

**2017 International Health Conference**  
St Hugh's College · Oxford

**BOOK OF  
ABSTRACTS**

29th June - 1st July  
2017



## Oral Presentations

Sessions starting Friday 30<sup>th</sup> 9:00am

### Health Economics:

#### **0098 The Western Australian (WA) Research Translation Projects Program**

Babu Simon<sup>1</sup>, Neil Lynch<sup>1</sup>, Sharyn Rodger<sup>1</sup>, Michael Banazis<sup>1</sup>, Richard Fordham<sup>2</sup>, Bruce Robinson<sup>3</sup>, Gary Geelhoed<sup>1</sup>

<sup>1</sup>Research Development Unit, Department of Health, Western Australia, Perth, Western Australia, Australia, <sup>2</sup>Norwich Medical School, University of East Anglia, East Anglia, UK, <sup>3</sup>School of Medicine and Pharmacology, University of Western Australia, Perth, Western Australia, Australia

#### ***Theory/Framework***

The Research Translation Projects program of the WA Department of Health funds investigator-initiated problem-focussed research projects aligned with management aims for efficiencies in healthcare delivery while maintaining or improving standards of care.

#### ***Methods/Hypotheses***

Since 2007 this annual program has funded 111 projects on competitive merit, focussing on innovative solutions and health economic evaluation to facilitate translation of research findings into policy/practice.

#### ***Results/Conclusions***

This program has demonstrated cost savings and is a significant policy enabler for embedding research into the public health system. Examples of successful projects that have changed practice and of barriers to implementation will be presented.

#### **0138 Evaluation of Unmet Needs in Health Care: Opportunities for Multi-Criteria Decision Analysis**

Diana Araja<sup>1,2</sup>

<sup>1</sup>Riga Stradins University, Riga, Latvia, <sup>2</sup>University of Latvia, Riga, Latvia

The classic approach of the unmet medical needs is defined as the self-reported unmet needs for medical care for the three following reasons: financial barriers, waiting times, too far to travel. The aim of this research is to investigate the statistical data of the unmet needs for health care and to assess the applicability of a multi-criteria decision analysis (MCDA). The data show that not only the ranges of criteria which are related to the health care organisation and financing, but also to the personnel attitude of patients and social determinantes are significant and should be investigated by using MCDA.

#### **0160 Medical Care and Spending for Physician and Non-Physician Patients at the End of Life**

Stacey Chen<sup>1</sup>, Hongwei Chuang<sup>2</sup>

<sup>1</sup>GRIPS, Tokyo, Japan, <sup>2</sup>Tohoku University, Sendai, Japan

We compare end-of-life care between physician and non-physician patients, using more than 20,000 physicians from administrative data. Physician patients are more

informed than non-physician ones of the appropriate amount of treatments so their gap in the end-of-life care may indicate the degree of asymmetric information. We compare three sets of measures during the last six months of life: (1) the number of days using intensive care; (2) the indicators for surgery, hospitalization, intensive care unit admission, and death in a hospital; (3) the expenditure conditional on health and socioeconomic status. We also contrast physicians by specialty and experience.

**0030 Financing the Crisis: Public expenditure of the A(H1N1) influenza pandemic**

Helene Pasquini-Descomps<sup>1,2</sup>, Nathalie Brender<sup>1</sup>, David Maradan<sup>1</sup>

<sup>1</sup>Haute École de Gestion Genève, HES-SO University of Applied Sciences Western Switzerland, Carouge, GE, Switzerland, <sup>2</sup>Université de Genève, Genève, GE, Switzerland

Japan, Switzerland and the United States successfully managed the 2009 A(H1N1) crisis according to their pandemic plans' objectives. We explain the differences in their strategies and compute the public expenditure for their respective response in total and per inhabitant. We find out that public authorities spend between \$11.3 to \$26.7 per inhabitant to manage H1N1. The vaccination policy and intended coverage (from 29% to 83% of the general population) mostly explains the differences in the spending per inhabitant. Analyzing past strategies and related financial data can potentially help the public authorities to anticipate their budget for future influenza pandemics.

Health Inequalities:

**0210 Proof of the Pudding: Impact of Horatio-Alger Exercise**

Varun Shetty, Ronald Magliola

Case Western Reserve University-Metrohealth Medical Center, Cleveland, OH, USA

**Objective**

To assess the efficacy of Horatio-Alger Exercise adapted for a global health context.

**Methods**

We conducted a survey to assess changes in attitude of educators before and after the exercise.

**Result**

34 people were surveyed. 44% of respondents agreed that they were well aware of privilege, bias and oppression in any population. 73.52% agreed to this post-workshop. 16.67% agreed to feeling comfortable about teaching others about unearned privilege, bias and oppression and 73.48% agreed post-workshop.

**Conclusion**

The Horatio-Alger exercise is a powerful tool that educators can use to understand and demonstrate unearned privilege in society.

**0217 Structural production of urbanized vulnerabilities: A mixed methodology study on the re-emerging of infectious diseases in Kerala, India.**

Sivaja Nair, Umakant Dash

Indian Institute of Technology Madras, Tamil Nadu, India

Despite Kerala's advancement in health sector, the state faces socio-spatial differentials in vulnerabilities associated with re-emerging infectious diseases. A mixed methodology study using cross sectional survey of sick (n=430) and 30 in-depth interviews was employed to explore the pathways of urbanized vulnerabilities. The results indicate that various social, political, and governance structures created sustained and reinforced spaces of urbanized vulnerabilities by influencing urban population's route to illness and care. Results draws attention to newer forms and pockets of vulnerabilities in a society in transition (in epidemiological and development context), and raise questions on how development is equated with aggressive urbanization.

0104

#### **Disability data disaggregation to inform and improve healthcare practices**

Rachel Murphy<sup>1</sup>, Archana Bhambal<sup>2</sup>, Emma Jolley<sup>1</sup>, Pauline Thivillier<sup>1</sup>, Elena Schmidt<sup>1</sup>

<sup>1</sup>Sightsavers, Haywards Heath, UK, <sup>2</sup>Sightsavers, Bhopal, India

Globally, over a billion people experience disability but little is known about their access to healthcare. We conducted disability data disaggregation in different settings (sub-Saharan Africa; Asia) to assess equity and make our programmes more inclusive.

The Washington Group questions were integrated into routine data collection to understand "functional limitations" of patients.

India: 17.5% of patients were classified as disabled, the majority (80%) attending outreach centres rather than the hospital.

Tanzania: 20% of trachoma trichiasis camps attendees had disability;

Disaggregating data by disability is feasible and useful to inform and improve healthcare practices to make them more patient-centred and inclusive.

0275

#### **The Forgotten Tail: Does Mean BMI Reflect Under-nutrition and Severe Under-Nutrition in Women aged 20-49 years across 60 Low- and Middle-Income Countries (LMIC)?**

Shohinee Sarma<sup>1,2</sup>, Behnam Sadeghirad<sup>5</sup>, Fahad Razak<sup>3,4</sup>

<sup>1</sup>Internal Medicine Residency Program, McMaster University, Hamilton, ON, Canada,

<sup>2</sup>Mailman School of Public Health, Columbia University, New York City, NY, USA, <sup>3</sup>Li

Ka Shing Knowledge Institute of St Michael's Hospital, Toronto, ON, Canada, <sup>4</sup>Faculty

of Medicine, University of Toronto, Toronto, ON, Canada, <sup>5</sup>Department of Clinical

Epidemiology & Biostatistics, McMaster University, Hamilton, ON, Canada

British epidemiologist Geoffrey Rose postulated that the mean of a population distribution is closely linked to its tails. There is a relationship between normalcy and deviance in a population.

We examine whether mean BMI is associated with prevalence of severe undernutrition (BMI<16) and undernutrition (BMI<18.5) in women aged 20 to 49 years. We used Demographic and Health Survey (DHS) data from 60 LMIC (N = 500,761) and found that Pearson's correlation and regression coefficients were lower for undernutrition than overweight categories.

Although BMI reflects individual changes, it may not capture the intricacies of undernutrition at a population level.

## Older Age:

### **0164 Mental health promoting interventions among the elderly: results from a large-scale systematic review**

Janni Niclasen<sup>1</sup>

<sup>1</sup>*Department of Psychology, University of Copenhagen, Copenhagen K, Denmark,*

<sup>2</sup>*Centre for Health Collaboration, Aarhus University, Aarhus, Denmark*

**Aim:** To evaluate interventions with a focus on preventing mental health problems and promote mental health among healthy elderly aged 65+.

**Method:** A systematic review was carried out according to PRISMA-guidelines. Literature was searched in PubMed and PsycINFO. Inclusion criteria were: RCT-studies, samples aged 65+, and published within the last ten years. A total of 3512 articles were identified of which 53 were included.

**Results:** A number of factors were identified as important for a positive effect of an intervention including personal characteristics, content and structure, and implementation.

**Conclusion:** Some interventions are promising but more research is needed.

### **0226 Examining the effects of Activities of Daily Living (ADLs) on Informal Caregiver Strain**

Edel Walsh, Aileen Murphy

*University College Cork, Cork, Ireland*

This research examines the factors associated with caregiver strain in those caring for older people in Ireland. A sample of 1394 carers from the Quarterly National Household Survey (2009) is utilised. Regression analysis estimates the effects of nine caring activities on caregiver strain. Factors such as the dependents condition and relationship to the caregiver are also controlled for. The results suggest helping with personal care, physical help, helping with paperwork or financial matters, giving medicine and keeping an eye on the dependent are statistically significant in increasing carers' strain. This research identifies a number of specific challenges for informal carers.

### **0184 Culture Specific Care: A Study Among Institutionalised Elderly In Varanasi**

Dipannita Chand, Suhita Chopra Chatterjee

*Indian Institute of Technology, Kharagpur, West Bengal, India*

Varanasi, having a death centric culture, attracts many elderly at their last stage of life. The study explores and examines available care provisions and their implications among institutionalised elderly through semi-structured interview and observation. Findings reveal that the care provided is mostly grounded on the prevailing death culture of dominant Hindu community rather than a proper communication with the inmates, resulting in a poor end of life care. It concludes that the care approach for the older people, till their death, should essentially acknowledge their culture specific needs and preferences which are influenced by their individual beliefs and perceptions.

### **0173 Nursing Home Work Climate and Worker Turnover: A Re-examination**

Frank Eyetsemitan

*Roger Williams University, Bristol, RI, USA*

Nursing home facilities experience high turnover rates of between 55-200% annually (Koneteka et al 2005). Factors responsible for this outcome include inadequate pay, lack of recognition, lack of opportunities for development and supervisor behavior. The assumption that a lack of job satisfaction would lead to a turnover, however, is not always tenable. In this survey of workers at a skilled care facility, employees who identified poor worker conditions had longer tenure than those who did not. There are adverse implications for service delivery when workers are dissatisfied with their work environment and yet do not quit.

## Public Health:

### **0187      Treating Acute Childhood Malnutrition in Rural Haiti in the Time of Cholera: Outcomes and Obstacles from a Hospital-Based Outpatient Therapeutic Feeding Program (OTP)**

Emily Dansereau<sup>3</sup>, Anand Habib<sup>4</sup>, Mary Davies<sup>5</sup>, Samuel Ware<sup>6</sup>, C. Nicholas Cuneo<sup>1,2</sup>

*<sup>1</sup>Brigham & Women's Hospital, Boston, MA, USA, <sup>2</sup>Boston Children's Hospital, Boston, MA, USA, <sup>3</sup>University of Washington, Seattle, WA, USA, <sup>4</sup>Harvard Medical School, Boston, MA, USA, <sup>5</sup>Columbia University College of Physicians and Surgeons, New York, NY, USA, <sup>6</sup>Planned Parenthood, Nassau County, NY, USA, <sup>7</sup>Medical Missionaries, Manassas, VA, USA*

This study reviews data from an OTP at a clinic in rural Haiti with focus on the effect of the 2010 cholera epidemic on program operations. A retrospective chart review was conducted for the complete set of OTP patients from its inception in 2009 through 2014. Data from 170 complete (93.4% of total) records were included in a multivariate logistic regression model. Average cholera burden during OTP treatment duration was negatively correlated to likelihood of cure when controlling for patient and care-related variables (OR=0.859, p=0.002). These results have driven investment in a more patient-and community-centered model of management.

### **0188      Changes in Abdominal Aortic Aneurysm Rupture and Short Term Mortality 1994 - 2013**

Greta Tam<sup>1</sup>, Yiu Che Chan<sup>2</sup>, Grace C Cheung<sup>2</sup>, Stephen W Cheng<sup>2</sup>, Marc Chong<sup>1</sup>, Faith Ho<sup>1</sup>

*<sup>1</sup>Chinese University of Hong Kong, Hong Kong, Hong Kong, <sup>2</sup>Division of Vascular Surgery, Department of Surgery, University of Hong Kong Medical Centre,, Hong Kong, Hong Kong*

Background: Endovascular aneurysm repair (EVAR) was introduced in 1999 in Hong Kong as a less invasive treatment of abdominal aortic aneurysms (AAA) with an acceptable mortality. This study aims to assess the surgical outcome of AAA. Methods: 20,151 AAA public hospital admissions from 1994 to 2013 were identified. Results: Although there was an increase in AAA ruptures, short-term AAA related deaths decreased from 73 to 22 per 100 admissions (p<0.0005). This is due to decreased rupture deaths (p<0.0005) and operative mortality for intact repairs (p=0.033). Conclusions: Declined mortality rates are likely related to introduction of EVAR.

### **0145      Assessing Engagement and Knowledge Regarding Advanced Care Directives**

Jacob Bradshaw, Cheyenne Kern, Galliher Ariel, Amie Wojtyna  
*University of Indianapolis, Indianapolis, United States Minor Outlying Islands*

The young adult age group has the highest accident rate of any group. The lack of engagement and knowledge of Advanced Care Directives in the college population has been an understudied subject in public health. This neglect has cost the student population and the medical community millions of dollars in medical expenses through unrequested life sustaining treatment and delayed treatment because of unclear legal representation to give consent. The lack of Advance Care Directives has also reduced efficiency and quality of care.

**0244**      **Understanding single nucleotide polymorphisms and getting tested for diseases like Alzheimer's Disease (AD) developing in life during later years is vital for International Health Security**

Girish Kotwal  
*UMass Medical School, Worcester, MA, USA*

**Theory/Framework:** The Human Genome project has resulted in the elucidation of the entire human DNA sequences and alternate forms of the genes (alleles) for 100 different genetic diseases have been identified based on single nucleotide polymorphisms (SNPs) within alleles for specific genes.

**Methods and Hypothesis:** Predisposition or risk to certain diseases like AD can be ascertained by determining SNPs in individuals for Apo E gene. This can be achieved by submitting saliva to 23andMe or by extracting the DNA and sequencing.

**Results:** 98year individual screened for Apo E had the normal alleles by both methods.

**Conclusion:** Knowing genes promotes longevity

Social Science and Medicine:

**0076**      **The Association Between Patient-Physician Communication and Cost-Related Medication Non-adherence Among Diabetic U.S. Medicare Beneficiaries**

James Zhang, David Meltzer  
*The University of Chicago, Chicago, USA*

Patient-physician communication (PPC) plays a critical role in healthcare. We evaluated the association between PPC and cost-related medication non-adherence (CRN) using 2012 Medicare Current Beneficiaries Survey. Among 2,316 diabetic patients, 464 (20%) reported CRN. Controlling for other covariates, patients with doctors who seemed to be in a hurry were 88% ( $p < 0.01$ ) more likely to report CRN; likewise relationship persisted for those patients with doctors who did not explain medical problems, who often acted as though she/she was doing the patient a favour by talking to the patient, and whom they could not depend on to feel better physically and emotionally.

**0136**      **Is Research a Barrier to Health Service Delivery? Findings from an Ethnographic Study of the Implementation of Imaging Pathways.**

Maria Kordowicz, Eloise Radcliffe, Patrick White, David Armstrong, Mark Ashworth  
*King's College London, London, UK*

**Background**

TOHETI is an imaging programme, promoting research as part of multidisciplinary collaboration. Research tends to be characterised by protracted timeframes, potentially delaying TOHETI implementation.

**Methods**

The TOHETI team was studied ethnographically for two years. The data were analysed using a thematic analytical framework.

**Findings**

Research can be a distraction from achieving patient benefit. The success of research is influenced by the wider organisation and achieving clinician 'buy in'.

**Conclusions**

Despite research being promoted within an evidence-based healthcare model, its utility will be influenced by organisational context. Attempts should be made at managing the potential risk research holds for service delivery.

