

SP1-24 PROFILE EPIDEMIC OF THE ELDERLY ASSISTED IN THE PUBLIC HOSPITAL IN MACEIÓ X FREQUENCY OF FALLS

doi:10.1136/jech.2011.142976n.1

¹C Fônsêca, ²A Pedrosa,* ³D Melo, ⁴M Fernandes, ⁵G Teixeira. ¹Fundação Faculdade de Medicina, Universidade de São Paulo, FFMUSP, São Paulo, São Paulo, Brazil; ²Faculdade de Medicina, Universidade Federal de Alagoas, FAMED/UFAL, Maceió, Alagoas, Brazil; ³Hospital Universitário Professor Alberto Antunes—HUPAA/UFAL, Maceió, Alagoas, Brazil; ⁴Centro de Ciências Biológicas e Saúde, Universidade Católica de Pernambuco, Recife, Pernambuco, Brazil; ⁵Universidade Estadual de Ciências da Saúde de Alagoas—UNCISAL, Maceió, Alagoas, Brazil

Introduction It is believed that the falls are one of the great problems of the geriatrics. They present serious consequences in the elderly's bio-psico-social ambit, being mortality cause in that age group.

Methods The present work has as objective to trace the elderly epidemic profile assisted in the national health clinic of geriatrics of the Hospital Universitário Professor Alberto Antunes—HUPAA correlating with the frequency of falls. A cataloguing of the data contained in the record of per-existent evaluation, tends as variables: sex, age group, independence for activities of the daily life, occurrence of falls and the place, amount of medication that it uses and instruction level.

Results and Conclusion Before the analysed variables it can be observed that most of the elderly was independent and they had tendency to falls, most of them happened in the elderly own Lar and that great part made use of at least four medications.

SP1-25 CORONARY HEART DISEASE PREVALENCE AND CORRELATES IN A BRAZILIAN POPULATION LIVING IN RIBEIRÃO PRETO, SÃO PAULO, BRAZIL, 2007

doi:10.1136/jech.2011.142976n.2

S A de Moraes,* I C M de Freitas. University of São Paulo, Ribeirão Preto, São Paulo, Brazil

Background The demographic-epidemiological transition and the increasing of cardiovascular risk factors warrant epidemiological studies to identify coronary heart disease (CHD) prevalence and correlates in the Brazilian population.

Objectives To identify the prevalence of CHD and correlates in adults from Ribeirão Preto, São Paulo, Brazil.

Methods Cross-sectional population-based epidemiological study using three-stage cluster sampling. The variability introduced in the third sampling fraction was corrected by attributing equal weights to the number of eligible units in each domicile, resulting in a weighted sample of 1532 participants aged 30 years or older. The design effect was 1.33. Rose Questionnaire and ECG tracings classified by Novacode criteria (Q waves and ST-T abnormalities) were used to estimate CHD prevalences (95% CI). To investigate correlates, crude and adjusted prevalence ratios (PR) according to Novacode were estimated by points and 95% CIs, using Poisson regression.

Results The age-adjusted prevalence was 12.52% (10.11% to 15.39%) or 26.32% (22.87% to 30.10%) using Rose Questionnaire or Novacode, respectively. The Rose sensitivity and specificity compared to Novacode were, respectively, 16.08% and 88.76%, and the area under the curve AUC=0.52 (0.49 to 0.55). Age-gender-adjusted prevalence ratios in the final model were represented by "age" PR=1.02 (1.01 to 1.03); "hypertension" PR=1.65 (1.23 to 2.19); "waist/height ratio" PR=1.54 (1.05 to 2.25-2° tertile) and 2.02 (1.15 to 3.56-3° tertile); "hospitalisation" PR=1.36 (1.04 to 1.78) and "moderate physical activity" PR=0.57 (0.34 to 0.94), compared to

the reference category. Trend test for PR across waist/height ratio tertiles were statistically significant ($p<0.05$).

Conclusion The results show high CHD prevalence in the study population as well as identified correlates liable to public intervention policies.

SP1-26 NEIGHBOURHOODS AND CENTRAL OBESITY IN A BRAZILIAN POPULATION-BASED STUDY: A MULTILEVEL ANALYSIS

doi:10.1136/jech.2011.142976n.3

I C M de Freitas,* S A de Moraes. University of São Paulo, Ribeirão Preto, São Paulo, Brazil

Objectives To estimate conicity index (CI) means and correlates.

