

problems were assessed using the Chinese adaptation of the Youth Self-Report and then subject to multivariate response profile regression analysis.

Results: Compared with the naïve group, lifetime prevalence of alcohol or tobacco use increased from 12.4% and 30.2%, respectively, to more than 80% for the other three groups, whereas that of any other club drug use (0.2%) increased substantially for the groups of ecstasy only (41.4%) and use of both (58.7%) but only modestly for the group of betel nut only (2.8%). In the multivariate analyses, both the groups of betel nut only and ecstasy only reported more symptoms on the syndromes of Anxious/Depressed, Rule-Breaking Behavior, and Aggressive Behavior, with ecstasy users having more symptoms than betel nut users. Meanwhile, the group of betel nut only experienced more symptoms on the syndromes of Withdrawn, Thought Problems, and Attention Problems, whereas the group of ecstasy only experienced more symptoms on the Somatic Complaints. Conclusions: Adolescent users of betel nut have a profile of substance involvement and behavioral/emotional problems different from that of adolescent users of ecstasy.

#### OT8-05

##### **Problems and Impacts of Alcoholic Beverage Consumption of People in Khon Kaen Province, Thailand**

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This descriptive cross-sectional study aimed to investigate problems and impacts of alcoholic beverage consumption of the people in Khon Kaen Province, Thailand. The total of 464 samples was systematically randomly selected from the population aged  $\geq 15$  years and responded to questionnaire interviews. The questionnaire was developed by the researcher with content validity and reliability of 0.85. Descriptive statistics were used to describe the problems where as logistic regression was applied to show the association between factors and alcoholic beverage consumption. The results revealed that majority of the respondents were males (63.6 %) with the average aged of  $44.5 \pm 15.9$  years. Most of them drank alcoholic beverage (83.6 %). Drinkers were found 2 times higher in males than females. Their average aged at first drink was  $22.0 \pm 8.6$  years. At present most of them drank beer (60.1 %) with the median volume of 1,920 liters/year. Most of them drank with friends/ colleagues (86.1%) and mostly drank after work (60.6 %). Impacts of their drinking behaviors were absentee from work/ study (76.2 %), late for work/ study (73 %), legal problems (14.7 %), accidents (13.6 %), destroy properties (11.1 %) and illness (10.8 %). Factors affecting impact of alcoholic beverage consumption were drinking with friends (OR=3.26, 95%CI=1.05-10.14), binge drinking (OR=2.84,

95%CI=1.67-4.84) and frequency of consumption, weekly, (OR=2.45, 95%CI=1.46-4.11).

#### Oral Track 9- Tobacco Use

#### OT9-01

##### **Influences of Psychopathological Factors on Adolescent Cigarette Smoking**

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Background: Adolescent smokers increased in the past 5 years despite the population of adult smokers decreased. Adolescent tobacco use has attracted research interests. There is a lack of research regarding the association between comprehensive aspects of psychopathological factors and adolescent smoke, especially in Taiwan. Materials and Methods: This study employed a cross-sectional design, and subjects were selected from high school students with grade 7 to 12 selected from 4 senior and 4 junior high schools in Kaohsiung city during 2003. Smokers were referred by teachers or tutors when smoking behaviors were identified. Non-smoking subjects for comparison were selected from students at the same classes. Data collected included demographic information, parental factors, smoking habits and capacity, and psychopathological factors employing SCL-90-R. 1,264 eligible adolescents completed the survey.

Results: Ages of studying subjects ranged from 11.8 to 19.6 with mean 15.4 years old. Factors related with adolescent smoke including demographic, parental, and psychopathological factors were identified. Father smoke, single parenthood, poor economic status, neglectful parenting style were factors associated with adolescent smoke. After adjust age, gender, grade, and parental factors, psychopathological factors including anxiety (OR:1.20; 95% CI=1.17-1.24), depression (1.20; 1.17-1.23), obsessive-compulsive symptoms (0.88; 0.84-0.92), interpersonal sensitivity (1.26; 1.22-1.30), hostility (1.25; 1.21-1.30), paranoid (1.04; 1.02-1.07), and psychoticism (1.22; 1.18-1.26) were associated with adolescent smoke with some were positive and some were negative relationships.

Conclusion: Distinction of psychopathological factors was identified in adolescent smokers. The degree of psychopathological factors along with single parenthood, father smoke, poor economic status, and neglectful parenting style influenced the adolescent cigarette smoke.