**0120****The Human Development Model of Disability, Health and Wellbeing.**

Sophie Mitra

*Fordham University, New York, USA*

This paper introduces the human development model of disability, health and wellbeing. It is developed to describe and explain health deprivations (impairments, health conditions), their causes and their consequences on wellbeing. The model is based on Sen's capability approach and informed by the socioeconomic determinants of health. It defines disability as a deprivation in terms of functionings or capabilities among persons with health deprivations. Health deprivations and disability result from the interaction of personal factors (e.g. age), structural factors (e.g. physical and social environment) and resources (e.g. assets). It is compared to other disability models and its implications are derived.

**0052****The capability approach to health**

Paul Anand<sup>1</sup>

*<sup>1</sup>Open University, Milton Keynes, UK, <sup>2</sup>London School of Economics, London, UK*

The paper reviews ways in which the capability approach can contribute to understanding health and provides an introduction to a new family of health measures - OXCAP.

**Wellbeing, Social Science and Nursing:****0122****Evaluating the impact of health information technology on efficiency and costs of home care**

Kestutis Staras, Audrone Juodaite Rackauskiene, Aiste Raulusaitiene, Marius Ciurlionis

*Centro poliklinika, Vilnius, Lithuania*

In 2014 Centro outpatient clinic has launched an innovative model to optimize home care, communication and monitoring processes through inventive information technologies. Decision was made in order to deliver more care procedures and increase variety of home-based care services, without increasing economic costs. Our aim was to analyze the impact of information technologies to the home care patients: procedures and monitoring. Integrated digital solutions for monitoring and administrative processes, allowed us to

save time and keep economic resources low. Moreover we are able to provide bigger range of services and deliver more care to our patients.

**0139**                    **Cancer Treatment With Photodynamic Therapy**

Antonio Jimenez

*Hope4Cancer Institute, Playas de Tijuana, Mexico*

Photodynamic Therapy (PDT) has been used in combination with other non-toxic integrative treatment approaches for the treatment of a variety of cancers at our clinics in Mexico. PDT targets cancer cells by selectively activating a sensitizer using specific light frequencies. It also indirectly activates the immune system, delivering a long-term therapeutic effect. Recent and long-term clinical experience with this treatment will be discussed. We will also describe a new LED-based light delivery technology that enhances penetration of light through tissue, overcoming one of the biggest disadvantages of this treatment method.

**0262**                    **Is wellbeing being mobilised to promote personal responsibility in healthcare systems?**

Jo Hobbs

*University of Manchester, Manchester, UK*

This study used the 'Theory of Responsibilisation' to investigate whether there is empirical evidence to support theoretical claims that wellbeing is part of governance efforts to shift responsibility for health from the state to the individual.

Data was obtained through semi-structured interviews with 22 participants and supplemented with data from 2 co-researchers research diaries.

Evidence indicated a minority of participants' perceived wellbeing is mobilised to promote personal responsibility for health. However, the majority of participants concomitantly perceived the state was primarily responsible for health. This suggests there may be a disjuncture between citizen and state regarding the responsibility for health.

**0088**                    **Analysing the non-clinical learning of health professionals on international placements**

Natasha Tyler<sup>1</sup>, Louise Ackers<sup>1</sup>, Lucie Byrne-Davis<sup>2</sup>, Anya Ahmed<sup>1</sup>, Carlos Collares<sup>3</sup>

<sup>1</sup>*University of Salford, Salford, UK*, <sup>2</sup>*University of Manchester, Manchester, UK*,

<sup>3</sup>*Maastricht University, Maastricht, The Netherlands*

It is believed that low-resource, international work has non-clinical, developmental benefits for healthcare professionals. This work involved a series of studies to examine such learning, beginning with a meta-synthesis of existing literature. Followed by a Delphi study to gather consensus among key stakeholders. This generated a core outcome set; which was developed into a Likert-scale questionnaire and administered to health professionals. The results of the questionnaire are currently being analysed using Exploratory Factor Analysis and Item Response Theory. So far outcomes can be loosely categorised into complex skill sets, including leadership and communication. The constituent components of these are explored.

Sessions starting Friday 30<sup>th</sup> 10:40am

## Health Inequalities and Big Data:

### **0018      Determinants of uptake of hepatitis B testing and health-seeking by migrant Chinese in England**

Andrew Lee<sup>1</sup>, Alicia Vedio<sup>1,2</sup>, Eva Liu<sup>1</sup>, Sarah Salway<sup>1</sup>, Jason Horsley<sup>3,1</sup>, Amrita Jesurasa<sup>1</sup>

<sup>1</sup>*The University of Sheffield, Sheffield, UK*, <sup>2</sup>*Sheffield Teaching Hospitals, Sheffield, UK*,  
<sup>3</sup>*Sheffield City Council, Sheffield, UK*

In England, migrant Chinese are a high-risk group for hepatitis B infection but underutilise services. We explored the determinants of hepatitis B testing and health-seeking by the Chinese in England. Community issues identified included population mobility, poor disease knowledge, stigma, and lack of familiarity with health services. There was little social discourse about hepatitis B and erroneous perceptions of personal risk. Health practitioners missed opportunities to test and misjudged infection risk in the Chinese. Inadequate language support and 'cultural competence' were also barriers. Health commissioners were unaware of this issue and competing demands on limited meant they are often overlooked.

### **0253      Sex Inequality and Intersectional Inequality in Child Nutrition: Evidence from a HDSS Site in West Bengal**

Simantini Mukhopadhyay

*Institute of Development Studies Kolkata, Kolkata, India*

The headcount ratio of undernutrition has limitations. The Mean of Squared Deprivation Gaps (MSDG) incorporates dimensions of depth and severity and is decomposable across population subgroups. This paper uses data for 3520 children below five years from Birbhum Health and Demographic Surveillance System, India. We examine how child undernutrition (headcount ratio and MSDG) varies across sex and across sex-caste intersections. Girls have worse outcomes among Tribals and Upper caste Hindus. There is no significant sex gap in the bottom asset quintile. MSDG reveals a lot more on sex inequality and intersectional inequality in child nutrition than the headcount ratio.

### **0266      Age at menarche and the risk of later health outcomes: China Kadoorie Biobank**

Taslim Savji, Ling Yang

*Oxford University, Oxford, UK*

Early menarche may be associated with increased risk of non-communicable diseases.

The association between age at menarche and risk of baseline disease was explored using cross-sectional data from the China Kadoorie Biobank using logistic regression to estimate adjusted odds ratios.

Inverse associations were observed and risk of disease decreased by 3% (OR=0.97,0.94-0.98) for CHD, 4% (OR=0.96,0.94-0.97) for stroke/TIA, 9% (OR=0.91,0.87-0.95) for breast cancer and 6% (OR=0.94,0.93-0.95) for diabetes per year of later menarche. U-shaped associations with age at menarche were found for

asthma and for COPD. BMI adjustment attenuated associations. These findings provide preliminary evidence for future research in China.

**0178**      **Project Embrace: A Non-Profit Providing Sustainable Medical Materials to Low and Middle-Income Countries**

Mohan Sudabattula<sup>1,2</sup>, Gabrielle Hoyer<sup>1,2</sup>

<sup>1</sup>*The University of Utah, Salt Lake City, Utah, USA*, <sup>2</sup>*Project Embrace, Salt Lake City, Utah, USA*

As an organization, Project Embrace is dedicated to reducing global health inequalities and promoting a healthier planet through the re-utilization of sustainable medical materials for patients in need across the globe. Our methods are to collect medical devices that provide skeletal structural support or provide mobility assistance. Typically these devices are mislabelled as excess or waste and are disposed of prematurely when they could to be reused by other patients. By interrupting this cycle, we found a significant reduction in medical waste as well as fulfilled a demand for these devices in developing low and middle-income healthcare facilities abroad.

Mental Health:

**0036**      **A phenomenological study exploring consumer views of participating in an opioid replacement program in rural Australia.**

Wendy Penney<sup>1</sup>, Penny Cash<sup>1</sup>, Tejaswini Patil Vishwanath<sup>1</sup>, Jacqueline Keevans<sup>2</sup>, Pauline Molloy<sup>2</sup>

<sup>1</sup>*Federation University, Victoria, Australia*, <sup>2</sup>*Ballarat Community Health, Victoria, Australia*

Background: There is scant literature examining the everyday experiences of participants involved in opioid replacement therapy ORT programs, the literature is dominated by a focus on access and cost.

Methods: In-depth interviews enabled researchers to conceptualise the meanings that participants attribute to the phenomena of being an ORT program consumer, highlighting the broader social experience.

Results: Results illuminate the perspective of the consumer with the intent to improve the ORT service and develop best practice guidelines.

Conclusion: Stories told by participants are rich and powerful and have the potential to change primary healthcare practice.

**0137**      **When communicating is hard....: How art can assist in finding the ‘invisible string’ with children and their families experiencing health challenges”**

Jannie B. Olsen

*Queensland Health, Brisbane, Australia*

This presentation will through case studies explore what art therapy is and how art therapy and family systems can be integrated to provide a safe space for each individual within a family system to express their experiences, feelings and thoughts when living with health and developmental challenges. Externalising thoughts and

emotions in words can at times be a difficult process and can within a family system create perplexity to an already complex situation when not understood. The aim is for professionals to see how creativity can support difficult communication and thereby help families finding the 'invisible string'.

**0111 Arts in the Eye of the Beholder: Stigma in Mental Illness**

Rhiza Kristata

*The University of Sydney, Camperdown, NSW, Australia*

The use of various forms of art in increasing the life quality of people with mental illness has been commonly known as though they are limited to issues around treatments and symptom reductions. In fact, arts can be used to shift the negative perception of the public and increase the chance of social inclusion for people with mental illness.

Using analogy with arts as a bridge, arts provide rooms for the public and people with mental illness to connect. Studies showed that arts as representations of the disease has also successfully impacted on public perceptions and social acceptability.

**0068 Outcome-Based Prescribing: Selection of Antidepressants**

Farrokh Alemi, Aryan Mazloum-Yazdi

*George Mason University, Fairfax, USA*

The majority (61%) of depressed patients do not benefit from their first antidepressant. These patients go through trials and errors that leaves their depression untreated. They remain at risk of suicide, while money is spent on unnecessary medications. We report on a decision aid for selecting antidepressants that doubles the accuracy of prescribing (from 39% to 78%), making the first antidepressant the right medication for majority of patients. The study presents genetic and diagnostic profile of patients who benefit from antidepressants. For example, we found that patients with PTSD and neurological disorders do not benefit from citalopram.

Public Health:

**0043 Evaluation on SDIDTK (Stimulasi Dini Intervensi Deteksi Tumbuh Kembang / Early Stimulation, Detection and Intervention on Child's Growth) Program at Puskesmas 1 Denpasar Barat, Indonesia**

NK Semara Yanti<sup>1,3</sup>, Luh Pitriyanti<sup>2</sup>, NL Astri Indraswari<sup>2</sup>

*<sup>1</sup>University of New South Wales, Sydney, New South Wales, Australia, <sup>2</sup>Udayana University, Denpasar, Bali, Indonesia, <sup>3</sup>Lembaga Pengelola Dana Pendidikan (LPDP), Jakarta, Indonesia*

Framework: SDIDTK is the program that runs by Puskesmas (Public Health Centre) in collaboration with the healthcare workers, parents and schools to ensure the health status among the schoolchildren and kindergarteners

Method: Reflective method and comparison between implementation and standard procedure were done as a part of the audit process.

Result: Local customs have a direct impact on the program, but the lack of healthcare workers and miscoordination between parents and schools can act as a threat.

Conclusion: The implementation of the program was good. The community's patterns should be treated effectively to improve the quality of the result.

**0045                    The Prevalence Of Scabies among Traditional Quran house (khlawa) in Sherg Alneel locality ,Khartoum state,2016**

Fatemeh Suliman

*Khartoum University, Khartoum, Sudan*

Lack of healthy environmental conditions augment scabies transmission. This is a school based cross sectional study, at Aeid babiker khalwa in Sherg Alneel locality, total students were 812 male, interview questionnaires and clinical examination were done hypothesising epidemics of scabies in khalwa, associated with tenia capitis infection and some persistent influencing factors. Of 200 students, scabies prevalence (56%), tenia capitis prevalence (69.6%) with significant association between them. There were significant association between the malnutrition, sharing personal things, history of scabies, urinary tract complications and scabies prevalence. But there were no significant association between the state of origin, age, other suspected factors and scabies prevalence. Policymakers should design programs for treatment and management of scabies epidemics in khalwa.

**0022                    Inflammatory Bowel Disease in Denmark: Current and future epidemiological profile**

Anders Green, Peter B Jensen, Vibeke Andersen

*Odense University Hospital, Southern Denmark, Denmark*

We have linked nationwide register data on hospital activities and civil service to investigate incidence, mortality, treatment patterns and prevalence of Inflammatory Bowel Disease (IBD) in Denmark for the period 2000 through 2011. In a 'stock-and-flow' model we estimated relevant transition rates and used them to project the future incidence, mortality and resulting prevalence through the year 2030 and to estimate the factors that determine the future prevalence of IBD.

The impact of a continuously increasing prevalence of the major components of IBD (Crohn's Disease and Ulcerative Colitis), will be discussed from a public health and health economics perspective.

**0260                    The Test-retest Reliability and Construct Validity of a Single Item Physical Activity Intention Questionnaire for Adults with Intellectual Disabilities.**

Yetunde Dairo

*Oxford Brookes University, Oxford, UK*

Framework: To examine the construct validity and test-retest reliability of a physical activity (PA) intention measure (SPAIM) for adults with intellectual disabilities (awID).

Methods:

Surveys were administered by the researcher face-to-face to a total of 50 participants/their carers to establish the meaningfulness of 30-minute time duration and PA. A second survey was administered to assess PA intention. The survey was repeated after 14 days.

Results:

All participants understood 30-minute time duration and PA. The test-retest reliability for the SPAIM was substantial,  $k=0.70$ ,  $p<0.001$ .

Conclusion:

The SPAIM is a reliable and valid tool for measuring the PA intention of awID.

## Social Determinants, Social Science and Patient Reported Outcomes:

### **0270 Investing in Education will help reduce Maternal Mortality**

Onthatile Serehete

*University of Oxford, Oxford, UK*

Target 5A of MDG 5, aimed to reduce by three-quarters the maternal mortality ratio (MMR), however this goal was not met and globally only a 44% reduction in the MMR was achieved between 1990 and 2015. To achieve SDG Target 3.1 we need triple the efforts of the MDGs and investing in education which is a social determinant of health will help address the complexity of maternal deaths. Education is a high-impact intervention which empowers its recipients and by educating mothers to utilize health services more we will achieve better health outcomes.

### **0009 The use of caring touch in health practice**

Nicola Power

*Auckland University of Technology, Auckland, New Zealand*

Literature suggests many benefits of caring touch. However, the complex, multiple constructions of touch can cause anxiety or confusion. Its role is immeasurably more complex when working as a health professional.

Understanding the dominant constructions of touch, and deconstructing their meanings and practices as articulated by various health practitioners, enabled the identification of when certain touching practices are legitimate or condoned and/or are inhibited or prevented. This post-structural discourse analysis aimed to build understanding of the hidden discourses driving the use or non-use of touch. Semi-structured interviews highlighted concerns about misinterpretation and similarly, personal conflicts about the use of touch.

### **0017 Chronic Illness And Employment: Career Changes and Strategies as Health Management Behaviour**

Lavanya Vijayasingham<sup>1</sup>, Uma Jogulu<sup>1</sup>, Pascale Allotey<sup>1</sup>

*<sup>1</sup>Monash University Malaysia, Bandar Sunway, Malaysia, <sup>2</sup>Multiple Sclerosis Society Malaysia, Petaling Jaya, Malaysia, <sup>3</sup>Edith Cowan University, Western Australia, Australia*

Continued work in populations with chronic illness is a desired outcome and confers many health and economic benefits. Viewing chronic illness as social experience and careers as social outcomes, we use a selection of career theories and hermeneutic phenomenology data to explore how working individuals with multiple sclerosis in Malaysia strategize to achieve a dynamic balance of health, career and life goals. This study contributes knowledge to how work-related constraints and trade-offs are manoeuvred in a multi-level context.

### **0008 The changing face of masculinities and infertilities in the Middle East**

Adam Talbot

*University of Manchester, Manchester, UK*

Theory/framework: This project develops and reinforces theory that men in the Middle East are embracing emerging masculine ideals and identities as they engage with reproductive technologies.

Methods: Literature including Marcia Inhorn's vast ethnography is used to explore Middle Eastern masculinity and the impact of infertility and reproductive technologies on masculine identities.