Methods Cross-sectional population-based epidemiological study using three-stage cluster sampling. The variability introduced in the third sampling fraction was corrected by attributing equal weights to the number of eligible units in each domicile, resulting in a weighted sample of 2197 participants aged 30 years and older, living in the urban area of Ribeirão Preto, São Paulo, Brazil, in 2006. Multilevel linear regression model was fitted to estimate β s (individual level) and intra-regions variance (ecological level) considering 81 census tracts nested in four neighbourhoods (central-south, west, east, and north), and the conicity index as the outcome.

Results The crude CI means were higher in male (1.25) than in female (1.18). In final model, age ($b=0.003$), family history of stroke ($b=0.008$), BMI ($b=0.005$), number of medicines taken ($b=0.004$), years of smoking ($b=0.001$), alcohol dependence ($b=0.011$), and diet for weight loss ($b=0.015$) were positively associated with CI. Gender ($b=-0.07$), healthcare ($b=-0.011$), and consumption of MUFAs ($b=-0.001$) were inversely associated. The fraction of variance due to regions (p) was 14.1%. In both gender, CI adjusted means were high for nutritional status, smoking, alcohol dependence, and consumption of MUFAs, mainly in north and east regions.

Conclusion The results depicted the contribution of the ecological level to the conicity index, pointing out the role of correlates liable to intervention, which should be taken into account in planning prevention strategies, even considering that Ribeirão Preto city has been classified in the upper levels of Human Development Index.

SP1-27 METABOLIC SYNDROME IN SOUTH ASIAN IMMIGRANTS: MORE THAN LOW HDL REQUIRING AGGRESSIVE MANAGEMENT

doi:10.1136/jech.2011.142976n.4

S Dodani,* M Butler, J Vacek. University of Kansas Medical Center, Kansas City, USA

Background Aggressive clinical and public health interventions have resulted in significant reduction in coronary artery disease (CAD) worldwide. However, South Asian Immigrants (SAIs) exhibit the higher prevalence of CAD and its risk factors as compared with other ethnic populations. The main objective of the current study is to assess the prevalence of metabolic syndrome (MS), its association with high density Lipoprotein (HDL) function, Apo lipoprotein A-I (Apo A-I) polymorphisms, and sub-clinical CAD using common carotid intima-media thickness (CCA-IMT) as a surrogate marker.

Methods Community-based cross-sectional study on SAIs aged 35–65 years was conducted. Sub-clinical CAD was measured using CCA-IMT. Dysfunctional/pro-inflammatory (Dys-HDL) was determined using novel cell free assay and HDL inflammatory index.

Results According to the International Diabetes Federation definition, MS prevalence was 29.7% in SAIs without CAD. 26% had HDL inflammatory index ≥ 1 suggesting Dys-HDL. Six novel APOA-1 gene polymorphisms were discovered and on logistic regression, three single nucleotide peptides-SNPs (G2, G3, and G5) were found to be significantly associated with MS ($p=0.397$, $p=0.386$, $p=0.054$). On multi-variate analysis, MS was significantly associated with BMI >23 ($p=0.005$), Apo-A-I levels ($p=0.01$), and Lp [a] ($p<0.0001$).

Conclusion SAIs are known to be at a disproportionately high risk for CAD that may be attributed to a high burden for MS. There is need to explore and understand non-traditional risk factors with special focus to Dys-HDL, knowing that SAIs have low HDL levels. Large prospective studies are needed to further strengthen current study results.

SP1-28 COMPARISON OF ESTABLISHED RISK FACTORS FOR PRE-MENOPAUSAL AND POST-MENOPAUSAL BREAST CANCER

doi:10.1136/jech.2011.142976n.5

^{1,2}R Ghiasvand,* ²E S Maram, ²H R Tabatabaee, ^{2,3}S Tahmasebi. ¹Cancer Research Center, Cancer Institute of Iran, Tehran, Iran; ²Shiraz University of Medical Sciences, Shiraz, Iran; ³Cancer Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

Introduction Molecular, epidemiologic and clinical evidences suggest that there are two main breast cancer types: pre-menopausal and post-menopausal. The purpose of this study was to ascertain the differences between distribution and strengths of risk factors in pre-menopausal and post-menopausal breast cancer.

Methods A case control study was conducted. We included 1014 women with histologically confirmed, incident breast cancer and 1014 controls matched by age and province of residency. All information for the exposures was collected during face-to-face interviews. Logistic regression was performed to investigate associations of reproductive and anthropometric factors in the risk of pre-menopausal and post-menopausal breast cancer. We used Receiver Operating Characteristic (ROC) analysis to compare two models.

