: Experiences of violence are not uncommon among youth living in urban regions of British Columbia. Some youth were more at risk for both experiencing violence and feeling unsafe in their communities and neighbourhoods, and these experiences were linked to poorer mental health and other negative health outcomes.

## Charter 1

14:00

### Urban Health Metrics

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Richardson

Dr Paramita Sengupta, Professor in Community Medicine, Christian Medical College, Ludhiana

Co-authors: Dr. Anoop I Benjamin, Dr. Subhash Batta, Dr. Bontha V Babu

Countdown 2015: Maternal and child health services' coverage amongst urban migrants in Ludhiana, North India

**Background:** Migration has a major impact on access to and utilization of health services. The demand for and utilization of antenatal care (ANC) depends on numerous factors, many beyond a woman's direct control, more so for the disadvantaged and vulnerable migrant population. To assess progress towards the Millennium Development Goals, it is essential to monitor the coverage of health interventions in subgroups of the population, especially the urban poor because national averages can hide important inequalities. Gaps in coverage are concentrated in poor countries, and within countries among the most vulnerable, the poorest and the least educated. **Aims and objectives:** To assess the utilization and coverage of maternal and child health (MCH) services among migrants in the slums of Ludhiana, with the view to identify barriers and causes for deficiencies therein. **Methods:** Design: Cross-sectional. Setting and participants: 3947 newer migrant families from 91 slums in Ludhiana, residing in the city for at least 30 days but not more than 10 years, were selected by cluster sampling. 370 women having an under-2 years old child were randomly selected from these households to obtain information regarding MCH care they received for their last childbirth. Government health workers, doctors, women of child bearing age and local community leaders were participants of focus group discussions and in-depth interviews. Data was analyzed using SPSS software for quantitative and Atlas-ti software for qualitative data. **Results:** Government health workers provided ANC in 1.6% of the 3947 households surveyed. Of the 370 women surveyed for MCH services, 163 (44.0%) received any ANC. 24.6% of them had >4 ANC visits, 28.9% received iron-folate tablets, 27.8% had institutional deliveries, and routine complete immunization coverage in 12-23 months old was 12.2%. Only 7.8% were visited by the health worker during the pregnancy. Qualitative data revealed that most women preferred private providers for ANC because of their dissatisfaction with government health services, greater distance and other barriers in seeking proper care. They attributed the neglect to their poverty and migrant status. **Conclusion:** Despite the relative proximity and concentration of health centers in urban compared to rural areas, poor women are still not able to access quality MCH care. This is partly because of the ineffective outreach and weak referral system of the urban public health system and as no felt need was generated in them by awareness and advocacy. The problem of non-availability and uneven distribution of skilled health care providers is the central challenge to meeting our health goals. In the wake of the National Urban Health Mission, outreach clinics at least once a week by health teams may help to bridge the gap. **Key Words:** Migrants, urban slums, MCH services.

## Charter 1

14:00

### Urban Health Metrics

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Richardson

Ms Laura Nolan, Student, Princeton University

Slums: Their definition, characteristics, and relevance in urban India

In the context of rapid urbanization in developing countries, political and applied policy rhetoric has often employed the term 'slum' to refer to areas of concentrated deprivation. Millennium Development Goal 7, target 7.D, is devoted to achieving 'a significant improvement in the lives of at least 100 million slum dwellers'. But how are slums defined and what are the actual area- and household-level characteristics of slums and their residents? The answers to these questions have implications for priority-setting and public health programming: the spatial concentration of poverty and public service deprivation affects the efficiency and equity of health service delivery and health outcomes. Using data from the Indian National Family and Health Survey (NFHS) from eight cities from 2005-2006, the characteristics of primary sampling units identified as slums by four different definitions - from the Census, the NFHS survey enumerator, the United Nations Human Settlement Program (UN-HABITAT) and a Committee on Slum Statistics/Census in India - are compared. The Census definition emphasizes legality, the NFHS definition relies on fieldworkers' impressions of the area around the respondent's home, the UN definition is a standardized set of five criteria, and the Committee definition is specific to the Indian context. The study sample includes 18,455 households from 596 primary sampling units ('neighborhoods'). Proportions of primary sampling units identified as slums in the eight cities range from 28 percent by the Committee definition to 75 percent by the UN-HABITAT definition. Given this variation, area-level provision of public services (water, sanitation) and household-level characteristics (housing quality, density of living) are investigated in primary sampling units defined as slums by each of the four definitions. Results indicate significant heterogeneity in neighborhood-level and housing characteristics between slum definitions. For example, while 60 percent of UN-defined slums had households living at high density, the corresponding proportion of Census-defined slums was 49 percent. These results indicate that identification of communities as 'slums' depends on the definition used and that both neighborhood-level and household characteristics are not evenly distributed across slum definition. In addition to emphasizing the need for a more nuanced understanding of what constitutes a slum, these findings are consistent with previous research in the developing country context which has found that slums house a significantly more heterogeneous population and public service environment than is generally presumed. The implications of these findings are that the characterization of urban poverty as concentrated in a well-defined and spatially segregated manner is overly simplistic; more work needs to be done to understand the spatial distribution of urban deprivation in the developing country context.

## Charter 1

14:00

### Urban Health Metrics

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Richardson

Dr Elizabeth Richardson, Postdoctoral Research Associate, University of Edinburgh

Co-authors: Jamie Pearce, Niamh K. Shortt, Richard Mitchell

Mortality change from 1999 to 2009 in European cities: a population-based observational study

Aims Europe consists of an ever-increasing proportion of city dwellers, hence understanding urban health and its determinants is increasingly important. Processes at local, city, regional, national and wider scales interact in complex ways to influence the health of city populations. However, with the growing autonomy of cities from their nation states the relative importance of higher-level influences may be decreasing. We explore how mortality rate change over time has varied between European cities and assess the relative importance of city-, country- and macroregion-level influences. We also investigate the role of socioeconomic differences in explaining the trends.