Results: Infertility is highly detrimental to men's masculinity in the Middle East and reproductive technologies are being taken up with difficulty but may act as a vector for change.

Conclusion: Reproductive technologies are changing the mentality of men who have been steeped in religious and social mores since childhood.

## General Practice and Paediatrics:

### **0225 To Switch Or Not To Switch-Who Decides On NOACs?**

Aileen Murphy<sup>1</sup>, Ann Kirby<sup>1</sup>, Colin Bradley<sup>2</sup>

<sup>1</sup>Department of Economics, University College Cork, Cork, Ireland, <sup>2</sup>Department of General Practice, University College Cork, Cork, Ireland

Since the emergence of New Oral Anticoagulants as safe and effective alternatives to warfarin, switching or treatment changes have become prominent; changing the landscape for prescribers. Here anticoagulant switching decisions are analysed from a General Practitioners perspective using primary Irish data. A multivariate probit is applied to determine who is making the decision to switch and what characteristics are influencing those decisions. Results indicate switching decisions are a function of individual and joint decision making processes. However in contrast to previous findings where communications with patients is highlighted, this is not evident in the Irish results.

### **0049 Volunteering as a clinical lead and temporary medical coordinator for a cluster of refugee camps: personal, clinical and professional lessons learnt.**

Rula Najim

*Imperial College NHS Trust, London, UK*

Theory: Working within a refugee camp has been the strongest single influence on my personal and professional development as a trainee to date.

Methods: 1 month was spent volunteering in 4 camps in North Greece housing Syrian and Iraqi refugees; my role included clinical lead and temporary medical coordinator.

Results: The lessons learnt aided my understanding of:

- Communities;
- Leadership qualities required within a stressful environment;
- The role of the doctor within this setting.

Conclusion: Working with traumatized groups of people can foster personal development, feelings of gratitude, improve leadership qualities and encourage compassion to both our local and international communities.

### **0119 Association between postnatal growth and high blood pressure in childhood.**

Augusta Urugwiro<sup>1</sup>, Ana Cristina Santos<sup>1,2</sup>

<sup>1</sup>EPIUnit - Instituto de Saúde Pública, Universidade do Porto,, Porto, Portugal,

<sup>2</sup>*Department of Clinical Epidemiology, Predictive Medicine and Public Health, Faculdade de Medicina, Universidade do Porto,, Porto, Portugal*

High blood pressure (BP) among young is a growing health problem worldwide; early surveillance is substantial for preventing future cardiovascular risk.

Postnatal growth effect on early childhood high BP levels was assessed, on 2795 children recruited from "Generation XXI"; using multivariate regression analysis models between longitudinal defined growth trajectories and BP levels.

The overall prevalence of (systolic/diastolic) BP levels, into 90-94<sup>th</sup> and BP $\geq$ 95<sup>th</sup> percentile were 17,6 % and 3,3% respectively. Catch up weight during infancy exposed more children, even after adjustment for preterm delivery and pregnancy weight gained by pre-pregnancy BMI.

Postnatal growth impacted on early childhood elevated BP levels.

**0189      A National Children's Inpatient and Day Case Survey in England: Comparing Child and Parent Responses**

Amy Tallett<sup>1</sup>, Steve Sizmur<sup>1</sup>, Dougal Hargreaves<sup>2</sup>, Jackie Pitchforth<sup>2</sup>, Bridget Hopwood<sup>1</sup>

<sup>1</sup>*Picker Institute Europe, Oxford, UK, <sup>2</sup>University College London, London, UK*

Children's perspectives are rarely heard in measuring paediatric care quality. In 2014, a national children's survey in England measured experiences of a hospital admission in 8-15 year olds. 6204 parents completed a survey; the child section was completed either by children themselves (58%), by parents (14%), or jointly (28%). Child and parent responses showed high levels of concordance on some measures, including pain relief, but differed significantly for communication skills, feeling safe, involvement in decisions, and privacy. Since children's feedback can differ from that of parents, it should always be sought to improve the quality and patient-centeredness of paediatric care.

**Health Economics and Patient Reported Outcomes:**

**0013      Physical exercise for low back pain: A patient-centered perspective.**

Emmanuel Aboagye

*Department of Environmental Medicine, Karolinska Institutet., Stockholm, Sweden*

Physical exercise is considered effective for individuals with non-specific low back pain, but adherence is essential.

Factors that influence individual differences in health choices and adherence are associated with the individuals' attitudes and potentials to perform exercise recommendations with a health condition.

From a patient-centered perspective, a discrete choice experiment examines the relative importance of exercise characteristics to individual-preference and the role of employer incentives to engage them. The results show that the most preferred is physical exercise with aerobic component (i.e. cardiovascular training), a group exercise with supervision and of high intensity preferably twice per week during work hours).

**0090**                    **Does routine screening for cardiovascular risk factors widen socioeconomic inequalities in health? : A systematic review**

Melisa Tan<sup>1</sup>, John Tayu Lee<sup>1</sup>, Theo Lorenc<sup>2</sup>

<sup>1</sup>*Saw Swee Hock School of Public Health, National University of Singapore, Singapore,* <sup>2</sup>*Centre for Reviews and Dissemination, University of York, York, UK*

Screening for cardiovascular disease risk targets tends to benefit the predominant population and those with more socioeconomic ability. We conducted a systematic review in the relevant databases and included studies which evaluated uptake of health checks for CVD multifactorial risk factors in various screening sites. We found socio-economic inequalities in the uptake of health screening. Low uptake rates in the socioeconomically disadvantaged population are observed to be likely in less deprived and older age groups. While health checks aim to detect and treat CVD risk factors early, it also threatens the socioeconomic inequalities gap.

**0144**                    **The long journey: Diagnostic Odyssey and Social Health Inequalities**

Setti RAIS<sup>1</sup>, Lise ROCHAIX<sup>1,2</sup>, Paul DOURGNON<sup>3</sup>

<sup>1</sup>*Hospinomics, Paris, France,* <sup>2</sup>*Paris 1 Panthéon Sorbonne, Paris, France,* <sup>3</sup>*IRDES, Paris, France*

We measure time to diagnostic work-up defined as the timespan from first symptoms to final diagnostic for four chronic conditions, and analyze the role played by patients' social characteristics in accounting for time to diagnostic work-up. We use self-reported data from an online open access questionnaire administered to a French social network of patients with chronic conditions. Duration models were used to explain variations in diagnostic delays. The results show that social participation and social support reduce the probability of experiencing longer periods of time to diagnostic work-up. Higher levels of education increase the probability of experiencing longer periods.

**0181**                    **Causal Analysis of Impact of Trump's Presidency on Price of Stock in Health Insurance Companies**

Farrokh Alemi, Tim Coffin

*George Mason University, Fairfax, USA*

We introduce Causal Control Charts (CCC) and apply the technique to impact of Trump presidency on healthcare stock. CCC estimating the unconfounded impact of an intervention on the process by removing the effects of alternative explanations using Stratified Covariate balancing. The analysis controls for (1) changes in an index of funds that measures changes in general economy, and (2) an index of funds that measure price changes in health insurance industry. The impact of Trump's presidency on fluctuations in individual insurance stocks are reported.

Sessions starting Friday 30<sup>th</sup> 1:40pm

Health Policy:

**0011**                    **Patient Engagement at the Patient-Physician level: A Mixed Methods Study**

Vidhi Thakkar<sup>1</sup>, Raisa Deber<sup>1</sup>, Neeru Gupta<sup>1,2</sup>, Aviv Shachak<sup>1</sup>

<sup>1</sup>*Institute of Health Policy Management and Evaluation, Toronto, Canada, <sup>2</sup>St Michael's Hospital, Toronto, Canada*

**Theory/ Framework:** Patient engagement at the patient-physician level is related to preferred role in decision-making, which may vary by patient, disease, and health system characteristics.

**Methods:** This mixed methods study of glaucoma patients will include: a quantitative survey using the problem-solving decision-making scale (PSDM), e-health literacy (e-HEALs), trust in physician scale, and demographic variables; followed-up by qualitative interviews.

**Hypotheses:** Although most people wish to have a shared-decision-making role in health care, this may vary with patients' levels of perceived e-health literacy.

**Results/ Conclusion:** Data collection on the scales is in progress. These findings inform patient-engagement models to match people's preferences.

**0032**

### **Shaping A(H1N1) pandemic response: Money will follow.**

Nathalie Brender<sup>1</sup>, H el ene Pasquini-Descomps<sup>1,2</sup>, David Maradan<sup>1</sup>

<sup>1</sup>*Haute  cole de gestion de Gen ve, HES-SO, University of Applied Sciences Western Switzerland, Geneva, Switzerland, <sup>2</sup>University of Geneva, Geneva, Switzerland*

This paper explores how costs are considered when selecting mitigation strategies against the A(H1N1) influenza pandemic. Based on the analysis of semi-directed interviews and official documents in Switzerland, Japan and the United States, we conclude that decision makers and experts are knowledgeable about medical effectiveness, but lack cost information at the time the decisions were made. Public authorities assume that current budget lines will absorb overspending in case of emergencies. Consequently, information on costs remains rare and plays a little role in shaping the A(H1N1) response, and the expenditure analysis is performed ex-post to evaluate the use of public funds.

**0002**

### **A patient-centred approach improves research, policy, and care**

Lydia Makaroff

*European Cancer Patient Coalition, Brussels, Belgium*

Patients have unique knowledge, perspectives and experiences that can enhance health services and strengthen the link between research and practice. Optimal research, policy, and care can only be obtained by understanding the diverse needs and preferences of patients.

A patient-centred approach can increase treatment adherence by ensuring the route of administration, treatment duration, and treatment frequency matches patient preferences. Patient-centred eHealth tools can encourage better communication between health professionals and patients. Patient-friendly clinical trial search engines can boost participation in research. Ensuring that patients are recognised stakeholders in health technology assessment and other regulatory processes can also improve health policy.

**0012**

### **Unplanned use of Emergency Department and inpatient wards within 30 days of an index admission for heart failure or COPD**

Kate Honeyford, Paul Aylin, Derek Bell, Alex Bottle  
*Imperial College, London, UK*

Despite increasing focus on reducing unplanned readmissions, our understanding of patient journeys is limited. Using English Hospital Episode Statistics we describe the unplanned use of hospitals by 170,000 patients within 30 days of discharge from an index emergency admission for COPD or heart failure. 16.7% of patients attended Accident and Emergency at least once, of whom 75.2% were admitted; of those not admitted, 16.7% were subsequently admitted through A&E within 30 days of index discharge. 27.0% of 30-day readmissions did not come via A&E. Understanding different pathways patients take after discharge will support reduction in unplanned use of hospital services.

## Health Psychology:

### **0175 Mismatch Negativity to sound pitch deviants as a possible screening tool for depression**

Leonardo Bonetti<sup>1</sup>, Niels Trusbak Haumann<sup>1</sup>, Peter Vuust<sup>1</sup>, Marina Kliuchko<sup>2,3</sup>, Elvira Brattico<sup>1,2</sup>

<sup>1</sup>*Center for Music in the Brain, Department of Clinical Medicine, Aarhus University, Aarhus, Denmark/Midtjylland, Denmark,* <sup>2</sup>*Cognitive Brain Research Unit, Institute of Behavioral Sciences, University of Helsinki, Helsinki, Finland, Finland,* <sup>3</sup>*BioMag Laboratory, HUS Medical Imaging Center, University of Helsinki and Helsinki University Hospital, Helsinki, Finland, Finland*

Theory/Framework: Depression is a state of aversion to activity and low mood that affects behaviour, thoughts and sense of well-being, frequently related to altered neurophysiological responses.

Methods and hypotheses: Mismatch negativity responses (MMNs) to acoustic deviants were recorded using magnetoencephalography (MEG) in 98 participants who filled in the Montgomery-Åsberg Depression Rating Scale. We hypothesized a connection between MMN amplitudes and depression level.

Results: Higher level of participants' depression corresponds to higher MMN amplitudes to pitch deviants.

Conclusions: Depression trait modulates the central auditory discrimination of pitch deviants, suggesting implications for prevention and screening of individuals with tendency to depression.

### **0125 Mobbing, Coping with Stress and Job Burnout Among Polish Nurses**

Ewa Wilczek Rużycza  
*Cracow University, Cracow, Poland*

Objective: The aim of the study was to analyze interrelationships between mobbing, coping with stress and job burnout among nurses.

Material and methods: The study included 86 nurses and was based on three instruments: *The Negative Acts Questionnaire (NAQ)*, *COPE Inventory* and *Maslach Burnout Inventory (MBI)*.

Results and conclusions: A relationship was found between the preference for some specific stress management strategies and job burnout level, also after adjustment for the mobbing intensity, age and seniority of the respondents, thus empirically confirming a multifaceted nature of the unfavorable phenomena related to the work of a nurse.

**0169**                    **How can aggression and its antecedents be measured reliably using experience sampling method?**

Tridip Jyoti Borah

*Ecole des hautes études en santé publique/The French School of Public Health, Paris, France*

Aggression leads to severe health and economic burden. Experience sampling is an emerging method of measuring aggression that uses mobile technology to record thoughts, emotions, behaviour, events and context that occur in a person's daily life. Experience sampling has an excellent retrospective recall, ecological validity and a high statistical power but lacks a robust psychometric foundation. This pilot aims to establish new experience sampling measures and evaluate their acceptability, reliability and validity in understanding aggressive behaviour. The findings will provide researchers with a set of tools to reliably measure aggression and its antecedents using experience sampling method.

**0023**                    **Internet Addiction Among Medical Students in Omdurman-Sudan in 2016**

Sondos Altayeb

*Faculty of medicine - university of khartoum, Khartoum, Sudan*

Theory: internet addiction is impulse control disorder, destroys our lives.

Objective: determine pattern and effects of Internet addiction.

Method: Cross sectional study, using stratified random sampling.

Result: most purpose for use is chatting and academic purposes, the most side effects for prolonged use are eye blurring and headache, most students have academic performance affected, prevalence of internet addiction is 80.15%, no significant association between gender and internet addiction, most students prefer staying on internet than sitting with others.

Conclusion: Internet use is increasing because of technology development, availability of internet on mobile phones and low cost of internet.

Health Economics:

**0241**                    **The three horsemen of health behaviour**

Jaikishan Desai

*Victoria University of Wellington, Wellington, New Zealand*

Health behaviour is all the things we do to stay alive and be healthy. Biology plays a central role in this, yet research on health behaviour largely ignores it. In this paper, I take a close look at the basic characteristics of living organisms and the species-specific features of human biology and from those draw out behavioural implications. The three factors that emerge are information, uncertainty, and agency. I explain how

these three horsemen affect the way people manage their own health, and how they influence the provision, delivery, and financing of health care services.

**0220 Borderline Personality Disorder: resource utilisation patterns and costs**

Jane Bourke<sup>1</sup>, Aileen Murphy<sup>1</sup>, Daniel Flynn<sup>2</sup>, Mary Kells<sup>2</sup>, Mary Joyce<sup>3</sup>, Justina Hurley<sup>3</sup>

<sup>1</sup>University College Cork, Cork, Ireland, <sup>2</sup>Health Service Executive, Cork, Ireland,

<sup>3</sup>National Suicide Research Foundation, Cork, Ireland

The objectives of this paper are to (i) estimate the cost of Borderline personality disorder (BPD) in Ireland; and (ii) compare resource utilisation patterns across Europe. Total costs (health care and productivity losses) per individual in Ireland was €9,937 annually. Total yearly cost of illness was €332 million. Given the dearth of cost of illness studies in mental health coupled with the lack of national guidelines for BPD, these results provide an insight on the cost of treating BPD and can be employed to inform the development of national guidelines that promote effective and cost effective treatments for BPD.

**0195 Analysing the Magnitude of Out-of-Pocket Expenditure among Different Social Categories in India**

Shivendra Sangar, Ramna Thakur, Varun Dutt

*Indian Institute of Technology, Kamand, Mandi, Himachal Pradesh, India*

In this study authors have analyzed the catastrophic impact of out-of-pocket (OOP) expenditure on health care among different social categories (General, Scheduled Castes, Scheduled Tribes and Other Backward Classes) in India. By using National Sample Survey data for the period of twenty years from 1995-2014 authors have found that the incidence and intensity of OOP expenditure is higher in case of general category while the burden of OOP expenditure is more in case of other backward classes. There is a need to revisit the approach towards health care in India to minimize the burden of OOP expenditure on health care.

