

Thursday 6th March

Exchange Hall

11:00-12:30 Poster presentations Session 3 Groups 1-4

Eposter	Poster Session 1	Poster Session 2	Poster Session 3	Poster Session 4
Lucia Feticu Yoonjung Han Kopal Mathur Timothy Shao Ern Tan Kopal Mathur Tri Rahmat Basuki	Rikke Gjellerod Martyn Senior Kathy Leadbitter Ayo Olomolaiye Mary Obiyan Xiu Hong Tian	Prasheena Naran Dance Gudeva Nikovska Roger Rosa Silvia Zaman Tova Tampe	John Steward Vineet Kumar Kamal Helen Armitage	Leonid Karp Ying Guan Mojca Juricic

Eposters

Ref: 327 ePoster

Prevalence Of Human Papilloma Virus And The Virus Correlation With The Cytological Abnormalities And With The Age In An Urban Population From Transylvania, Romania

Presenting author: **Lucia Feticu 1, Candidate for a doctor's degree, senior doctor, lucfet@yahoo.com**

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Co-authors: Ioan Stelian Bocsan 2, PhD, Professor, bocsanioanstelian@gmail.com Cosmina Ioana Bondor3, Candidate for a doctor's degree, Assistant professor, bondor_ioana@yahoo.com Cecilia Bobos 4 , PhD, Assistant professor, ceciliabobos@yahoo.com

Background: The importance of Papilloma viruses (HPV) in human pathology is well-known. However, less investigated is the prevalence of the infection with HPV in the population from the our urban areas and its epidemiological significance. Methods: The presence of HPV was tested in the period 2008-2012 in clinical samples coming from patients of both genders in urban areas, through PCR method by using the reverse hybridization technique (INNO-LiPA HPV Genotyping Extra test) and La Roche genotyping (Linear array HPV genotyping test kit). Results: The genital secretions were collected from 375 subjects (372 women and 3 men) aged 16-65 years. In 212 out of 375 cases (56.5%) various types of HPV were detected. Of the HPV positive cases, 106 (50%) cases had single infections (95 infections in the urban area: 94 women and one man) and 106 (50%) women presented multiple infections (89 women from the urban area). 34 types of HPV were identified: 15 types of high risk HPV (51, 82, 56, 18, 39, 45, 59, 68, 16, 31, 33, 35, 52, 58, 73; 16 types of low risk HPV (42, 61, 62, 72, 81, 83, 84, CP6108, 70, 6, 11, 55, 74, 54, 67, 40); 3 types of probably high risk HPV (26, 53, 66). In two women aged 21 years and 32 years, HPV type could not be specified. Babes-Papanicolaou cytological examination was performed in 15 female patients and of these, in 5 cases the following HPV were identified by using PCR method: HPV 16, HPV 31 and the association between the types 6 and 31 were traced. Between 20 years and 25 years, the number of single and multiple infections increased, in urban areas, then it decreased. Below 45 years, the number of associations of HPV types is significantly higher than over 45 years. Conclusions: The high number of oncogenic HPV detected makes necessary the introduction of programs for the tracking of the HPV infection by using Babes-Papanicolau cytological examination and PCR and for the prophylaxis by using HPV vaccination in patients of both genders. Keywords: HPV, PCR, cytological examination, urban area

Ref: 490 ePoster

Exploring patterns of public and private partnerships to facilitate community participation for health promotion

Presenting author: **Yoonjung Han**

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Co-authors: Jinhee Kim, Seunghyun Yoo

Working in partnerships is an effective mechanism for planning and implementing health promotion programs. By joining action for mutual benefit, pooling resources, and sharing responsibilities, organizations expect to achieve results more likely together in partnerships. Recently there is a growing interest to engage more members from the community in health promotion programs in the Republic of Korea. Limited information on community organizations and lack of understanding on the how and why organizations enter into a partnership, however, keep potential partners from participating in partnership. This study aims to explore the nature of the existing partnerships and uses a multiple case study design in two fields of health promotion: (1) alcohol programs where several private organizations are participating in health promotion efforts and (2) healthy cities which is a public-led health promotion approach. By interviewing stakeholders, we explore the nature of the existing partnerships (16 participants from 15 organizations in the alcohol sector; 16 participants from 4 districts in the healthy cities sector). Interview questions include types and levels of current partnerships, motivation for developing and sustaining partnerships, and comparison of partnerships with the public sector versus others. Interview data were analyzed in an iterative approach and were organized to meaningful themes. To attain trustworthiness of the findings, the preliminary analysis was reviewed by selected interviewees in two focus group discussion sessions. Interviewees from both public and private sectors classified partners into two categories: co-workers and program recipients. Desired partners are those would act as a control tower to coordinate the participating organizations in the partnership. Also there was a strong need for more grassroots organizations to be involved. Throughout the process of partnership building and maintenance, familiarity between the partners and compatibility with the system were two main themes. Familiarity with the partner organization's values, operating systems, and other organizational characteristics work in favor of establishing better relationships. Boundaries between governmental departments, project cycles and time frames, resources, personnel, health promotion values, and understanding of partnerships should be compatible for developing and nurturing partnerships. Interviewees from both sectors agreed that the public sector should develop the framework and guidelines and provide institutional support for the private sector to maximize their potential. This study concludes by suggesting the need for a partnership coordinating function that would seek for potential partners and keep a registry of these various partners. There should be more opportunities for partners to share their stories and lessons learned from their experiences.

Ref: 505 ePoster

Ageing workforce in the healthcare organisations

Presenting author: **Kopal Mathur**

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Co-authors:

A distinct and irreversible change in the global demographics has been observed with the rise in ageing population and retiring workers, individuals aged 60 years and above. This study was undertaken to study the challenges faced by the members of the workforce as well as healthcare organisations on account of this situation and with the objective that the findings may influence the development of strategies to utilise the skilled and experienced workforce effectively. A review of the literature carried out as a part of this study enabled the recognition of the problems faced by the workers and the employers within the workplace and also facilitated the development of key questions that were asked during the interviews with selected informants that included experts, managers and workers close to retirement within the healthcare sector. The interviews were carried out to validate the findings from the literature review. The findings from this study indicate a lack of long-term workforce planning by healthcare organisations. The inappropriate or inadequate training for continued medical education provided to these experienced workers by the healthcare organisations has been identified as a major area of concern. There is a need to develop strategies to utilise the expertise of these workers to maintain a skilled workforce, which would inter-alia require succession and retirement planning by organisations and workers. Another issue with the ageing workers has been their occupational and age-related health problems, which requires attention in relation to the working environment and flexibility in working hours. A favourable working environment is needed as part of the long-term investment in these highly specialised workers so as to maintain as well as improve the quality of healthcare delivery and to accrue financial benefits to both workers and organisations. The findings from this study should help in the development of appropriate strategies for dealing with the ageing workforce in healthcare organisations and will also help in planning and maintaining a patient-focussed care from the skilled and experienced workforce. Keywords: Ageing workforce, Healthcare organisations, Challenges, Demographics

Ref: 783 ePoster

The Management of Infants up to 6 months with Suspected Adrenal Insufficiency - An Audit

Presenting author: **Timothy Shao Ern Tan**

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Co-authors:

Background Adrenal insufficiency (AI) is an uncommon paediatric condition which is easily unrecognized. Its clinical diagnosis can be delayed or missed due to vague and non-specific symptoms early in its course. This is life-threatening and infants are especially vulnerable. Hence, prompt recognition and management prevents mortality. Aims We aim to evaluate the appropriate management of infants up to 6 months of age with suspected AI at a single regional centre. Our standards focused mainly on specialist input, pharmacological management and education. Methods Data from 45 infants up to 6 months of age who have undergone at least one standard dose synacthen test (SDST) over a 2-year period was reviewed. A SDST is performed to detect any glucocorticoid deficiency and a cortisol level of $<550\text{nmol/L}$ at 30 minutes in response to synthetic ACTH was defined as subnormal. Results 49% (22/45) of infants had subnormal whereas 51% (23/45) had normal 30-minute cortisol levels on SDST ($>550\text{nmol/L}$). From our standards, all infants were referred to paediatric endocrinology for assessment. Infants with subnormal SDST results were followed-up, treated with glucocorticoid therapy and received adrenal crisis emergency training for their families/caretakers. Conclusion 100% of infants with suspected AI were appropriately managed according to our standards. Based on our results we recommend that referral to Paediatric Endocrinology and commencement of glucocorticoid treatment of infants with biochemical evidence of AI is to be achieved within 24 hours of a subnormal SDST result. Subsequently, families are to receive first communication about adrenal crisis emergency training within 1 week of infants starting glucocorticoid treatment. Lastly, follow up with the Paediatric Endocrine Team is to be within 3 months of the first consultation for infants with subnormal SDST results. We also noted that 8 infants had transiently subnormal SDST but were asymptomatic. This suggests a physiological delay in maturation of adrenal glucocorticoid secretion. Thus, further research is essential towards identifying and managing these infants who present normally. Also, more research into AI prophylaxis and glucocorticoid dosing for premature infants would benefit their management.

