



4th World Congress on

Public Health, Epidemiology & Nutrition

May 24-25, 2018 Osaka, Japan

Scientific Tracks & Abstracts **(Day 1)**

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Indicators of mental health in later life: A major public health issue**Lynn Tepper**

Columbia University, USA

Background: Mental health is essential to overall health and must be recognized and treated at all ages, including later life. Older people are currently the fastest growing age group yet have the most widely under-recognized mental health conditions which result in either lack of treatment or under-treatment. It is estimated that 20% of people age 55 years or older experience some type of mental health concern. Most commonly experienced conditions include anxiety, cognitive impairment and mood disorders. Mental health issues are often implicated as a factor in cases of suicide, especially men over the age of 80 (45 per 100,000, compared to the overall rate of 11 per 100,000 for all ages).

Method: Data on the mental health of older adults are collected through the United States Center for Disease Control, through random, digit-dialed telephone surveys, of non-institutionalized Americans aged 50 years or older, using the Behavioral Risk Factor Surveillance System. This questionnaire consists of core questions asked to all subjects, as well as supplemental modules which a series of questions on specific topics.

Result: Reported data indicates that there are significant mental health issues reported among older adults, grouped into the following areas of assessment: Social and emotional support, life satisfaction, frequent mental distress, current and lifetime depression and current and lifetime anxiety disorders. Incorporated into these results are the public health uses of this information to identify populations that might be most risk and to monitor the need for and the effectiveness of various public health interventions.

Conclusion: Continuous mental health surveillance should be used to develop public health programs. These agencies can incorporate mental health promotion into disease prevention efforts, conduct surveillance and research to improve the mental health evidence base and collaborate with partners to enhance coordination of care for older adults.

Biography

Lynn Tepper's research focuses on the behavioral aspects of health promotion and disease prevention, with emphasis on anxiety-related medical and dental interventions, tobacco use, the application of theoretical models of health behaviors, and healthy aging. With more than 30 professional papers, book chapters, and textbooks, important products of her research have been the development of multidisciplinary health behavior assessment instruments, in both English and Spanish, for people with behavioral concerns related to the maintenance of health and the prevention of disease, as well as the testing of interventional protocols, which have been proven successful with older patients. Dr. Tepper is the primary investigator for three NIH-funded projects, and two U.S. Department of Education grants. In addition to her Columbia responsibilities, she officiates on community board committees related to long term care and the aging population.

lmt1@cumc.columbia.edu

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Sustainability via active garden education (SAGE): Enhancing the social return on investment from school programming**Rebecca E Lee, Elizabeth Lorenzo, Jacob Szeszulski, Anel Arriola and Erica G Soltero**
Arizona State University, USA

Purpose: The Ecologic Model of Physical Activity (EMPA) suggests that actions in one micro-environment, like early care and education centers (ECEC), may influence actions in other micro-environments, like the home via dynamic exo-environmental linkages. This collection of studies explored how experiences that children have at ECEC may influence parent behavior and the home environment.

Method: Over three controlled experiments (SAGE 1: N=9; SAGE 2: N=11; SAGE 3: N=13), Sustainability via Active Garden Education (SAGE) was developed and tested as a 12-session, garden-based physical activity and fruit and vegetable promotion program for children age 3-5 years delivered in ECEC. SAGE uses the plant lifecycle as a metaphor for human development. Children learn how to plant, water, weed, harvest and do simple food preparation along with active learning songs, games, science experiments, mindful eating exercises and interactive discussions. In SAGE 2 and 3, parents received weekly newsletters linked to the curriculum and local resources and events. Newsletters were developed using nominal group technique and later evaluated by focus groups. SAGE 1 parents completed measures about perceived benefits from their child's participation. SAGE 2 and 3 parents reported parenting practices and home fruit and vegetable availability.

Result: In SAGE 1, most parents believed that SAGE improved their child's knowledge of physical activity (83%) and nutrition (92%) and improved their own knowledge of physical activity (69%) and nutrition (83%). Over half (54%) stated that their child asked to do SAGE activities at home. Focus groups rated newsletters favorably, liking content, colors, organization, layout and reading level. SAGE 2 and 3 parents reported more practices encouraging and fewer practices discouraging ($ps=0.05-0.17$) their children's physical activity after participation in SAGE. SAGE 2 and 3 produced modest but consistent increases in home fruit and vegetable availability after the SAGE interventions.