### OT9-02

#### **Exploring the Social Factors of Simultaneous Tobacco and Alcohol Consumption of Adolescents** ***Ying-Chia Huang, Yi-Yun Li*** *Asia University, Taiwan*

Those who consume tobacco or alcohol in first time in their adolescence will have more chances to adopt the illicit, addictive substances in their adulthood than others. Especially, those who simultaneously consume tobacco and alcohol in their adolescents belong to the higher risk group of drug abuse in the future. In order to explore the social factors that influence the simultaneous smoking and drinking behavior of the adolescents, students of 5th to 9th grades in Yunlin county were surveyed by stratified, random, cluster sampling in May 2009. There were 8,130 students investigated by using the self-administered questionnaires, and 351 students who simultaneously consuming tobacco and alcohol were self-reported. Through the logistic regression analysis, we found there are several significant factors influencing adolescents such as: 8th-9th grades, divorced parents, living with relatives, skip-a-generation, moderate income, feeling of family life, sibling relationships, parents smoking or drinking, sibling or friends smoking. Not only the habit of people around the adolescents, but also grandparenting, and sibling relationships are the important factors that make the adolescent to consume tobacco and alcohol simultaneously. For the prevention of adolescent smoking and drinking, it is necessary to develop a resource mechanism to solve the problems of skip-a-generation, the whole family smoking, and the domestic relations.

### OT9-03

#### **Tobacco Use among Teenage School Children in the District of Colombo, Sri Lanka** ***Prasad Katulanda<sup>1</sup>, Kremlin Wickramasinghe<sup>2</sup>, Supun Kulatunga<sup>3</sup>, David Matthews<sup>2</sup>, Isurujith Liyanage<sup>3</sup>, Indika Karunathilake<sup>4</sup>, A.C.A. Pathirana<sup>4</sup>, Indunil Piyadigama<sup>5</sup>, Paula H. Palmer<sup>6</sup>, Thamal Withanage<sup>6</sup>***

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**Introduction:** Tobacco use is a major preventable risk factor for diseases. Although data on adult smoking are available there is paucity of data for adolescents. These data are essential in formulation of an effective preventive strategy

**Methods:** Two staged stratified random sample of 6000 students were selected from 202 schools in the Colombo district. Data were collected using a pre-tested, validated questionnaire. Tobacco smoking, associated factors and socioeconomic correlates were assessed

**Results and Analysis:** Response rate was 89.2%(n=5351). Male:female ratio 52:47 and the mean age 15.72 years. Exposure to passive smoking during previous week was seen in 51.2%. Tobacco smoking at home was reported in 36.8% and 25.6% reported parental-smoking. Life-time-smoking prevalence was 26.9% among males and 13.3% among females. Smoking was significantly higher( $p<0.05$ ) in the group who reported parental-smoking. Among male smokers, 80% have started smoking at the age of 15 years or younger. Majority(65%) who smoked wanted to quit; 64.7% tried to quit smoking during the previous year and 52% of them were able to refrain for over 6 months. Majority(91%) suggested establishing programs to help quitting and 60% believed that such programs should be based in schools

**Discussion:** The prevalence of smoking and passive-smoking was much higher than previously reported data. Parental-smoking was associated with high risk smoking among adolescents. Intentions to quit was high among smokers therefore more support should be made available at school level to facilitate quitting.

### OT9-04

#### **Factors Associated with Success or Failure from the Quit Smoking Attempts** ***Tin Tin Su<sup>1</sup>, Sallehuddin bin Abu Bakar<sup>2</sup>, Murniati Hj Hussain<sup>2</sup>, Swinder Jit<sup>2</sup>, Saimy Ismail<sup>1</sup>***

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Tobacco smoking is responsible for the premature death of approximate 10,000 Malaysian each year. More than half of Malaysian smokers are willing to quit smoking. However, the main barrier for decision to quit smoking is addiction to nicotine. The quit smoking clinics therefore play important role in assisting their client to quit smoking. However, there are largely unknown about factors determining to quit smoking successfully. The aim of the study was to investigate the success rate of quit attempts and factors associated with success or failure from the quit attempts in Tangling quit smoking clinic, Kuala Lumpur. The smokers who enrolled the Tanglin quit smoking clinic from 2005 to 2008 were included in our study. There were altogether 495 participants in our study. Socio-demographic information, history of smoking and health status of participants were extracted from the patients' records. All data were processed and analysed by using STATA 9. Average success rate of quit smoking attempt was about 40%. Multivariate logistic regression was done in order to identify the factors determining to quit smoking successfully. The factor "being Malay""previous experience of quit attempt""having high blood pressure" and "regular attendance of clinic" had positive association to quit smoking successfully. In contrast, clerical staff had negative association to quit smoking. People who started smoking in their teenage had high chance to be relapse.