Ref: 314 Poster

The Path towards Universal Health Coverage: A Study Comparison between Indonesia and Thailand

Presenting author: **Tri Rahmat Basuki, MD, MPH**

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Co-authors: Regina Sauto Arce, MSc

Background: Many people in several countries could not get access to the health care because payment to the health services could lead them into financial difficulty. In 2007, the World Bank indicated that only 26.1% Indonesian people with health insurance, then 46% people were insured in 2009, and finally in 2011 there were 63% people who have health insurance. Health insurance schemes available in Indonesia are Askes (SHI for civil servants), Jamsostek (SHI for private sector workers), Jamkesmas (SHI for the poor) and private health insurance. Thailand is the country in South East Asia that has gone through a more important reform in the health care financing system in order to advance towards UHC. In 2002, UHC was successfully established to give protection to all Thailand citizens. Today, there are 3 public health insurances which are CSMBS (for civil servants), SSS (for private sector workers) and UCS (for informal sector). **Methodology:** Data and information are collected based on selected literature review from high impact journals and publications from several international organizations also from Indonesia and Thailand government publications. Data comparison is mostly based on secondary data from world health statistics and MDG statistics. **Results:** Thailand has better result than Indonesia in 24 indicators from comparison of 29 selected UHC indicators. **Discussions:** Thailand has better result than Indonesia due to some reasons such as wider health coverage, higher public health expenditure and smaller OOP payment. **Conclusions:** Thailand under UHC system has better health financial protection, health services, health outcomes, and health system resources than Indonesia. Based on lessons from Thailand, recommendations could be made to improve health coverage in Indonesia. **Recommendation:** Funeral fund as health insurance is proposed at the end of the thesis as an author's contribution in order to improve health financing system in Indonesia. **Keywords:** UHC, health system, health financing, health insurance, insurance coverage, UHC indicators.

Poster Session 1

Ref: 656 Poster

An Audit of Broad-Spectrum Antibiotic Prescribing in a GP Practice in a Deprived Urban Area.

Presenting author: **Martyn Senior**

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Co-authors:

Background: Broad-spectrum antibiotics are drugs used in the treatment of: infections caused by a wide-range of bacteria, particularly in infections that do not respond to first-line treatment. Inappropriate prescribing of these drugs in the past has led to drug resistance and can cause Clostridium difficile infection. Antibiotic resistance is a process where some bacteria are able to survive antibiotic treatment after having been previously exposed to that antibiotic. This is a significant global side-effect of broad-spectrum antibiotic use. In March 2013, the Chief Medical Officer for England, Professor Dame Davies, advised the Government that the global threat of antimicrobial resistance was as serious as terrorism, and should, therefore, be treated as such. Aim: To ensure that 90% of the prescriptions issued at the GP Practice were appropriate when compared with local and national antibiotic prescribing guidelines. The decision was taken to set the criterion high, but not absolute, as clinical judgement should be used where individual patient cases do not fall into specific guidelines. Methods: The practice EMIS database was searched for broad-spectrum antibiotics issued between 17th March and 17th June 2013. The key variables were: the date of issue of the prescription; the clinical indication for the prescription; the antibiotic that was prescribed; and the clinician who issued the prescription. Results: Cefalexin, Ciprofloxacin and Co-Amoxiclav were the antibiotics that were prescribed within the audit's time-frame. Of the prescriptions issued by clinicians in the practice 80% were considered appropriate. Conclusions & Recommendations: The majority of the broad-spectrum antibiotic prescriptions that were issued were appropriate within local and national guideline recommendations, although the audit criterion of 90% was not met. Narrow-spectrum antibiotics should be prescribed when possible and all efforts should be made to adhere to the guidelines.

Ref: 572 Poster

PASS: A Parent-Mediated Intervention for Autism Spectrum Disorders in South Asia

Presenting author: **Dr Kathy Leadbitter**

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Co-authors: Jonathan Green, Hannah Tobin, Vikram Patel, Gauri Divan, Vivek Vajarakar, Atif Rahman, Ayesha Minhas, Catherine Aldred, Carol Taylor

Background Recent work in high-income countries has identified parent-mediated communication-focused interventions as having the best evidence base for the treatment of autism. The UK Preschool Autism Communication Trial (PACT; Green et al., 2010) was the largest trial to date of such an intervention; showing rapid and substantial impact on parent-child communication. The Parent-mediated intervention for Autism Spectrum Disorders in South Asia (PASS) study is an adaptation and implementation pilot study of the PACT intervention in Pakistan and Southern India, involving collaborations between the Universities of Manchester and Liverpool, Sangath, Goa, and The Institute of Psychiatry, Rawalpindi. **Aims and Methods** Phase 1: Adaptation and Task-Shifting (1) To adapt the PACT intervention to ensure acceptability to local communities and build clinical capacity of South Asian teams; development workshops and interviews with parents, regional specialists, stakeholders, and health providers (2) To develop a training/supervision 'task-shifting' pathway, enabling non-specialists to deliver the intervention with parents (3) To develop a research measurement protocol, adapting key measures for local use and providing training for researchers Phase 2: RCT To conduct a two-site, two-arm single blinded RCT of the adapted intervention to evaluate: (i) its feasibility and acceptability, (ii) the success of the 'task-shifting' approach, (iii) the effectiveness of the adapted model against routine care for children with ASD Participants were 65 children with confirmed ASD aged 2-9 years, randomised to the intervention group or to treatment as usual Measures were selected for their potential to build capacity for future ASD studies in the region and included examiner-rated observations of parent-child communication and parent-rated measures of child adaptive functioning and communication **Results & Conclusions** Phase 1 - Successful adaptation of the intervention procedure to the local context (including qualitative interviews of parents and focus group discussions with stakeholders and intervention adaptation workshop with regional experts) - Development of a cascading supervision model in which firstly senior therapists in the sites were trained to fidelity and then those senior practitioners trained community health workers who delivered the intervention - Translation and adaptation of the intervention manual into local languages and cultures - Maintenance of objectively recorded fidelity - Successful adaptation of the chosen research assessments and training of research staff in their use Phase 2 - Successful complete recruitment to the RCT and excellent retention - Capacity has been built in both India and Pakistan in relation to the intervention practice and research evaluation - Trained PASS Facilitators have delivered the PASS intervention, with excellent fidelity Results of the Pilot RCT will also be presented.

Ref: 797 Poster

A case report on the use of anti-mullerian hormone as a diagnostic marker for premature ovarian failure

Presenting author: **Ayo Olomolaiye**

University of Manchester, University of Manchester, United Kingdom.