Design Population-based observational longitudinal study. Setting 329 cities from 28 European countries (11 Eastern and 17 Western European). Participants City-level data on all-age all-cause mortality, age and sex structure and mean household income were obtained for three waves of the Urban Audit: 1999-2002, 2003-2006 and 2007-2009. Standardised mortality ratios (SMRs) were calculated, and multilevel random coefficient regression models were used to model the temporal trend in city-level SMRs, accounting for the nesting of waves within cities within countries. Results Mortality rates declined over time for each city, and the East-West gap narrowed due to faster improvements in Eastern than Western European cities. In particular the most rapid improvements occurred in cities of the Baltic States, which had the highest mortality initially. Changes in household income across the study period explained much of the variation in mortality decline. Higher-level geographies such as countries were more important for explaining the variations across Europe than the cities themselves. Conclusions The study contributes to our understanding of urban health and health inequalities in Europe. National influences on city-level health remain strong. Socioeconomic characteristics, such as household income levels, have been major determinants of mortality declines in European cities, and have contributed to a narrowing of the East-West mortality gap. Nonetheless the marked improvement in health we report for Eastern European cities in general, and those of the Baltic States specifically, may be particularly vulnerable to economic shock such as the global financial crisis. In addition to monitoring the ongoing situation, future work could further investigate the specific characteristics that influence urban health and its change over time.

# Friday 7th March

## Charter 1

14:00

### Urban Health Metrics

Session title ABSTRACT PRESENTATIONS

Chair Dr Elizabeth Richardson

Dr Hannah Cooper, Associate Professor, Emory University

Co-authors: Loida Bonney, Danielle Haley, Josalin Hunter-Jones, Sabriya Linton, Mary E Kelley, Conny Karnes, Monique Martin, Zev Ross, Adaora Adimora, Gina Wingood, Carlos del Rio, Richard Rothenberg

#### Public Housing Relocations in Atlanta: Implications for Relocators? HIV Risk and Depression

Background: The US is experiencing a paradigm shift in public housing policy: while policies in the 1950s-1970s sought to spatially concentrate households receiving housing subsidies into housing complexes (e.g., high-rises, campuses), more recent policies seek to spatially disperse these households, often to voucher-subsidized rental units scattered across neighborhoods in a city. Initiatives that relocate households from public housing complexes to rental units tend to move residents to neighborhoods that are less poor and less violent. Here, we summarize the results of a longitudinal, multilevel study of the relationships between pre-/post-relocation changes in exposure to several neighborhood characteristics and changes in (a) depressive symptoms, and (b) biobehavioral risk for HIV in a cohort of adult relocators; by design, most participants misused substances at baseline. Methods: Baseline data were gathered from 172 adults living in public housing complexes in Atlanta Georgia (US) that were targeted for relocation and demolition between 2008-2010; substance misusers were oversampled. Three additional waves of data were gathered every 9 months thereafter. At each wave, data on participant depressive symptoms, sexual risk behaviors, and substance misuse were gathered via survey; participants' urines were tested for current infection with a sexually transmitted infection (STI). Home addresses were geocoded to census tracts at each wave, and administrative data were analyzed to characterize tract-level economic conditions (poverty rate; median income; educational attainment); social disorder (violent crime rates; alcohol outlet density); STI prevalence; and male:female sex ratios. Multilevel models were used to test associations between changing exposure to tract characteristics and each outcome. Results: In the main, participants experienced substantial improvements in all tract characteristics studied between baseline and Wave 2 (the first post-relocation assessment); these improvements were sustained thereafter. All health outcomes studied also improved post relocation. Participants who experienced greater improvements in tract-level economic conditions had fewer depressive symptoms; had 'less risky' sex partners; and had a lower probability of binge drinking and of recent illegal drug use; reduced binge drinking was also associated with reduced alcohol outlet density. Participants who moved to tracts with more equitable sex ratios were less likely to test positive for an STI. Discussion: In this at-risk sample, post-relocation improvements in economic conditions, sex ratios, and alcohol outlet density were associated with fewer depressive symptoms and reduced biobehavioral risk for HIV. Findings can inform future urban planning and public housing policies. Future research will explore the roles of relocators' social and sexual networks in mediating relationships between changes in tract characteristics and these outcomes.

# Friday 7th March

## Charter 2

11:00

### Healthy Cities

**Session title** Who leads Who? - Promoting city leadership and participatory governance for health

**Chair** Stephen Michael Woods

Stephen Michael Woods, UK Healthy Cities Coordinator

Councillor Roz Gladden, Deputy Mayor of Liverpool

# Friday 7th March

## Charter 2

12:40

### World Health

Session title ABSTRACT PRESENTATIONS

Chair Professor Waleska Caiaffa

Mr Aditya Singh, PhD Candidate, University of Portsmouth

Co-authors: Abhishek Kumar, Pragya Prajnali, Saradiya Mukherjee

Maternal care utilization among adolescent mothers in Urban India: Evidence from DLHS-3

