

individuals with a risk score of 0 to 35 ranged from 1.4% to 32.0%. The area under the receiver operating curve was 0.713 for the learning sample and 0.744 for the testing sample. With the addition of tobacco, alcohol use and physical activities, the improvement in prediction in terms of NRI value was 0.1523 ($P < 0.005$).

Conclusions: This study demonstrates that a predictive model that is convenient can be used to predict the occurrence of diabetes among non-diabetic adults by means of a set of risk scores that is relatively easy to implement.

OT17-4

A 3-Years Evaluation of the Pay-for-Performance Program for Asthma under the National Health Insurance in Taiwan

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The Bureau of the National Health Insurance (NHI) in Taiwan implemented a "Pay for Performance Program (P4P) for Asthma" in 2001 to improve the care outcome. This study aims to analyze the long-term effects of this program with a hypothesis that the P4P program may reduce patient's emergency department (ED) visit or hospitalization due to asthma.

We employed a quasi-experimental study design. Using the NHI claim data during 2002 and 2006 we identified 714 asthma patients who were enrolled into the program in 2003 as the experimental group. By using the propensity score method, we then randomly selected 2,142 patients in the control group. We employed negative binominal regression model with difference-in-difference analysis to evaluate the effects of the P4P program.

The difference-in-difference analysis showed that the P4P program increased the physician visits for asthma significantly. After controlling for the baseline patient characteristics in the model, the net differences of the number of physician visit were 2.89, 1.89 and 1.57 respectively between the two groups in 2004-2006. Patients in the P4P group had fewer ED visits than the control group with net differences of 0.02, 0.06 and 0.05 respectively in the three years. The numbers of hospitalization were also lower in the P4P group with net differences of 0.02, 0.02 and 0.03 respectively. However, the differences did not reach a statistical significance level of $P < 0.05$.

In conclusion, the P4P program significantly increased patient's physician visit for asthma, and the difference in the numbers of physician visits between the two groups lessened gradually in the successive years. However, the P4P program did not significantly decrease the enrollees' emergency visits or hospital admissions. The current P4P program for asthma has to be modified to reach its ultimate goal.

OT17-5

The Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum: The Trail Blazer and Trend Setter for Public Health Education in India

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The Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), located in the state of Kerala is a trail blazer and trend setter for public health education in India. SCTIMST, an institute of national importance established by an act of parliament in 1980 started the first Master of public health program (MPH) in India in the year 1997, when MPH was not a required qualification for any job positions either at the national or at the state level in India. So far 11 batches of students have graduated and all of them have gained excellent jobs, over 90% within India.

Over 10 organizations in India started MPH program after the successful experience of SCTIMST. Jawaharlal Nehru University, New Delhi, National Institute of Epidemiology, Chennai, Post Graduate Institute for Medical Education and Research, Chandigarh, Tata Institute of Social Sciences, Mumbai are some of them. Another major public health initiative in India is the establishment of the public health foundation of India (PHFI), a public private partnership launched by the Honorable Prime Minister of India, Dr. Manmohan Singh, on March 28, 2006. PHFI is working towards building public health capacity by establishing eight new institutes of public health offering teaching, training and research programs. SCTIMST could provide technical and faculty support to many of the new public health initiatives India.

Major challenges for public health education in India are recruitment and retention of quality faculty and creating career paths for public health graduates at state and national level similar to that exists in a few states such as Tamil Nadu and Gujarat. While all efforts should be made to develop quality faculty it will be worthwhile to experiment usefulness of information technology to share faculty from India and abroad by several public health institutions.

OT17-6

Blood Donation- Does University Students Care?