Co-authors: Nikoletta Panagiotopolou, Mr C Philip Harris

A 22-year old white Caucasian woman presented to an infertility clinic with amenorrhoea in December 2012. This episode occurred whilst taking the combined oral contraception pill and thus she stopped taking it. In January 2013, she had an episode of unprotected sex for which she took the 'morning after pill'. Amenorrhoea further persisted until a spontaneous episode of per vagina (PV) bleeding in March 2013. Periods have since been regular. This is the only incident of amenorrhoea that this patient has experienced. Prior to this she has had regular periods since menarche. There is no other significant medical, surgical or family history. Clinical examination was unremarkable. She appeared generally well with no signs of hirsutism, acne or striae and her BMI is 19.3. Investigations Prolactin, free androgen index and autoimmune antibody screen were unremarkable and the patient's karyotype is 46, XX. Progesterone, oestrogen and luteinising hormone levels were unremarkable. Follicle stimulating hormone (FSH) was very high in the 3rd month of amenorrhoea (104 iu/ml) and also the 4th month (68 iu/ml)- this is consistent for a woman with premature ovarian failure (POF). Upon menstrual resumption, Anti-müllerian hormone (AMH) was measured at <0.6pmol/L- a result which is thought to reflect an extremely depleted follicular pool. Two months later AMH was repeated and had increased to 4.3pmol/L. Discussion A diagnosis of POF in this 22-year old was influenced by the results of FSH and AMH. FSH is known to be reliable whereas AMH is a new biomarker for ovarian function and reserve and hence its reliability is under much scrutiny. In females, AMH is secreted from ovarian follicles continuously from birth until the menopause and so AMH levels are deemed to reflect the size of the follicular pool (Bhide P, 2012). A woman's follicular pool is known to deplete with age-it is therefore contrary that AMH levels should dramatically increase like that seen in this patient. Various causes for the inconsistency of AMH levels are currently being explored. Recent literature has proposed that variations in the handling of AMH samples can lead to inaccurate results (Nelson, 2013). Other factors that may affect AMH results include the variability of the AMH assay itself; there are multiple types that are currently being analysed by a range of laboratories (Nelson, 2013). Current knowledge of AMH opens up exciting possibilities for its use in reproductive medicine. If accurate, it is possible that it could be used to assess a woman's fertility and perhaps predict menopause onset. This case study highlights the current unreliability of AMH, thus it should not yet be used in this manner. References Bhide P et al 2012. The role of anti-mullerian hormone as a predictor of ovarian function. The Obstetrician & Gynaecology, pp. 161-166. Nelson, S., 2013. Biomarkers of ovarian response: current and future applications. Fertility and Sterility, Volume 99, pp. 963-9.

Ref: 514 Poster

Suffering and Smiling: Intimate Partners Violence among Urban Women in Lagos State, Nigeria

Presenting author: **Obiyan Mary O.**

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Co-authors: Ajala Stephen T.

This study investigates the socio-economic characteristics that act as predicting factors of intimate partner violence (IPV) and forms of IPV among urban women in Nigeria. The 2008 NDHS was used alongside with 15 in-depth interviews (IDI) with women who volunteered self-reported experiences of IPV. The findings revealed that women's educational level was significantly related to physical abuse while partner's use of substance and alcohol intake were significantly associated with both emotional and physical violence. The qualitative findings revealed that the culture of submissiveness and absence of democratic dialogue was an influencing factor of IPV. Patriarchy also encourages inequality and provides unfair position for women to negotiate sensitive issues with their partners. Emotional violence was the commonest form of violence; however, it does not affect women as much as physical violence. There is need for more enlightenment programmes and policies that are culturally sensitive in addressing IPV in urban Nigeria.

Ref: 627 Poster

An analysis based on female sex workers' characteristics, Social Discrimination of entertainment places and AIDS research study in Minhang District of Shanghai

Presenting author: **XiuHong Tian**

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Co-authors:

Objective Investigate the character, HIV/STI knowledge and attitude of female sex workers (FSWs) in order to guide the design, implement and assessment of HIV/STI prevention and inventions. Methods specific questionnaire conducted. Two communities were selected randomly by multi-procedures cluster sampling method. 125 female sex workers were recruited from 22 entertainment places based on these two communities. Results There were significant differences in age, education, marital status and income between FSWs working in large venues and FSWs working in small venues. HIV/STD quiz mark, self-concern about HIV infection, age and education background have little impact on HIV discrimination. People had higher score in condom use knowledge and self-prevention test revealed condom use in all times. Conclusion FSWs are still the key population for preventing and controlling HIV. They are at risk of infection with HIV and STI. there is an association between participants' situations, their occupations and HIV discrimination. Keywords: HIV/STI; female sex workers(FSWs); characteristic discrimination

Poster Session 2

Ref: 804 Poster

The Cost of Living with Rheumatoid Arthritis and Osteoarthritis

Presenting author: **Prasheena Naran**

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Co-authors:

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

Ref: 557 Poster

How much knowledge is healthy? Results of Knowledge, Attitudes and Practices on tuberculosis survey among ethnic minorities in Republic of Macedonia

Presenting author: **Dance Gudeva Nikovska**

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Co-authors: Natasa Nikolovska Stankovic, Kiril Soleski, Darko Iliev

Background Despite all the efforts that Republic of Macedonia (RM) place to control and fight tuberculosis (TB), the disease still persists and current societal, political and economic trends are in favor of TB to still pose a threat and tends to further spread in some ethnic minorities. Incidence in Albanian and Roma ethnic minorities is 20 and 5 times higher, respectively, compared to general population. **Methods** Cross-sectional survey was conducted May-Sep, 2013 on a representative sample of 900 ethnic minority households; standardized questionnaire with close-ended questions, in 5 big cities with largest clusters of ethnic minorities. **Results** 636 respondents (70.7%) were male of average age 31.27 years, 2.6% living in rural areas. 31.3% have completed high school, 42.7% are unemployed and 24% live on a monthly income of <100 EUR. 78% correctly identified TB as infectious disease, yet, 64% consider it as not very serious. Only 19% have correctly identified mode of transmission through an infected person; 11% think that TB can be transmitted during sexual intercourse, 7% through food and 9% through blood transfusion. As high as 38% and 18% think that only poor or homeless people, respectively, can be infected with TB. High 74% know that TB can be cured with drugs, however, 14% think it can be cured with home-made remedies. One third (31%) would feel ashamed if diagnosed with TB, but more than a half (51%) will correctly go to their family doctor if coughing more than 2 weeks. **Conclusions** The research has provided a baseline on the knowledge, attitudes and practices related to TB among ethnic minorities. Although knowledge, attitudes and practices in general show fairly high values across different measures, the results provide insight into specific biases and problems and provide direction for future activities, in order to ensure equity in TB control among ethnic groups in the country.

Ref: 403 Poster

Inequalities in the metropolitan area of Porto Alegre, Brazil: hospitalizations for cystitis.

Presenting author: **Roger dos Santos Rosa**

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Co-authors: Jéssica Morgana Gediel Pinheiro; Luís Fernando Kranz

INTRODUCTION: Cystitis is an ambulatory care sensitive condition that should not generate hospitalizations. The metropolitan region of Porto Alegre (MRPA/RS) covers 32 counties and 4.1 million people in southern Brazil with unequal access to health services. Therefore it is important to know the origin city and where patients with cystitis were hospitalized in the public health system (SUS) .