**Background:** Unacceptably high proportion of adolescent maternal deaths (9%) in total maternal deaths in India is a challenge for policy makers and government. Considering the lack of studies looking at factors associated with the utilization of maternal healthcare services among married adolescents in urban India, this study is an attempt to fill the gap. **Data and Methods:** Using the data from third wave of District Level Household Survey (2007-08), this paper studies the factors associated with the utilization of maternal healthcare services among married adolescent women (aged 15-19 years) in urban India. Three components of maternal healthcare service utilization have been measured: full antenatal care, safe delivery, and postnatal care within 42 days of delivery for the women who gave births in the last three years preceding the survey. Bivariate analyses including chi-square test to determine the difference in proportion, and logistic regression to understand the net effect of predictor variables on selected outcomes have been used. **Results:** Overall, 23% of women received full antenatal care, 70% utilized safe delivery care and 65% had postnatal care check-ups. Women from the richer and richest wealth quintiles ( $OR = 3.646, CI = 1.621-8.201$ ;  $OR = 3.850, CI = 1.688-8.782$ ), women with higher education ( $OR = 2.346 CI = 1.680-3.276$ ) were more likely to receive full antenatal care. On the other hand, high parity women ( $OR = 0.710, CI = 0.554-0.910$ ) and Muslim women were 27% less likely ( $CI = 0.574-0.931$ ) to utilize full antenatal care. Women from the richest wealth quintiles ( $CI = 1.895-4.583$ ), with high school and above education ( $OR = 2.249, CI = 1.623-3.117$ ), who had full antenatal care ( $CI = 2.174-3.930$ ) were more likely to go for safe delivery care. On the other hand, Muslim women ( $OR = 0.755, CI = 0.600-0.952$ ), low parity women ( $OR = 0.509, CI = 0.414-0.626$ ) were less likely to go for safe delivery care in urban areas. Women from richest quintile ( $OR = 2.148, CI = 1.324-3.486$ ), women with primary ( $OR = 1.341, CI = 1.029-1.747$ ) and middle education ( $OR = 1.390, CI = 1.035-1.867$ ), Muslim women ( $OR = 1.545, CI = 1.197-1.996$ ), who received full antenatal care ( $CI = 8.191-12.371$ ), women with safe delivery ( $CI = 8.191-12.371$ ) were more likely to receive postnatal care. **Conclusion:** The study reveals unacceptably low levels of full antenatal care and moderate level of safe delivery and postnatal care among adolescent ever married women in urban India. Women's education, husband's education, mother's employment type, social group, religion, economic status, region of residence and use of maternity services have been found to have a significant influence on the utilization of maternal healthcare services among women.

# Friday 7th March

## Charter 2

12:40

### World Health

Session title ABSTRACT PRESENTATIONS

Chair Professor Waleska Caiaffa

Ms Marylene Wamukoya, Data Analyst, African Population and Health Research Center

Co-authors: Donatien Beguy, Blessing Mberu, Maharouf Oyolola & Caroline Kabiru

The Effect of Changing Proximate Determinants on Fertility levels among Urban Poor Women in Kenya: Evidence from Nairobi's Informal Settlements, 2000-2012

**Aims:** About two thirds of urban dwellers in sub-Saharan Africa (SSA) currently reside in informal settlements. It is projected that the urban population growth in SSA will continue to be driven by natural population increase as the proportion of individuals in reproductive ages (15-49 years) continues to increase. According to the 2009 Kenya census, the proportion of individuals aged 20-29 years in Nairobi is 30% compared to 20% nationally. Thus, it is important to understand the major drivers of fertility in urban areas. This study will examine changes in proximate determinants of fertility among women aged 15-49 years and living in Nairobi's informal settlements between 2000 and 2012. The key aim is to understand whether and how changes in proximate determinants are associated with changes in fertility levels. **Design and setting:** Data are from the Nairobi Cross-sectional Slums Surveys (NCSS) conducted in 2000 and 2012 in all Nairobi informal settlements and from the 2008/09 Kenya Demographic and Health Survey (KDHS). We use descriptive statistics to look at changes in the onset of first marriage, timing of first sexual experience, and contraceptive use over the inter-survey period. **Participants:** 3256 women from the 2000 NCSS, 3892 women from the 2012 NCSS and 8444 women from the 2008/09 KDHS. **Results:** There is postponement in onset of marriage and first sex between 2000 and 2012 with fewer older women being married by the age of 18. Among those aged 40-49 the proportion married by 18 dropped from 46% to 31%, while for those aged 25-39 it dropped from 28% to 25%. The proportion did not change among young women aged 15-24 (22%). The median age at first sex increased from 17 years to 18 years. Despite the observed delays in marriage and sexual initiation, women in informal settlements in 2012 still marry about 4.5 years earlier and initiate sex 2 years earlier than Nairobi women. The proportion of married women using modern contraceptive methods increased from 39% in 2000 to 54% in 2012, compared to only 49% of Nairobi women. There is an accompanying drop in the total fertility rate (TFR) between 2000 and 2012 from 4.0 to 3.5 but this TFR is still higher than Nairobi (2.8).

**Conclusions:** There is an observed reduction in the risk of exposure to pregnancy between the two surveys, with a concomitant reduction in TFR. The use of contraceptives has improved over the inter-survey period, thus lowering the TFR, and is actually better in the Nairobi informal settlements than in other parts of Nairobi. There still remain inequalities between women in Nairobi informal settlements and women living outside slums in Nairobi, who have lower TFR and initiate sex and get married later than women in slums. Sexual and reproductive health initiatives that sustain and strengthen contraceptive use, particularly among very young women, are of particular import in Nairobi's informal settlements.

## Charter 2

12:40

### World Health

Session title ABSTRACT PRESENTATIONS

Chair Professor Waleska Caiaffa

Ms Patricia Elung'ata, Data Manager, African Population and Health Research Center

Co-authors: Donatien Beguy, Blessing Mberu

Tracking progress in MDG 4: Changes in Childhood mortality among urban slum dwellers in Nairobi, Kenya

Aims: Estimates indicate that about two-thirds of urban residents in sub-Saharan Africa live in informal settlements. Evidence shows that children living in slums are at greater risk of mortality compared to children living in other urban areas or rural areas. Substantial investments have been made in an effort to improve survival of children in line with Millennium Development Goal 4(MDG4). The extent to which these efforts have been effective in urban slums is largely undocumented. This study examines childhood mortality in Nairobi's urban slums between 2000 and 2012 to assess progress towards MDG4. Design and setting: The study uses data from two cross-sectional surveys in informal (slum) settlements conducted in 2000 and 2012. In the first survey 3256 women aged 15-49 years were interviewed, while in the second 4240 women aged 12-49 years were interviewed. Cluster random sample selection was used in both surveys. Childhood mortality estimates were calculated from the lifetime reproductive histories of all women using survival analysis method. Changes in levels, trends, socio-economic and bio-demographic differentials were assessed for all childhood mortalities. Results were compared to national estimates. Participants: 6382 children were reported in 2000 while 6218 children were reported in 2012. Results: Infant, under-five and post-neonatal mortality rates decreased between 2000 and 2012; decreases larger than those reported at national level. Neonatal mortality however increased, consistent with an increase reported at national level. Changes were observed in the pattern of risk across socio-economic and bio-demographic differentials overtime. In 2000 the risk of mortality was consistently higher in males than females, but in 2012 the risk of neonatal mortality was higher in females. In 2000 the risk of post-neonatal mortality was higher than that of neonatal mortality across all geographical divisions, but in 2012 the pattern changed with the risk of neonatal mortality being higher. In 2000 the risk of mortality was observed to increase with increasing birth order, but in 2012 the pattern changed and the risk of mortality was higher for first-birth and higher order births. The variation in risk of mortality with ethnicity, mother's age at birth, access to antenatal care, parity, birth interval and size at birth remained largely the same in 2012 as in 2000. The changes were generally consistent with national patterns but with larger within-group differences. Conclusions: Consistent with national findings slums show significant improvements in child survival, except for neonatal mortality. Equity effects have narrowed but socio-economic and bio-demographic differentials in survival have generally persisted over the 10-year period. Findings highlight the need for more targeted interventions, and show that addressing inequities is important to sustain the progress already made towards achieving MDG4.

