O37 - Comunicación Oral/Oral communication

Estilos de vida: Tabaco

Life styles: Tobacco

Sabado 4 de Octubre / Saturday 4, October
9:00:00 a/to 11:00:00

Moderador/Chairperson:
Manel Nebot

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TOBACCO AND ALCOHOL CONSUMPTION, SEDENTARY LIFESTYLE AND OVERWEIGHTNESS IN FRANCE: A MULTILEVEL ANALYSIS OF INDIVIDUAL AND AREA-LEVEL DETERMINANTS

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Introduction: We investigated the effect of the level of consumerism, expressed as the gross domestic product (GDP) per capita in the broad area of residence, on the risks of smoking, drinking, sedentary behaviour and overweightness.
Methods: Using a representative sample of the French population, multilevel logistic models allowed us to examine the effect of the GDP on such health-related behaviour.
Results: After adjustment for potential confounders, we found no GDP effect on the odds of being a moderate smoker. Conversely, the risk of being a highly-dependent smoker as opposed to a moderate consumer or an abstainer increased with the area-level GDP per capita (OR: 1.13, 95% CI: 1.04-1.23 for an increment of one standard deviation). A similar pattern was found for alcohol consumption: the odds of being a moderate consumer were not related to the GDP per capita, but a positive effect of the GDP on the odds of being an alcohol-dependent drinker as opposed to a moderate consumer or an abstainer was found among women (OR: 1.14, 95% CI: 1.02-1.28). The gap between the sexes with respect to alcohol-dependency therefore appeared to be narrower when the GDP per capita was high. On the other hand, the risk of overweightness was found to increase with the area-level GDP per capita among blue-collar workers only (OR: 1.21, 95% CI: 1.03-1.43).
Conclusions: Beyond the well-documented socioeconomic effects operating at both the individual and the local neighbourhood levels, our study suggests that broader areas of residence, through their level of economic development, may also have an independent impact on health-related behaviour. It is therefore relevant to take into account the level of consumerism in the broad area of residence when targeting health-promotion programs.

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MATERIAL DISADVANTAGE AND SMOKING

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Introduction: Smoking is more prevalent among those with lower income and poorer material circumstances. It has been suggested that those with lower income may smoke as a response to stress caused by economic hardship. The aim of this study was to analyse differences in smoking by several measures of material disadvantage, and more specifically to examine whether the association between low income and smoking can be explained by people's perceived economic disadvantage.
Methods: The data derive from surveys conducted among the employees of the City of Helsinki in 2000 and 2001. The data include 6.243 respondents aged 40-60 years (response rate 70%). Indicators of material circumstances were household income per consumption unit, perceived economic difficulties and economic satisfaction.
Results: In both men and women, smoking was more common among those with lower income, those who had experienced economic difficulties and those who were dissatisfied with their economic situation. Economic difficulties and economic satisfaction explained about half of income differences in men, and in women the inverse income gradient practically disappeared. Economic difficulties showed only a modest association with smoking among women after the level of income and economic satisfaction were controlled for. Economic dissatisfaction remained strongly associated with smoking even after income and economic difficulties were taken into account.
Conclusions: Smoking was associated both with income and the measures describing people's perceived economic situation. Economic difficulties and economic satisfaction partly explained the association between low income and smoking. Economic dissatisfaction was associated with smoking independently of income and economic difficulties.

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PRICE AND CONSUMPTION OF TOBACCO IN SPAIN