OBJECTIVES: To identify the origin and destination of residents in MRPA/RS hospitalized for cystitis in SUS during 2008-2010. **METHODS:** Analysis of secondary data in the public domain from the SUS Hospital Information System (SIH/SUS) ('RD files'). A database was generated with first-listed admissions of residents from MRPA/RS anywhere in the country for cystitis (ICD-10 N30), from 2008 to 2010, tabulated by TabWin[®] software. **RESULTS:** Cystitis was the primary diagnosis in 831 admissions (0.1%) out of 786,898 for residents from MRPA/RS (39.4% men and 60.6% women). Two-thirds of the admitted were residents from five cities (47% of the population). There were 241 (29.1%) of Porto Alegre (the state capital), 140 (16.9 %) of Campo Bom, 64 (7.7%) of São Jerônimo, 62 (7.5%) of Sapiranga and 49 (5.9%) of Canoas. Hospitalizations were not proportional to the population in the MRPA/RS - Porto Alegre (35.0%), Campo Bom (1.4 %), São Jerônimo (0.5%), Sapiranga (1.9%) and Canoas (8,1%). As a destination, 86% out of all hospitalizations occurred in the same five cities. There were 373 (45.0%) in Porto Alegre, 158 (19.1%) in Campo Bom, 77 (9.3%) each in Sapiranga and São Jerônimo, and 29 (3.5%) in Canoas. Residents hospitalized in their own cities were 241 (100%) of the capital, 139 (99.3%) of Campo Bom, 64 (100%) of São Jerônimo, and 59 (95.1%) of Sapiranga. However, only 29 (59.2%) of Canoas were hospitalized in their own town leaving the rest to Porto Alegre. The hospitalization coefficient was 6.7/100,000 inhab./yr (5.6/100,000 inhab./yr in the capital) with large amplitude (0.0 in Capela de Santana, Estancia Velha and Igrejinha up to 100.2 in São Jerônimo). Mortality was 1.3% (0.4 % in Porto Alegre up to 5.0 % in Campo Bom). **CONCLUSIONS:** Hospitalizations for cystitis represent a small volume in relation to the total admissions. However, lack of proportionality between population and hospitalizations and the large amplitude of the hospitalization coefficients and of the mortality coefficients indicates urban filters in the access and quality of care, even for a condition responsive to primary health care that should not generate admissions. Knowing source and destination flows of admissions in a metropolitan area allows identifying constraints faced by families and health staff regarding access to health services. Moreover, helps to improve the regulation mechanisms of services supply in order to reduce inequalities among these cities.

Ref: 435 Poster

Using a Community-Based Approach to Measure Intra-Urban Health Service Utilization Disparities in Bangladesh

Presenting author: **Tova Tampe**

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Co-authors: Amira Roess

Aims: Recent research looking at urban health disparities in developing countries has typically examined urban poor versus urban non-poor. However, research that investigates discrepancies between slum dwellers and other urban poor populations is limited. This study aims to address this gap and measure the impact of slum residence on maternal and child health service utilization in Bangladesh between 2007 and 2011. Specifically, use of ANC, tetanus toxoid vaccination, appropriate delivery and full child immunization are examined. The study uses a unique community-based approach to identifying slum residents, adapted from UN Habitat's slum definition, where a group of individuals living under the same roof is considered a slum household if it lacks at least one of the following: access to improved water, access to improved sanitation, sufficient-living area, durability of housing and security of tenure. The community-based approach considers a slum household one that lacks at least two of the UN criteria and is located in a geographic area where more than 50% of other households also meet the criteria. Applying this newly developed approach, the study attempts to understand intra-urban health disparities and explore the concept of spatial inequality in Bangladesh. **Design:** Cross sectional data from the most recent two DHS surveys were analyzed using a series of multivariate logistic regression models. **Setting:** Bangladesh has shown rapid urban population growth in the last decade, with Dhaka now considered one of the most densely populated urban areas in the world. Analysis was based on slum populations identified in Chittagong, Dhaka, Khulna, Rajshahi and Sylhet. **Participants:** Secondary data from the Bangladesh DHS in 2007 and 2011 provided a nationally representative sample of ever-married women aged 15-49 in 2007 and 12-49 in 2011. **Results:** No statistically significant differences were found between slum and non-slum residents in terms of ANC utilization, appropriate delivery, and child immunization. However, differences in mothers' tetanus toxoid vaccination revealed major discrepancies between slum and non-slum residents. In 2007, the study found that there was a 45% decrease in the odds of getting at least two tetanus toxoid injections before birth among slum residents compared to non-slum residents. In 2011, results indicated a 25% decrease in the odds of receiving the appropriate tetanus toxoid vaccination among slums residents compared to non-slum residents. **Conclusions:** While not all health seeking behaviors varied between slum dwellers and other urban poor populations in Bangladesh, the differences in uptake of tetanus toxoid vaccine for mothers demonstrate an area where health service utilization disparities exist. As tetanus toxoid vaccination before birth is a key intervention to reduce neonatal mortality, attention should be given to barriers faced by slum dwellers in accessing and utilizing such interventions.

Poster Session 3

Ref: 542 Poster

Development and validation of a score chart for prediction of Outcomes after severe head injury based on patients admission characteristics.

Presenting author: **vineet kumar kamal**

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Co-authors: Dr. RM Pandey, DR. Deepak Agrwal

Background: Traumatic brain injury is the leading cause of disability and death all over the world. An early estimation of outcome after TBI is of great importance for several reasons. Objectives: Our aim is to evaluate the risk factors for severe head injury and to develop and validate a score chart in a user friendly manner to estimate the probability of in-hospital mortality and 6-months outcome according to Glasgow Outcome Scale using admission characteristics in patients with severe head injury.

Methodology: We retrospectively used trauma database (n=1230 patients) for severe head injury patients, from JPN Apex Trauma Center (AIIMS, New Delhi), to develop and validate a score chart. JPN Apex Trauma Center is currently the best integrated level I trauma center in India and continues to set benchmarks in patient care not only nationally but also internationally. A total of 946 patients were utilized for development of score chart and 284 patients were utilized for validation of the score chart. For each outcome, we developed a score chart in a user friendly manner to estimate the probability of poor outcome based on admission characteristics using logistic regression analysis. The performance of the score chart was assessed in terms of discrimination and calibration. Discriminative and celebrative ability were assessed with the area under the receiver operating characteristic curve (AUC), and Hosmer-Lomeshow test respectively. Results: For in-hospital mortality and 6-months outcome; age, motor score, papillary reactivity, limb movement and CT features (Midline shift, SDH, EDH, Basal cistern effaced, tSAH/IVH) were the independent predictors. The discriminative ability of the score chart for in-hospital mortality and 6-months outcome was excellent in the development data set (AUC: 0.894 and 0.899 respectively). The external validation from the same centre in validation data set confirmed the discriminative ability of the score chart (AUC: 0.874 and 0.884 respectively) for each outcome.

Calibration in development and validation data set was also good for both outcomes (H-L test p-value>0.05) Conclusion: Based on the biggest study for severe head injury patients, we are the first to show limb movement as the independent predictor of in-hospital mortality and 6-months outcome in TBI patients. Our models performances were good and these models are generalizable for predicting outcomes in new severe TBI patients. We recommend for the use of these models and its score chart in predicting outcomes for severe head injury patients in India as well as other low-and middle-income countries of Asian continent.

Ref: 375 Poster

An investigation into the relationships between health, social and socio-economic characteristics and underweight in community-dwelling, older people in England

Presenting author: **Helen Armitage, Public Health Specialty Registrar, North West School of Public Health, Liverpool**

Mersey Deanery, Public Health, Knowsley Council, Municipal Buildings, Archway Road, Huyton, Merseyside, L36 9YU, United Kingdom.

Co-authors: Dr Daniel Pope, Senior Lecturer in Epidemiology, Department of Public Health and Policy, University of Liverpool

Aims: To quantify associations between underweight (body mass index (BMI) $\leq 20.0 \text{ kg/m}^2$) in older people and health-related and social characteristics; to determine the extent to which underweight can be considered a health inequality from its association with indicators of socio-economic status; to critically discuss findings within the context of the existing evidence base and make considered recommendations for Public Health practice and research. **Design:** Descriptive and inferential cross-sectional analysis of secondary data using unconditional logistic regression analysis. Underweight individuals are compared to those with BMI $\geq 20.1 \text{ kg/m}^2$. **Participants:** People aged 65 years and over, living at home who contributed valid BMI measurements as participants in the Health Survey for England 2005 ($n=3259$). **Main outcome measures:** Prevalence of underweight, unadjusted and adjusted odds ratios for underweight for health-related, social and socio-economic variables. **Results:** Prevalence of underweight was 3.4% ($n=112/3259$), which is comparable to other European estimates. In line with previous research, being underweight was univariately associated with worse attributes in subjective health, mental health, functional and social domains. Independent associations were evident for increasing age, female sex, current smoking, 'bad' self-assessed health, perceived lack of people to rely on (social support) and never seeing non-co-habiting relatives (social isolation). The significant association between being in the most deprived quintile of the population and being underweight did not persist after multivariable adjustment, and notably when smoking status was entered as a second independent variable. This suggests that smoking into older age may at least partially mediate the association between deprivation and underweight in UK older people. **Conclusions:** This is an under-recognised Public Health issue in the UK. This study shows that older people with BMI $\leq 20.0 \text{ kg/m}^2$ experience worse health and less social support and contact than not-underweight counterparts. Underweight is more likely to arise in the most socio-economically disadvantaged portion of the older population. Public Health practitioners should improve epidemiological intelligence on the nutritional status of free-living, elderly populations and work in this area should consider social as well as health needs. Future research should employ prospective and qualitative methodologies and explore alternative measures of malnutrition risk. **Key words:** elderly, community, malnutrition, social, inequality