# Friday 7th March

## Charter 2

14:00

**Healthy Cities**

**Session title** Community Resilience

**Chair** Professor David Morris

Professor David Morris, Director of the Centre for Citizenship and Community, University of Central Lancashire

How can public services harness the value of communities to promote inclusion outcomes?

# Friday 7th March

## Charter 2

14:00

**Healthy Cities**

**Session title** Community Resilience

**Chair** Professor David Morris

Dr Bernd Eggen, Principal Climate Change Scientist, Air Pollution and Climate Change Group Centre for Radiation, Chemical & Environmental Hazards Public Health England

Pollen, climate change and health

# Friday 7th March

## Charter 2

14:00

### Healthy Cities

**Session title** Community Resilience

**Chair** Professor David Morris

Mr Thiago Herick de Sa, Researcher, Public Health School, University of Sao Paulo

Co-authors: Ana Clara da Fonseca Leitão Duran; Carlos Augusto Monteiro

Correlates, travel patterns and time trends of cyclists in the São Paulo Metropolitan Area, 1997-2007

**BACKGROUND:** Replacing motorized trips for bicycling is a promising strategy to help tackling the global burden of NCDs due to the many positive effects of bicycling on health. A growing body of evidence suggests that bicycling for transportation has co-benefits in other health-related outcomes: from air pollution to cities' energy efficiency, outweighing the potential risks of increasing bicycling. Over the past years, initiatives to promote bicycling have been implemented in the city of São Paulo, as it has been happening in other Latin American cities. Despite that, little is known about bicyclists' characteristics in the São Paulo Metropolitan Area. **AIMS:** We aimed to describe bicyclists and bicycling trips, and identify the individual-level correlates and time trends of bicycling in the São Paulo Metropolitan Area (SPMA) from 1997 to 2007. **DESIGN:** Cross sectional study using data from SPMA Household Travel Surveys. **PARTICIPANTS AND METHODS:** We obtained information of 460 bicyclists in 1997 (1,307 trips) and 595 bicyclists in 2007 (1,684 trips). A bicyclist was defined as any person for whom bicycling was the chosen mode of transport for at least part of a daily trip. We also utilized information of the entire sample of 2007 SPMA Household Travel Survey (91,405 individuals) in order to identify the correlates of bicycling using Poisson regressions. We used decay functions to estimate the cumulative percentage of bicycling trips as a function of distance or duration. **RESULTS:** The age-standardized rates of bicyclists (per 1,000 inhabitants) in 1997 and 2007 were 4.5 and 6.3, respectively - a 40% increase. The number of bicyclists reporting exclusive use of bicycles on their daily trips increased from 71.8% (95% CI 65.0; 78.7) to 80.9% (95% CI 75.6; 86.2). We also found a larger number of trips lasting more than one hour in 2007 - 9.1% vs. 3.9% in 1997. Half of all bicycling trips in 2007 were less than 2 km and 3.0% of them were more than 10 km (no information on distance was collected in 1997). In both years, one quarter of bicycling trips started between 6 am and 7 am, and 5 pm and 6 pm. Multivariate analysis showed that, in 2007, men were more likely to bicycle than women, as well as younger adults and those who did not own a car or a motorcycle. A clear trend was shown for education: less educated individuals were more likely to use the bicycle as their mean of transport. **CONCLUSIONS:** Increasing rates of bicycle use in the SPMA reinforces the need for dedicated bicycling infrastructure in order to provide bicyclists with safer and more pleasant trips, as well as the integration of the bicycle with the public transport. Public policies should also address disparities on bicycling rates. **Keywords:** Motor Activity. Environment and Public Health. Walking. Transportation. Urban Health.

# Friday 7th March

## Charter 2

14:00

### Healthy Cities

Session title Community Resilience

Chair Professor David Morris

Mr Aditya Singh, PhD Candidate, University of Portsmouth

Co-authors: Mahesh Nath Singh

Diarrhoea and acute respiratory infections among slum children from selected megacities in India:  
Evidence from NFHS-3

**Background:** In the wake of rapid and continuous increase in slum population in urban India, a substantial reduction in the prevalence of diarrhoea and acute respiratory infections, the top killers of children aged below five years, would need evidence based public health interventions and programs. Considering the lack of studies at national level, the present study aims to study differentials and determinants of diarrhoea and acute respiratory infections in urban slums of India.

**Methodology:** Using data from National Family Health Survey (NFHS III), 2005-06, we analysed information on 2687 children under age five years and usual residents of urban slums. Apart from bivariate analysis, logistic regression analysis was performed to identify the significant independent determinants of prevalence of diarrhoea and acute respiratory infections among slum children.

