

Monday to Wednesday or Thursday to Saturday. The analysis were carried out for the overall sample and stratified by sex using the Mixed Linear Model and the effect of age and gender was tested.

**Results** The macronutrient intake varied according the week phase. The analysis of the overall sample showed increasing consumption from the beginning to the end of the week for all macronutrients. However, the increased macronutrient consumption occurred at expenses of women's intake and the difference on intake was 482.64 kcal/day;  $p=0.010$ ; 61.16 g/day;  $p=0.019$ ; 11.53 g/day;  $p=0.014$ ; and 22.76 g/day;  $p=0.010$ ; for energy, carbohydrate, protein and total fat, respectively, for the end of the week.

**Conclusion** These results show that adolescents have increasing consumption of macronutrient during the week, reaching the highest intake at the end of week.

### SP3-94 COMMUNITY ASSESSMENT OF SHAHINSHAHR CITY, ISFEHAN, IRAN

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**Introduction** Community involvement is the most important strategy in development. In health program planning, community assessment is a process in which society members get a thorough understanding of all matters and problems. This study was conducted to identify and prioritise problems of the ShahinShahr city, in 2009, with active participation of the people. ShahinShahr is a city with a population of over 150 000 located 20 km to the north of Isfahan, Iran. Community assessment is one of the core competencies for Public Health Professionals and it gives them a better understanding about the strengths and drawbacks of their jurisdiction.

**Methods** The study was based on our local experiences and a model designed in North Carolina, US. In this model, the assessment process is performed in eight steps in ShahinShahr. In the first seven steps problems are identified and prioritised, and in step 8 a plan of action is developed to deal with the problem selected. The assessment team included wide range of key stakeholders and local people were in three levels: Advisory, work and project group. Observation, interview, focus group discussion and summary list of health resources used for data collection.

**Results** More than 50 problems were identified, of which the following were considered to be top priorities: drug abuse, smoking among adults and depression. After creating community assessment profile, community health action plans were provided.

**Conclusion** The neglected community assessment is one the best tool for assessing communities to identified and prioritised health problems in developing countries.

## Global health

### SP4-1 INTERACTION BETWEEN SUBJECTIVE AND OBJECTIVE OCCUPATIONAL CONDITIONS IN AFFECTING PHYSICAL HEALTH OF WOMEN WORKERS IN MULTINATIONAL ESTABLISHMENTS

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The Philippines has established many export zones as a response to the Structural Adjustment Programs of the World Bank in order to stabilise its economy. The study aimed at looking into the problems

caused by organisational factors such as job autonomy, content of job, nature of task, hazard exposure and management styles to mental health of women workers. This was conducted in an export zone involving 31 industries and an interview with 613 women workers. The results showed that there were several interactions between variables which include the following- the need for new quality for products is associated with the need to upgrade knowledge and skills, fast-pace work is associated with heavy physical load, poor health and safety policies at work with exposure to vapours, and participation in benchmarking with better policies on promotion and training. Other significant associations were: exposure to vibration with noise, and awkward positions while working and prolonged standing in the workplace. Correlation matrix was also done for the factorised variables in the worker's questionnaire. The significant associations show the following statistical conclusions. Boring and repetitive jobs and work pressure were correlated with absence of programs other than health and safety while sufficient salary and compensation was correlated with the presence of such programs. Workers who have no autonomy in applying their own strategy to accomplish their work are likely to have low mental health. Workers also tend to have low mental health when they are subjected to close monitoring, hazardous work pressure and, poor work quality. Medium industries are less likely to have cases of low mental health among workers. This study has policy implication and can serve as a basis for advocacy work and program implementation for the promotion of mental health counselling.

### SP4-2 ASSOCIATION BETWEEN HYPERGLYCEMIA AND GLYCATED HAEMOGLOBIN

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**Aim** To assess association of blood glucose levels and haemoglobin A1c.

**Materials and Methods** Population-based screening for glucose metabolism impairments using standard 2-h OGTT among 661 adults in Moscow Country was conducted in 2009. HbA1c was determined in 39 subjects with glucose metabolism impairments. Correlation ( $r$ ) and unstandardised regression coefficient ( $B$ ) was calculated.

**Results** There was no association ( $r=0.306$ ,  $p=0.083$ ) between fasting hyperglycemia and HbA1c in people without T2DM, also there was no association ( $r=0.134$ ,  $p=0.456$ ) between 2-h hyperglycemia and HbA1c in people without T2DM, but there was positive association between IFG+IGT and HbA1c ( $B=3.180$ ,  $p=0.024$ ). Also newly diagnosed T2DM increase HbA1c ( $B=1.735$ ,  $p=0.031$ ).