Poster Session 4

14.00-15.30 Poster presentations Session 3 Groups 1-3

Poster Session 1	Poster Session 2	Poster Session 3
Adriana Meireles Amelia Augusta Friche Roseanne Autran Uzair Adam Timothy Shao Ern Tan Hisham Saumtally	Isabel Sierra Marija Jevtic Angus Oli Xiu Hue Lee Omar Elsawi	Francoise Barten Francoise Barten Fahmida Afroz Violeta Tafilaj Kate Blair Nicole Russell

Poster Session 1

Ref: 364 Poster

Effects of individual and neighborhood features on self-rated health (SRH) in a large urban center: Saúde em Beagá Study, Belo Horizonte, Brazil, 2008-2009

Presenting author: **Adriana Lúcia Meireles**

Observatory for Urban Health of Belo Horizonte - School of Medicina/Federal University of Minas Gerais, Avenida Alfredo Balena, 190, 7 andar, Belo Horizonte, Minas Gerais, Brazil.

Co-authors: Amélia Augusta de Lima Friche, César Coelho Xavier, Fernando Augusto Proietti, Waleska Teixeira Caiaffa

Objective: To determine whether between-neighborhood variation in SRH exists and if so, if it is related to the differential distribution of individual risk factors for and correlates of health or to contextual influences of neighborhoods. **Methods:** We used data from a multistage (census tracts, households and residents) household survey conducted in Belo Horizonte City. Neighborhood was defined as census tract. The SRH was dichotomized into poor and good. The independent individual variables selected comprised the domains: sociodemographic, lifestyles, use of health services, psychological and physical health. To assess the neighborhood features we used 9 scales, based on individual perception: Quality of Services, Aesthetic Quality, Walking Environment, Safety, Violence, Social Cohesion, Activities with Neighbors, Physical Disorders, Social Disorders and Neighborhood Problems. Multivariate multilevel models were fitted considering the sampling design. **Results:** Of the 4,048 adults, 53.1% were female; the mean age was 44.9 (SD=16.83) years old. A good SRH was reported by 70.07% and poor by 29.93% of participants. In our null model, the neighborhood contributed significantly to the variance in poor SRH ($s^2_{\epsilon} = 0,17$, $\rho = 0,048$). Controlling for individual, neighborhood attributes reduced the between-neighborhood variance significantly ($s^2_{\epsilon} = 0,003$, $\rho = 0,001$). The SRH was influenced by individual and neighborhood characteristics. The individual characteristics associated with poor SRH were: female sex, older age, poor socioeconomic status, food insecurity measured as no have more food before they had money to buy, at least once in life, lower fruit consumption, negative psychological well-being, life dissatisfaction, common mental disorders (SRQ-20), obesity, to have one or more chronic diseases and to have incapacity or disability. The safety scale, a neighborhood variable level, remained associated to SRH in the final model. **Conclusion:** The significant between-neighborhood variation in current SRH exists even after controlling for the individual factors. This provides evidence for neighborhood level contextual influences on SRH. Further research is needed to determine potential mechanisms through which neighborhood may influence SRH outcomes.

Ref: 571 Poster

Social context of neighborhood and socioeconomic status on leisure-time physical activity in an urban center: Beagá Health Study

Presenting author: **Amelia Augusta Friche**

Federal University of Minas Gerais, Av. Alfredo Balena 190 sl. 730 /Belo Horizonte, Minas Gerais, Brazil.

Co-authors: Amanda Cristina de Souza Andrade; Sérgio Viana Peixoto; Amélia Augusta Friche; Janaína Lavalli Goston; Cibele Comini César; César Coelho Xavier; Fernando Augusto Proietti; Ana V. Diez-Roux; Waleska Teixeira Caiaffa

Objectives: Investigate the association between leisure-time physical activity (LTPA) with social and physical features of neighborhood environments in different socioeconomic statuses (SES).

Methodology: Household survey in Belo Horizonte, Brazil (2008-2009). LTPA was defined as at least 150 minutes of physical activity a week, measured by the International Physical Activity Questionnaires (IPAQ). Scales based on physical and social perceptions of neighborhood included the following attributes: Services, Walking Environment, Aesthetics, Social Cohesion and Safety. Multilevel logistic regression analysis was performed for each SES stratum. **Results:** This study included 3,597 adults (aged 18 years or older). The total prevalence of LTPA was of 30.2%, being 20.2% amongst participants of low SES, 25.4% of medium SES and 40.6% in the high SES group. Greater perceptions of social cohesion and a worse evaluation of community services were associated with increased LTPA only amongst participants of the lowest SES even after adjusting for individual characteristics. **Conclusions:** The results demonstrate the importance of social cohesion for the promotion of LTPA in economically disadvantaged groups, supporting the need to stimulate actions, which can enhance social relationships in this population. **Key words:** leisure-time physical activity, social and physical environment, neighborhood, socioeconomic status, social cohesion.

Ref: 538 Poster

Is there a correlation between active transport with MVPA in Portuguese adolescents? Analysis in a subject of school adolescents.

Presenting author: **Roseanne Autran**

Research Centre in Physical Activity, Health and Leisure, Rua Dr. Plácido Costa, 91, Paranhos, Porto. 4200-030. Porto, Portugal.

Co-authors: Maria de Fátima de Pina, Jorge Mota and Maria Paula Santos

Introduction: Studies have shown that the active transport (e.g., walking and cycling) to and from school is associated with improved physical activity level among adolescents. The aim of this study is to verify if there is an association between adolescents who use active transport to and from school and moderate to vigorous physical activity (MVPA). Methods: Data were obtained from 238 adolescents (54.9% girls) aged 14 to 18 years-old attending public schools in Porto municipality). The PA was measured with accelerometers (Actigraph GT1M) during 7 consecutive days, considering 8 hours per day. For the analysis of levels of MVPA we used the Evenson (2008) cut-points. The active transport to and from school was accessed by NEWS-Y questionnaire. Pearson linear correlation was calculated. Results: The adolescents who walked to school showed a positive correlation with moderate PA and MVPA ($r=0.34$; $p=0.00$ and 0.240 ; $p=0.01$). From school to home we also found a positive correlation between walkers adolescents and moderate PA (0.26 ; $p=0.05$). There is a positive correlation ($r=0.19$; $p=0.04$) between using bicycle as a way of active transport to and from school and a MVPA. Conclusion: We found a positive correlation between active transport to and from school and MVPA levels. Our results suggest that while active transport should be encouraged among all school-aged adolescent, it is especially important to promote the continuing of this behaviour. Project funded by the FCT PTDC/DES/111807/2009; FCOMP-01-0124-FEDER-014697

Ref: 622 Poster

Pancreatic Islet Cell Transplantation in the Treatment of Type 1 Diabetes

Presenting author: **Uzair Adam**

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Co-authors: Daniella Golding, Will Dodwell, Joseph Froggatt and Shayreen Khan

In type 1 diabetes, islet cells in the pancreas have been destroyed. These cells are responsible for producing insulin, a hormone that controls the levels of sugar in the blood. Over the last decade a method has been developed that allows these cells to be taken from a donor's pancreas and transplanted into a diabetic patient. This procedure has been successful in avoiding the severely damaging effects of very low blood sugar levels.

Ref: 787 Poster

Prescription of Atorvastatin 80mg in post Acute Coronary Syndrome: An Audit

Presenting author: **Timothy Shao Ern Tan, Li Tian Yeo**

Manchester Medical School, The University Of Manchester, Stopford Building, Oxford Rd, Manchester, Greater Manchester M13 9PT, United Kingdom.