**0223 The cost-effectiveness of pre-diabetes screening: a systematic review of evidence**

John Ta-Yu Lee<sup>3</sup>, Manasi Nandihalli<sup>3</sup>, Kamlesh Khunti<sup>1</sup>, Eszter Vamos<sup>2</sup>, Kee Seng Chia<sup>3</sup>

<sup>1</sup>University of Leicester, Leicester, UK, <sup>2</sup>Imperial College London, London, UK,

<sup>3</sup>National University of Singapore, Singapore, Singapore

Diabetes Mellitus (DM) is a major cause of mortality worldwide. Patients pass through a pre-diabetes stage before developing DM. Screening for pre-diabetes and implementing interventions can delay or prevent diabetes onset. This systematic review assesses the economic evaluation of pre-diabetes screening. Eligible studies were identified through databases to select original publications in English from the last 20 years with pre-diabetes screening and intervention compared against no screening. Selected articles were 7 hypothetical modelling and 2 observational studies from United States, Australia, Canada, United Kingdom, Germany, China and Mexico. All studies proved to be cost-effective.

## Public Health:

### **0170 Psychological effects and coping strategies during puberty: A qualitative study exploring pubertal experiences of young males aged 18-21 in an urban city of Pakistan**

Noureen Shivji<sup>1</sup>, Joanne Lymn<sup>1</sup>, Kim Watts<sup>2</sup>, Oonagh Meade<sup>1</sup>

<sup>1</sup>The University of Nottingham, Nottingham/ Nottingham shire, UK, <sup>2</sup>King's College London, London, UK

Background: In Pakistan, pubertal experiences of young males has been largely underreported but could potentially have long-term health impacts. Exploring puberty experiences could help in providing appropriate interventions for future young males. Methods: Twenty-two semi-structured interviews with young males were analysed using Thematic Analysis.

Results: Puberty experiences were associated with anxiety, shame and embarrassment often leading to isolation and depression. Participants alongside these psychological effects adapted several coping strategies.

Conclusion: In order to have positive pubertal experiences and a normal adult life, participants highlighted the need for additional material and health promotion programs to aid the transition process.

### **0222 An argument for the Capabilities Approach in conceptualizing Key Populations in HIV**

Oliver Mutanga

*University of Oslo, Oslo, Norway*

In this paper, with the help of the capabilities approach, I offer a critique of the current conceptualisation and understanding of 'key populations' by most international organisations involved in HIV intervention work. Firstly, there is no agreement among various organisations using this label on the composition of this group. Secondly, each group within the 'key populations' is treated homogeneously, or separated from other social networks yet human beings have multiple affiliations and are members of numerous social groups. Thirdly, it is assumed that all people with certain characteristics or behaviour will willingly identify themselves with different labels within the key population group.

### **0250 Gender differences in smoking behaviours among Thai university students**

Dujrudee Chinwong, Ngamtip Mookmanee, Jongkonnee Chongpornchai, Surarong Chinwong

*Faculty of Pharmacy, Chiang Mai University, Chiang Mai, Thailand*

In Thailand, the male smoking prevalence is about 20 times the female smoking prevalence. This cross-sectional study using a self-administered questionnaire aimed to investigate gender differences among 364 university students (321 males and 43 females) in northern Thailand. The study showed higher smoking behaviours among males than among females. Both groups did not differ in nicotine dependence as measured by the Fagerstrom test; however, females were more likely than males for intention to quit smoking in the next month (51.2%, 34.0%, respectively p=0.041). A health promotion action for smoking cessation should be provided to students.

### **0081 Examining the Association Between Healthcare Quality and Health Status Among American Children**

Damien Byas<sup>1</sup>, James Gillespie<sup>1</sup>, Patricia Talbert<sup>1,2</sup>, Jasmine Kinnard<sup>2</sup>

<sup>1</sup>Center for Healthcare Research, Chicago, IL, USA, <sup>2</sup>Howard University, Washington, D.C., USA, <sup>3</sup>Xavier University, New Orleans, USA

Theory/framework: American children are diagnosed with serious acute and chronic disease types in increasingly high numbers.

Methods: A large randomly drawn sample of children (N = 524,581) ages 5 to 12, was examined in this research study using the Pearson Chi Square test.

Hypothesis: There is a statistically significant association between healthcare quality and disease prevalence

Results: The results of this study found that there was a statistically significant association between healthcare quality and disease prevalence (p < .001).

Conclusion: The research findings substantiate the importance of the quality of healthcare and healthcare services delivery.

## Health Management, E-Health and Hospitals:

### **0133 Usability Assessment of a Patient-centered Mobile Health Application (iHeartU) for Self-management of Heart Failure**

Lingling Zhang, Sabarish Babu

*Clemson University, Clemson, SC, USA*

Heart failure (HF) causes significant economic and humanistic burden for patients and their families, especially those low-income populations, partly due to high hospital readmission rates. HF patients' engagement and self-management are not only a very accessible and affordable resolution, but also critical for improving their health outcomes.

We will conduct a usability assessment of a virtual-human assisted, mobile self-management system ("iHeartU") for HF patients.

Findings from this study will help improve effectiveness, efficiency, and satisfaction of using iHeartU and enhance patient engagement. This work will establish a standardized, systematic user-centered design for a mHealth-based self-management application for chronic diseases.

### **0078 Downsizing the Bureaucracy and its Impact on Health Workforce: A Study of Public Sector Nurses in Thailand**

Napaphat Satchanawaku<sup>1,2</sup>, Sureeporn Punpuing<sup>1</sup>

<sup>1</sup>*Institute for Population and Social Research, Mahidol University, Nakhon Pathom, Thailand*, <sup>2</sup>*Department of Political Economy, King's College London, London, UK*

This paper examines the impact of downsizing Thailand's bureaucracy on health workforce by illustrating through nursing personnel. This study employed mixed methods – survey, documentary analysis and interviews. The study was analysed based on theories and concepts of neoliberalism, bureaucracy and human resources for health (HRH). It is argued that downsizing Thailand's bureaucracy had an adverse impact on nursing workforce in the public sector. The findings suggest that young nurses are given non-permanent status, which resulted negatively in their working conditions. It is important for the government to design any innovative employment to ensure the sustainability of the health services.

### **0255 Association between medication adherence and clinical outcome among acute coronary syndrome patients**

Surarong Chinwong<sup>1</sup>, Kodchawan Doungsong<sup>1</sup>, Preeyarat Channaina<sup>1</sup>, Arintaya Phrommintikul<sup>2</sup>, Dujrudee Chinwong<sup>1</sup>

<sup>1</sup>Faculty of Pharmacy, Chiang Mai University, Chiang Mai, Thailand, <sup>2</sup>Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

This retrospective cohort study assessed the association between patients' adherence to medications (dual antiplatelet, beta-blocker, ACEI/ARB and statin) and major adverse cardiac events (MACE). A total of 256 patients were included in the study with mean age of 65.9±13.0 years. The ACS patients with very good adherence (at least 90% adherence) of beta-blocker had a significantly lower risk of MACE than those with adherence less than 90%: HR = 0.50, 95% CI: 0.27-0.93, p = 0.028 after adjusting potential confounders. No significant association was found between patients' adherence to other medication groups and the occurrence MACE.

**0265 The need of research-driven policies to implement Reporting and Learning Systems in Low and Middle-Income Countries**

Lorenzo Cirri, Kelsey Flott, Erik Mayer, Ara Darzi

Centre for Health Policy, Institute of Global Health Innovation, Imperial College London, London, UK

Reporting and Learning Systems (RLS) are fundamental to improve organizational visibility and stimulate a 'learning-from-errors' culture, but remain underused in Low- and Middle-Income Countries (LMICs). We performed a systematic literature review to address their current role in such context and selected 17 studies. Of those, 59% evaluated existing RLS or described the implementation of new tools, while 41% explored perceptions and attitudes of staff towards adverse events reporting. 82% had a quantitative, 12% qualitative, 7% mixed-methods design and only 6% was about *Low-Income-Countries*. Overall, we identified poor evidence about RLS-implementation in LMICs and, when already present, the need for user-friendlier solutions.

Health Economics and Social Science:

**0042 Mapping Local Knowledge to Understand Causal Mechanisms of Child Pedestrian Injury**

Jacqueline Curtis<sup>1</sup>, Heather Trnka<sup>2</sup>, Alexandria Lesak<sup>2</sup>, Sherry Blair<sup>2</sup>, Heather Wuensch<sup>2</sup>

<sup>1</sup>Kent State University, Kent, Ohio, USA, <sup>2</sup>Akron Children's Hospital, Akron, Ohio, USA

Theory/Framework: Traditional spatial analyses of child pedestrian injuries are incapable of fully identifying causal mechanisms. However, by going into injury hot spots and re-casting community members as sensors of their environment, local knowledge (LK) can complement these traditional data.

Methods and Hypotheses: LK will reveal causal mechanisms, therefore public health and safety practitioners, and residents in one persistent child pedestrian injury hot spot were interviewed using sketch mapping or spatial video geonarrative.

Results: Spatial analysis of LK reveals otherwise unknown causal mechanisms of child pedestrian injury.

Conclusions: Mapping LK is useful in research-practice partnerships to understand child pedestrian injury.

0282

**Using Stochastic Health State Function to Forecast Healthcare Demand and Healthcare Financing: Evidence from Singapore**

Ngee Choon CHIA, Shu Peng LOH

*National University of Singapore, Singapore, Singapore*

Budgeting healthcare financing for an ageing population requires projections on healthcare demand and cost. However, detailed micro health data is often unavailable. Projection of healthcare demand is thus usually based on projected elderly population, which does not take into consideration changes in health state. This paper proposes a new approach to forecast health variables with a stochastic health state function and the well-established Lee-Carter stochastic mortality model, using life tables, hospital admission and cost patterns by age bands. We thus use Singapore's life tables and hospital admission data to project the hospitalization rate, healthcare demand and healthcare financing cost.

0094

**Medical progress and financial sustainability in orphan diseases: experiences in six years of orphan drug assessment and pricing in Germany**

Susanne Philippj, Karina Ehrig, Thomas Müller

*Federal Joint Committee (Gemeinsamer Bundesausschuss), Berlin, Germany*

Framework: Since 2011, an early benefit assessment (EBA) is required for newly authorized medicinal products. For orphan drugs (EC/141/2000) the additional benefit is proven by market authorization (German social code).

Methods: Analysis of orphan drug-EBAs (outcome, QOL, therapy costs).

Hypothesis: EU-incentives trigger negligence regarding evidence provision by the pharmaceutical industry.

Results: Of 43 orphan drug-EBAs one was appraised with a considerable additional benefit. Although effect sizes accounting for additional benefit are low, therapy costs are extraordinarily high.

Conclusion: Focus on clinical evidence generation and a legislative framework assuring patient access considering economic potential of national health care systems is indispensable.

0041

**Targeting Health Interventions in Informal Settlements using Spatial Video Geonarratives to identify and Contextualize Key Locations**

Andrew Curtis

*Kent State University, Kent, Ohio, USA*

Informal settlements have a high disease burden while often lacking spatial data and context needed to target effective interventions. Spatially encoded video and geonarratives can fill this gap providing an easy-to-use and cost effective strategy for local health officials to find both *where* and *why* health risks are greatest. Case studies from Colombia and Nicaragua (Dengue and Zika), Haiti (cholera), and Tanzania (WASH), will show how local collaborators have used our spatialized word clouds, location specific contextual maps capturing institutional and community knowledge, and Spatial Video derived GIS data layers to target scant resources to affect the greatest change.

Sessions starting Friday 30<sup>th</sup> 3:20pm

## Acute Health:

### **0203      What Factors Influence Nurse's Intention to Leave the Adult Critical Care Settings?**

Nadeem Khan<sup>1,2</sup>, Helen Walthall<sup>1</sup>, Obrey Alexis<sup>1</sup>, Debra Jackson<sup>1</sup>

<sup>1</sup>*Oxford Institute of Nursing and Allied Health Research (OxINAHR), Oxford Brookes University, Oxford, UK, <sup>2</sup>oxford University Hospitals, Oxford, UK*

**Aims:** To present findings of a systematic literature review related to nurse's intention to leave the adult critical care settings.

**Background:** The shortage of specialist nurses has been an ongoing issue for many decades. A greater understanding of the factors influencing nurse's intention to leave the critical care environment is crucial.

**Methods:** A systematic search of databases was completed.

**Results:** Six main themes emerged following data analysis.

**Conclusions:** The literature review highlighted the need for further research on how these themes may impact on critical care nurses.

### **0271      Chest pain and elevated troponin I: Acute Coronary Syndrome?**

Muhammad Jawad Noon

*University of Oxford, Oxford, UK*

Patients with raised cardiac enzymes and chest pain are often treated for myocardial infarction. We report a case of 73 year old female who presented in the ER with shortness of breath and chest discomfort. The test results showed elevated troponin. She was treated as the case of acute coronary syndrome, until S1Q3T3 ECG pattern was recognized by a physician and CT Angiography was ordered that showed saddle pulmonary embolism. ECG is a non-invasive tool for screening patients with Pulmonary Embolism and elevated troponin has several non-ACS causes.

### **0015      Implementing the South African Triage Scale (SATS) in a rural district hospital in Kwazulu-Natal**

Marie Broyde<sup>1,2</sup>, Claire Crichton<sup>2</sup>

<sup>1</sup>*North West Deanery, Manchester, UK, <sup>2</sup>Benedictine Hospital, Nongoma, South Africa*

The South African Triage Scale (SATS) was validated in 2004, yet many hospitals still see patients in time order. We implemented SATS in a large rural hospital in Kwazulu-Natal to improve clinical prioritisation and patient flow.

Waiting time to see a doctor was measured for 798 attendances over three periods: pre-SATS, one month, and seven months after implementation. SATS reduced waiting times for all attendances, and more unwell patients were seen sooner. This change was sustained at 7 months.

Chronic staffing shortages makes 24 hour triage difficult and continuous training and championing is needed to ensure SATS is used appropriately.

## Community Care and Older Age:

### **0020 Child deaths in rural South Africa: comparing home and hospital deaths.**

Jessica Price

*Oxford University, Oxford, England, UK*

#### Background:

In rural South Africa over 50% of under-5 deaths occur at home. Such deaths are not reliably captured by national statistics. Verbal autopsies offer an opportunity to evaluate circumstances around these deaths.

#### Aims/methods:

This study aims to compare determinants of under-5 deaths in three HDSS sites in South Africa, to characterise household risk profiles for home deaths and treatment seeking behaviours in affected households. Verbal autopsies were the primary data collection tool. Descriptive analysis was used to characterise care usage patterns and household risk profiles.

#### Results:

Cause of death, care usage patterns and determinants of treatment seeking behaviour will be presented.

### **0005 Elder Abuse and Sleep Quality: A cross-sectional study among rural older Malaysians**

Raudah Yunus, Wasfeea Syeda, Noran Naqiah Hairi, Wan Yuen Choo, Farizah Hairi, Sajaratulnisa Othman, Awang Bulgiba Awang Mahmud  
*University of Malaya, Kuala Lumpur, Malaysia*

Elder abuse and neglect (EAN) has been shown to adversely affect health. Anetzberger (1997) proposed a framework explaining the possible mechanisms of how EAN leads to different types of health outcomes. This study investigates the phenomenon of EAN among rural older Malaysians and sleep quality is affected. A number of 1648 respondents were randomly chosen and interviewed. Abuse was determined by modified Conflict Tactic Scale questionnaire and sleep quality was measured by the Pittsburgh Sleep Quality Index. A dose-response relationship between clustering of abuse and sleep scores was demonstrated. Regression analyses showed a significant relationship between abuse and poor sleep.

### **0191 Building a House of Care: Feedback from Clients on What Matters for Home Care**

April Nakaima<sup>1</sup>, Sanjeev Sridharan<sup>1,2</sup>, Rachael Gibson<sup>1,2</sup>

<sup>1</sup>*Evaluation Centre for Complex Health Interventions, Toronto, Ontario, Canada,*

<sup>2</sup>*University of Toronto, Toronto, Ontario, Canada*

This paper discusses learnings from an Evaluation of Integrated Care for Complex Populations (ICCP) on what clients value in terms of person-centred care. The implications of learnings are described in the context of two sets of provincial and national policies: 1) Patients First: a framework that guides action in Ontario, Canada; and 2) A House of Care: a framework that guides action in Scotland. Twelve learnings will be highlighted. These learnings pertain to multiple levels of determinants of person-centred care, including the policies, organizations, integrated networks, staff and clients. Knowledge translation implications of results to aspirational policies will be highlighted.