**Principal Findings:** The prevalence of diarrhoea and ARI is about 8% and 8.5% respectively. Age, birth weight of the child, access to safe water and improved toilet facilities and region of residence emerged as main factors affecting prevalence of diarrhoea among slum children. Children aged 2 or more years and whose weight was not reported were about 63% and 51% less likely to suffer from diarrhea. Using water from safe sources reduces the likelihood of getting diarrhoea by about 20% while not having an improved toilet increased the odds of diarrhea almost twice. Children from the slums in the South region were 50% less likely to have diarrhoea. Children aged 2 or more years and whose weight was not reported were about 48% and 43% less likely to suffer from ARI compared to the children aged less than 2 years and those weighed less than 2500 grams. The likelihood of getting ARI is about twice among children of illiterate parents compared to where both parents are literate. Even partial exposure to mass media reduced the odds of ARI to 50%. Having a toilet other than a flush toilet and not having a separate kitchen increased the odds of ARI by 54% and 40% respectively. Children from slums located in Southern region were about 76% less likely to suffer from ARI.

**Conclusion:** Age, birth weight of the child, access to safe water and improved toilet facilities and region of residence emerged as main factors affecting prevalence of diarrhoea among slum children. ARI among slum children was associated with age and birth weight of the child, religion, caste, parental education, type of family, access to safe water, improved toilet, mass media exposure, region, and availability of separate kitchen. The findings call for dedicated programs and policies, in line with those already existing such as RAY, IHSDP, NUHM, ICDS and JNNURM, for development of urban slums through provision of affordable housing, adequate nutrition to mothers and children, physical amenities and basic services. Targeted interventions for vulnerable groups identified in the analysis could also help reduce the prevalence.

# Friday 7th March

## Charter 2

14:00

### Healthy Cities

Session title Community Resilience

Chair Professor David Morris

Mr Steve Barnes, Policy Analyst, Wellesley Institute

Co-authors: Bob Gardner (Director of Policy, Wellesley Institute), Brenda Roche (Director of Research, Wellesley Institute)

Dealing with Avoidable Urban Health Crises: Policy and Provider Responses in Canadian Cities to Cuts to Refugee Health Benefits

Refugees are a vulnerable population who often have complex health needs. Meeting their needs can pose substantive health challenges in urban settings, where the majority of refugees often settle; it is critical that refugees have immediate access to comprehensive healthcare services. In Canada, the federal government made significant cuts to the Interim Federal Health (IFH) program in 2012. IFH provided basic healthcare coverage to refugees. These cuts left many refugees without even basic healthcare coverage, placing them at risk of poor health. The federal IFH cuts had immediate impacts for other levels of government and healthcare providers as healthcare provision is a provincial/territorial responsibility. The Wellesley Institute completed two policy-oriented health equity impact assessments (HEIAs) of the IFH cuts. We sought to understand how decision makers and healthcare providers responded to a policy decision that was outside of their control and that contributed to poor health. The first HEIA was completed before the cuts took effect and identified potential health risks to refugees and policy solutions at the federal, provincial/territorial, regional health authority and service provider level. The second HEIA was completed one year later and analyzed whether the predicted health impacts occurred. Using case data of negative health outcomes for refugees without IFH coverage, we identified policy and provider responses and recommended how to avoid negative health outcomes. Our analyses found that the IFH program creates confusion, lessens access to healthcare services, leads to inconsistency in care across Canada, and results in poorer health for refugees. At the same time, providers and policy makers developed many innovative solutions. For example, free clinics run by volunteer healthcare professionals were expanded and new clinics were established. Two provinces provided coverage similar to what the IFH used to cover, and another increased funding for community health centres to provide care to refugees. Providers established contingency plans, monitored the demand and use of services by refugees, and documented the impact of the cuts on patients and on provider costs and services. Cuts to the IFH demonstrate the importance of considering health in all policies and at all levels of governance. If health impacts were considered early in the decision making process it is possible that negative health outcomes could have been avoided or mitigated. When this does not occur, leadership is required at multiple levels as governments and service providers respond to policy decisions over which they do not have control. Cuts to the IFH highlight the importance of completing rapid assessments of the health impacts of policy decisions, fostering advocacy at multiple levels, and developing coalitions to collect and share information about the impact of policies and plan responses.

# Friday 7th March

## Charter 3

11:00

### Urban Planning and Architecture

Session title Healthy and Liveable Cities – learning from Copenhagen

Chair Dr Mette Mogensen and Dr Bianca Maria Hermansen

Dr Mette Mogensen, Development Manager, COWI, Lyngby, Denmark

Dr Bianca Maria Hermansen, CEO of CITITEK, Denmark

# Friday 7th March

## Charter 3

14:00

### Urban Planning and Architecture

Session title | Health 2020: The Spatial Determinants of Health and Healthy Equity

Chair | Dr Chinmoy Sarkar

Marcus Grant, Deputy Director of WHO Collaborating Centre for Healthy Urban Environments

How can we support leadership for healthy urban planning?

# Friday 7th March

## Charter 3

14:00

### Urban Planning and Architecture

**Session title** Health 2020: The Spatial Determinants of Health and Healthy Equity

**Chair** Dr Chinmoy Sarkar

Christina Krog, International Federation for Housing and Planning, Copenhagen

For a better tomorrow - Interaction between spatial planning and public health

# Friday 7th March

## Charter 3

14:00

### Urban Planning and Architecture

**Session title** | Health 2020: The Spatial Determinants of Health and Healthy Equity

**Chair** | Dr Chinmoy Sarkar

Stephen Woods, Co-ordinator, UK Healthy Cities Network

Striving for healthy, happy, vibrant and socially integrated communities

# Friday 7th March

**Cobden 1**

**11:00**

**Urban Risk and Humanitarian Response: Ambivalence of Urban Humanitarianism**

**Session title** Ambivalence of urban humanitarianism III: Refugees, Inequalities and Humanitarianism

**Chair** Dr Tanja Müller

Cathy Wilcock, University of Manchester, UK

Institutional resistance to the transnational political activities of refugee groups: The anti-politics of refugee NGOs towards Sudanese activists in Manchester

# Friday 7th March

**Cobden 1**

**11:00**

**Urban Risk and Humanitarian Response: Ambivalence of Urban Humanitarianism**

**Session title** Ambivalence of urban humanitarianism III: Refugees, Inequalities and Humanitarianism

**Chair** Dr Tanja Müller

Dr Jorge Inzulza

Tremors and large waves: loss of memories and threat in the context of the Chilean reconstruction -  
The case of Talca and Constitución