Results Longer duration of breastfeeding, positive family history, employment vs housekeeping, oral contraceptive (OC) usage and higher parity were shown significant association with pre-menopausal breast cancer. Higher education, employment vs housekeeping, later age at first marriage, OC usage, positive family history and higher BMI were significant association with post-menopausal breast cancer. The comparison of logistic models for pre-menopausal and post-menopausal breast cancer demonstrated that patterns of risk factors were significantly different. Area Under Curve (AUC) = 0.7442 for women ≥ 50 years vs AUC = 0.6635 for women <50 years, $p<0.001$.

Conclusion Established risk factors can predict post-menopausal breast cancer well, and unknown factors have a greater role in the prediction of pre-menopausal breast cancer.

SP1-29 FATIGUE AND QUALITY OF LIFE IN BREAST CANCER SURVIVORS: TEMPORAL COURSES AND LONG-TERM PATTERN

doi:10.1136/jech.2011.142976n.6

¹M Schmidt,* ¹J Chang-Claude, ²D Flesch-Janys, ¹K Steindorf. ¹German Cancer Research Center, Heidelberg, Germany; ²University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Introduction Fatigue is a major severe complaint in the growing population of breast cancer survivors. Therefore, we investigated the

different courses of fatigue from pre-diagnosis to long-term follow-up, and their associations with long-term quality of life (QoL) in disease-free breast cancer survivors, including comparisons with the general population.

Methods Incident breast cancer patients diagnosed 2001–2005 were recruited in a case-control study conducted in Germany (MARIE). At follow-up in 2009 (median 5.8 years), patients who were still alive self-reported current fatigue and QoL status using validated questionnaires (FAQ, EORTC-QLQ-C30). In addition, survivors retrospectively rated fatigue levels pre-diagnosis, during different treatment phases, and 1 year post-surgery. Our analyses included 1928 disease-free breast cancer survivors without elevated pre-diagnosis fatigue levels.

Results Fatigue levels were increased during radiotherapy, without significant difference between patients with and without chemotherapy. Among patients who received both therapies, 61.4% reported higher, 30% same, 8.6% lower fatigue levels during chemotherapy compared to radiotherapy. Inter-individual variation in courses of fatigue was high. Survivors with persisting long-term fatigue had significantly and markedly worse scores for all EORTC QoL functions and symptoms several years after end of adjuvant treatment than other survivors and compared to the general population.

Conclusion Chemotherapy appears to have a stronger negative impact on fatigue than radiotherapy. Breast cancer survivors may have long-term QoL comparable to the general population, even when they had substantial fatigue during treatment. However, prolonged or persistent fatigue can lead to extensive continuing loss in QoL with respect to physical, social, cognitive, and financial aspects.

SP1-30 PREDICTORS OF RECOVERY OF FUNCTIONALITY AFTER HIP OR WRIST FRACTURES DUE TO FALLS IN ELDERLY PEOPLE

doi:10.1136/jech.2011.142976n.7

¹J M Quintana,* ¹M Orive, ²A Bilbao, ¹S Garcia, ¹C Las Hayas, ¹G Navarro, ¹U Aguirre. ¹Hospital Galdakao-Usansolo, Galdakao, Bizkaia, Spain; ²Bioef, Sondika, Bizkaia, Spain; ³Corporació Sanitaria Parc Taulí, Sabadell, Barcelona, Spain

Introduction Hip fractures are one of the most severe fractures that elderly patients may suffer while wrist fractures are among the most common. The goal of this study was to determine which clinical and social factors predict a better recovery of functionality, as measured by the Barthel questionnaire, after those fractures.

Methods Patients older than 65 years who attended the emergency room (ER) of 7 acute hospitals with a hip or wrist fracture due to a fortuity fall were recruited. Patients fulfilled the Barthel questionnaire at the time of the fall, as how they were before the fall, and 6 months later, as well as some other questions on socio-demographic parameters. Clinical parameters from the ER and admission to the hospital were also recorded. Univariate and multivariate regression analysis were performed, considering the change on Barthel as dependent variable.

Results Preliminary analysis of our data (recruitment of 343 patients with hip and 412 wrist fractureS) showed an important decline in Barthel scores (hip: 23.2; wrist fractures: 5.4 points) at 6 months after the fracture. Patients who were older, who did not receive social support and not living alone were those with higher losses on hip fracture, after adjusting by baseline scores. In the case of wrist fractures, older patients and those not living alone had higher losses in the Barthel.

Conclusion Providing support through social services as well as the living status of the patient diminished the losses in general function perception due to those fractures.