

The IEA-EEF European Congress of Epidemiology 2012: Epidemiology for a Fair and Healthy Society

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Epidemiology for a fair and healthy society: Euroepi 2012

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Epidemiology is an exciting science that provides the way to formulate intelligent questions and often responses to understand the dynamics of health and disease in the communities. Bridging different methods and fields of enquire the ultimate interest of epidemiology is the ability to make the well known distance from the bench side to the bed side even shorter if it also takes the way to the population side and back.

As times are changing also epidemiology seems to follow: from communicable diseases to non-communicable diseases, from biological determinants to social capital, from cross-sectional thinking to life course approaches, from the reductionist strategy of single agents or single genes to systems biology and systems public health. Thus an extraordinary diverse world of opportunities is born and many different approaches can be tested giving epidemiology new chances.

Any simple descriptive exercise in epidemiology can show us that iniquities in health are a main challenge faced by human societies. In the 1990 the median age at death was five years for those living in sub-Saharan Africa and seventy-five for those living in what was then called the established market societies. This is an essential hallmark of what can be a claim for a universal human right to health or, as Jonathan Wolff put it, the beginning of an “exercise in cautious idealism” (1), and probably the most interesting confront that epidemiologists have ahead of them: working for a fair and healthy society, especially in societies and at times of crisis. And all societies and times face crisis!

The European Epidemiology Conference that takes place in Porto, Portugal, from 5 to 8 September 2012 brings together research findings, scientists, clinicians and public health practitioners from 45 countries addressing, from multiple perspectives, the most important methodological and substantive findings that build up the health debate through the eyes of epidemiology.

On behalf of the Organizing Committee we sincerely hope that this meeting, and all these presented and published abstracts, might be a privileged moment to share knowledge and an opportunity to make

the epidemiological contribute even sounder, particularly regarding the making of evidence to inform action.

1. Wolff J. The human right to health. W.W. Norton & Company, Inc. 2012

Abstract submission and evaluation

Abstracts by country

Country	Submitted abstracts		Accepted abstracts		Accepted oral communication	Accepted as poster
	n	%	n	%		
Albania	3	0.4	2	66.7	1	1
Argentina	2	0.3	0	0.0	0	0
Australia	3	0.4	2	66.7	1	1
Austria	2	0.3	2	100.0	0	2
Belgium	3	0.4	2	66.7	1	1
Bosnia and Herzegovina	2	0.2	2	100.0	1	1
Brazil	152	23.0	99	65.1	13	86
Bulgaria	1	0.2	0	0.0	0	0
Canada	4	0.6	4	100.0	1	3
Croatia	5	0.8	5	100.0	0	5
Cyprus	3	0.4	3	100.0	1	2
Denmark	16	2.4	14	87.5	10	4
Egypt	1	0.2	1	100.0	1	0
Estonia	2	0.3	2	100.0	0	2
Finland	4	0.6	4	100.0	3	1
France	13	2.0	11	84.6	3	8
Germany	28	4.1	25	89.3	18	7
Greece	5	0.8	5	100.0	1	4
Iran	10	1.1	7	70.0	0	7
Ireland	3	0.4	2	66.7	1	1

P2J22

Anthropometric profile of workers with different workplaces

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Background The eating habits are acquired mostly during childhood. However, some factors such as work place, meal times, reduced physical activity, prolonged sitting at work, type of activity and the possibility of free food consumption may influence eating habits and consequently change the nutritional status of people (Martins, 2010 e Fisberg, 2006). According to Martins (2010), the pattern of obesity among different types of jobs or activities differs by gender, the prevalence of this pattern is higher in people whose work involves driving a car, because it is a sedentary activity, and BMI may differ depending on the type of job.

Objectives To characterize the nutritional status of workers and verify the influence of different workplaces in the nutritional status.

Methods Data collection was collected with workers at a company from Oporto to Portugal. Workers were classified according to their workplaces: crew chief (CRC), administrative, controller dock (CD), preparer order (PO), clerk of goods (CG), charger commodity (CC), responsible for department (RD), cleaner and a driver. The anthropometric profile was measured by body mass index (BMI), waist-hip ratio (WHR), and body fat percentage (%BF) obtained from the bioimpedance. Were used reference values proposed by WHO to categorize the BMI and WHR. The %BF was categorized according Gallagher et al. (2000). Statistical analysis was performed using the Kruskal–Wallis Test in SPSS 17.0.