**0221 Mammography screening in Nigeria: women's view on the factors affecting participation.**

Olanrewaju Lawal, Fred Murphy, Julie Nightingale  
*University of Salford, Manchester, UK*

Aim: Explore the barriers affecting women's attendance in mammography screening.

Method: Thematic analysis of seven focus group discussions conducted amongst women in Lagos, Nigeria.

Results: Poor knowledge of the benefits and risk of having a mammogram influences the women's anxiety; thus, this directly affects their attendance. Furthermore, low level of professionalism displayed by healthcare workers and lack of adequate resources were found to discourage women.

Conclusion: As there has not been any research in this society that directly explores women's view regarding their non-attendance in mammography screening- the women emphasise the need for a wider awareness programme.

**Health Policy and Systems:**

**0199 From the offices of the WHO to the pharmacies and patients of the developing world**

David Ranney, Adolphe Edward, Jerry Gardner  
*El Centro Regional Medical Center, El Centro, CA, USA*

The WHO has published a model drugs list every other year since 1977, but the dollars spent on research are not accomplishing their founding goals: provide safe, efficacious, and cost-effective medicines to developing nations. With less-than 60% of essential drugs available in public health facilities, the UN suggests improving this number through, "better monitoring of availability of essential drugs..." The authors maintain: getting appropriate drugs to accessible locations is no longer a matter of research, it's a matter of practicality. We hypothesize, combining locally developed drugs lists, national logistics plans, and regional economic bodies, greater access to medicines is possible.

**0234 The uptake of reproductive, maternal, newborn and child health care in GonjiKolela, Amhara Region, Ethiopia: A qualitative exploration of what is on the ground and what could be helpful**

Yan Ding, Fei Yan, Ji Liang, Hong Jiang, Xiaoguang Yang, Xu Qian  
*Global Health Institute, Fudan University, Shanghai, China*

To explore what's on the ground and what could be helpful for uptake of reproductive, maternal and newborn health services in Gonjikolela Ethiopia, a qualitative study was performed as part of a baseline assessment through nine key informants' interviews. Content analysis was used to analyze the data. Gonjikolela had a three-tier health system with structured health volunteer groups in communities. A regularly updated health information system was in place and function. Based on existing system, the project could help improve service uptake through community engagement, awareness raising, capacity building, equipment donation, transportation support and small in-kind incentives to the locals.

0200

**Brazilian Community Health Agents bridging access to and in health care systems**

Margareth Zanchetta<sup>1</sup>, Renée Bailey<sup>1</sup>, Annette Bailey<sup>1</sup>, Rogério Pinto<sup>2</sup>, Vanessa Daufenback<sup>1</sup>, Luana Alves<sup>1</sup>, Stephanie Lucchese<sup>4</sup>, Fernanda Fernandes<sup>1</sup>, Inês Leoneza<sup>3</sup>

<sup>1</sup>Ryerson University, Toronto, Ontario, Canada, <sup>2</sup>University of Michigan, Michigan, USA, <sup>3</sup>Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, <sup>4</sup>St. Michael's Hospital, Toronto, Ontario, Canada

Community Health Agents (CHAs) respond to human resource crisis in deprived communities by providing primary health care (HC) access, promoting integrative HC, and mobilizing communities. A conceptual model of Brazilian CHAs work was developed using secondary data analysis, and validated through interviews with Brazilian CHAs and health experts.

Validation of the model reinforces CHAs integration in the HC system as insufficient in tackling inadequate health resources. Their integration into an interprofessional delivery system enhances HC accessibility. Paradoxically, enhanced accessibility may result in less community engagement. The model was expanded to incorporate this new dimension of access to/in Brazil health services.

0239

**Nairobi Newborn Study: Estimating the gap between the need for and the availability, utilisation, and quality of facility-based inpatient newborn care in Nairobi, Kenya**

Georgina Murphy<sup>1,2</sup>, David Gathara<sup>2</sup>, Nancy Abuya<sup>2</sup>, Mike English<sup>1,2</sup>

<sup>1</sup>University of Oxford, Oxford, UK, <sup>2</sup>KEMRI Wellcome Trust Research Programme, Nairobi, Kenya

This project aimed to assess the availability and quality of inpatient newborn care in hospitals in Nairobi City County across the public, private, and not-for-profit sectors and contrast this to the estimated need for such services, therefore describing the gap between capacity and demand and identify priority areas for quality improvement. Assessment of admissions, structural capacity, and process quality of care across 32 hospitals was conducted. Our estimates suggest that almost a third of the predicted number of sick newborns likely to need inpatient services are not accessing care and numerous quality gaps exist where care is provided.

Medical Decision Making and Medical Statistics:

0242

**Equal Opportunities? Assessing Global Health Education in U.K. Medical Schools**

Ellisiv Clarke, Megan Livingstone, Sarah Holmes, Zoe Kirkham, Jackie Chui  
Newcastle Medical School, Tyne and Wear, UK

Following new GMC guidelines, this study assesses current global health teaching provisions across UK medical schools, reviews current literature and suggests proposals for standardisation.

We measured global health teaching provisions at UK medical schools using a points-based system based on the following criteria:

1. Mandatory teaching
2. Student selected components

3. Intercalation
4. Extracurricular activities
5. An institute of global health

We collected data by visiting university websites, emailing admissions offices and circulating questionnaires to students.

The results ranged from 0-8, with a mean of 3.55 and median of 4.

**0207      **Bioethics in the Real World: People With Disabilities and the International Drive Towards Legalized Assisted Suicide and Euthanasia****

Mark Mostert

*Regent University, Virginia Beach, Virginia, USA*

In this paper I discuss (a) the current state of the push to legalize assisted suicide/ euthanasia, (b) how social contexts in many countries today mimic Nazi Germany's progression in the 1930s toward public acceptance of euthanasia, (c) how these developments do, indeed, target people with medical and other disabilities, and (d) how cultures in which assisted suicide and euthanasia are anathema might respond to these developments.

**0278      **A novel electronic algorithm using host biomarker point-of-care-tests for the management of febrile illnesses in children (e-POCT): a randomized, controlled, non-inferiority trial. Point-of-care technologies to improve management of febrile illnesses in children****

Frank Kagoro<sup>1,2</sup>, Kristina Keitel<sup>3,5</sup>, Valerie D'Acremont<sup>3,6</sup>, Blaise Genton<sup>1,8</sup>, Josephine Samaka<sup>2</sup>, John Masimba<sup>2</sup>, Zam zam Said<sup>2</sup>, Hosiana Temba<sup>2</sup>, Tarsis Mlaganile<sup>2</sup>, Willy Sangu<sup>7</sup>

<sup>1</sup>*University of Oxford, Oxford, UK*, <sup>2</sup>*Ifakara Health Institute, Dar es Salaam, Tanzania*, <sup>3</sup>*Swiss Tropical and Public Health Institute, Basel, Switzerland*, <sup>4</sup>*University of Basel, Basel, Switzerland*, <sup>5</sup>*Boston Children's Hospital, Boston, USA*, <sup>6</sup>*Department of Ambulatory Care and Community Medicine, University of Lausanne, Lausanne, Switzerland*, <sup>7</sup>*Dar es Salaam City Council, Dar es Salaam, Tanzania*, <sup>8</sup>*Infectious Diseases Service, Lausanne University Hospital, Lausanne, Switzerland*

The absence of point-of-care tests in resource-limited settings leads to mismanagement of childhood infections and irrational antibiotics use.

A randomized controlled non-inferiority trial involving 1586 children of 2-59 months presenting with acute febrile illness given electronic point-of-care algorithm (ePOCT) compared to similar 1583 controls, was conducted between 2014-2016 in Dar es Salaam, Tanzania.

In e-POCT, clinical failure by day 7 was reduced from 4.1%-2.3% compared to the control (RR 0.57, 95% confidence interval[CI] 0.38-0.85). Antibiotic prescription was lowered from 29.7%-11.5% (RR 0.39, 95% CI 0.33, 0.45).

e-POCT can improve clinical outcomes and reduce antibiotics use to children with febrile illnesses.

## Public Health:

### **0014      Respectful maternal care for ethnic minority women in Lao PDR**

Helen Catton<sup>1,2</sup>

<sup>1</sup>*Save the Children, Luang Prabang, Thailand,* <sup>2</sup>*Manchester University, Manchester, UK*

Lao PDR has a 38% health facility delivery rate; one of the lowest regionally.

Theory: Formative research with ethnic minority women highlighted that lack of respectful maternal care (RMC) is a barrier to birthing at a health facility.

Hypothesis: Facility based mentoring is a feasible, effective approach for strengthening RMC in resource poor settings.

Methods: Facility mentorship for government staff is being implemented in 10 rural districts. Ongoing monitoring evaluates skills of mentors, mentees, quality of service and client satisfaction.

Results: Available prior to conference.

Conclusion: Facility mentorship advances RMC.

### **0115      When the Message Does Not Fit All: Framing Communication to Promote Family Planning in Uganda**

Marjorie Kyomuhendo<sup>1</sup>, Gorette L Nassanga<sup>1</sup>, Anne R Katahoire<sup>2</sup>

<sup>1</sup>*Makerere University, Department of Journalism and Communication, Kampala, Uganda,* <sup>2</sup>*Makerere University, School of Public health, Kampala, Uganda*

Based on the Encoding and Decoding Communication model, this paper examines how men and women in Uganda perceive family planning (FP) campaign radio and poster messages. A qualitative study was conducted using 20 focus group discussions and 10 in-depth interviews with purposively selected women and men aged 18-40 in Kabarole district, Uganda. Open-ended interview guides were used.

Five themes emerged. The messages were perceived as; silent on the side effects of contraceptives; aloof to inadequate health facilities, misleading on family planning efficacy, contradicting religious norms and Instructional.

Future FP messages should address the different needs and attitudes of specific audience segments.

### **0039      A Randomised Controlled Trial to assess the use of low-cost Android tablets and locally made educational videos to train Community Health Workers (CHWs) in rural Uganda, to aid in the recognition, treatment and prevention of pneumonia in children under-5.**

James O'Donovan<sup>1</sup>, Margarita Chukina<sup>2,3</sup>, Ken Kabali<sup>3</sup>, Elizabeth Nalweyiso<sup>3</sup>, Edward Mutimba<sup>3</sup>, Alan Penman<sup>3,5</sup>, John Mukadde<sup>3</sup>, Jaqueline Kading<sup>3</sup>, Edward O'Neil<sup>3,4</sup>

<sup>1</sup>*Addenbrookes Hospital, Cambridge, Cambridgeshire, UK,* <sup>2</sup>*University of Maryland,*

Baltimore, MD, USA,<sup>3</sup>Omni Med Uganda, Mukono, Uganda,<sup>4</sup>Tufts University, Boston, MA, USA,<sup>5</sup>University of Mississippi, Oxford, Miss, USA

**Theory** Prompt recognition and treatment of pneumonia by Community Health Workers (CHWs) could help prevent unnecessary deaths of children in LMICs, however their training programs are often poorly designed and delivered.

**Methods** We designed an mHealth-based video tutorial program to train CHWs in the recognition, treatment and prevention of pneumonia.

**Results** 168 CHWs were involved in the study and divided into control and intervention groups. There were significantly better pre- and post-intervention test-scores in CHWs receiving tablet vs. traditional training.

**Conclusion** Our program could potentially allow for better recognition and management of children with pneumonia, helping to reduce unnecessary deaths.

0083

### **Essential and Toxic Elements in Different Medical Plants and Impact on humans Health**

Eid Brima

*King Khalid University, Abha, Saudi Arabia*

Theory: Local medical plants from Madenia city, in Saudi Arabia are used to cure different diseases. However, are considered to cause adverse health effects.

Method: Five different medical plants were collected from Madina city. These plants are Mahareeb (*Cymbopogon*), Sheeh (*Artemisia*), Harjal (*Cynanchum argel delile*), Nabiboot (*Equisetum*) and Kafmariam (*Vitex agnus-castus*). Essential and toxic elements were analyzed by using ICP-MS.

Results: Elements were analyzed in washed and unwashed plants. Nevertheless, all plants had high level of nickel. In particular, *Cynanchum argel delile* is a source of arsenic.

Conclusion: Conventional medical plants are a source of exposure to toxic elements.

## Health Policy and Systems:

0197

### **Improving Maternal Healthcare in India: Policies That Work But Health Facilities That Do Not**

Mandar Bodas

*Virginia Commonwealth University, Richmond, Virginia, USA*

India, recently implemented policies to increase institutional births and reduce maternal mortality. I examine whether the states that were targeted under these policies had a higher increase in the proportion of institutional births compared to the rest of the country and whether this change was associated with conditions of the local health facilities. Reproductive age women from India Human Development Survey were in the sample. Targeted states showed improvements in study outcomes at a significantly higher rate but the difference between mothers who had access to better local health facilities compared to mothers that did not was insignificant.

**0085**                    **Systematic review of triennial plans for health promotion in Chile: imaginary construction outside of everyday life**

Francisca Valdebenito<sup>2</sup>, Javier García<sup>2</sup>, Julio Hasbún<sup>2</sup>, Carolina Cobos<sup>1</sup>, Andrea Bravo<sup>1</sup>  
<sup>1</sup>*Ministry of Health, Santiago, Región Metropolitana, Chile,* <sup>2</sup>*Symbolon Consultants, Santiago, Región Metropolitana, Chile*

A systematic review of communal plans for health promotion, an unprecedentedly policy in a middle income country, in a context of high centralization, geographic dispersion and inequality, which gives the opportunity to explore the imaginary around the topic.

The planned activities were reviewed through mixed analysis, in a sample of 320 local governments, to identify the imaginary around health promotion program.

The problems and planned activities are transversal in the national territory and do not take account of local particularities. The main finding is that health promotion is planned as an exceptional event, and not as a daily habit.

**0067**                    **Health systems in BRICS countries: Challenges and learnings**

Pedro Arruda<sup>1</sup>, Mary MacLennan<sup>2</sup>

<sup>1</sup>*United Nations Development Programme International Policy Centre for Inclusive Growth, Brasilia, Brazil,* <sup>2</sup>*London School of Economics, London, UK*

This article aims to provide an updated account of how the health systems of the BRICS countries have evolved and are evolving - particularly in the context of large economic changes. It focuses on challenges and potential lessons to be learned from BRICS countries as they progress along the development continuum. It takes a descriptive lens and does not make judgement on best practice among the different systems, but draws out broad themes. Large and often similar challenges are faced by many of the countries. In addition to health systems, changes in social security programs are also briefly addressed.

Sessions starting Saturday 1<sup>st</sup> July 10:00am

Health Informatics and Policy:

**0247**                    **Anti-Apoptotic Responses of N-Acetyl-L-Cysteine Against Methoxychlor Induced Granulosa Cells Apoptosis in Caprine Antral Follicles *In Vitro***

Jitender Bhardwaj, Priyanka Saraf

*Kurukshetra University, Kurukshetra, Kurukshetra, Haryana, India*

Antral follicles form an important aspect during ovulation and pregnancy that undergoes atresia owing to pesticide exposure. There exists a direct correlation between follicular demise and granulosa cell apoptosis. The present study demonstrates that Methoxychlor induces GCs apoptosis by causing cytotoxic and geno-toxic stress. It also causes histopathological alterations at cellular and subcellular level that was found to be ameliorated on NAC supplementation. NAC mediated alteration in cytotoxicity, DNA fragmentation, steroidogenic and oxidative stress pathways resulted in its anti-apoptotic activity against MXC induced toxicity; proving NAC to be successful reproductive ameliorant, protecting ovarian follicular pool to combat infertility troubles.

**0121**                    **Classification of Nicotine Dependence with a Machine Learning Approach**

Mohammad Kharabsheh<sup>1</sup>, Sukaina Alzyoud<sup>1</sup>, Sreenivas Veeranki<sup>2</sup>, Omar Meqdadi<sup>3</sup>, Suzan Alshdefat<sup>1</sup>, Noh Alhindawi<sup>4</sup>

<sup>1</sup>Hashemite University, Zarqa, Jordan, <sup>2</sup>University of Texas Medical Branch, Galveson, USA, <sup>3</sup>Jordan University of Science and Technology, Irbid, Jordan, <sup>4</sup>Jadara University, Irbid, Jordan

Waterpipe (WP) tobacco smoking is gaining momentum among youth and this is particularly evident among females. This study examined the ability of machine learning approaches in classifying women waterpipe smoker's level of nicotine dependence. A dataset of female waterpipe smokers was used to train the machine learner in order to determine the set of attributes that are useful to classify smoker's nicotine dependence level. Our obtained results show that our developed classifier properly classified the majority of the dataset entries with a recall of 80% using several novel features including age, residency, educational level, and current WP smoking.