# Friday 7th March

**Cobden 1**

**12:40**

**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Mr Nicholas Savage and Mr Rakeeb Patel

Mr Nicholas Savage, Student, University of Manchester

Protection for prisoners protects the community

Abstract: The subject of sexual relations between prisoners does not attract much in the way of public health resource or political interest. Prisoner healthcare is often seen to be at odds with the security needs of the penal system or populist 'punishment' rhetoric from elected officials. However, once released former prisoners pose a serious healthcare risk to the entire community. Inmates who acquire sexually transmitted infections whilst in prison are more likely to spread these amongst the wider population. Thus prisoners are a key target for Public Health England in efforts to contain the burden of sexually transmitted diseases. Her Majesty's Chief Inspectorate of Prisons policy statement on prisoner health stipulates that 'barrier protection should be freely available to all prisoners'. Never the less, the availability and accessibility of condoms to the prison population remains patchy. Here in Greater Manchester we studied the different policies adopted by HMP Forest Bank, HMP Manchester, HMP Hindley, and HMP Buckley Hall in an attempt understand why condom provision is not universal as well as to identify best practices based on evidence.

# Friday 7th March

**Cobden 1**

**12:40**

**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Mr Nicholas Savage and Mr Rakeeb Patel

Mr Kevin Karia, Student, University of Manchester

The Use of Smartphone Applications within Medicine: A Doctors Point of View

**INTRODUCTION:** The use of Smartphones and subsequently the use of their Applications (Apps) has been growing exponentially. The number of people that own smartphones is continuously increasing across all the socioeconomic and age groups in the United Kingdom. The usage of Apps in Medicine is currently in its early stages and research into its efficacy and benefits is still within its infancy. It is an area with growing interest and has potential become a very important aspect of medical healthcare. **METHOD:** 40 Doctors from the UK have participated in a questionnaire outlining the use of medical applications in clinical practice, this spanned over various specialities and a range of grades. The results shall be analysed to gain a further understanding into the current uses of Apps by Doctors and their views on the use of Apps in the future. **CONCLUSION and DISCUSSION:** There is a clear relationship between the benefits of using Apps in healthcare and the growing need for more innovation within this area of emerging medicine. Although there are regulatory bodies in the UK for Apps, more research into each medical App should be conducted to ensure it stays in line with evidence based medicine. Having said this, the current literature and feedback shows a promising future in this area.

# Friday 7th March

**Cobden 1**

**12:40**

**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Mr Nicholas Savage and Mr Rakeeb Patel

Mr Rakeeb Patel, Student, University of Manchester

Co-authors: Arsa Syed

Is there a relationship between alcohol outlet density and alcohol consumption in early and middle adolescence? –A systematic review

**SETTING:** Early adolescent drinking remains a major public health challenge. It is associated with an increased risk of drinking and driving, suicides, sexual assaults, injuries, and impaired development. Exposure to a higher number of alcohol outlets within a community may lead to increased alcohol use among the residents of that community. **AIMS:** This review outlines the association between alcohol outlet densities and early adolescent alcohol consumption. **DESIGN:** This study was achieved using medical and scientific database searches. **PARTICIPANTS:** The focus group comprised of adolescents aged between 11 and 15, from developed countries. **RESULTS:** The results pose implications on future strategies, policies, and regulations that aim to target and reduce underage drinking.

# Friday 7th March

**Cobden 1**

**12:40**

**A Perspective from Fresh Minds**

**Session title** ABSTRACT PRESENTATIONS

**Chair** Mr Nicholas Savage and Mr Rakeeb Patel

Mr Ziyad Elgaid, Student, University of Manchester

Gastrointestinal Disease Surveillance: What attributes make a successful and effective questionnaire for use in surveillance?

No one likes to answer questions. Let alone hundreds of questions; especially after suffering from an infectious unpleasant illness. By looking at the way questionnaires are designed you can study what attributes make up a well received questionnaire. Up-take on different questionnaires vary wildly, this is due to certain qualities the questionnaires may have when designed. Also other factors, such as quality of information gathered, can be altered too by the design and quality of the questionnaire. If the goal of surveillance is to obtain the most accurate patient information from the largest cohort of patients possible then it is imperative that successful and effective questionnaire design is achieved.

**Cobden 1****12:40****A Perspective from Fresh Minds****Session title** ABSTRACT PRESENTATIONS**Chair** Mr Nicholas Savage and Mr Rakeeb Patel

Mr Akash Shah, Student, university of Manchester

**A Cross Trust Audit on Inappropriate Emergency Department Attendances**

**Background:** Emergency Departments (EDs) are currently pressured to see large numbers of patients. Studies show that up to 40% of these patients present with problems that could be managed in Primary Care, where the cost of treatment is lower compared to EDs. Salford Care Commissioning Group (CCG) has made the decision to cap the amount paid to its local ED for seeing patients with non-urgent problems in a bid to increase the rate of deflection back to primary care.

**Methodology:** Data was collected retrospectively from patients of Langworthy Medical Practice and another comparable Central Manchester based medical practice over a 10 month period to interpret data on deflection rates from their local EDs. Patients were excluded if they presented to the ED outside of their GPs opening hours. Of the remaining patients, 1710 were from Langworthy Medical Practice and 1172 from the comparison practice. In the absence of sufficient detail, the discharge outcome was used as a proxy indicator; anyone referred to primary care or another health care provider was deemed to have presented inappropriately to the ED. **Results:** Whilst Langworthy Medical Practice is a smaller practice (15,500 patients) than its centrally located counterpart (20,000), there is a difference of 51 per 1000 registered patients in the number of A&E attendances during open hours. Langworthy Medical Practice has more attendances, as well as a higher proportion of patients presenting inappropriately and then deflected back to Primary Care. There is no data to determine the proportion of those who present inappropriately but are not deflected.

The demographics of those that presented to their local ED vary greatly between the two EDs.