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Background: In Spain, there is a "dual" tobacco market with cigarette brands of national origin (called black tobacco) at relatively low prices smoked mainly by men and also foreign (and national) brands of blond tobacco. The Spanish tobacco market has seen major transitions in these types of tobacco used in cigarettes in recent decades: blond cigarettes have gradually supplanted Spain's traditionally preferred black tobacco cigarettes. Another particularity of the epidemics of smoking in Spain is the recent spread (beginning in the 1970's) of the habit among women. Among other determinants, some studies have indicated that changes in cigarette price have had an appreciable impact on smoking consumption in several countries, but scanty data are available for Spain.
Aim: To analyse the effect of price of cigarette on tobacco consumption between 1965 and 1995 in Spain.
Methods: We used information on official legal tobacco sales from Tabacalera (the former Spanish tobacco monopoly) for sales of black and blond tobacco. We used Tabacalera data on the average price of a 20-cigarette pack of black and blond cigarettes separately. We computed the annual consumption of cigarettes per adult per day and the real price (in Euro standardised to 2000) of a pack of cigarettes. We used multiple linear regression analysis with log transformation (in the dependent and independent variables) to obtain price elasticities of demand for cigarettes (percentage change in cigarette consumption for a 1% change in price), adjusted for per capita annual gross domestic product. We decided to fit separate models for each type of tobacco based, to distinguish the different patterns of blond and black tobacco in Spain.
Results: A pack of blond cigarettes was cheaper in the 1990's than in the late 1950's. At the beginning of the 1970's the real price of blond cigarettes descended markedly. For blond tobacco, the model explained almost all the annual variation in smoking consumption (adjusted R2=0.98). The real price of blond cigarettes was significantly and inversely associated with the blond cigarette consumption with a price elasticity of -0.71 (on average, smoking prevalence decreased 0.71% for a 1% increase in the real price of cigarettes). For black cigarettes (adjusted R2=0.82), we found a lower but still high and significant elasticity of -0.51. Lack of reliable information on smuggling did not allow us to consider its influence.
Conclusions: There is an inverse relation between price and consumption of cigarettes in Spain, indicating that interventions at the economic level (such as real increases in prices) may have an important public health impact in tobacco control.
Financial support: European Commission, Europe Against Cancer Programme (agreement SI2.32443, 2001CVG2-008), as part of the framework project of the European Network for Smoking Prevention

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TOBACCO SMOKING AS A PREDICTOR OF COMPLICATIONS IN GENERAL SURGERY. A PROSPECTIVE STUDY

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Background: The evidence regarding the association of tobacco smoking and adverse effects, mainly nosocomial infection, in hospitalized patients is conflicting. We have not found any report analyzing smoking and mortality in general surgery. Te objective of this report is to analyze whether tobacco smoking is related to nosocomial infection, admission to ICU, in-hospital death, and length of stay (LOS).
Methods: This was a prospective study on 2989 patients admitted consecutively to a Service of General Surgery in the period 1992-1997. Tobacco consumption was assessed by a structured questionnaire. Patients were interviewed at the outpatient office or within the first 24 hours after admission. Postoperative infection was classified using the Centers for Disease Control criteria. Surveillance was extended to 30 days after hospital discharge, to detect hospital infections clinically developed at home. Relative risks and 95% confidence intervals were estimated. Confounding was controlled for by logistic regression analysis.
Results: 62 (2.1%) patients died, 503 (16.8%) developed a nosocomial infection, of whom 378 (12.6%) were surgical site infection (SSI) and 44 (1.5%) lower respiratory tract infection (RTI). Smoking (mainly past smoking) was associated to male sex, advanced age, chronic obstructive pulmonary disease, cancer, longer preoperative stay, longer surgical time, higher degree of wound contamination, and higher ASA. A long history of smoking (51+ pack-years), either past or current smoking, increased postoperative admission to ICU (adjusted OR = 2.86, CI95, 1.21-6.77) and in-hospital mortality (adjusted OR = 2.56, CI95, 1.10-5.97). There was no relationship between current smoking and SSI (either incisional or organ/space) (adjusted OR = 0.99, CI95 0.72-1.35), whereas it was observed with past smoking (adjusted OR = 1.46, CI95, 1.02-2.09). Current smoking, and in a lesser degree past smoking, augmented RTI risk (adjusted OR = 3.21, CI95, 1.21-8.51). Smokers did not undergo more frequently additional surgical procedures during hospitalization. In multivariate analysis LOS was similar for smokers and non-smokers.
Conclusion: Smoking increases in-hospital mortality, admission to ICU, and lower respiratory tract infection, but not SSI. Deleterious effects of smoking are also observed in past smokers and they cannot be counteracted by hospital cessation programs. This highlights the importance of community smoking cessation programs.