## Research Utilisation:

### **0010 Re-imagining Undergraduate Health and Social Care education:early findings.**

Martin King, Alison Chambers, Eula Miller  
MMU, Manchester, UK

NHS England's Five Year Forward View outlines new care models and the need for a workforce that has the skills, values and competencies to deliver this vision. This paper will document early findings from an HEE funded project led by MMU in the North West of England. Using an Action Research methodology and drawing together key stakeholders from the sector, the project aims to explore the potential for creating a professional health and social care graduate workforce which meets the needs of an integrated service delivery landscape by identifying key issues to be addressed when redeveloping the undergraduate curriculum.

### **0168 Compliance of Systematic Reviews in Ophthalmology with the PRISMA Statement**

Seon-Young Lee<sup>1</sup>, Harkiran Sagoo<sup>2</sup>, Reem Farwana<sup>3</sup>, Katharine Whitehurst<sup>4</sup>, Alex Fowler<sup>5</sup>, Riaz Agha<sup>5</sup>

<sup>1</sup>Grantham and district hospital, Grantham, UK, <sup>2</sup>Guys Kings and St Thomas' School of Medical Education, London, UK, <sup>3</sup>University of Birmingham, Birmingham, UK, <sup>4</sup>University College London, London, UK, <sup>5</sup>Guys and St Thomas' NHS Foundation Trust, London, UK

Researches in ophthalmology may represent further challenges, due to their potential complexity in study design. The aim of our study was to determine the reporting quality of systematic reviews and meta-analysis in ophthalmology with the PRISMA statement, by assessing the articles published between 2010 and 2015 from five major journals with the highest impact factor. Our study showed the median PRISMA score of 17 of 27 items (63%), with range of 7-26 (26-96%) and 95% CI 14.4-16.7 (53-62%). The reporting quality of systematic reviews and meta-analysis in ophthalmology need significant improvement.

## Public Health:

### **0233 An evaluation of the Simulation-based Training for Skilled Birth Attendants in Ethiopia Midwife Train-the-Trainer Program**

Ying Zhao<sup>1</sup>, Yan Hu<sup>1</sup>, Ji Liang<sup>2</sup>, Yan Ding<sup>2</sup>, Fei Yan<sup>2</sup>, Hong Jiang<sup>2</sup>, Xiaoguang Yang<sup>2</sup>, Xu Qian<sup>3</sup>

<sup>1</sup>*School of Nursing, Fudan University, Shanghai, China*, <sup>2</sup>*School of Public Health, Fudan University, Shanghai, China*, <sup>3</sup>*School of Public Health & Global Health Institute, Fudan University, Shanghai, China*

This pilot study was divided into two stages. The participatory observational method and the Kirkpatrick model was used for evaluation. In-depth interview results showed the Ethiopian medical staff spoke highly of the Program. The mean scores in the first and last scenario rehearsals showed significant improvement of skills ( $p < .01$ ). The mean score of total mastery degree was  $3.48 \pm 0.16$  by self-assessment and  $3.63 \pm 0.16$  by peer-assessment. This study shows that a simulation-based training program is feasible, effective, and well-adapted for a midwifery Train-the-Trainer program in Ethiopia.

**0103**

### **Air Pollution and Health Impacts: The FUTURAR Project Review**

Ana Mendes<sup>1,2</sup>, Solange Costa<sup>1,2</sup>, Joana Ferreira<sup>3</sup>, Joana Leitão<sup>3</sup>, Carlos Silveira<sup>3</sup>, Helder Relvas<sup>3</sup>, Myriam Lopes<sup>3</sup>, Alexandra Monteiro<sup>3</sup>, Peter Roebeling<sup>3</sup>, Ana Isabel Miranda<sup>3</sup>, João Paulo Teixeira<sup>1,2</sup>

<sup>1</sup>*EPIUnit - University of Porto Institute of Public Health (ISPUP), Rua das Taipas, nº 135, 4050-600, Porto, Portugal*, <sup>2</sup>*National Health Institute Dr. Ricardo Jorge, Rua Alexandre Herculano, 321, 4000-055, Porto, Portugal*, <sup>3</sup>*CESAM & Dept of Environment and Planning (CESAM), Campus Universitário de Santiago, University of Aveiro, 3810-193, Aveiro, Portugal*

Air pollution causes adverse impacts on human health. The main goal of FUTURAR project is to assess environmental and health impacts, together with a cost-benefit analysis, associated with the air pollutants emission reductions for 2030 imposed by the National Emission Ceilings new Directive (NECD). FUTURAR addresses and overtakes policy-oriented research gaps, particularly country-specific exposure-response functions for many important morbidity endpoints. This study focuses on the literature review, data collection and critical analysis of exposure-response functions for the pollutants addressed by the NECD. The project aims to support public health policy strategies to be taken at national/regional level by competent authorities.

## Health Policy and Systems:

**0109**

### **Implementing a patient-oriented research system: the Ontario experience**

Vasanthi Srinivasan, Eddy Nason  
*Ontario SPOR SUPPORT Unit, Ontario, Canada*

With the advent of the Canadian Strategy for Patient-Oriented Research (SPOR), Ontario established its SPOR SUPPORT Unit (OSSU) in 2014. To showcase how providing intellectual infrastructure for patient-oriented research (POR) could enhance a provincial research system, OSSU developed IMPACT Awards— projects using OSSU infrastructure for implementable and scaleable health research for decision making. With 16 projects underway, A preliminary ecosystem analysis of these IMPACT Awards has identified how providing research activity funding that aligns with ‘support’ for POR is already creating demonstrable impact on the health system, the health research system and health policy making in Ontario.

**0089**

### **On the autonomous practice of midwives in Bulgaria**

Petya Dilova, Silviya Aleksandrova-Yankulovska  
*Medical University-Pleven, Pleven, Bulgaria*

Midwives in Bulgaria still cannot practice independently despite that normative documents have been adopted.

Through application of individual self-administered questionnaire among 76 women before and after delivery and 60 midwives we aim at studying patients' confidence in and midwives' attitude towards autonomous practice.

52% of midwives support autonomous practice. Permanent access to a midwife is useful for 40,8% of the pregnant women. Autonomous midwives' practice is welcomed by 61,9% of pregnant women and 87,5% of women in puerperium.

Our results demonstrate the need of reorganization of maternity care to allow midwives to work autonomously under the national health insurance plan.

## Hospitals and Decision Making:

### **0047 Evaluation of door to needle time, factors associated with the delay for administration of fibrinolytic drug at Alshaab Teaching hospital and Sudan heart institute 2017**

Rayan Mamoon

*University of Khartoum, Khartoum/Khartoum, Sudan*

Theory: american heart association suggest a door to needle time of less than 30 minute.

Methods: prospective descriptive observational cross sectional hospital based study using standartized questionnaire and checklist hypothesizing a lack of applicability

Results: total of 24 patient were included, mean age 56.7,males represented 58.3%,most from Ja'alin tribe 95.8% came with typical chest pain, drugs received" Aspirin 95.8%,Nitrate 83.3%,66.7% statin. Investigations "ECG 100%,i3.3%.Complications arrised"cardiac faluire,cardiogenic shock and arrhythmia" patient were eligibile.A door to needle of less than 30 was achieved in only 26.8%.causes of delay were"lack of specialist,difficulties interpreting ECG,transferring patient to ICU.

Conclusion:A door to needle time of less than 30 was achieved in small percentage.

### **0236 Phronesis and the medical community: initial findings.**

Mervyn Conroy<sup>1</sup>, Aisha Malik<sup>1</sup>, Chris Turner<sup>2</sup>

*<sup>1</sup>University Of Birmingham, Birmingham, UK, <sup>2</sup>Universty Hospital of Coventry and Warwickshire, Coventry, UK*

Doctors rely on clinical data and their reasoning to make clinical judgements regarding instituting treatment for a particular patient. Clinical judgement, however, is plagued with uncertainty and further confounded by patient preference, family preference and resource availability.

We argue that in such circumstances *phronesis*, practical wisdom that promotes the good in morally difficult situations, helps clinicians make right decisions. We are conducting an empirical study to understand what *phronesis* means to medical practice. Having completed phase one of our research, we present initial themes and

findings regarding virtues and cultivating/developing practical wisdom during the professional career of doctors.

## Older Age:

### **0174 Story-telling and Narrative Medicine in US Prison Hospices**

Kori Novak<sup>1</sup>, [Michael Mavrommatis](#)<sup>2</sup>

<sup>1</sup>*The Oxford Research Centre for Humanities, Oxford, UK*, <sup>2</sup>*University of Suffolk - Department of Psychology Sociology and Social Work, Ipswich, UK*

In the United States prison inmates' premature aging often brings the earlier onset of age-related disease. This paper studies the intersection between long-term sentencing and end-of-life care. Our study makes the case for integrating narrative medicine with the care of terminally ill prisoners.

Methods: Interviews with administrators and offenders, observation in six prisons and penitentiaries, secondary research, documentary photography recording care and interaction in prison.

Results/Conclusions: Narrative medicine and the incorporation of the patients' account to medical treatment could help establish a link between the early onset of disease and end-of-life care in prison.

### **0269 Association of diet and physical activity on gross motor function: a cross-sectional study in older adults in the UK.**

[Thanasis G Tektonidis](#), Shelly Coe, Patrick Esser, Helen Lightowler  
*Oxford Brookes University, Oxford, UK*

Reduced gross motor function (GMF) has been linked to cognitive decline. Healthy diet and physical activity in early life benefits cognition; yet there is no evidence on maintaining GMF in later life. We will determine the cross-sectional association of lifestyle factors with GMF in later life of 250 older people (69-74y) from the National-Survey-of-Health-and-Development. We hypothesize that healthy diet and physical activity will be associated with better GMF. This study sets out to identify which GMF parameter(s) is linked with an early lifestyle and cognitive status, to be explored further in a larger cross-sectional population.

## Community and Social Science:

### **0190 Exploring the Impact of Integrated Care for Complex Populations (ICCP)**

[Sanjeev Sridharan](#)<sup>1,2</sup>, April Nakaima<sup>1</sup>, Rachael Gibson<sup>1,2</sup>

<sup>1</sup>*Evaluation Centre for Complex Health Interventions, Ontario, Canada*, <sup>2</sup>*University of Toronto, Ontario, Canada*

This paper explores the impacts of a program called "Integrated Care for Complex Populations (ICCP)." This program was implemented in Toronto, Ontario, Canada, from 2011 onwards. The following methodological process was implemented to estimate impacts:

As the client assignment to ICCP was not random, multivariate propensity scoring methods were used to ensure that individuals in the two groups were

comparable; Multi-level longitudinal models were implemented to explore the impacts of ICCP.

Evidence for favourable impacts of ICCP were obtained.

**0281 Occupational Therapists and Teachers use collaborative Action Research to develop Inclusive Education in Pakistan.**

Debbie Kramer-Roy<sup>1</sup>, Denise Hashim<sup>2</sup>, Nighat Tahir<sup>2</sup>, Rabeea Minai<sup>3</sup>, Nasira Faiz<sup>3</sup>  
<sup>1</sup>*Brunel University London, Uxbridge, UK*, <sup>2</sup>*Dow University of Health Sciences, Karachi, Pakistan*, <sup>3</sup>*The AMI School, Karachi, Pakistan*

Occupational Therapy in Pakistan is a small profession that is exploring how to develop contextually relevant roles. The vast majority of children with special needs and disabilities are not attending school at all and very few mainstream schools include children with special needs. This severely restricts the social inclusion and participation of these children.

The research team uses Action Research to develop strategies, materials and lesson plans that enable ALL children - with and without special needs - to learn better together, and to improve social inclusion.

A Resource Guide is being developed (in English and Urdu) to disseminate widely.

Sessions starting Saturday 1<sup>st</sup> July 11:00am

Health Economics:

**0264 How does retirement affect health care expenditures? Evidence from a change in the retirement age**

Péter Elek<sup>1</sup>, Anikó Bíró<sup>3,2</sup>  
<sup>1</sup>*Eotvos Lorand University, Budapest, Hungary*, <sup>2</sup>*Corvinus University of Budapest, Budapest, Hungary*, <sup>3</sup>*The University of Edinburgh, Edinburgh, UK*

Using individual-level administrative panel data from Hungary, we estimate causal effects of retirement on health care expenditures. Our identification strategy is based on an increase in the official early retirement age of women. Estimates from a two-part (hurdle) model show that the shares of women with non-zero outpatient care expenditures and non-zero prescribed pharmaceutical expenditures, respectively, decrease by about five and two percentage points in the short run due to retirement. These results are mainly driven by pre-retirement work- and sick leave-related health care use patterns. The effect of retirement on the size of non-zero health care expenditures is ambiguous.

**0273 Inpatients' capability supported by nursing care - formulation of capability approach considering individual utilisation ability**

Huilin Wang<sup>1</sup>, Hideyuki Kobayashi<sup>2</sup>, Reiko Gotoh<sup>1</sup>  
<sup>1</sup>*Hitotsubashi University, Tokyo, Japan*, <sup>2</sup>*Keio University, Fujisawa, Japan*

Framework: Inpatients' capability is formulated by functionings, of which the conversion from individual basic skills is influenced with utilisation ability.

Methods: Individual functionings and utilisation ability were evaluated through questionnaire survey in Japan (n=3,274). The gradient and the magnitude of functionings vectors were compared by the differences in individual utilisation ability and hospitalised wards.

Results: The functioning vector distribution of individuals with different utilisation abilities were more aggregated in medical wards rather than in surgical wards, and in patients without constraint in moving activity.

Conclusion: Inpatients' capability fluctuates in accordance with the differences in level and type of utilisation ability.

**0268 Individual capability set of inpatients in Japan and Sweden; empirical capture through patients' experiences**

Hideyuki Kobayashi<sup>1</sup>, Klas-Göran Sahlen<sup>2</sup>, Reiko Gotoh<sup>3</sup>

<sup>1</sup>Keio University, Fujisawa, Japan, <sup>2</sup>Umeå University, Umeå, Sweden, <sup>3</sup>Hitotsubashi University, Tokyo, Japan

Framework: Capability set of individual inpatients, opportunity of achievement in diverse well-being, is empirically captured through patients' experiences on nursing services.

Methods: The capability set between two functionings was investigated for cardiac patients in Japan and Sweden. A questionnaire about specific nursing situations was used to capture the achievement of functionings, and the data were analysed with multiple regression analysis.

Results: Substitutability between the two functionings was observed in Sweden, whilst complementarity was observed in the lower achievement levels of the two functionings in Japan.

Conclusions: The difference in capability set could reflect societal and institutional differences surrounding individual patients.

Human Resources:

**0245 Work Motivation among Medical Students in Hong Kong**

Jonathan Lam, Johnson Lau

*The Chinese University of Hong Kong, Hong Kong, Hong Kong*

Healthcare professionals are indispensable for healthcare delivery. Alarmingly, young physicians in Hong Kong are more susceptible to high burnout. Work motivation is associated with burnout and turnover. However, the work motivation of medical students is not known. This cross-sectional study was conducted between 14 June 2016 and 6 October 2016 to explore the work motivation of Hong Kong medical students (N=923). Different from previous generations, medical students were motivated by "autonomy and use of skills" most. Understanding the work motivation of the future physicians help policy makers to develop human resource strategies to prevent burnout.

**0051 "Know-do" gap of doctors in Timor-Leste: Findings from direct clinical observation and vignettes**

Rashid Zaman<sup>1</sup>, Xiaohui Hou<sup>2</sup>, Firdaus Hafidz<sup>3</sup>, Sophie Witter<sup>4</sup>

<sup>1</sup>Oxford Policy Management, Oxford, UK, <sup>2</sup>World Bank, Washington DC, USA, <sup>3</sup>Gadjah Mada University, Yogyakarta, Indonesia, <sup>4</sup>Queen Margaret University, Edinburgh, UK

Timor-Leste has deployed large number of Cuban-trained doctors in rural areas over a decade following the independence. However, there were concerns about their knowledge and skills. We carried out 635 direct clinical observations and vignettes in 69 health facilities throughout the country in order to assess their knowledge, skill and the "know-do" gap. The doctors performed well in history taking and treatment, but poorly in physical examination. Performance in simulated cases were better than the real cases. Lack of knowledge was significantly associated with non-performance. Clinical performance of doctors can be improved by ensuring supervision, training, compliance with clinical protocols.