Conclusion: Activities that happen in the child's ECEC micro-environment may have exo-environmental ripple effects beyond what happens in the ECEC, enhancing the social return on investment from school programming. Children are part of a dynamic system and can serve as active change agents, influencing parents and other family members as well as the home environment.

Biography

Rebecca E. Lee is a professor in the College of Nursing and Health Innovation and previously served as founding director of the Texas Obesity Research Center in the Department of Health and Human Performance at the University of Houston. She still holds a courtesy appointment in the University of Houston Department of Health and Human Performance. Dr. Lee oversees the Understanding Neighborhood Determinants of Obesity (UNDO) research team, where she aims to provide innovative, theoretically-derived, trans-cultural, and community-based approaches to improving health to the science and community alike.

releephd@yahoo.com

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Economic and medical assessment of a hospital-based process for the screening and treatment of malnutrition among elderly people**Jean-Pierre Marissal**

Hospital Group of the Catholic Institute of Lille, France

Background: Malnutrition among elderly people is a major factor of frailty and dependency, having consequences on both health and quality of life. This factor is also associated with specific difficulties in the process of screening and caring, needing dedicated processes.

Objective: We analyze the economic and medical relevance of an experimental process going from the screening of malnutrition to the definition of individual care plans and the assessment of the clinical impact. This process required the involvement of hospital workers and ambulatory networks around a specialized hospital team.

Method: 272 patients were included between April 2013 and October 2015. Patients were recruited by physicians from the emergency ward (34.9%), the external geriatrics consultation (26.1%), the traumatology ward (11.8%), the cardiology ward (11.0%), other short stay wards (4.6%) and the day hospital for geriatrics evaluation (2.6%). Five general practitioners recruited patients (4.4%). Among the 272 patients, 106 were seen during a follow-up consultation, on average 7.2 months after their inclusion.

Result: The specialization of the team and TTS central position in the hospital organization ensured the economic viability of the process by allowing a relevant use of the available resources, a constant influx of cases and a reduced cost of screening and assessing the medical needs. This process was associated with an improved nutritional status for 35.7% of persons displaying a risk of malnutrition and for 54.5% of patients diagnosed as malnourished at the inclusion. Gains were not limited to the sole nutritional status, inducing positive externalities for the patients of their participation to a nutritional care.

Conclusion: The involvement of hospital workers and ambulatory networks has a proven medical interest for the care of elderly patients with malnutrition-related problems.

Biography

Jean-Pierre Marissal is working as a Health Economist at the Lille Catholic University, France and the depending hospital structures. He is also a Lecturer of Microeconomics at the same academic institution.

jean-pierre.marissal@univ-catholille.fr

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Comparison of circulating cathodic antigen cassette test and real time PCR in diagnosis of *Schistosomiasis mansoni* with different infection intensities**Amal F Allam, Hoda F Faraga, Mervat M Osman, Mohamed Abdel Rahman Ahmed, Nancy Abd El Kader Hagras, Adel Zakib, Rashad Abdul-Ghanid and Amel Y Shehaba**

Alexandria University, Egypt

Objective: To compare the performance of urine circulating cathodic antigen (CCA) cassette test and real time PCR cycle threshold values in cases of *Schistosomiasis mansoni* of different infection intensities.

Method: Stool and urine samples were collected from 110 school children after obtaining the consent of school guardians and children's parents. Stool samples were microscopically examined using double Kato slides (41.7 mg each). Midstream urine specimens were tested for *Schistosomiasis mansoni* by using CCA and were tested for *Schistosomiasis haematobium* by filtration technique. Part of each stool sample was kept at -20 °C and further processed by SYBR Green PCR.

Result: All the examined cases were negative for *Schistosomiasis haematobium*. In spite of the high prevalence of *Schistosomiasis mansoni*, the majority of children had light infection intensity (64.3%) as estimated by Kato-Katz. The highest infection rate of *Schistosomiasis mansoni* was detected by real time PCR (82.7%), followed by CCA test (60%) while the lowest infection rate was diagnosed by Kato-Katz (50.9%). The three tests showed similar performance in moderate and heavy infections. On the contrary, among the 54 negative schistosomiasis individuals after Kato-Katz, real time PCR diagnosed higher positive cases (70%) in comparison to CCA (22%). Cycle threshold values higher than 25, suggest the absence of heavy infection.