Co-authors:

Background: The Quality and Outcomes Framework (QoF) highlights to clinicians necessary reviews that should be conducted for patients. An area where QoF does not cover is the prolonged use of high-dose statins in the secondary prevention of acute coronary syndromes (ACS). The lack of a reminder system may result in clinicians overlooking this matter, causing patients to continue on a high-dose statin treatment inappropriately. This increases patients' risk of developing hepatic impairment, myalgia and rarely rhabdomyolysis. There is hence a need to review these patients. Aims and Objectives: Guidelines provided by the National Institute for Health and Clinician Excellence (NICE) and Trafford Primary Care Trust (PCT) states that for all post-ACS patients, Atorvastatin 80mg should be prescribed irrespective of lipid levels. These patients should be reviewed after 12 months and depending on the recent lipid profile check, the dosage of statins should be adjusted, accordingly to the management of patients with Ischaemic Heart Disease (IHD). We aim to review all patients in a local health centre who have been prescribed Atorvastatin 80mg after an ACS event and evaluate whether blood monitoring and appropriate doses of statins were prescribed after the 12-month time frame. We also aim to investigate reasons behind why patients were not managed according to guidelines. Methods: A list of patients who were currently on Atorvastatin 80mg was generated. Patients indicated due to reasons other than the secondary prevention of ACS were excluded. Data from the remaining patients were audited to determine if their lipid profile were checked by the 12-month period and if the dosage of Atorvastatin was adjusted accordingly to their lipid profile. Results: Over a period of 2 years, 43 patients met the inclusion criteria. 5% (2/43) of patients were managed according to guidelines while 70% (30/43) were not. The remaining 25% (11/30) of patients were still within the 12-month period and were not reviewed yet. Of those who were not managed according to guidelines, 83% (25/30) of patients either did not undergo a 12-month lipid profile test or had the test beyond 18 months. The remaining 17% (5/30) of these patients had undergone relevant blood tests but were continued on Atorvastatin 80mg which was inappropriate for their lipid levels. Discussion: A large number of patients were noted not to be managed according to guidelines. Thus, we recommend following up on all post-ACS patients currently taking Atorvastatin 80mg, create a reminder system within the practise to remind clinicians of the 12-month time frame and to provide leaflets to educate patients about the monitoring required and the 12-month review policy.

Ref: 834 Poster

Type 1 diabetes mellitus (T1DM) is caused by the loss of islet insulin-secreting cells. How is this brought about? What measures are being taken to manage the disease? And what attempts are being made to cure T1DM?

Presenting author: **Hisham Saumtally**

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Co-authors:

Aim: T1DM tends to be overshadowed by today's high prevalence of type 2 diabetes. Focussing on type 1a, this report highlights the disease's spread, pathophysiology and current management. It will also examine possible future treatments and their viability. **Epidemiology:** It constitutes about 15-20% of diabetes cases, with its estimated incidence increasing by 3-5% worldwide and 3.2% in Europe every year. It mostly affects children in developed countries. **Pathogenesis:** T1DM is a T-cell-mediated autoimmune response leading to progressive destruction of β -cells responsible for secreting insulin. It is thought that environmental triggers (viruses, diet) can cause insulinitis in genetically predisposed individuals. This process ultimately leads to insufficient or non-existing insulin production causing hyperglycaemia. **Management:** In the presence of symptoms, a positive diagnosis also includes a random blood glucose level $> 11\text{mmol/L}$ or a fasting blood glucose level $> 7\text{mmol/L}$. Otherwise, two positive findings in either test are required. Current management involves the use of a combination of different types of insulin having different mode of actions - onset after administration, time of peak of action and duration - delivered by either injections at particular times or continuously with additional boluses. The main regimens implemented are: - Multiple daily injections (MDI) - a long/intermediate-acting insulin once or twice a day and short-acting insulins before meals. Dose adjusted according to the amount of carbohydrate in meal. - Continuous subcutaneous insulin infusion (CSII) - A short-acting insulin constantly injected all day long by means of a pump at basal rates. Extra boluses are given prior to meals. Education about this chronic disease is imperative to recognise the complications of both the disease itself and the insulin-based therapy. To achieve long-standing euglycaemia, the best available option is a pancreatic transplantation. **Prospects for the future:** - β -cell replacement - β -cell regeneration offers a great platform for future research as there is a wide pool of cells that can potentially be used including β -cells, α -cells, pancreatic acinar cells and stem cells. Islet transplantation could also be a solution provided there is an effective way of combating rejection. - Combination therapy - simultaneous prevention of autoantibodies formation and induction of tolerance towards islet antigens form the cornerstone of this approach. More research targeting the specific autoantibodies and the action span of boosted regulatory T-cells. - Non-cell based treatment - other forms of insulin administration (oral and inhaled) would provide better control over hypoglycaemic episodes.

Poster Session 2

Ref: 280 Poster

Local policies to improve health: planning and governance aspects

Presenting author: **Isabel Sierra**

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In this presentation, we would like to raise strategic and technical proposals to improve local interventions in urban health, taking into account the institutional, organizational and political factors in Catalunya that act as vehicles for the implementation of the strategy of Health in all Policies designed by WHO. These proposals are based in the experience of more than fifteen years supporting to 941 municipalities in the development of policies and programs, both in financing their projects and also offering a technical and methodological assessment. In public health area, municipalities are working in promotion and health protection and, depending on their population, they develop more activity in promotion of health, meanwhile protection services are widely developed in all their intensity in all municipalities. In this moment, no real coordination or cooperation is established between urban and health departments in local governments, that allows a really policy of urban health in the majority of municipalities. The exception is made by the network of 'Healthy Cities', only about 20 or 30 in all Spain and 10 in Catalunya.

2. Conditions and proposals to improve urban health at the local level In this context, we have been working the last ten years with the objective of promote a general local policy that is oriented to put the people of cities in the center of the political decisions in the city. Our action is addressed to all the municipal organizations in Catalunya and the main strategies that we have used have been four: - Mapping the local public health policies and initiatives of cooperation between urban and health policies and social cohesion. We have used an online survey for extensive data, focus groups to deepen the content and analysis of programs and projects. - Analysis of the effects of the projects, both in relation to improved coordination, planning and management process, and the results in health and social cohesion. - Improving the training of politicians and technicians in the fields of health and social welfare and urban planning, with the aim of a joint analysis of the population and define intervention proposals for a healthy urban planning. - Providing tools for healthy urban planning at large-scale (city), medium scale (district) and small scale (neighborhood, area, etc.), both from the point of view of participation of people, as well about design and use of tools for strategic planning.

3. Results About 25 municipalities have participated in our program of improvement of skills and conceptual habilitation for health urban planning. More than 40% have powered urban transformation initiatives oriented health goals and social cohesion. In these experiences, we have involved more than 200 professionals, 40 politicians, and about 2.500 citizens, generating local processes that have been consolidated in local dynamics. We have also could test the initial diagnostic instruments and systems that facilitate citizen participation political decision to transform the city, as well as governance success factors that ensure a joint project between the city and the citizenry. From our point of view, we are now in a good position to engage in international initiatives looking for improving the political and technical aspects that allows more healthy cities to live.

Ref: 103 Poster

Stability and Sterility Studies on the Routine Immunization Vaccines in use in South-East Nigeria

Presenting author: **Oli Angus Nnamdi or Ikegbunam Moses Nkechukwu**

Nnamdi Azikiwe University, Department of Pharmaceutical Microbiology and Biotechnology, Faculty of Pharmaceutical Sciences, Agulu Campus, Anambra State, Nigeria.