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DETERMINANTS OF EXPOSURE TO ENVIRONMENTAL TOBACCO SMOKE IN A MEDITERRANEAN URBAN POPULATION

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Background: Although "it is known" that a high proportion of the population is exposed to environmental tobacco smoke (ETS), few attempts to estimate the actual extent of this hazard at the population level have been done.
Aim: The objective of this study was to assess the prevalence of exposure to ETS in general, in the workplace, at home, and in leisure time, and to describe their determinants, in a sample of the population of Cornellà (Spain).
Subjects and methods: Data were obtained from the Cornellà Health Interview Survey Follow-up (CHIS.FU) study. We analysed cross-sectional data on ETS exposure in non-smokers, obtained from the follow-up questionnaire (409 men and 605 women). We calculated the prevalence of ETS exposure (crude and age-stand) in general and in different environments (workplace, home and leisure). We computed age-adjusted odds ratios (OR and 95% confidence interval [CI]) of ETS exposure according to self-perceived health and selected sociodemographic variables.
Results: The crude prevalence of ETS exposure (in general) were 51.4% (46.8%-56.1%) in men and 47.9% (43.9%-51.9%) in women. We observed a decreasing trend of ETS exposure with age: 78.3% (68.6%-88.0%) in <25 years and 25.4% (17.5%-33.3%) in >64 years in men and 83.6% (73.8%-93.4%) and 25.0% (18.7%-31.3%) in women, respectively. The age-standardised prevalence of ETS exposure was 54.2% (49.7%-58.8%) in men and 54.1% (49.9%-58.3%) in women. The age-standardised prevalence rates of ETS exposure according to exposure source and sex were: 25.9% (21.8%-30.1%) at home, 34.0% (23.5%-45.6%) in the workplace and 55.1% (50.8%-59.4%) in leisure time in men and 34.1% (29.8%-38.5%), 30.1% (18.7%-41.3%) and 44.3% (40.5%-48.2%) in women. In men, there were no statistically significant differences in ETS exposure at home or workplace. In leisure time ETS exposure was associated to being married (OR=0.3; 0.1-0.5 vs. being unmarried) and to alcohol intake >17.75 g/day (OR=2.1; 1.1-4.0 vs. absteiners). In women ETS exposure at home was less prevalent among housewives (OR=0.6; 0.37-0.98 vs. being employed); in workplace, ETS exposure was more prevalent among those women with universitary studies (OR=3.3; 1.3-8.3 vs. less than primary studies); and in leisure time, it was related to education (OR=4.2; 1.3-10.1 universitary vs. less than primary studies), civil state (OR=0.2; 0.1-0.4 married vs. unmarried), occupation (OR=0.5; 0.3-0.9 housewife vs. employed), suboptimal health (OR=0.3; 0.1-0.5 vs. optimal health) and alcohol intake (OR=2.7; 1.5-5.1 >17.75 vs. absteiners).
Conclusion: Near 50% of non-smokers of this study are exposed to ETS. The major determinant of this exposure is age, without differences by sex. In men, ETS exposure is related to civil state and alcohol intake, while in women it is related to educational level, civil state, occupational status, self-perceived health, and alcohol intake.
Partially funded by Fondo de Investigación Sanitaria (PI02/0261) and Cornellà de Llobregat City Council.

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DETERMINANTS OF SMOKING CESSATION IN A POPULATION-BASED COHORT FOLLOWED FOR 8 YEARS. THE CORNELLÀ HEALTH INTERVIEW SURVEY FOLLOW-UP (CHIS.FU) STUDY

