Objectives Social position and social mobility are associated with cancer incidence and mortality, yet little is known about their association with mediating factors such as occupational exposures to carcinogens. Our aim was to assess the association between the type of professional trajectory and multiple occupational exposure profiles.

Method Data were extracted from the Giscop93 study (n = 1 009), which is a cohort of cancer patients with (mainly) respiratory tumours. Job histories were reconstructed through interview, then a multi-disciplinary expert group examined the probability of occupational exposure to a list of 54 potentially carcinogenic agents. The typology of professional trajectories was built based on employment stability, employment continuity, job qualification trend, and multiple skills through Multiple Correspondence Analysis followed by Ascending Hierarchical Classification. Association with multiple-exposure profiles was then assessed through multiple logistic regression.

Results Men and women differed in terms of predominant job category over the lifecourse (68,2% of blue-collar-workers among men, 57,3% of employees among women, p < 0.0001). Professional trajectories were grouped in four classes as "stable qualified, employee" (21,3%), "stable manual, independent blue-collar-worker" (24,4%), "stable tiring, no gain in qualification" (30,5%), and "very unstable, precarious" (23,8%). Among men, the last two categories were associated with exposure to at least five different occupational carcinogens ($OR_{stable\_tiring/stable\_qualified}$=2,0 [1,3;3,1], $OR_{very\_unstable/stable\_qualified}$=2,6 [1,6;4,2]). No such association was found among women.

Conclusions The association found between the type of professional trajectory and multiple occupational exposures among men should be replicated among people not suffering cancer. Forthcoming analysis will investigate the gendered differences observed.

| 0196 | MENTAL HEALTH INEQUALITIES BY INFORMAL EMPLOYMENT AND GENDER IN CENTRAL AMERICA |

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Objectives To analyse the relationship between mental health and non-agricultural informal employment in Central America; and to examine whether patterns of association differ by gender

Method Cross-sectional study of 8904 non-agricultural workers (48% women) based on the I Central American Survey of Working Conditions and Health of 2011. Employment profiles were created combining formal and informal characteristics: labour relationship (permanent employees, temporary employees, self-employed, employers), social security coverage (yes, no), type of contract for employees (written, oral or no contract), company size for employers (≤5, >5 workers). Using logistic regression models, odds ratios (OR) of poor mental health (measured by GHQ12 questionnaire) and 95% confidence intervals (95% CI) were calculated by sex, adjusting for country and age, with employment profiles as independent variable. The reference group was permanent employees covered by social security with a written contract.

Results Around 37% of women and 34% of men reported poor mental health. In both sexes all profiles without social security coverage were associated with poor mental health except for permanent employees. Temporary employees covered by social security were associated with poor mental health if they have oral or no contract for women and men. Covered permanent employees with oral or no contract among women (OR: 1.70, 95% CI:1.12–2.59) and covered self-employed among men (OR: 1.59, 95% CI:1.03–2.46) were associated with poor mental health.

Conclusions In Central America health inequalities by employment profiles exist, principally for not being covered by social security, or having an oral or no contract for employees (main characteristics of informal employment). Few gender inequalities have been found.

| 0197 | THE PARTICIPATION FOR SOLID WASTE MANAGEMENT APPROPRIATE MODEL OF UNDERGRADUATE IN SRINAKHARINWIROT UNIVERSITY, THAILAND |

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Objectives The objective was to study participatory for solid waste management of undergraduate students Faculty of Physical Education Srinakarinwirot University Ongkarak.

Method Collect the data by the questionnaire developed interview used as a tool to collect employed quantitative data. The content validity was improved and adjusted by the suggestion of the experts.

Results The result revealed that: the sample were women 75.5%, age between 18–22 years old, age average 19.75 years old (S. D. =1.047, Min=18, Max=22), the bin condition, or storage of waste provided by the University have various stains 81.5%, minor is not covered or close incompletely 56.8% and 36.1% damaged, broken or leaking the trash. The storage of waste by University provide cause of nuisance 88.7%; almost of foul smell 92.5%, minor is nuisance form animals and insects such as flies, mice, etc., 36.6% and the other (the leachate outflow / waste overflow flooded / gruesome) 4.2%. The knowledge level about solid waste management almost moderate level 53.5%, minor was high level 45.5% and low level 1.1%. The attitude level about solid waste management almost moderate 65.8%, minor were low level 18.2%, and high level 16.0%. The practice behaviour level about solid waste management almost moderate 72.8%, minor were high level 15.2% and low level 12.0%.

Conclusions Undergraduate students have the knowledge, but not implemented for separate the garbage, and the correct type of waste, uncooperative for separate the garbage because of that embarrassment and there is not enough knowledge about solid waste management. The University do not have the campaign seriously.

| 0206 | PROSTATE CANCER RISK AMONG FRENCH FARMERS IN THE AGRICAN COHORT |

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Objectives Prostate cancer is one of the most frequent cancers worldwide. Its aetiology is largely unknown with farming being suspected. Our aim was to identify occupational risk factors for prostate cancer in farmers in the French prospective cohort study AGRICAN.