Conclusion: Real time PCR was the most detector of positive *Schistosomiasis mansoni* cases missed by Kato-Katz and CCA test and it would enhance the effectiveness of surveillance and control programs of schistosomiasis. To detect low infection intensity and missed cases after Kato-Katz, it is recommended to increase the cycle threshold during application of real time PCR to 40 cycles.

Biography

Amal Farahat Mohamed Allam is an acting Dean of medical Research Institute, Alexandria University he is also the Vice Dean of community service and environmental affairs & Professor of Parasitology in Parasitology Department. She published her papers in many international Journals. She participates in many national health education campaigns and help in the treatment of poor population.

amalalam2005@yahoo.com

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

The impact of the characteristics of interpreters on the care satisfaction of foreign patients**Yuka Yamazaki**

Tokyo Medical University, Japan

Background & Objectives: In Japan, the number of foreign residents is increasing. In addition, the numbers of foreign visitors will also increase because of the Olympic in 2020. Therefore, it is crucial for the Japanese government to develop a system for foreigners to live in and stay at Japan comfortably. In particular, language barrier prevents foreigners from accessing hospitals and having smooth communication with doctors. Recently, several articles suggest that appropriate interpreters specialized in medical fields are necessary for foreign patients to see doctors generally. However, previous studies mention that sometimes family members or friends with the similar cultural background as patients are more effective than certified interpreters. Therefore, to identify what type of interpreters is appropriate in Japanese hospitals, we conduct a questionnaire survey.

Methods: We are planning to collect total 250 foreign visitors and residents who visit the department of general medicine in Tokyo Medical University with an interpreter. Inclusion criteria is those who are 20 years and older and those who were born in foreign countries. Questionnaire and psychological tests will be conducted. Questionnaires were developed in four languages: Japanese, English, Chinese, and Korean. Question items are mainly patient's demographics, social economics, disease, and interpreter's demographics. Visual Analogue Scale and Profile of Mood of States will be used to evaluate patient's care satisfaction. Qui square tests and Logistic Regression Model are used for data analysis.

Results & Conclusions: Recruiting of subjects was started in March, 2018. So far, one pair of foreign patient and interpreter was recruited in the outpatient department. The patient was Chinese resident and the interpreter was also Chinese. The patient indicated high satisfaction level with the care given by a doctor, overall health care, and skill of his interpreter. We found that most foreign patients who visit Tokyo Medical University in Shinjuku, Tokyo is Chinese and Korean residents and they can communicate with doctors in Japanese without an interpreter. To recruit appropriate number of subjects, we may need to do this survey at all departments of Tokyo Medical University. In addition, we have to reconsider the research site such as academic hospital in urban area is really appropriate for this research.

Biography

Yuka Yamazaki has completed her MD degree from Juntendo School of Medicine in 2002 and her PhD in 2010 from Juntendo University Graduate School of Medicine. She is an assistant professor at the department of Medical Education from Tokyo Medical University. She has published papers in public health and medical education fields.

yuka28@tokyo-med.ac.jp

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Improving access to quality adolescent and youth friendly sexual and reproductive health services in the Eastern Cape Province, South Africa: A 30-month success storySundrapragasen Pillay¹, M Muzigaba¹, S MacDonald¹ and G Reiprich²¹Enhancing Care Foundation, South Africa²Health Focus GmbH, Germany

In South Africa (SA), adolescents and youth represent a critical target group at high risk of HIV infection and other health and psycho-social challenges, yet they make insufficient use of public sexual and reproductive health (SRH) services. The project objectives were to address this core issue by improving the youth friendliness of clinics in the target South African sub-districts, increasing youth utilization of SRH services and improving youth ratings of service quality. The multi-faceted approach comprised: Improving training of nurses; improving youth health relevant skills; enhancing knowledge and attitudes of service providers; supporting the application of a quality management approach to health service delivery; addressing shortage of youth health-targeted support materials; engaging youth in the process and enhancing cooperation and coordination between key stakeholders. Results indicated that from a baseline measurement of zero, 58% of clinics met the National Department of Health's (NDOH) 5 minimum standards to be classified as adolescent and youth friendly services implementing sites. The number of SRH services used by young people aged 10-24 years increased by a margin of 59%. Strong positive change was reported for satisfaction with quality and confidentiality of the services as well as for helpfulness of staff. These results achieved in a relatively short timeframe support a case for the scaling up this approach which could potentially accelerate the successful implementation of the adolescent youth friendly services program of the SA NDOH as well as provide valuable lessons to other countries aiming improve such services.