**Discussion:** I have highlighted the joint responsibility between Primary Care and EDs as gatekeepers to Secondary Care. Whilst EDs may have financial incentives to treat patients, there is a social responsibility to encourage deflection back to Primary Care. There is significant interest from both parties in propagating patient education on appropriate reasons to attend the ED as this will result in lower costs to the CCG. This report also explores reasons why patients choose to attend the ED in favour of their Primary Care Facility, focusing specifically on perception of illness, knowledge of services, and the ability to obtain appointments with a GP on demand. **Recommendations and Scope for Further Study:** I have made recommendations that focus on introducing national guidance to aid patient education. I have also highlighted the potential analytical benefit of creating a more informative coding system for EDs. Studying claims reports from EDs could determine if there is a significant financial incentive for EDs to be apathetic to changes in policy. There are also significant gains to be made from eliciting which of those problems that are manageable within primary care are most likely to present inappropriately to the local ED.

# Friday 7th March

**Cobden 1**

**14:00**

## **Bangladesh Plenary**

**Session title**    Urban Health - Experience from a Developing Country

**Chair**            Dr Shamim Hayder Talukder

Mr. M M Neazuddin, Health Secretary, Ministry of Health and Family Welfare, Government's Republic of Bangladesh

Dr. Mohammad Khairul Ahsan, Planning Wing, Ministry of Health and Family Welfare, Government's Republic of Bangladesh

Mr. Swapnil Kumar Sarkar, Director General , Ministry of Local Government and Rural Development

Dr. Zahirul Islam, Programme Officer, Health, SIDA

Dr. Shamim Hayder Talukder, Chief Executive Officer, Eminence and Member Secretary Bangladesh Urban Health Network

Kaosar Afsana, Director, Health, BRAC

Peter Kim Streatfield, Director, Centre for Population, Urbanization and. Climate Change, ICDDR,B

Dr. Halida Hanum Akhter, Chief of Party, NGO Health Service Delivery Project, Country representative, Pathfinder International

Karar Zunaid Ahsan, Senior M&E Resident Advisor, MEASURE Evaluation, The University of North Carolina

Shams El Arefin, Director and Senior Scientist, Centre for Child and Adolescent Health, ICDDR,B

**Cobden 2**

**11:00**

**Health Promotion / Health Equity, Inequalities and Disparities**

**Session title** ABSTRACT SESSION

**Chair** Professor Waleska Caiaffa

Mr Tendayi Gondo, PhD Student, University of Venda

(Re) defining the climate change - urban health equity nexus through a sustainable partnership lens: Building evidence for better practice.

In most third world countries climate change infers a serious threat to the health and wellbeing of people who reside in cities where population densities are high. The overlap between health inequity and environmental change has seen many governments unleashing a torrent of top down actions that in most cases are grounded on developing partnerships between key stakeholders at various scales. Despite the obvious benefits associated with the development of working partnerships, there is a general consensus among climate change and health practitioners that developing nations are characterized by certain conditions that limit the adoption of sustainable partnerships. Yet these have not been pursued. This analysis uses a developing country experience to (re) define the climate change - urban health nexus through a sustainable partnership perspective. Building evidence from a sample five African countries, the analysis first develops a conceptual model for sustainable partnerships relevant to a developing country context. Using this theoretical frame, the analysis then employs the method of pattern matching to interrogate the extent to sustainable partnerships are reflected in the case studies. Results reveal that the climate change - urban health partnership agenda has dominated the global and regional scales with little collaboration taking place at the local scale where populations are high risk. Most partnerships reviewed at local scale tend to be loose and reactive in nature. If Climate change related health risk are to be lowered, there is a need to 'glocalize' partnerships and promote contractual type of collaborations that benefit from proactive planning.

# Friday 7th March

**Cobden 2**

**11:00**

**Health Promotion / Health Equity, Inequalities and Disparities**

**Session title** ABSTRACT SESSION

**Chair** Professor Waleska Caiaffa

Dr Manuja Perera, Duminda Guruge and Kalana Peiris, MD trainee in Community Medicine, Department of Public Health, Faculty of Medicine, University of Kelaniya

The uses of community symposiums in health promotion processes in Sri Lanka

Health Promotion, defined as a 'process of enabling people to increase control over, and to improve, their health' by World Health Organizations in 1986, is still in its innovative phase. New methods of evaluation and knowledge sharing too are being developed as the field progresses. 'Community symposiums' that utilizes a narrative method to present health promotion processes is an example. The aim of this study was to examine the usefulness of community symposiums as a tool in promoting community health in Sri Lanka. In-depth interviews and focus group discussions were conducted using structured protocols to find out the perceptions of identified partners, health care workers, community members and other stakeholders involved in the community symposiums held up to May 2012 in Sri Lanka. In-depth interviews were carried out among 24 participants recruited by judgment sampling after community symposiums held at district and national level. Eight focus group discussions were conducted among community members and field health staff separately in each district. Constant comparative analysis method was used to analyze data. The main benefits of community symposiums reported were in evaluation, community empowerment, advocacy and knowledge sharing. The symposiums have also contributed to scaling up the interventions within and between districts, building a supportive network among people of different community settings and making the processes more sustainable. The main weakness perceived by the informants was the lack of ability and experience to utilize community symposiums optimally. 'Community symposiums' are useful in enhancing the effectiveness of health promotion interventions and building capacity among planners, implementers, researchers and trainers