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WHO reported that blood donation has gone into a steady decline although the demand for transfusion continues to rise. There are various factors that cause the decline in the number of blood donation. This study aims to assess the attitude and practice of blood donation and to show their relationship with knowledge of blood donation. Four hundreds and six students of University of Malaya had been randomly selected to answer the

questionnaire on the knowledge, attitude and practice of blood donation. The questionnaire was modified and translated from a similar study in Quebec, Canada and had been pre-tested on a group of medical students. Results showed that 38% of the 406 respondents had donated blood at least once in their lifetime. Forty one percent blamed medical reason for not donating blood. The level of knowledge in most of the respondent was moderate (61.8%). Respondents with high knowledge scores have the intention to donate blood should there be depletion in blood supply ($P=0.013$), and majority of them had actually donated blood in the past. Most respondents who donated blood had no intention to donate blood but donated impromptu. In conclusion blood donation campaigns should be expanded to disseminate information on blood donation and provide opportunity for people to donate blood.

Oral Track 18- Mental Health

OT18-1

Association between Religion and Dementia

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Background: Dementia is a growing health issue in the elderly. Several risk factors, e.g., age, gender, and genetic factors have been related to dementia risk. However, studies exploring the relationship between religion and dementia are few.

Methods: A total of 169 patients with Alzheimer's disease (AD), 97 patients with vascular dementia (VaD) and 215 controls were recruited from National Taiwan University Hospital and Cardinal Tien's Hospital from 2007 to 2009. A questionnaire was administered to collect information on religion and social activities. **Results:** Christians or Catholics had a lower risk of AD [adjusted odds ratio (AOR)=0.26, 95% confidence interval (CI)= 0.12-0.58], but not VaD, than non-believers after adjusting for age, gender, and education level. Taoists and Buddhists showed a decreased, but not significant, risk of dementia.

Interactions between religion (believers vs. non-believers) and social activities (>2 vs. ≤ 2 times/month) were not significant for AD ($p=0.37$) and VaD ($p=0.93$). Both non-believers and believers with less social activities (≤ 2 times/month) had a higher risk of AD (AOR=3.15, 95%CI=1.62-6.14; AOR=1.93, 95%CI=1.01-3.68, respectively), but not VaD, as compared to believers with more frequent social activities (>2 times/month). **Conclusions:** Religion and social activities seemed protective factors for the risk of AD. Future studies exploring the association between religiosity and dementia are warranted, as it may vary across different cultures.

OT18-2

Is there A Difference in Help Seeking Behavior in Stressful Situation among Individuals with Different Psychological Status? A Colombo Experience

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Introduction: The help seeking behavior of an individual at a stressful situation, is important to consider when planning health educational programmes to improve their coping strategies. As there is a wide variation in help seeking pattern among different individuals, recognizing this variation helps to refine the objectives of such interventional programmes.

Methodology: This descriptive cross-sectional study was carried on systematically randomized 240 permanent residents aged 20-39 years at Homagama Pradeshiya Sabha, a sub-urban community in Sri Lanka. Informed verbal consent was obtained from the participants, before allowing them to answer the pretested and validated General Wellbeing Schedule (GWS) questionnaire. Data was analyzed using SPSS-15.

Results: There were 107 males and 133 females in the sample. 53.3% were married & 70.8% were permanently employed. 10 % (24/240) of the sample was severely distressed while 48.75% (117/240) were moderately distressed & rest of 41.25% (99/240) were in positive wellbeing according to GWS questionnaire. The majority of severely and moderately distressed individuals had not met a suitable person to ask for help (41.6% and 50.42% respectively). 33.3% & 25.6% of them respectively, had never thought of getting any help when they were distressed. In contrast majority (45.6%) of positively wellbeing individuals had always sought help from others when distressed & only 10.2% of them had never thought of it. **Conclusion:** Individuals who are psychologically well tends to seek help from others when in distress, while severely and moderately distressed individuals tend to avoid getting help from others. We recommend a public awareness programme to address this.

OT18-3

Trajectories of Depression and Their Relationship with Health Status and Service Use

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Purpose: This longitudinal study was conducted between 1994 and 2004 in a cohort of southern Taiwan community-living elderly residents. The study aims to explore the trajectories of depression and how these patterns differed between respondents who survived and those who died during data collection phases; this study