Biography

Sundrapragasen Pillay is a Medical Doctor and Researcher based in South Africa. He is the Director of the Enhancing Care Foundation, a Research Institute of the Durban University of Technology. He is the Heads of an international infectious diseases research site funded by the US National Institutes of Health. He was the Principal Investigator of the Medical Education Partnership Initiative grant of the University of KwaZulu Natal.

pillay@ecarefoundation.com

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Health disparity: Childhood diabetes mellitus control, assessment of control and compliance enhancement with Telehealth**George William Moll**

University of Mississippi Medical Center, USA

Diabetes mellitus (DM) requires individualized treatment programs to optimize quality of life and survival. Mississippi has a 2017 population 2.98 million including about 3 per 1000 school age children with DM over 48,434 sq. miles served by only one Children's of Mississippi Hospital. In 2016 we ranked 1st in US with 308,295 adults living with DM prompting our 2017 Mississippi diabetes action plan. This identified disparities in DM prevalence and hospitalization rates for race, education, income and rural vs. metropolitan. Our DM patients often return to clinic few if any blood sugar (BG) records or meters. The clinic visit is an optimal time to make DM control recommendations. Hemoglobin A1c (HgbA1c) levels associate with tragic DM complication risks and reflect average BG exposure over previous 2 to 3-month interval. We use point of care (POCT) BG and HgbA1c for individualized DM home care recommendations while awaiting our National Glycohemoglobin Standardization Program (NGSP) certified clinical lab (CENT) HgbA1c levels. Our retrospective quality improvement study comparing patient simultaneously obtained POCT and CENT HgbA1c levels indicates our instrumentation can attain HgbA1c standard of care agreement with total allowable error no more than 10%, but POCT HgbA1c 8.5%-10% can at times return CENT HgbA1c 7.5% or less (excellent control). Our UMMC Telehealth is improving individual care beyond clinic visits with remote patient monitoring encouraging 3-4 times daily BG compliance. RPM reduced HgbA1c levels in 16 of 23 patients (44%) and hospital encounters decreased 2.6 to 0.7 per patient per year. We are seeing improved childhood DM control.

Biography

George William Moll has received Biochemistry PhD and MD from University of Chicago Pritzker School of Medicine. He is Tenured Professor Pediatrics and Pediatric Endocrinology at University of Mississippi Medical Center (UMMC) where he has been Division Chair for 25 years. He published over 50 peer reviewed papers and 100 abstracts. He has over 40 years Clinical practice, Education as Graduate Faculty UMMC School of Medicine and Research experience. He is UMMC Sigma XI Chapter President and holds Chair or Vice-Chair in Mississippi Academy of Sciences Division of Health Sciences. He serves as abstract and journal reviewer and Mississippi Health Department Genetics Advisory Board Member.

gmoll@umc.edu, gmoll1220@gmail.com

Notes:



4th World Congress on

Public Health, Epidemiology & Nutrition

May 24-25, 2018 Osaka, Japan

Scientific Tracks & Abstracts (Day 2)

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Incentives to reduce nosocomial infections: A matter of economics and statistics**Jean-Pierre Marissal**

Hospital Group of the Catholic Institute of Lille, France

Background: There is a growing political will to link hospital payments not only to the severity and complexity of the cases treated, but also to the ability of a structure to meet some objectives regarding public health or cost cuts. One possible and legitimate objective appears to be the performance about the prevention of nosocomial infections.

Objective: We analyze the ability of DRG-based payment systems to help defining financial incentives or penalties, about both their economic and statistical feasibility.

Method: We assess the theoretical and empirical evidence for the possibility of payment/reward systems aimed at reducing the incidence of nosocomial infections, based on an analysis of the costs involved by such infections for hospitals in both terms of productivity and opportunity losses or gains. We use the case of *Clostridium difficile* infections as an illustration of the dilemma involved in the task of incentivizing hospitals to prevent nosocomial infections.