0131

### **Characteristics and healthcare use of high-cost users in the Netherlands**

Joost Wammes<sup>1,2</sup>, Marit Tanke<sup>1,2</sup>, Gert Westert<sup>1,2</sup>, Philip van der Wees<sup>1,2</sup>, Patrick Jeurissen<sup>1,2</sup>

<sup>1</sup>Celsus academy for sustainable healthcare, Nijmegen, The Netherlands, <sup>2</sup>IQ healthcare, Nijmegen, The Netherlands

Theory/framework: For quality improvement and cost reduction it is necessary to acquire in-depth understanding of the characteristics and care use of high-cost beneficiaries.

Methods: claim database analysis.

Hypotheses: high-cost populations generally suffer from multimorbidity, and high-cost users may be characterized by the condition with highest costs (index disease).

Results: The average number of conditions per high-cost user was 5.5. The index disease accounted for 50% of total costs per beneficiary on average. Frequent index diseases were: renal insufficiency, certain cancers and mental and behavioral disorders.

Conclusions: Approaches need to be developed that address patients' care needs across multiple conditions.

## Social Sciences:

0003

### **What are the factors effecting utilisation of antenatal and postnatal care services according to mother and health care workers in the Pwani region, Tanzania?**

Sanam Qasemzahi<sup>1,2</sup>

<sup>1</sup>Liverpool School Of Tropical Medicine, Liverpool, UK, <sup>2</sup>University of Liverpool, Liverpool, UK

Background: In Tanzania, less than 50% of women attend antenatal and postnatal care visits despite it being free of charge. This research sets out to explore why.

Methods: Focus group discussions and semi-structured interviews were undertaken with mothers and health care workers to explore their views.

Results: Costs of transport, equipment and bribes as well as attempts to minimise the number of visits, were stated as reasons for non-attendance by most women. Resource-scarcity and minimal salaries lowered the quality of care provided.

Conclusion: Further investments in resources and education is needed to improve the quality of care and attendance.

**0087**      **Supply-induced demand for antibiotics among vulnerable populations in Northern Thailand: Exploring the next frontier of antibiotic misuse to tackle antimicrobial resistance in Southeast Asia**

Nutch Charoenboon<sup>1</sup>, Marco J Haenssge<sup>1,2</sup>, Yuzana Khine Zaw<sup>2</sup>, Yoel Lubell<sup>1</sup>  
<sup>1</sup>*Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand*, <sup>2</sup>*Centre for Tropical Medicine and Global Health, University of Oxford, Oxford, UK*

Clinical interventions to reduce popular antibiotic use in Southeast Asia focus on primary care settings. However, socio-economically marginalised groups are often excluded from public healthcare and susceptible to advice from informal drug sellers. Our mixed-methods study explores the interplay between marginalisation and supply-induced antibiotic misuse in rural Northern Thailand, analysing quantitative data from 1,200 participants of a biomarker test intervention and semi-structured interviews with 24 hilltribe members and in-/formal antibiotic providers. We offer more nuanced interpretations of clinical research data from the region and consider how interventions can address the widely acknowledged yet largely disregarded problem of informal antibiotic supply.

**0095**      **Social and behavioral determinants of health among the Ukrainian working-age population**

Iryna Mazhak  
*Aarhus University, Aarhus, Denmark*

The objective is to reveal social (education, occupation, income, married status, family roles, employment conditions) and behavioral (alcohol consumption, smoking, exercise, and BMI) determinants of health adjusted for gender and age. The dataset includes 1580 respondents (females aged 18-60, males aged 18-65) and the survey was conducted in December 2016. The data was analyzed using SPSS 24. The results of regression analysis have shown some relations between social and behavioral determinants and subjective (self-reported) and objective (number of doctor's visits and hospital treatments) health among the Ukrainian working-age population.

Public Health:

**0028**      **Proportion of disrespectful and abusive care during childbirth in Khartoum state in 2016**

Awatif Altahir<sup>1</sup>, Dalya Eltayeb<sup>2</sup>  
<sup>1</sup>*Faculty of Medicine University of Khartoum, Khartoum, Sudan*, <sup>2</sup>*Federal ministry of health, Khartoum, Sudan*

Introduction: One major factor inhibiting women from delivering at health facilities is disrespectful and abusive care (D&A) by health providers. The objectives are; to measure the proportion and to determine types of (D&A) during childbirth in Khartoum state.

Materials & Methods: Descriptive cross-sectional study was done in 3 hospitals; by total coverage 263 mothers were interviewed.

Results: The proportion of (D&A) was 77.2%. The most common categories: Non-confidential care (79.8%), Non-consented care(71.5%) & Abandonment of care(21.7%).

Conclusions: The Proportion is very high. Health administrator should promote respectful maternity care standard to protect women's right & to attract women to health facilities.

**0227**      **Climate Change and the Incidence of Diarrhea: Evidence from Outpatient Data from Uganda**

Precious Akampumuza, Hirotaka Matsuda  
*The University of Tokyo, Tokyo, Japan*

The relationship between climate change and health is gaining increasing importance, albeit scanty empirical research about the same. We apply econometric techniques on outpatient and climate data to investigate the effect of climate change on the incidence of diarrhea, dysentery and intestinal worms in Uganda. Regression results indicate that outpatient visits related to each of the three diseases tend to increase in months with rainfall figures falling 20% below the month-specific 87-year average. The results imply the need to incorporate climate change into healthcare planning to ensure readiness to contain disease outbreaks related to climate shocks.

**0243**      **The increasing burden of obesity in Cameroon: Obesity as a risk factor for lower limb cellulitis.**

Tsi Njim<sup>1</sup>, Leopold Aminde<sup>2</sup>, Valirie Agbor<sup>4</sup>, Louis Toukam<sup>3</sup>, Eric Ohuma<sup>1</sup>  
<sup>1</sup>*University of Oxford, Oxfordshire, UK*, <sup>2</sup>*University of Queensland, Queensland, Australia*, <sup>3</sup>*University of Bamenda, North west region, Cameroon*, <sup>4</sup>*Ibal sub-divisional Hospital, North west region, Cameroon*

Cellulitis is a common infection of the skin and subcutaneous tissues associated with significant morbidity. We assessed using a cross-sectional study the risk factors and burden of cellulitis in Cameroon. After controlling for potential confounders, obesity, history of skin disruption and presence of toe-web intertrigo were shown to be independent risk factors for cellulitis. It was determined that 20.6% of cellulitis cases could be prevented if preventive strategies were instituted to curb the prevalence of obesity. In a country where over 13% of the population is obese, there is an urgent need for health promotion activities to address this problem.

Health Policy and Public Health:

**0167**      **Anaesthesia in Developing Countries – A Global Crisis**

Isabella Epiu  
*University of California Global Health Institute, California, USA*

The WFSA (World Federation of Societies of Anesthesiologists) provided international standards for safe practice of anaesthesia. In resource-limited settings, these mandatory minimum standards are rarely met<sup>1</sup>.

Our recent study conducted at the National Referral Hospitals in East Africa demonstrated that even “high level hospitals” in this region were inadequately equipped and had significant shortages of personnel<sup>1</sup>. According to WFSA standards, none of the hospitals had available all requirements to provide safe anaesthesia. These hospitals however continued to conduct elective & emergency surgery associated with morbidity and mortality.

1 Epiu I. et al Anesthesia & Analgesia, 124, 1, Page 290-299; 2017

**0146 Mobile based data collection to assess the progress of the healthcare sustainable development goals**

Kevin Martin<sup>1</sup>, Alexander Chu<sup>1</sup>, Roshnee Patel<sup>1</sup>, Tristana Perez<sup>2</sup>, Shyam Gokani<sup>2</sup>

<sup>1</sup>University College London, London, UK, <sup>2</sup>Imperial College London, London, UK

The sustainable development goals (SDGs) have focused on target areas to enhance quality of life globally. For monitoring purposes, an essential stipulation was the collection of high quality inclusive data. With over seven billion mobile phone subscriptions worldwide, mobile-based technologies have the potential to be vital assets in monitoring the progress of the SDGs.

We carried out an example-based critical analysis of three mobile-based technologies; mobile phone surveys, global positioning systems/geographic information systems and wearable technology.

Our results allowed us to make global policy recommendations pertaining to training and education, investment, collaboration and awareness and best practice.

**0283 Lost but not forgotten: A retrospective notes-based review of patients lost to follow-up from Antiretroviral Therapy (ART) in Mulanje Mission Hospital (MMH), Malawi**

Silas Webb<sup>1</sup>, Joseph Hartland<sup>1</sup>

<sup>1</sup>Bristol University, Bristol, UK, <sup>2</sup>Great Western Hospital, Swindon, UK

Background:

This project was performed in MMH in Malawi as part of Swindon Academy's Global Health eSSC. Mulanje's HIV prevalence is very high at 18%, making prevention of defaulting and ART compliance essential.

Method:

All patients classified as defaulters during a 12 month period at MMH ART clinic were included. Demographic variables were collected and compared against clinic non-defaulters.

Results:

Chi-squared tests showed significant association with age, gender and duration of treatment.

Discussion:

This study has helped develop a risk identification tool for patients most likely to default from MMH ART clinic and thus provides areas for targeted public health interventions and education.

Public Health:

**0198 The Cost-Effectiveness of Targeted versus Mass Screening Strategies for Cardiovascular Risk in Middle Income Countries**

John Tayu Lee<sup>2,1</sup>, Chris Millett<sup>1</sup>, Kenny Lawson<sup>3</sup>

<sup>1</sup>National University of Singapore, Singapore, Singapore, <sup>2</sup>Imperial College London, London, UK, <sup>3</sup>Western Sydney University, Sydney, Australia

The aim of this study was to compare mass and targeted screening strategies in terms of effectiveness, cost effectiveness in six middle income countries, including China, Ghana, India, Mexico, Russia, and South Africa. We undertook simulation models of four screening strategies using data from WHO Study on Global Ageing and Adult Health: mass screening, targeted screening of older population, targeted screening of deprived communities and combinations of the latter two. We found targeted screening strategies are less costly than mass screening, and can identify most of high-risk individuals. The additional resources required for mass screening may not be justified.

**0159**

### **Clean Drinking Water as Treatment to Malaria**

Amos Gelbard

*Zefat Academic College, Zefat, Israel, Israel*

This article presents the theory that the best treatment to Malaria would be by sufficient intake of clean drinking water, which would help with thinning of the bloodstream, more fluent passage of the infected cells to the spleen and ease the pressure on the spleen to prevent its enlargement. The challenge this presents is that in areas where Malaria is most common, specifically in sub-Saharan Africa, there's a well documented shortage of clean drinking water.

Still, this theory of Clean Drinking water to be the optimal treatment to Malaria, should help in understanding and battling the disease.

**0093**

### **Patient and Public Involvement in low birth-weight research and action**

Susanna Rance<sup>1</sup>, Angela Harden<sup>1</sup>, Dilisha Patel<sup>2</sup>, Gulnar Ali<sup>1</sup>, Patrick Tobi<sup>1</sup>, Judith Stephenson<sup>2</sup>

<sup>1</sup>University of East London, London, UK, <sup>2</sup>University College London, London, UK

In Newham, East London, 10.4% of babies have low birth-weight, and the local authority sponsored a project to address the problem. A Patient and Public Involvement group contributed to all stages of research. Parents of diverse ethnicities reported needs for 1-to-1 and group support, pre-pregnancy care, and consistent messages about infant feeding. Stakeholders met to discuss findings and propose interventions. The project produced a video on local initiatives in these areas, and a model for engaging parents, professionals and peer support workers in partnerships to drive improvements. Using an asset-based approach, the project involved parents and local residents in co-designing actions to prevent low birth-weight and its long-term consequences.

## Policy and Public Health:

**0057**

### **Evaluation of Baseline Risk and Time Course of Symptomatic Venous Thromboembolism in the elderly after hip fracture surgery**

Sandi Chit Lwin<sup>1</sup>, Kiat Sern Goh<sup>2</sup>, Adrian Lau<sup>2</sup>, Teck Kheng Goh<sup>3</sup>, Wai Leng Chow<sup>1</sup>

<sup>1</sup>Health Services Research, Eastern Health Alliance, Singapore, Singapore, <sup>2</sup>Changi

*General Hospital, Singapore, Singapore,<sup>3</sup>St. Andrew Community Hospital, Singapore, Singapore*

**Objective:**

This study evaluated the risk of symptomatic VTE in the elderly during and following hospitalization for hip fracture surgery.

**Methods:**

This prospective cohort evaluated 329 elderly with a fragility hip fracture who underwent surgery at Changi General Hospital from December-2014 to November-2015.

**Result:**

5.5% developed symptomatic VTE at 30-days follow-up. 44% of events occurred after hospital discharge. 85% received in-hospital mechanical thromboprophylaxis. Survival analysis showed that the risk of developing VTE was highest within 10 days after surgery which extends after hospital discharge.

**Conclusion:**

Additional routine prescription of pharmacologic agent with optimal duration should be considered in this population.

**0086**

**Contextual factors in clinical interventions: C-reactive protein biomarker testing across Myanmar, Thailand, and Vietnam**

Marco J Haenssger<sup>1,2</sup>, Nutcha Charoenboon<sup>2</sup>, Nga DT Thuy<sup>3</sup>, Heiman FL Wertheim<sup>3,4</sup>, Thomas Althaus<sup>2</sup>, Yoel Lubell<sup>2</sup>

<sup>1</sup>Centre for Tropical Medicine and Global Health, University of Oxford, Oxford, UK,

<sup>2</sup>Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand, <sup>3</sup>Medical

Microbiology Department, Radboudumc, Nijmegen, The Netherlands, <sup>4</sup>Oxford

University Clinical Research Unit, Ho Chi Minh City, Viet Nam

"Context matters" in medical interventions, but clinical trials rarely offer insights how variations in contextual factors influence interventions. This study analyses contextual factors of biomarker test interventions (C-reactive protein) for antibiotics prescriptions, utilising a unique qualitative data set of 85 hours of recorded material from 117 patients and healthcare workers across Thailand, Vietnam, and Myanmar (interviews/group discussions). We identify four principal domains of contextual influences for intervention success: the health system configuration, demand side factors, the epidemiological context, and the study design of the biomarker test intervention. These factors underscore the need for locally appropriate and contextually sensitive interventions.

Session starting Friday 30<sup>th</sup> 5:40pm

Poster Presentations:

**0027**

**Long Lasting Insecticide Treated Nets: How Receptive are the Citizens of Lagos to this Mode of Malaria Prevention.**

Ifeoma Anabraba, Olanrewaju Onigbogi

*University Of Lagos Department of Community Health and Primary Care, Lagos, Nigeria*

Background: Malaria is one of the leading causes of morbidity and mortality especially among pregnant women and children under the age of five.

Methodology: A cross sectional descriptive study was done using a multi staged sampling method quantitative data was collected from 204 respondents using interviewer-administered questionnaires.

Results: Almost all (94.61%) of the respondents had good attitude towards ITNs, while only 42.65% owned ITNs. ITN use was also poor with only 37.93% of respondents sleep under ITNs..

Conclusion: Knowledge and attitude towards ITNs was generally good but ITN use was found to be poor.

**0138**      **Evaluation of Unmet Needs in Health Care: Opportunities for Multi-Criteria Decision Analysis**

Diana Araja<sup>1,2</sup>

*<sup>1</sup>Riga Stradins University, Riga, Latvia, <sup>2</sup>University of Latvia, Riga, Latvia*

The classic approach of the unmet medical needs is defined as the self-reported unmet needs for medical care for the three following reasons: financial barriers, waiting times, too far to travel. The aim of this research is to investigate the statistical data of the unmet needs for health care and to assess the applicability of a multi-criteria decision analysis (MCDA). The data show that not only the ranges of criteria which are related to the health care organisation and financing, but also to the personnel attitude of patients and social determinantes are significant and should be investigated by using MCDA.

**0004**      **Global Health Center: Access of Care Through an Emergency Department by Newly Arriving Refugees in Louisville, KY**

Carmen Mitchell, Annuradha Persaud, Ruth Carrico

*University of Louisville, Louisville, Kentucky, USA*

The aim of this study was to determine use of a local emergency department for care among refugees newly arrived to Louisville, Kentucky. A review was done of 2655 adult refugees arriving in Louisville between September 2011-November 2015. Cross referencing was done with the Newly Arriving Refugee Surveillance System (NARSS) database and the Emergency Department electronic health records at the University of Louisville Hospital. A majority of the visits were of a nature that could be handled outside an emergency care setting. Further studies in this area can lead to better understanding of primary care access issues for refugees.