**Conclusion** Only combination IFG+IGT and T2DM increase HbA1c.

### SP4-3 THE POSSIBILITIES OF THE SYMPTOM THROUGH THE CONTINUE USAGE OF WIRELESS COMMUNICATING DEVICES AMONG THE POPULATION

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The human brain and the way in which it stores and retrieves information is a subject of debate and speculation. There are many possible causes of memory loss or forgetfulness; some factors may be like tiredness, concentration problem, pregnancy, general anxiety, normal ageing and more serious causes are Alzheimer's disease,

Parkinson's disease, depression, emotional problems, chronic alcoholism etc. But, Can the cellular phone irradiation be a cause of forgetfulness? This study was particularly designed to investigate the possibilities of association of the common symptom "forgetfulness" among the cellular phone users. The close proximity of the cellular phone to the head causes likely 40–60% energy emitted by the device to be absorbed in the brain. In this study 188 (77.7% male and 22.3% female) cellular phone users in Lucknow city of India were enquired about the association of forgetfulness. They were enquired about their general profile (age, sex etc.), calls detail and health (disease, smoker or non-smoker). The subjects belonged to 14–62 years age range (mean age  $\pm$  SD;  $29.1 \pm 9.5$ ). Study revealed that 12.7% (14) subjects were associated to forgetfulness symptom. The frequency of forgetfulness among high user (HU > 500 h use in life) and low user (LU < 500 h use in life) was found 2.1% and 10.6% respectively. In general it was found that the users, who held cell-phone above the 4–5 years, were supplementary associated to the symptoms. This study supported by UP Council of Science and Technology, India. [Ref. CST/D 3558 (2); 31.03.2009].

#### SP4-4 ANALYSIS OF KNOWLEDGE ABOUT ALCOHOL AND TOBACCO BY STUDENTS OF PHARMACY IN THE UNIVERSITY OF BARCELONA

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**Introduction** It is well known that knowledge can change behaviours, thus introducing healthy habits or reducing the prevalence of risky habits. Based on this information, we studied the level of knowledge of students of Pharmacy in the University of Barcelona (Spain), concerning to the effects and diseases related to alcohol and tobacco.

**Methods** We analysed 178 students of both sex, between 18 and 27 years old. Data were obtained by applying a self-reported questionnaire.

**Results** The risk of ingestion of pure alcohol was considered such that practically no one consumed it. The students expressed low knowledge of the relationship between tobacco and bladder cancer (40.3%), osteoporosis (29.9%), and neonatal death (49.7%). For alcohol the smallest percentages of knowledge were observed for the relationship between alcohol and sexual dysfunction (58.4%) and endocrine-metabolic diseases (66.9%). 25.9% answered that the issue "tobacco as a risky factor to health" is insufficiently discussed or not discussed during the classes, and 41.6% answered the same about alcohol.

**Conclusions** In conclusion, about the risk of consumption of these drugs should be more emphasised by the university education.

#### SP4-5 HEALTH CHECK-UP: CHANGES OCCUR IN MEDICAL REPORT

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**Introduction** Many disorders of the skin, mucous membranes, throat, ears and nostrils can be detected simply by visual examination doctor. The telltale characteristics include size, shape, colour and

location of the anomaly. Any change of function or appearance can lead to important consequences for physical and mental health.

**Objectives** This research aims to identify the existence of medical and clinical changes related to various aspects, verifying the presence or absence of abnormalities, as well as the frequency of these.

**Methods** This study was done with students of the school children Francisco Melo of the neighbourhood Moacir Andrade and with children of the neighbourhood Santa Lucia, both in Maceió-AL, all assisted by Extension Project Santa Lucia/Tabuleiro Novo (PESLUTAN).

**Results** We analysed 88 children, of whom 45.5% were female. As for colour of skin and mucous membranes most were normal (86.4%), only 1.1% it was hipercor and 12.5% pale. Of the total, 21.6% were using some kind of medication, had no physical defect, 14.8% had an umbilical hernia, 30.7% had mycosis, 11.4% were observed warts, 6.8% had oropharyngeal hyperaemia and 5.7% had hypertrophic tonsils. Regarding changes in the nasal cavity, 7.9% had turbinate hypertrophy, hyperaemia were 5.7% and 5.7% had nasal secretions. And as for normal hearing, 5.7% had abnormal hearing, 2.3% had otitis and 1.1% with otalgia.

**Conclusion** The results were quite impressive showing little change medical clinics, except only for fungal infections which accounted for 30%, showing a distance of information about the personal hygiene of children.

#### SP4-6 PHARMACEUTICAL WARNING: RECURRENT DISEASE IN THE COMMUNITY VILA SOMBRA DOS EUCALIPTOS

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**Introduction** Epidemiologically, the theoretical model considers disease as a result of the aggression of a microorganism to an organisation and incorporates the concept of risk factor as the basis for the production of knowledge about preventive measures, useful in understanding the process and mechanisms of chronic non-transferable.

**Objectives** To obtain data about the most frequent diseases in the community, relating them to the indiscriminate use of medicines and to observe if that helps, harms and onset of symptoms than those originally presented.

**Methodology** Through home visits were conducted 80 interviews in the Vila Sombra dos Eucaliptos to collect data on prevalent diseases and to bring information to the community, ranging from pamphlets to Pharmaceutical Care.

**Results** Hypertension is undeniably the most common chronic recurrent in community, as well as nationally, followed by diabetes and flu. The poor conditions of hygiene and housing lead to a high rate of intestinal worms, especially among local children. While noting the high rate of self-medication, there was no direct relationship between the number of patients and the effects of the medication. Most patients considered more severe makes correct use of medicines prescribed by a doctor, not even making new appointments, thus not causing further damage to your health.

**Conclusion** The continuing occurrence of diseases at the community provides, among other factors, due the socio-economic conditions, structural conditions and the neglect of the relation Community vs Health Center—public agencies—primarily due to lack of medicines and basic assistance to the community.