Co-authors: Agu Remigus Uchenna, and Esimone Charles Okechukwu

Aims: The study sets to evaluate the stability and sterility of the vaccines used in the routine immunization programme in the south-east, Nigeria **Design:** The stability studies carried out include: thermal stability test by colony count for the Bacillus Calmette-Guérin (BCG) Vaccines, physical examinations on all the vaccines and shake test on the Diphtheria-Tetanus-Pertussis (DPT), Hepatitis B and Pentavalent vaccines. Test for sterility was carried out using tests for bacteria and fungi contamination. The bacteria endotoxin quantification test (Limulus Amebocyte Lysate test) was also done to test for the presence or absence of pyrogens/endotoxins. **Setting:** South-eastern Nigeria is made up of five States which are dominated by the Igbo ethnic group. The dominant religion is Christianity. **Participants:** Expanded Programme on Immunization vaccines namely: BCG, DPT (or Pentavalent), Oral Polio Vaccine, Yellow fever, Hepatitis B and Measles Vaccines were donated by the States' Ministries of Health. **Results:** The BCG vaccines have mean percentage potency losses of $13.67 \pm 4.45 > 12.99 \pm 5.15 > 12.44 \pm 4.36 > 12.05 \pm 4.98 > 10.71 \pm 6.62$ for from Anambra, Abia, Enugu, Imo and Ebonyi respectively. The shake test showed that the adsorbed vaccines (DPT, Hepatitis B and Pentavalent) had no granules or floccules. The vaccines' mean settling times were 25.33 ± 2.52 , 20.60 ± 2.07 and 25.50 ± 0.71 minutes for DPT, Hepatitis B and Pentavalent vaccines used as control respectively and 72.00 ± 17.32 , 63.20 ± 12.28 , 63.50 ± 2.12 minutes for the vaccine samples respectively. On physical examination, none of the vaccines had any visible change in appearance. The Limulus Amebocyte Lysate (LAL) test did not detect any bacteria endotoxin in the viral vaccine except in the bacteria vaccines (BCG and DPT). The tests for bacteria and fungi contamination did not reveal any contaminant. **Conclusions:** The vaccines showed good and acceptable sterility and stability profiles. **Key words:** {Safety Evaluation, Vaccines, Routine Immunization, Stability, Sterility, South-east, Nigeria} **Acknowledgement:** The Canadian Commonwealth Scholarship Program administered by the Canadian Bureau for International Education and African Doctoral Dissertation Research Fellowship award offered by the African Population and Health Research Center in partnership with the International Development Research Centre funded the research. States' Ministries of Health donated the vaccines

Ref: 690 Poster

An Audit Examining the Screening of Eating Disorders in Adolescents between the Ages of 13-19 in General Practice

Presenting author: **Omar Elsawi**

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Co-authors:

Eating disorders are rare psychiatric conditions that usually occur in adolescent girls. There are three different classes of eating disorders whose diagnostic symptoms can overlap: anorexia nervosa; bulimia nervosa; eating disorder not otherwise specified / atypical eating disorder. They develop due to a complex interaction between biological, psychological and environmental factors. The presentation of these disorders can be wide and varied, and it is usually up to primary care physicians to identify them and take appropriate action. This has proved difficult, with just as many cases of anorexia nervosa going unidentified as there are identified. As a result, in 2004 NICE created guidance on which presentations necessitate screening for eating disorders. This audit investigates whether the Chorlton Health Centre has screened for eating disorders effectively in accordance with NICE guidance, and also with other risk factor criteria. Chorlton Health Centre is considered a small practice with 3300 patients. I searched for patients currently between the ages of 15-19, which produced 99 patients, and then looked over their consultations over the past 2 years to see whether any patients needed screening, and if they were. This produced 14 patients, 5 of whom had had some form of screening. The main conclusions that can be drawn from this audit are that the NICE guidelines on screening are too narrow and need to include more at risk groups, general practitioners need to standardise and employ screening methods more effectively, and that the screening of adolescents should perhaps be moved to a more appropriate setting, i.e school

Poster Session 3

Ref: 840 Poster

Urban Planning and Health in Greater Paramaribo, Suriname

Presenting author: **Francoise Barten**

PAHO, Henck Arron straat 60, Suriname.

Co-authors: Peyun Kok, Hedwig Goede, Francoise Barten

Urban Planning and Health in Greater Paramaribo, Suriname Paramaribo in the Republic of Suriname is an example of a primate city where the vast majority of the country's development and economic activity occurs, and is home to approximately half of the country's population. Despite the city's importance, however, there has been little urban planning and governance to guide its continued development. Land management systems are outdated, and the planning process is ad hoc with no mechanism for public participation. As a result, greater Paramaribo faces a number of challenges with respect to housing, transportation, social and environmental issues, all of which impact public health. This paper will discuss examples of how the city's historical and current development patterns and inadequate land use planning have shaped the social and physical fabric of the city in ways that reinforce social and health disparities, and create unhealthy and/or unsafe environments. Given the growing body of evidence on the relationships among urban form, human behavior and health outcomes, it is argued that as the country's population continues to urbanize, comprehensive urban planning - reconnecting public health with urban planning - should be prioritized as a strategy for creating environments that protect and promote population health and contribute to universal health coverage. Authors: Peyun Kok, Hedwig Goede, Francoise Barten

Ref: 851 Poster

Learning from Implementing the WHO Urban Health Equity Assessment and Response Tool in Suriname, South America

Presenting author: **Francoise Barten**

PAHO, Henck Arron straat 60, Suriname.

Co-authors: Stephanie Laryea, Johanna Lakhisaran, Anjali Kisoensingh, Radjesh Ori, Maureen van Dijk, Maikel Wormer, Rashida Filemon, Francoise Barten

Background The scale and nature of population growth and urban change accentuate development challenges to ensure sustainable healthy environments. Further challenges to health equity arise, as development within and between cities is not homogenous. Recognizing the accelerated development of urban areas in Suriname, a multi-sectoral team conducted the WHO Urban Health Equity Assessment and Response Tool (Urban HEART) to identify intra-city health equity challenges. **Methods** The Urban HEART recommends a six-step methodology: 1) Build an inclusive team; 2) Define local indicator set and benchmarks; 3) Assemble relevant and valid data; 4) Generate evidence; 5) Assess and monitor health equity gaps and gradient and 6) Identify the best response. Guided by the WHO Urban HEART manual, the team adapted the methodology to implement the tool in three areas of Paramaribo, the capital city of Suriname. Continued progress monitoring and pre/post sessions with a wide range of key-actors occurred. **Results** Initial sessions defined local indicators and facilitated data collection process. Despite the expressed interest of key-actors, a divergence from the Urban HEART steps was necessary due to limited data availability related to privacy regulations as well as the paucity of data sharing agreement and aggregated data sets. During the final session, key-actors discussed data and completed the tool using the priorities identified in the initial session. Reflecting on the process, data system capabilities, human resources, time and empowerment of team members proved crucial. Further lessons learned relate to the participatory research process, such as continuous team building, sufficient space, time and willingness to develop a strong shared conceptual framework. **Conclusions.** The implementation of the Urban HEART revealed underlying contextual elements of the process and participatory research factors that are important for consideration and preparation prior to implementation. Despite the challenges, the Urban HEART is a beneficial tool that highlights the need to reinforce mechanisms for intersectoral collaboration to address health equity. **Authors:** Stephanie Laryea (PAHO), Johanna Lakhisaran (PAHO), Anjali Kisoensingh (ABS), Radjesh Ori (BOH), Maureen van Dijk (BOG), Maikel Wormer (DC Office), Rashida Filemon (DC Office), Francoise Barten (PAHO)

Ref: 343 Poster

Final Evaluation of the Integrated Child Centered Climate Change Adaptation Project in Bangladesh.

Presenting author: **Fahmida Afroz**. Eminence Associates Bangladesh, 3/6,Asad

Avenue,Mohammadpur,Bangladesh, Bangladesh.