**0025**      **The Struggle for Universal Health Coverage in Nigeria: A Case Study of Private Health Practitioners**

Maximillan Iloh, Princess Christina Campbell

*University Of Lagos Department of Community Health and Primary Care, Lagos, Nigeria*

Introduction: Health Insurance has been proven to be the most effective way of achieving access to health care. In Nigeria, health insurance coverage is only at 3% with most of the beneficiaries in the formal sector. Methodology: The study was a descriptive cross-sectional study amongst private health practitioners in Isolo LCDA, Lagos state, Nigeria. Results: 97.1% of respondents had heard of the NHIS, 80.0%

had good knowledge while 94.3% had positive attitude to the scheme. However, only 20.9% enrolled in the scheme. Conclusion: Campaign efforts need to be intensified to ensure an increase in uptake among private health practitioners

**0029**                    **How does progress towards universal health coverage play a protective role against socioeconomic changes in Korea?**

Seung Ju Lee

*The Graduate Institute, Geneva, Switzerland*

By identifying how macroeconomic changes effect public-sector expenditure on health care (PEH) and cancer outcomes for 1999-2013, this research shows that progress towards universal health coverage (UHC) may give a protective effect against economic changes in Korea. Multivariable regression analysis is used to investigate the relationship between unemployment, PEH, and cancer mortality before and after 2005 when the national health insurance service was expanded to cover cancer. Cancer mortality data is divided into two groups: treatable cancer and untreatable cancer. As a result, this research shows that UHC may alleviate the negative relationship between unemployment and cancer mortality.

**0141**                    **National Policy of Permanent Education in Health in Brazil: fundamentals and perspectives**

Cristiane Lemos

*Universidade Federal de Goiás, Goiânia, Goiás, Brazil*

Introduction: In Brazil, an important mark for the Sistema Único de Saúde (National Health System) was the implementation of the National Policy for Continuous Health Education(PNEPS).

Objective: To analyze the fundament of Continuous Health Education contained in the PNEPS in Brazil (2004-2012).

Methods:Documentary analysis of texts from the Ministry of Health in relation to the PNEPS

Results:From the analysis of the documents, there are two central fundamentals in the PNEPS: the micropolitics of health work and the problematizing pedagogies. The idea is to educate workers towards relational and subjective processes, which install new possibilities of care organization (humanization and resolution).

**0196**                    **Data analysis on outpatient transport usage between February to August 2016 in Eden, Western Cape, South Africa.**

Richard Francis

*Thames Valley and Wessex Leadership Academy, Wessex, UK*

Data analysis on the use of hospital transport during Feb – July 2016 from a secondary care setting (George Hospital, Eden District, South Africa) to tertiary care centres in Cape Town. Transport booking data was compared to patients' scanned records at George Hospital and to Outpatient Clinic Attendance data at Groote Schuur Hospital, Tygerburg Hospital and Red Cross Hospital in Cape Town. Data analysis showed that between 64% to 82% of patient journeys were inappropriate depending on destination in Cape Town. While transport misuse had long been suspected, the evidence demonstrated the scale of the problem was larger than expected.

**0135**                    **Barriers to Effective Communication in Patients with Cancer**

Margarita Stankova, Polina Mihova, Veneta Vasileva  
New Bulgarian University, Sofia, Bulgaria

The study examines the factors that influence the process of communicating the bad news - diagnosis and prognosis in patients with cancer. The participants include 110 medical doctors and nurses. The method is a survey with questions concerning the communication with patients. The results show that the factors that influence the process are related to the severity of the disease, the reactions of the family, some cultural stereotypes, education and age of the patient, and the factor that interferes most with the direct communication is the feeling of emotional pity for people who have health problems.

**0070 Autologous blood patch for persistent ascites leak from non-closing paracentesis tracts**

Nazia Khan<sup>1,2</sup>, Kevin Dushay<sup>1,2</sup>

<sup>1</sup>Brown University - Warren Alpert Medical School, Providence, RI, USA, <sup>2</sup>Rhode Island Hospital, Providence, RI, USA, <sup>3</sup>The Miriam Hospital, Providence, RI, USA

*Background:* Ascites leak from a paracentesis site is associated with increased morbidity. Utilizing a blood patch provides an alternative approach to managing such patients, especially in resource-poor countries.

*Methods:* A two-center prospective case series was performed evaluating the efficacy of the blood patch in patients with significant persistent ascites leak following paracentesis.

*Results:* Six patients were recruited and underwent placement of a blood patch and 100% had resolution of the leak within 24 hours without complications

*Conclusion:* An autologous blood patch is a cost-effective, low risk option for ascites leaks that can reduce morbidity in patients with end-stage liver disease.

**0179 An worldwide overview of the geographic distribution of dentists: scoping review**

Maria Ercilia de Araujo<sup>1</sup>, Gilberto Alfredo Pucca Junior<sup>2</sup>, Gilles Dussaulte<sup>3</sup>, Mariana Gabriel<sup>1</sup>, Maristela Honório Cayetano<sup>1</sup>, Fernanda Campos de Almeida Carrer<sup>1</sup>

<sup>1</sup>University of São Paulo, Sao Paulo, Brazil, <sup>2</sup>University of Brasília, Brasilia, Brazil, <sup>3</sup>Institute of Hygiene and Tropical Medicine, Lisboa, Portugal

*Theory/framework* The unequal geographical distribution of dentists is a problem in health systems. This study analyze the geographic distribution of dentists highlighting: the geographic distribution determinants, intervention strategies implemented, monitoring and evaluations of the intervention strategies implemented. *Methods/hypotheses* Scoping review was carried. Results 10 publications were related to geographical distribution determinants, 5 of interventions implemented and 38 to the monitoring and evaluation process. *Conclusions* More studies are needed to approach needs for dental services and free market workforce, as well as local determinants of the dentist's distribution, to define more assertive intervention strategies and continuous process of evaluation and monitoring.

**0062 Caffeic acid phenethyl ester (CAPE) prevented streptozocin-induced dementia in rats**

Nitin Bansal, Manish Kumar

*ASBASJSM College of Pharmacy, Bela, Roapr, Punjab, India*

The present study investigates the effect of CAPE (a natural compound with antioxidant, immunomodulatory activity; administered intraperitoneally at 3 and 6 mg/kg, for 28 days daily) on intracerebroventricular streptozotocin-induced cognitive deficits in rats. Morris water maze and elevated plus maze used to evaluate the memory of animals. Treatment with CAPE prevented STZ-ICV-induced development of dementia in rats. Profound rise in brain GSH levels and diminution of TBARS as well as TNF- $\alpha$  content was observed in brains of CAPE treated rats. Hence, the memory enhancing activity of CAPE against STZ-ICV-induced dementia is attributed to its robust antioxidant and antiinflammatory property.

**0091**

### **The Influence of Educational Reforms on the Nursing Education Concept in Estonia**

Anne Ehasalu

*Tallinn Health Care College, Tallinn, Estonia*

#### Framework

In 1996 reforms of nursing education were applied in Estonia.

#### Hypothesis

The changes in education are reflected in nurses' understanding of the nursing education concept.

#### Method

A cross-sectional survey was carried out in 1999 and 2009. The nurses' agreement with educational ABC models (A - traditional, B - individual oriented, C - community oriented, Raatikainen & van Maanen) was assessed.

#### Results

There was a rise in agreement with models B and C; model A remained unchanged.

#### Conclusions

The better acceptance of the individual and community oriented nursing education in 2009 may be partly explained by the educational change.

**0108**

### **Identifying Loneliness in the Elderly Population during Inpatient Stay**

Aneesha Chauhan<sup>2</sup>, Masanori Watanabe<sup>2</sup>, Rebecca Li<sup>2</sup>, Natalia Cotton<sup>2</sup>, Sanja Thompson<sup>0</sup>

<sup>1</sup>*Oxford University Hospitals, Oxford, UK, <sup>2</sup>Hertford College, University of Oxford, Oxford, UK*

Subjective loneliness and objective isolation are associated with early mortality and morbidity. This study investigated the prevalence of loneliness amongst the elderly inpatient population, and looked for any predictors of loneliness.

50 non-confused inpatients aged 75+ years on acute general medical wards were interviewed using a questionnaire measuring objective isolation and subjective loneliness both pre- and during admission.

36% experienced subjective loneliness during their admission; 10% experienced significant loneliness. This did not correlate with objective social isolation, pre-admission loneliness, age, gender or inpatient stay duration.

Therefore, subjective questionnaires should be used to identify those who may need appropriate intervention.

**0021 Surface modified chitosan nanoparticles fabricated for oral delivery of noscapine: preparation, optimization, characterization and cytotoxicity study**

Sunil Kumar, Kiran Yadav  
*Kurukshetra University, Kurukshetra, India*

Noscapine is an orally bioavailable anticancer agent with an excellent tolerability profile. However, the effective dose is bit on a higher side and hence, development of natural biodegradable polymeric nanoparticles have been used to combat this constraint. Natural biodegradable polymer chitosan was used to formulate noscapine loaded nanoparticles using ionic gelation method. Process was optimized initially and then the optimized chitosan nanoparticles were coated with alginate and folic acid. Cytotoxicity study in MCF-7 and HeLa cells revealed that noscapine loaded folic acid coated chitosan nanoparticles showed maximum cytotoxic activity compared to noscapine loaded chitosan nanoparticles and noscapine free drug.

**0056 Air pollution and sufficient physical activity prevalence**

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This paper documents novel evidence on the relationship between fine particulate matter in micrograms per cubic meter (PM<sub>2.5</sub>) ( $\mu\text{g}/\text{m}^3$ ) and sufficient physical activity prevalence in U.S. counties. The rest of the explanatory variables include: ambient temperature, precipitation (mm), sunlight ( $\text{KJ}/\text{m}^2$ ), income per capita, and poverty rate. The beta regression results indicate that an increase in PM<sub>2.5</sub> by one  $\mu\text{g}/\text{m}^3$  is associated with a decrease in male (female) SPAP by 2.58 (4.15) percentage points.

**0107 Health Insurance Status in Asian American Populations**

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Immigrants to the US make up 30% of the uninsured population. Asians, as the fastest growing group of immigrants, may lack necessary healthcare. This study examined factors associated with health insurance status in data from 1642 Asian Americans aged 18-85 from the metropolitan New York area. 17% of participants were uninsured. Men were more likely to be insured than women (Odds ratio 1.54; 95% confidence interval (1.15,2.05)). Those employed were more likely to be insured than those unemployed (1.7 (1.24,2.35)). Length of time in the US was also associated with insurance status. These factors should be considered in health policy.

**0130 Educational activities in community areas**

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Theoretical and practical teaching of excellence must be a guiding premise in nursing education. However, it must be aligned to the reality as well as to the interests of those involved. After apprehending that health education was a required action by supervisors, professionals and population to nursing trainees at Primary Healthcare, professors of nursing school decided for its fulfillment in 7 towns in the Jequitinhonha Valley, Minas Gerais, Brazil. Subjects were diverse with special attention to elderly people. Educational work is an important skill to enhance quality of life and fundamental for health promotion.

**0176                    The correlation between local meteorological parameters and exacerbation of acute wheezing in Kandy, Sri Lanka**

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Weather wheezing correlation studies from South Asia are rare. We considered daily counts of patients nebulized at the out patients department of Teaching Hospital-Kandy as a proxy of exacerbations of wheezing in Kandy population. We employed wavelet time series analysis to determine the correlations between those counts and nine local meteorological parameters, daily for four years. All meteorological parameters including minimum temperature were correlated with the counts of patients nebulized. We explored utility of our findings. Prophylactic drugs on unusually cold days may reduce wheezing exacerbations. Wheezing incidence in Kandy may change with climate changes.

**0019                    Novel Benzimidazole Clubbed Benzothiazole Derivatives as possible antiinfective agents**

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A new series of N-(6-methoxybenzo[d]thiazol-2-yl)-2-substituted phenyl-1H-benz[d]imidazole-1-carbothioamide derivatives were synthesized and screened for their in vitro antimicrobial activity. Screening results showed that some compounds have emerged as prospective antibacterial leads endowed with excellent activity (MIC 12.5-62.5µg/mL). Only one fungal strain *C. albicans* was susceptible towards synthesized compounds, on the other hand two compounds exhibited noteworthy antimalarial activity with IC<sub>50</sub> values of 0.18 & 0.11µg/mL. The study revealed, that combining two heterocyclic moieties benzimidazole and benzothiazole through carbothioamide linkage have resulted in compounds possessing interesting biological activities. The biological data showed expediency of the chosen approach for further scientific exploration.

**0065                    Engagement and Understanding: Pregnant adolescents and health information in Freedom Park**

Maya Stevens-Uninsky

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This study examines the factors that influence how vulnerable young women understand, internalize and use reproductive health information. Participants were adolescent women, residents of the South African township of Mitchells Plain, and either pregnant or had a child. Data was collected via interview and analyzed using NVIVO. Three factors emerged as having impact on internalization and use of health

information; shared life experiences, trust in the source of information, and comfort levels. Future efforts to reduce adolescent pregnancy in resource poor areas should focus on who delivers sexual health information, and improving quality and ease of access to information.

**0267 Flexibility and Paternalism in Home Care Services**

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This study was carried on home care services HCSs in two countries as Germany and Turkey. A qualitative study using in-depth interviews was conducted with 23 homecare managers in two countries. Interviewers in Germany stated that care plans are not flexible. Standards related with time during care affects autonomy. For Turkish interviewer, organizational structure is not flexible, which leads to decrease in service diversity and competition. Finally, decrease in flexibility of HCSs impacts care giver and person taking care autonomy. Keeping off flexibility leads to decrease in sole of individual and make service be far away from patient centered care

**0035 Social Determinants of Health (SDH) and Universal Health Coverage (UHC): Focusing the gaps to achieve UHC in Bangladesh**

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Global commitment to UHC is fundamental, but so too is action on SDH to achieve health equity in Bangladesh. Health inequities in Bangladesh involve the health disadvantages that produce gaps in access to care, affecting the poor populations most. Social protection in health covers less than 2% of the country's population. Regarding implementation of UHC, access to health care, quality service, responsiveness and health work force are still poor. There is a need to systematically examine the social, cultural and economic factors that impinge upon health intervention outcomes and influence inequities in access to affordable medicines and health care.

**0033 The Determinants of the Adoption of Innovation in Healthcare**

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Objective: To conduct a systematic review of adoption determinants, evaluate those with the greatest impact and provide future policy recommendations.

Method: A systematic review was conducted across 3 databases with use of MeSH. Retrieved papers were scoped internationally, with unrestricted publication date range.

Results: Thematic analysis was conducted to categorise the 262 paper into overarching themes: National, Organisational, Individual, Patient. These themes were then divided into 15 subthemes. The most prominent theme to emerge was Organisational factors. 'Perceptions of the Innovation' most greatly influenced adoption. Patient and National factors were show to have little importance.

Discussion:Policies are provided to accelerate the adoption process.

**0132 Optimal alcohol policy**

Ilya Lukibanov

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I propose a policy for the Russian government that decreases men's mortality rate by 15%. Currently, up to 35% of working men's deaths in Russia are related to vodka consumption. It is known from the literature that the higher the degree of alcohol, the worse the consequences are for health. Thus, I suggest the policy that would shift demand from spirits to beer. Particularly, I introduce the increase in excise tax on vodka and the decrease in the excise tax on beer in such a way that the consumer surplus stays constant.

**0101 Empathy and Sharing in online forums for people with life-threatening illnesses.**

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Theory/Framework

Patients with life-threatening illnesses may use online forums to cope with uncertainty. This study examines the role of empathy and sharing among these people.

Methods/Hypothesis

Thematic analyses of threads from Motor Neurone Disease and Breast Cancer forums and interviews with forum users were conducted. We hypothesised that empathy influences how information is shared.

Results

The forums were characterised by sensitive person-focussed interactions that inspire and empower. Support for individuals helps reduce uncertainty.

Conclusion

Information and support provided online can support people with life-threatening conditions. Patients and health professionals benefit from online forums.

**0038 Analysis of Cause of Death Data in Yatinuwara Divisional Secretariat (DS) Area, Sri Lanka**

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**Background:**

Improper codes known as 'Garbage codes' are commonly used in death certificates

**Methods:** Registered deaths of the Yatinuwara DS area, from year 2004-2013, were analyzed. A univariate and bivariate analysis done.

**Findings**

Out of 1102 deaths, 92.9% deaths occurred outside hospital. Percentage of garbage codes were 56.8% and the relationship between garbage code and place of death

was not statistically significant( $p= 0.526$ ). Out of non- garbage causes, 87.2% were natural deaths and 82.1% were due to non- communicable diseases.

**Interpretation:** There was no statistically significant association between place of death and usage of Garbage causes.