Method During the period from enrollment (2005–2007) to 31 December 2009, 1664 incident prostate cancer cases were identified in the cohort (n = 92669) by linkage with cancer registries. Data on occupational history and agricultural exposures during lifetime on 13 types of crops and 5 types of animals were collected by the enrollment questionnaire. Hazard ratios (HR) were estimated using Cox regression analysis with attained age as underlying time scale.

Results Elevated risks were found for six agricultural activities: cattle, hogs, horses, grassland, wheat/barley and tobacco (HR=1.07 to 1.16; p = 0.07 to 0.23). Prostate cancer risk was related to duration of work in wheat/barley and tobacco productions, number of cattle and hogs, and grassland area. We also observed an increased risk for fruit growing, with both duration and area. Increased prostate cancer risk was associated with applying pesticides on wheat/barley (HR=1.40, p = 0.06) with a duration relationship, and with making hay (HR=1.16, p = 0.03).

Conclusions Our analysis suggests that the risk of prostate cancer is increased in some farming activities, mainly in crops. This work will be completed by a multivariate analysis, with variables positively associated with the outcome in the previous analysis. The possible association between use of some chemical classes of pesticides and prostate cancer occurrence will be analysed through a crop-exposure matrix (PESTIMAT).

0208 | **RESPIRATORY HEALTH AFTER STARTING WORK: THE APPRENTICE STUDY**

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Objectives Young adults between 16 and 24 years of age represent only 13% of the working population in the UK, yet they have higher rates of work-related accidents and injuries compared to workers of other age groups. However, little is known about the incidence and risk factors for occupational diseases such as occupational asthma in these individuals.

Method The study was based on data from the Avon Longitudinal Study of Parents and Children (ALSPAC). At 16 and 18 years, participants were asked to report their employment, along with questions on respiratory health.

Results At 16 years, those who left education and were employed had less severe asthma compared to those in education. At 18, asthma prevalence was higher among the employed, but the severity of asthma in these individuals did not differ significantly from those staying in education and who were not employed. There was no obvious relationship between the prevalence of asthma or the major occupational groups and the proportion of respondents reporting time lost from work.

Of all respondents who had asthma at 18 years, 3% had lost time due to the condition, and 11% suggested the symptoms were better at weekends. Symptom improvement was mostly seen among waiters and waitresses, kitchen and catering assistants, and sales and retail assistants.

Conclusions The high prevalence of work-related symptoms suggests they may be substantial number of cases of occupational asthma in the young work force.

0209 | **SCREENING OF COMMON MENTAL DISORDERS AMONG OCCUPATIONAL GROUPS: A REVIEW OF DIMENSIONAL STRUCTURE OF SELF REPORTING QUESTIONNAIRE–SRQ-20**

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Objectives The aim of this study was to evaluate the dimensional structure of the SRQ-20 in different occupational groups. It's a validation study that involved four sectional drawing surveys.

Method Individual analysis of the databases has been conducted by using the method of principal components. The latent class analysis has been used in the factor analysis of tetrachoric correlations in order to assess the dimensionality of the instrument, aiming to tailor the assessment method to the distribution of variable (categorical). The Vuong-Lo-Mendell-Rubin test adjusted Lo Mendell Rubin (*LRT Test*), the parametric bootstrap verisimilitude ratio test has been used to review the adequacy of the number of classes extracted in the recipiency of the CMD. The reliability of the latent classes has been evaluated by *Latent Class Reliability Coefficient* (LCRC).

Results The factor analysis of tetrachoric correlations allowed the assessment of the dimensions of the SRQ-20 and the comparison between different categories of workers. As a complement, the latent class analysis permitted the interpretation of subgroups for expressions of common mental disorders in the occupational sphere, providing in-depth research.

Conclusions The study combined two methods of analysis for assessing the dimensional structure of the SRQ 20 among workers. The factor analysis of tetrachoric correlations enabled us to verify the dimensional stability of the instrument, since the number of extracted factors and dimensions represented maintained similarities in the groups assessed. The study points to the use of measures of SRQ 20 as valid for screening TMC occupational groups.

0213 | **THE RELATIONSHIP BETWEEN NIGHT WORK AND MENTAL HEALTH AMONG HOSPITAL WORKERS**

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Objectives Night work is suggested as a risk factor for mental health. The objectives of this study were (i) to test the association between the duration of exposure to night work and mental health, evaluated through depression and minor psychiatric disorder (MPD) and (ii) to assess the relationship between intention to leave the night shift and mental health.

Method A cross-sectional study was conducted among 432 workers (physical doctors and nursing personnel) at two hospitals in Manaus, Amazonas State, Brazil. Depression condition and MPD were assessed by PHQ-9 and SRQ-20, respectively. The statistical analyses (bivariate, multivariate logistic and multinomial regression) were conducted at SPSS (v.18.0).

Results Female workers, those younger than 38 years old, with children under the age of 6 showed higher prevalence of depression and MPD compared to their counterparts. No significant association was detected between time of exposure to night work and mental symptoms. After adjusting for age, sex,