# Friday 7th March

**Cobden 2**

**11:00**

**Health Promotion / Health Equity, Inequalities and Disparities**

**Session title** ABSTRACT SESSION

**Chair** Professor Waleska Caiaffa

Dr Vanja Vasiljev Marchesi, Assistant Professor, Medical Faculty

Co-authors: Lovorka Bilajac, Ranko Stevanovic, Tomislav Rukavina

The school of clean hands

**Aim:** The aim of this study was to educate preschool and school children of the importance of proper hand washing practice. It is the cheapest way of reducing infections associated with transmission by unwashed hand such as viral diarrheal diseases, hepatitis A, parasitic infections, some respiratory infections, etc. **Design:** In practical workshop for the preschool children cinnamon and oil to imitate the dirt and microorganism were used. Throughout the game, the children were familiarized with the scheme of appropriate hand washing. The appropriate time was interpreted with a short song they were able to learn and sing during the hand washing. With the picture book the children was shown the important moments of hand washing. For the education of school children a commercial kit Glo Germ (Hygienic solutions, UK) which consists of lotion based simulated germs which glows under UV light was used. To get an idea of pupils' knowledge of hygiene a short and simple questionnaire was used. **Settings:** The workshops took place in kindergarten and primary school in Rijeka, Croatia. **Participants:** In the pilot programme of health promotion 77 of preschool children, age 3 to 6 years old, were included during 2012 and 2013. In the school settings 35 pupils were included in the programme during 2012. The group consisted of 14 boys and 21 girls of fourth grade primary school. **Results:** In the preschool group the children showed a huge interest as well as the childcare workers. Through the workshop the children concluded that for the removal of cinnamon and oil they need soap and warm water and minimum of 15 seconds. The most common unwashed place of hand was thumb and hangnails. The children continuanted to practice the singing with hand washing and with the effort of our students the health promotion programme is still going on. According to questionnaire, school children acquired the basic knowledge of appropriate hand washing in their home settings. The main problem of appropriate hand washing practice in the school settings was the lack of soap, paper towels and warm water. During the practical work the children realized that all of them are washing hand superficially and the common unwashed place of hand is the thumb and hangnails which was seen under the UV lamp. **Conclusions:** Appropriate hand washing practice in the early age is most powerful and cheapest method of the reduction of usual infectious diseases. The basic education should start at home but should continue during the entire educational path. The most concerning was the fact that in the school setting the pupils do not have warm water, soap and paper towels. This kind of health promotion workshop regarding the small price and simplicity can establish the children health habits and improve health overall.

# Friday 7th March

**Cobden 2**

**11:00**

**Health Promotion / Health Equity, Inequalities and Disparities**

**Session title** ABSTRACT SESSION

**Chair** Professor Waleska Caiaffa

Dr Syed Emdadul Haque, Postdoctoral Fellow, United Nations University-International Institute for Global Health (UNU-IIGH)

Co-authors: Mosiur Rahman; Sakisaka Kayako; Atsuro Tsutsumi; Habibul Ahsan; Capon Anthony

Effectiveness of school-based oral health education in preventing dental caries among urban adolescents in Bangladesh

**Aims:** Oral health educational interventions have been successful in many parts of the world. However, the effectiveness of school-based oral health education program in preventing dental caries through increasing knowledge, attitudes, and practices regarding oral hygiene has never been evaluated among urban adolescents in Bangladesh. Therefore, the objective of this study was to evaluate the effectiveness of oral health education to prevent dental caries among 10-15 years old school students in Bangladesh. **Design and setting:** This intervention study was conducted in Araihazar Thana, Narayanganj district in Bangladesh during April 2012 to March 2013. The total area of Araihazar Thana is 183.35 km<sup>2</sup> with 63,080 house-hold units and a population of 331,556. Araihazar has an average literacy rate of 53.0% (7+ years of formal education), compared to the national average of 68.4% literate. Out of 26 high schools in the study area, we randomly selected 3 schools for this study. **Participants:** The study participants were 944 adolescents aged between 10-15 years old from 3 local schools in Araihazar. One experienced dentist who graduated from medical college in Bangladesh trained 3 research assistants for this study. Six months oral health education was provided by the trained research assistants. The baseline and follow-up data on dental carriers were compared to evaluate the effectiveness of oral health education. This study protocol was reviewed and approved by the ethical committee of Bangladesh Medical Research Council (BMRC) in Bangladesh. **Results:** The oral health educational intervention remained a strong predictor of reducing the risk of dental caries among school aged adolescents (adjusted odds ratio [AOR] =0.32; 95% confidence interval [CI] = 0.11, 0.76). Significant increases were observed post versus pre intervention on knowledge of periodontal disease such as the impact of regular tooth brushing on protecting against tooth. With regard to attitudes, visits to the dentist for dental diseases and participants' attitudes that teeth cleaning are one's personal responsibility were significantly higher in the follow-up compared to baseline. With respect to practices regarding dental health, participants who received the intervention reported higher frequency of cleaning teeth (3 times per day), increased tooth brushing with paste, increased the frequency of changing brush within 3 to 6 months, and rinsing ones mouth regularly after meals. In addition, significant differences were observed between baseline and follow-up in cleaning tongue regularly during brushing or after meals. **Conclusions:** School-based oral health education can reduce dental caries in poor dental care settings through increasing knowledge, attitude, and practices among urban adolescents. Government should incorporate oral health education program in school health education curriculum in Bangladesh.

# Friday 7th March

**Cobden 2**

**14:00**

**Healthy Cities**

**Session title** Scaling up food reform in urban contexts: from settings to systems

**Chair** Professor Judy Orme

Matthew Jones, Senior Lecturer Health Community & Policy Studies, University of the West of England

Judy Orme, Professor of Public Health and Sustainability, University of the West of England

Amanda Donnelly

Richard Kimberlee

Jo Lewis

# Friday 7th March

## Cobden 3

11:00

### Urban Risk: Film Screening

**Session title** Film screening: Hot Cities - Climate Bites

**Chair** Dr David Dodman

# Friday 7th March

**Cobden 3**

**14:00**

**Urban Risk and Humanitarian Response**

**Session title** | Closing Plenary

**Chair** | Dr Tanja Müller

Professor Diana Mitlin, GURC, University of Manchester, UK

Urban Risk and Humanitarian Response: reflecting on urban realities and specificities

# Friday 7th March

**Cobden 3**

**14:00**

**Urban Risk and Humanitarian Response**

**Session title** | Closing Plenary

**Chair** | Dr Tanja Müller

Dr David Dodman, IIED

Climate change and its health impacts on the urban poor

# Friday 7th March

**Cobden 3**

**14:00**

**Urban Risk and Humanitarian Response**

**Session title** | Closing Plenary

**Chair** | Dr Tanja Müller

Graham Saunders, IFRC

Linking research and humanitarian challenges in urban areas