#### OT9-05

### **Project Quit Tobacco International 2: Building A Tobacco Cessation Network in India**

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This presentation provides a brief overview of research and training activities to be undertaken during the second phase of Project Quit Tobacco International (QTI 2). In order for tobacco cessation to become normative medical practice, a proactive research and training environment will need to be established. During QTI 2, selected medical colleges will be supported in their efforts to train a next generation of practitioners to routinely ask patients about tobacco use and encourage cessation. Selected schools will become the hub for recruiting and training a cohort of tobacco researchers who will form a tobacco cessation research network (TCRN). As a first step to mobilize TCRN, QTI 2 will foster cessation efforts among health professionals committed to the management of patient populations dramatically effected by tobacco (e.g. diabetes patients). After providing in-service training on the latest research related to tobacco use and culturally sensitive approaches to cessation, health professionals will be invited to participate in research designed to identify the most effective means of assisting patients to quit tobacco use in real world situations. Cessation activities will also be extended to the community through promoting cessation as a family and women's health issue and an occupational health right. The specific aims of QTI-2 are to:

1. Expand knowledge capacity through dissemination of a model tobacco education curriculum for medical schools.
2. Create a critical mass of five medical schools modeling integrated tobacco education and engaging in tobacco-related research within two states of India and Indonesia
3. Involve partner medical schools in tobacco-related community-based research to heighten public awareness of the benefits of tobacco cessation and provide research training opportunities for tobacco cessation researchers.
4. Build capacity in tobacco-related research by creating a tobacco cessation research network that supports collaborative research and sharing of the research experiences within each project state.

#### OT9-06

### **Prevalence of Smoking and Its Determinants among College Students**

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This cross sectional study was conducted in a higher secondary college to determine the proportion of current smokers and its determinants among the college students.

A total of 719 students were interviewed using self administered questionnaire. The number of male respondents was 413 and female was 306. The overall mean age of the respondents was 17.1±1.5 years. About 22% were current smokers. Among the total smokers 159, 133 (83.6%) were male and 26 (16.35%) female smoker. Mean age of the smoking initiation was 13±2.9 years. The mean difference of age of smokers and nonsmokers was statistically significant ( $p<0.001$ ). Among the smokers, 35% from urban and rest were from rural; the difference was statistically significant ( $p<0.01$ ). A statistically significant association was found between sex and parental education ( $p<0.001$ ). There was statistically significant association observed between sex and mean monthly family income ( $p<0.05$ ). The reason for initiation of smoking as mentioned by the respondents were due to peer pressure (50%) followed by curiosity (34%), to avoid anxiety and tension (27.7%), feeling of maturity (13.8%), symbol of manliness (8.8%), unhappy family environment (8.2%). When logistic regression was done, age and sex of the students were found significantly associated with smoking ( $p<0.001$ ) indicating smoking was 3.58 times higher among the students with aged 18 years and 5.37 times higher among the students aged 19 years and above.

## Oral Track 10- Maternal and Child Health

#### OT10-1

### **Testing the "Epidemiologic Paradox" of Birth Outcomes among Asian Immigrant Women in Hsin-Chu County, Taiwan**

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**Background/Purpose:** This retrospective study investigates whether immigrant status confers a protective effect on birth outcomes and whether this effect varies across racial/ethnic subgroups in Hsin-Chu County, Taiwan.

**Methods:** A total of 30,770 singleton birth certificates from January 1, 2002 to July 31, 2007 were analyzed using ANOVA and logistic regression with  $P=0.05$ . Outcomes included low birth weight (LBW,  $<2,500g$ ), high birth weight (HBW,  $>4,000g$ ), preterm ( $<37$  weeks) and stillbirth. Covariates included maternal age, year of delivery, mode of delivery, medical care institutions, infant sex, congenital birth defect and lunar month of delivery. Five models were designed for various analyses. The reference categories included non-immigrant, non-aboriginal Taiwanese and non-Chinese-speaking immigrant.

**Results:** Preterm rate ranged from 6.3% among Mainland Chinese to 13.5% among aboriginal Taiwanese. LBW rate ranged from 4.3% among Mainland Chinese to 17.3% among aboriginal Taiwanese. HBW rate ranged from 1.2% among aboriginal Taiwanese to 3.4% among Mainland Chinese. Stillbirth rate ranged from 0.2%