Background and objectives: The lives of hundreds of millions of people around the world are impacted by climate change each year. While climate change is a global phenomenon, not all countries feel its impact equally. Due to a lack of structural resiliency and a higher dependency on the environment for livelihoods, underdeveloped and poor countries are the most vulnerable to the consequences of climate change. In these countries climate change is more likely to lead to severe consequences such as death, serious injury, displacement, disease, malnutrition, loss of livelihoods, and food and water insecurity. Where the impacts for climate change are felt, children are likely to be the most affected. Children's inherent physical, cognitive and physiological immaturity means they are especially vulnerable to the impacts of climate change. Bangladesh is one of the most climate-affected countries in the world. Not only it is a large delta close to sea level that is prone to disasters, it also has little infrastructure in place to deal with the impacts of climate change induced calamities. Climate change associated risks are further exacerbated by a fast growing population and a heavy reliance on agriculture for survival. Since children are more vulnerable to the negative impacts of a changing climate, child-focused and child-led approaches to both Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) are essential to properly addressing this issue. Not only are these approaches believed to be more effective and efficient in the short-term; they will also be more beneficial in the long-term. Therefore The Integrated Child Centred Climate Change Adaptation (ICCCCA) Project was carried out with specific objectives of empowering children to build 'adaptive culture' in their communities, the project also aimed to: - Increase the social standing of children in the community as local climatic risk identifier, analyser and planner - Ensure sustainability and build a scalable model for future climate change adaptation projects - Grow the capacity of local organisations through training and capacity building on climate change adaptation Further an impact assessment was carried in order to assess the achieved results and the progress made towards the project goal and objectives. **Methodology:** The evaluation has used a qualitative approach to assess the ICCCCA project. Five qualitative research methods were utilised: a) desk research/literature review, b) workshop, c) joint-meeting with government, d) focus group discussions (FGD), and e) key informants interviews (KII). In addition to primary research, desk research was undertaken to review relevant literature and project documents. Data has been collected and analysed using qualitative measures. Analysis has followed general coding, thematic text and image analysis. **Result:** The ICCCCA project piloted a child participation approach to climate change adaption in Bangladesh. Through a network of children's clubs, children were empowered with knowledge and skills to help the rest of their community to increase their ability to identify climate change induced risks and vulnerabilities, and implement adaption techniques to mitigate these risks. The assessment shows children club participants showed that their knowledge has increased to a significant degree as a result of the project. **Conclusion:** This evaluation shows children have become learned about climate change, its impact and climate change adaptation mechanism. In a disaster prone country like Bangladesh being familiar with Climate change adaptation mechanism is very important since disaster cannot be inhibited.

Ref: 799 Poster

Schizophrenia and associated physical health risks

Presenting author: **Violeta Tafilaj**

University of Manchester, Base hospital: MRI, Kosovo.

Co-authors:

Schizophrenia is a severe mental disorder that affects a patient's mental, physical and social wellbeing. The genetic causes of schizophrenia are well recognized and include defective genes which make a patient genetically vulnerable to developing the disease. This genetic vulnerability does not necessarily result in the expression of the disease and external environmental stimuli are often required.

Biochemical causes of schizophrenia are explained in the dopamine and the NMDA receptor hypofunction hypothesis. This report will discuss the physical health risks associated with schizophrenia and the side effects of antipsychotic drugs used in its treatment. The main physical health risks include cardiovascular disease, diabetes, movement disorders, sexual dysfunction and cataract formation. The National Institute for Health and Clinical Excellence has already implemented guidelines regarding the regular monitoring of patients with schizophrenia as a means of preventing disease, but physical health monitoring might need to be more frequent than what has been recommended, and is perhaps a responsibility that could be delegated to psychiatrists or other mental health care workers who have more frequent contact with the patients. Frequent monitoring is necessary for the early detection of important physiological changes that can occur as a result of the side effects of antipsychotic drugs.

Ref: 835 Poster

Information Delivery to and Holistic Assessment of Children with Atopic Eczema and their Parents in an Inner City Ethnic Minority Community: Audit and Discussion

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AIM To assess GP performance in information delivery to and holistic assessment of children with atopic eczema and their carers in a UK urban community **DESIGN** This audit uses subsections of the data collection tool for assessing management of atopic eczema in children provided by NICE. These subsections measure information-delivery to and holistic assessment of children with atopic eczema. Search for patients was conducted on the patient database. A list of patients equal to or under the age of 12 coded with any of the relevant search terms and had an emollient or topical corticosteroid prescribed were included. **SETTING** Parkside Surgery sees patients living in the inner-city Manchester area of Longsight. The Longsight area is statistically one of the 10% most deprived areas in England, including measures in health, income and unemployment. It is ethnically diverse with over 3/4 of residents coming from minority ethnic groups. **PARTICIPANTS** 78 children under the age of 12 were identified as having atopic eczema in the practice. Among these patients 73% were of Pakistani origin, 12% of Bangladeshi origin, 9% of African origin, and the remainder of other ethnic groups. **RESULTS** Across all criteria, this GP surgery failed to meet the 100% standard set out by NICE. The highest compliance rates were found in criteria 1.4 (how often to apply treatment) and 8.1 (at least one emollient was prescribed) with both at 96.2%. The second-highest compliance rate was for criterion 1.9 (76.9%) which assessed whether patients and carers were told how to seek care if eczema became infected. Nearly 2/3 of patients were informed about the amount of creams to use, but were rarely prescribed the recommended amounts. Only 50% of patients were aware of a stepped-care approach for managing their eczema. Furthermore, only 1/3 of patients were told how to recognise flares of atopic eczema. If a patient is unable to assess their flare-ups, they will then be unable to give themselves appropriate treatment, therefore requiring healthcare services for every episode. This may be compounded by specific cultural expectations of the healthcare service. Only 1 patient received a form of written information. None were counselled about the possibility of eczema herpeticum, and only 14% were told how to recognise infected eczema. Less than 1/3 were assessed holistically, which included criteria for psychological well-being, sleep disturbance and impact on carers. **CONCLUSION** Safety-netting, the stepped-care approach and holistic assessment are important in the long-term care of children with atopic eczema. Due to the time constraints of a GP clinic, the NICE-recommended assessments seem difficult and impractical. After discussion with the GPs and patients, an action plan of using POEM assessment forms and the use of leaflets was implemented. Lastly, patient and patient education is required to reduce dependence on healthcare services and improve disease management.

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A community focused approach to prevention of cardiovascular disease, the public's perspective.

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Background: Cardiovascular disease is the leading cause of mortality, accounting for 30% of deaths globally. Yet these are almost entirely preventable diseases if provided with good risk assessment and management of lifestyle, obesity, hypertension, hyperglycaemia and hypercholesterolemia(1). In order for this to be successful adequate screening is required to ensure patients are identified and counselled early. Health Olympics is a medical student run society that provides full health assessments and health counselling at large-scale health awareness events across North West England. The primary aim is to educate the public on their current cardiovascular risk using the Framingham risk score, alongside counselling on how to improve lifestyle and reduce risk. **Aims:** The aim of this study was to survey those who partook in the health assessments to extrapolate their views on the benefits of health assessments in general community settings and their experience with the current primary care services. **Methods:** This study was carried out at two events in Preston and Bradford. The survey was provided to those in paper form as they waited for the health check. The results were collated and compared to gain comparisons between the 2 venues as well as by demographics. **Results:** A total of 207 people were surveyed (n=91 in Bradford, n=116 in Preston.) The ages surveyed ranged from 14 - 83 with a mean age of 49. In Preston 47% surveyed were White British, with 38% being Indian in ethnicity. Contrary to this in Bradford where a majority of 33% of people surveyed were identified as Pakistani in ethnicity. Just 20% of those surveyed had had a cardiovascular check in the last 5 years, despite 49% and 47% being aware that their General Practice (GP) provided cardiovascular health checks for Bradford and Preston respectively. 53% and 42% respectively for Preston and Bradford felt comfortable discussing concerns with their health and lifestyle with either their GP or practice nurse. 67% of people surveyed strongly agreed that it was beneficial to have cardiovascular checks in the community setting. **Discussion:** The feedback from the community health checks was positive with 67% strongly agreeing community checks were beneficial. Less than half of the population surveyed felt comfortable taking about their health and lifestyle with their GP which indicates a requirement for health professionals to cover these risks in their consultations, as well as making services more accessible to patients. **Conclusion:** Community cardiovascular checks are beneficial and desired by the general public and such services need to be more accessible to increase preventative measures. (1) Global status report on noncommunicable diseases 2010. Geneva, World Health Organization, 2011.