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Background: The study of the factors associated with successful quitting smoking is important to design interventions and campaigns addressed to favour smoking cessation. Recent studies have identified a number of variables associated with quitting smoking (i.e., smoking fewer cigarettes daily, higher educational level, past quit attempts, older age). This information is usually derived from cross-sectional studies, and information from longitudinal designs is however scarce.
Objective: To study the determinants of smoking cessation in a population-based cohort in Cornellà de Llobregat, an industrial city in the Barcelona (Spain) metropolitan area.
Material and methods: We used data from the Cornella Health Interview Survey Follow-up Study. 2,500 subjects were interviewed face to face in 1994 and followed up in 2002 by a telephone interview. The participation rate was 68.1%. We included for the analysis those subjects who declared to be daily smokers at baseline and had complete follow-up with information on smoking status in 2002 (n=353). We use Cox regression models to compute the relative risk (RR) of quitting (and 95% confidence intervals [CI]). We considered as potential independent predictors sociodemographic variables (civil status, birth place, occupational situation, educational level and social class); annual general preventive examination; tobacco-related variables (number of cigarettes smoked, age at starting smoking, physicians' anti-smoking counselling, motivation to quit, and previous attempts to quit); life-styles (physical activity and alcohol consumption); tobacco-related diseases and self-perceived health. The analyses were carried out by sex and we adjusted all models for age.
Results: Of 353 daily smokers 101 quitted during the follow-up period, corresponding to a cumulative quit rate of 28.6%. The incidence quitting rate was 41.7/1,000 person-years. Men aged 65 years or older were more likely to be quitters (RR=3.9; 95%CI: 1.2-12.0) as compared to men aged 15-24 years but no clear association with age was found in women. The annual preventive examination was associated with quitting in men (RR=1.9; 95%CI: 1.1-3.2), and in women (RR=2.9; 95%1.0-8.5). No apparent pattern of association according to civil status, birth place, educational level and social class, physicians' counselling to quit, tobacco related variables, motivational variables, life-styles, tobacco-related disease, and self-perceived health were found in men neither in women.
Conclusions: Age and having an annual preventive examination are the main determinants of smoking cessation in this cohort. Although no clear pattern of association with educational level, tobacco-related variables and other potential predictors of quitting was found in these preliminary analyses, the potential effect modification role of age and other variables should further be investigated.
This work is partially funded by Fondo de Investigación Sanitaria (PI02/0261) and The Cornella City Council.

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SURVEILLANCE OF SECONDHAND TOBACCO SMOKE IN LATIN AMERICA. COMPARISON OF LIMA, PERU AND MONTEVIDEO, URUGUAY

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Introduction: Secondhand smoke (SHS) is an involuntary exposure that poses serious health risk to passive smokers. In Latin America, there is insufficient information regarding range of exposure and locations where passive smoking is taking place. The objective was to compare secondhand smoke exposure in Lima, Peru and Montevideo, Uruguay using a surveillance method for assessing SHS in public places in Latin American countries.
Methods: Exposure was estimated by passive sampling of vapor-phase nicotine using a filter badge. Both countries used similar protocols and a training workshop was held previously to the fieldwork to favor comparability. In each city, filters were placed for 7-14 days in 1 hospital, 2 secondary schools, 1 local government building, the international airport, and at least 10 restaurants/bars. The number of filters was 97 in Lima and 121 in Montevideo. For quality control, 10% of the filters were duplicates and 10% blanks. Filters were checked daily or every 2 days to verify the correct placement, count the number of persons and smokers, the distance to the smoker nearby and to evaluate ventilation patterns. After removal, the airborne concentration of nicotine in $\mu g/m^3$ was measured by gas-chromatography. Since nicotine levels were markedly right-skewed, medians and interquartile ranges (IQR) are presented. For statistical comparisons between the two cities, levels were log transformed and the differences in the means were estimated using a t-test with unequal variances.
Results: Overall, median levels (IQR) were 0.13 $\mu g/m^3$ (0.01-0.80) in Lima and 0.75 $\mu g/m^3$ (0.29-1.54) in Montevideo, and these differences were statistically significant ($p<0.001$). By institution, levels were highly distinct between Peru and Uruguay in the hospital: 0.02 (0.01-0.07) and 0.80 (0.30-1.69), respectively; schools: 0.01 (0.01-0.08) and 0.67 (0.47-0.94); and the local government building: 0.93 (0.20-1.39) and 1.49 (0.53-2.71). For the airport, levels in Lima 0.93 (0.20-1.29), and Montevideo 1.14 (0.73-2.49), were marginally different ($p=0.09$). Finally, no differences were found in bars/restaurants of the two cities, 1.61 (0.49-4.98) and 1.49 (0.54-2.71) respectively, $p=0.72$.
Conclusion: Nicotine levels were minimal in schools and hospital of Lima, while none of the institutions sampled in Uruguay showed levels close to zero. This is possibly related to differences in legislation and its compliance. The situation is of especial concern in the hospital and schools of Montevideo, where 25% of the samples were above moderate-high levels of exposure. In local government buildings and airports, there were moderate-high levels in both cities, though higher in Montevideo. The highest levels were found in bars/restaurants, with no differences between cities. This surveillance study points out some priorities of action. The project is being extended to five more countries in Latin America and will be used to support smoke-free policies and programs to reduce passive smoking in the region.