**P2-417 NICOTINE DEPENDENCE AMONG DAILY CIGARETTE SMOKERS IN 14 COUNTRIES**

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**Introduction** Tobacco use is the leading preventable cause of death globally, causing more than five million deaths a year. There have been studies on nicotine dependence in developed countries. However, it is little know about nicotine dependence at population level in high burden and high populated countries. Nicotine dependence is important for tobacco control strategies. In this paper, we will present nicotine dependence among daily cigarette smokers in Russian Federation, Ukraine, Poland, Turkey, Brazil, China, Thailand, Vietnam, Philippines, India, Bangladesh, Uruguay, Mexico, and Egypt.

**Methods** Daily cigarette and bidi smokers are analysed from 2009 to 2010 Global Adult Tobacco Surveys (GATS) in 14 countries: China, India, Bangladesh, Brazil, Russian Federation, Vietnam, Philippines, Thailand, Mexico, Egypt, Turkey, Poland, Ukraine, and Uruguay. Nicotine dependence is measured by heaviness of smoking index calculated from the time since the first smoke and the number of cigarettes (and bids) that are analysed separately smoked per day. A statistical package, SUDAAN, was used in the analyses to take the complex survey into account.

**Results** Heaviness of Smoking Index (HSI) for daily cigarette smokers ranges from the lowest in Bangladesh (1.32) to the highest in Poland (2.53). For males, the highest HSIs are in the Russian Federation (2.75), Ukraine (2.69), and Poland (2.66). For females, the highest HSIs are in Poland (2.34) and India (2.12). Daily cigarette smokers who think about quitting have a lower HSI score than those who do not want to quit.

**Conclusion** Nicotine dependence among daily cigarette smokers varies by geographic region.

**P2-418 WEATHER VARIABILITY AND THE INCIDENCE OF INFLUENZA: BAYESIAN TIME SERIES ANALYSIS**

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**Introduction** Influenza is one of the most common infectious diseases in the world. Few studies have examined the quantitative relationship between weather conditions and influenza. This paper examined the potential impact of weather variability on the incidence of influenza in Brisbane, Australia.

**Methods** Data on daily weather variables (minimum temperature and rainfall), notified influenza cases and population size in Brisbane were supplied by the Australian Bureau of Meteorology, Queensland Health, and Australian Bureau of Statistics for the period of 1 January 2002–31 December 2008, respectively. Bayesian time series Poisson regression model was performed to examine the potential impact of weather variability on the incidence of influenza.

**Results** The weekly mean of number of influenza cases, minimum temperature and rainfall were 12.59, 15.41°C and 16.52 mm between January 2002 and December 2008, respectively. Bayesian time series Poisson regression model shows that the average number of weekly influenza cases increased by 3% (95% credible interval (CrI): 9 to 10%) and 6% (95% CrI: 2 to 10%), for a 1°C decrease in average weekly minimum temperature at a lag of one week and a 10 mm increase in average weekly rainfall at a lag of one week, respectively. An interactive effect between temperature and rainfall on influenza was also found.

**Conclusions** The results of this study suggest that temperature and rainfall are among the main determinants of influenza transmission.

**P2-419 PHYSICAL ACTIVITY AMONG DUBAI POPULATION PREVALENCE AND SOME ASSOCIATED FACTORS**

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**Objectives** Study the prevalence of physical activities among Dubai population and the effect of some associated factors, assess the knowledge, practice and attitudes.

**Methodology** A cross sectional survey has been carried out upon random sample of adult Dubai population age range (18–65) years, the sample was identified from schools, universities, primary healthcare centers visitors, governmental offices, commercial Malls and house hold families, sample size was estimated by using Epi Info software, it was 2226 individuals of different age, sex, income, social class. socio-demographic data, Knowledge, attitudes, practice, and reasons of avoidances.

**Results** 25.6% of the sample showed good knowledge and 86.6% showed positive attitude towards practicing physical activities, about 54.6% of the sample are practicing physical activity regularly (prevalence rate among Dubai adult population), it was appear that practicing of physical activity is significantly higher among emirates in comparison with expatriates, highly educated individuals (university and above), and high income people (10 000 ED and above), the study showed that the main reason behind non practicing physical activity were lack of time 47.3%, tiredness and exhaustion 20.1%. UN availability of suitable places 17.3%, the multiple logistic regression analysis showed that there are four factors significantly affect on practicing of physical activities in Dubai, they are, Nationality OR was 1.49 among Emirates compared to expatriates, Educational level, OR was 2.00 among higher education compared with low education (primary school), Awareness and knowledge factor OR 3.49 and income factor showed higher practicing of physical activity among individuals with high income (10 000 and above) compared to low income individuals <10 000 ED.

**Recommendations** Establishing national public health program to approach physical activity problem and developing effective strategies to deal with the causes.

**P2-420 IMMUNOGEnicity OF PANDEMIC INFLUENZA A (H1N1) MONOVALENT VACCINE AMONG IMMUNOSUPPRESSED HEMATOLOGY PATIENTS**

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**Introduction** Pandemic influenza A (H1N1) 2009 is one of the most important public health issues due to the severity of the disease and the high proportion of deaths in immunocompromised patients. The aim of current study was to assess the immunogenicity of monovalent influenza A (H1N1) vaccine in immunocompromised patients enrolled in the vaccination program in Japan.

**Methods** A total of 100 immunocompromised patients were enrolled in this study. The patients received a single dose of vaccine and the antibody response was measured at 0 and 4 weeks post vaccination. The primary endpoint was the percentage of patients with an antibody titer of at least 1:40 at week 4.

**Results** The overall antibody response was 75% at week 4, with no difference between subgroups of patients with different levels of immunocompromise. The results were consistent with the findings of other studies in immunocompromised patients.

**Conclusion** The monovalent influenza A (H1N1) vaccine is immunogenic in immunocompromised patients and can be recommended for vaccination in this population.