Results The sample was composed by 80 workers with mean age 34 ± 9 years old. Mostly workers were male (54 %) and their workplaces were: 45.0 % PO; 18.8 % CG; 15.0 % administrative; 6.3 % driver; 5.0 % CRC; 5.0 % CC; 2.5 % cleaner; 1.3 % CD and 1.3 % RD. Based on BMI, it was found that 42.5 % have Normal weight, 46.3 % Overweight and 11.3 % Obesity. Regarding the WHR, it was verified that 86 % of female and 5 % of male have central obesity. For the %BF, it was found that women are more overweight (31 ± 6 %) compared to men (19.2 ± 7.2 %). There was no difference between the median of the anthropometric measurements and the workplaces.

Conclusion Through the preliminary results we conclude that the job does not influence the nutritional status of workers because there is no relationship between the workplace and anthropometric measurements.

P2J23

Changes on physical activity and sports practice from early to late adolescence

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Introduction Childhood and adolescence are particularly relevant to achieve the maximum benefits from being physically active. It is in this phase that they acquire lasting habits of physical activity that will remain in adulthood.

Objective To investigate changes on intensity of physical activity (IPA) and sport practice (SP) from 13 to 17 years-old.

Methods The study was developed in a population-based cohort of urban adolescents born in 1990 and assembled at 13 years (EPITeen) in public and private schools of Porto, Portugal. We evaluated 1,531 (53.6 % girls) at 13 and 17-years-old. Data were collected using a structured questionnaire. Intensity of physical activity was obtained through self-perception of the activities in free time, with four possible answers, mostly of the time sit or standing (designated by low intensity) and mostly of the time walking or running (active/very active). SP was measured in terms of practicing some sport out of school curriculum. McNemar tests were used to evaluate the proportion of individuals that change of IPA or SP habits. Association between IPA and SP at 13 with IPA and SP at 17, adjusted to parents' education, were measured using odds ratio (OR) and 95 % confidence intervals by logistic regression analysis.

Results From the 281 girls that showed high IPA at 13, 51.2 % ($n = 144$) still maintained such levels at 17y and from the 449 that reported lower IPA, 29.4 % ($n = 132$) reported high IPA at 17y. Regarding SP of the 323 girls that practice sport at 13y 61.0 % (197) still practicing at 17y, while of the 460 girls that didn't practice sport 26.5 % (122) started practicing. Among boys, of the 374 that showed high IPA at 13, 69.8 % (261) still maintained such levels and from the 256 that showed lower IPA, 50.4 % (129) presented high IPA at 17y, while in SP of the 246 who didn't practice at 13, 57.3 % (141) started practicing during the follow-up and from the 431 who practice sport 81.9 % (353) still do it. In girls, the OR to had higher IPA at 17y old was 2.47 (1.81; 3.37) among those with higher IPA at 13y compared with those with lower IPA; In boys the OR was 2.29 (1.64; 3.19) respectively, at 17. Regarding SP, adolescents with SP at 13y had higher odds to practice at 17y, 3.40 (2.47; 4.67) in girls and 3.25 (2.26; 4.67) in boys.

Conclusion In both genders the probability of high IPA and SP at 17 it's at list two times more in those who showed high levels of physical activity at 13y.

P2J24

Dietary patterns and total mortality in a Spanish cohort: the SUN project

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Background Studying food patterns is acquiring an emerging role in nutritional epidemiology. There are two methods to characterize dietary patterns: the *a priori* approach and the *a posteriori* approach, which empirically derives combinations of foods or nutrients from factor or cluster analysis that explain a sizeable amount of total variability in food intake. There is little evidence on post hoc dietary patterns and all cause mortality in Southern European populations.

Objective To evaluate prospectively the relationship between a posteriori dietary pattern and risk of all-cause mortality in a large cohort of Spanish university graduates of middle age.

Methods We followed-up 15,536 Spanish university graduates (59.6 % women, mean age: 38 years) during 6.8 years (median). To assess dietary exposures, a validated semi-quantitative 136-item food-frequency questionnaire was administered. Dietary patterns were ascertained through a factor analysis based on 30 predefined food groups. Participants were classified according to tertiles of adherence to dietary pattern scores at baseline. Cox regression models were fitted to estimate multivariable-adjusted hazard ratios (HR) for mortality. Deaths were confirmed by review of medical records.

Results Two major dietary patterns were identified: the "Potatoes & Meats" dietary pattern and "Mediterranean" dietary pattern