Result: There is room for the definition of payment/reward systems based on the definition of criteria related to the productivity gains/losses, based on DRG-payment systems and the estimation of opportunity costs involved. However, we show that the main problem we are facing is related to the assessment of the impact of the nosocomial infection on the duration of hospital stay at the individual level.

Conclusion: The methodological stalemate involved in the definition of payment/reward systems, as shown by the analysis of a particular situation with general implications, calls for the definition of some academic consensus or common minimum standard of estimation of such a crucial data that is the measurement of the individual extra lengths of hospital stay.

Biography

Jean-Pierre Marissal is working as a Health Economist at the Lille Catholic University, France and the depending hospital structures. He is also a Lecturer of Microeconomics at the same academic institution.

jean-pierre.marissal@univ-catholille.fr

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Effects of early exercise on health status and quality of life in hospitalized patients with Chronic Obstructive Pulmonary Disease**Su-Er Guo and Hsuen Chen Shen**

Chang Gung University of Science and Technology, Taiwan

Background & Aim: Early exercise can promote patients with acute exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD) quickly return to a steady state. However, no previous studies have examined the effects of early Tai Chi exercise on exercise tolerance and quality of life. The aim of this study was to examine effects of Tai Chi intervention on exercise tolerance and health-related quality of life in hospitalized patients with AECOPD.

Method: A quasi-experimental study was conducted. A purposive sampling of 31 patients with AECOPD (experimental group, n=17 and control group, n=14) was selected from hospitals in two cities of Midwest Taiwan. The generalized estimating equations were used to examine the effects of Tai Chi training intervention.

Result: The experimental group had better exercise tolerance than control group ($P=0.01$), one week after discharge and ($P=0.01$) six months after discharge. The experimental group had better quality of life than control group ($P=0.04$) 3-months after discharge.

Conclusion: Early exercise with Tai Chi intervention during hospitalization can enhance exercise tolerance and health-related quality of life. The findings can be considered as references for professional healthcare providers to promote early exercise in the future.

Biography

Su-Er Guo currently works at the College of Nursing, Chang Gung University of Science and Technology. Su-Er does research in Allied Health Science and Medicine.

seguo@mail.cgust.edu.tw

Notes:

4th World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY & NUTRITION

May 24-25, 2018 Osaka, Japan

Detection of low-intensity *Schistosoma mansoni* infection by Percoll sedimentation and real-time PCR techniques in a low-endemicity Egyptian settingAmal F Allam¹, Hoda F Farag¹, Adel Zaki¹, Ola A Kader¹, Rashad Abdul-Ghani² and Amel Y Shehab¹¹Alexandria University, Egypt²Sana'a University, Yemen

Objective: To evaluate the performance of Percoll sedimentation and real-time polymerase chain reaction (PCR) for the detection of *Schistosoma mansoni* cases previously tested as negative by Kato-Katz technique in two low-endemic areas in Alexandria, Egypt, Abis- 4 and 8 villages.

Method: Stool samples of 824 primary school children were examined by Kato-Katz technique (three slides of 41.7 mg each). After obtaining the results of this survey, stool samples were recollected from a subset of 150 students, who gave negative results after Kato-Katz. These samples were microscopically examined after the concentration with Percoll technique. Part of the 150 negative stool samples and five positive samples (used as controls) were kept at -20 °C and further processed by SYBR Green PCR.

Result: Prevalence of *Schistosoma mansoni* infection as determined by three Kato-Katz thick smears was 1.82% (15 cases). Three more cases tested positive by Percoll sedimentation among the 150 samples that were negative by Kato-Katz. Specific amplification by SYBR Green PCR was noted in all positive controls and in three cases of Kato-Katz-negative samples, two of which were also positive by Percoll.

Conclusion: Percoll sedimentation and SYBR Green PCR proved useful in detecting low-intensity *Schistosoma mansoni* infections in low-endemicity areas in Egypt.

Biography

Amal Farahat Mohamed Allam is an acting Dean of medical Research Institute, Alexandria University he is also the Vice Dean of community service and environmental affairs & Professor of Parasitology in Parasitology Department. She published her papers in many international Journals. She participates in many national health education campaigns and help in the treatment of poor population.

amalalam2005@yahoo.com

Notes: