O25 - Comunicación Oral/Oral communication

Enfermedades crónicas

Chronic diseases

Viernes 3 de Octubre / Friday 3, October
11:30:00 a/to 13:30:00

Moderador/Chairperson:
Ana Navas Acién

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THYROXINE ADHERENCE STUDY: RANDOMISED CONTROLLED CLINICAL TRIAL OF THE IMPACT OF AN EDUCATIONAL BOOKLET ON THYROXINE ADHERENCE IN PRIMARY HYPOTHYROIDISM

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Introduction: Patient non-adherence with long-term medication is widespread and the provision of health educational booklets may improve adherence. The objective of this rando-mised clinical trial was to assess the clinical effectiveness of mailing an educational booklet to patients with primary hypothyroidism.
Methods: Adults prescribed 'thyroxine replacement therapy' for primary hypothyroidism (autoimmune thyroiditis, thyroidectomy, or radio-iodine therapy) were identified in three general practices. Patients were randomly allocated to an intervention ('hypothyroid educational booklet') or control group ('usual medical care'). The educational booklet ('readability' of a tabloid newspaper) contained a medication reminder sticker and calendar. Random allocation was by random permutated blocks, stratified by individual general practitioner. Neither patients nor physicians were aware of the allocation schedule in advance. Assessment at baseline and at 3 months included ultra-sensitive TSH (thyroid stimulating hormone) and patient questionnaire ('Short Form 36'; modified 'Billewicz Hypothyroid Index'). The primary outcome measure was mean 'within-subject' change in TSH. The intended sample size was 274. All TSH results were concealed.
Results: 497 patients had hypothyroidism, a point prevalence for treated primary hypothyroidism of 1.47 % (95%CI= 1.33% to 1.59%). Trial participants were younger than non-participants; more likely to have been symptomatic at diagnosis; undergone thyroidectomy; and had a recent TSH within the reference range. 332 patients with biochemically confirmed hypothyroidism participated. All patients were accounted for at the end of the trial and analysed by 'intention to treat' (TSH available for 330). The two groups were comparable at baseline. The dose of thyroxine prescribed was similar for both groups, although more patients in the intervention group had undetectable levels of TSH (20% vs.13%). The mean 'within-subject' change in TSH was -0.11 mIU/L (intervention group) and -0.12 mIU/L (control group), an absolute difference between groups of +0.01 mIU/L (95% confidence interval -0.93 to +0.94 mIU/L). Adjusted analysis (ANCOVA) for baseline TSH produced a difference between groups of -0.12 mIU/L (95%CI= -1.97 to +1.95). Between group differences in the modified 'Billewicz Hypothyroid Index' (-2.3; 95%CI -4.9 to +0.3); 'SF36-vitality' (+2.9; 95%CI -0.4 to +6.3); and 'SF36-general health' (+1.4; 95%CI -1.7 to +4.6) were minimal. On sub-group analysis, patients with baseline TSH greater than 4.7 mIU/L had a reduction in TSH that was 3.09 mIU/L (95%CI -2.57 to +8.76 mIU/L) greater in the control group than the intervention group.
Conclusions: Brief intervention with an educational booklet has no influence on adherence with thyroxine in primary hypothyroidism. The findings do not support the routine distribution of health educational materials to improve patient adherence with medication. Although a review of the literature indicates that printed educational material can influence objective outcome measures.

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FACTORS RELATED TO THE ONSET AND PERSISTENCE OF CHRONIC BACK PAIN IN THE COMMUNITY: RESULTS FROM A GENERAL POPULATION FOLLOW-UP STUDY

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Introduction: Chronic back pain (CBP) is very common, with a major impact on society. Understanding its epidemiology is essential for treatment and prevention. Most previous studies have focused on new or acute episodes or specific population groups. This longitudinal population study compared the prevalence of chronic back pain at two points four years apart, with socio-demographic, health and pain-related factors associated with CBP onset, persistence and recovery.
Method: A random sample (5,036 adults) was drawn from 29 general practices in Grampian, Scotland for postal survey in 1996; those who agreed (2,184) were re-surveyed in 2000. The questionnaire included chronic pain case definition questions (intermittent/persistent pain or discomfort for 3 months or more); cause (1996) or site (2000) of any chronic pain; the Chronic Pain Grade (a measure of severity); the Level of Expressed Need (LEN) questionnaire (a measure of help-seeking behaviour); the SF-36 general health questionnaire; demographic questions. Those with CBP in 1996 and 2000 had "persistent" CBP; those with CBP in 1996 but not 2000 had "recovered" CBP; those with CBP in 2000 but not 1996 had "new" CBP. Factors in 1996 predicting "persistent" and "new" CBP in 2000 were compared by multiple logistic regression.
Results: Corrected response rates were 82.3% (1996) and 83.0% (2000). The sample prevalence of chronic back pain was 16% (1996) and 26% (2000). CBP in 1996 was strongly associated with CBP in 2000 (OR = 20.8). "Persistent" CBP was associated with more severe pain, higher LEN, and poorer general health than "new" CBP. Factors independently associated with "persistent" compared with "recovered" CBP were pre-existing arthritis elsewhere, high LEN, poor mental health (SF-36) and not living alone. Factors independently predicting "new" CBP compared with no previous CBP were previous chronic pain elsewhere (especially from arthritis, injury or of uncertain cause), and poor health in the physical function, physical role, energy and vitality, and general health dimensions of the SF-36.
Conclusion: This population-based study confirmed CBP as a common and persistent problem, and it was generally clinical, rather than socio-demographic factors that predicted its persistence and onset. Individuals who experienced any chronic pain (in the back or elsewhere) were the most likely to develop or retain CBP. This supports the existence of a "chronic pain syndrome", with common aetiological factors. Prevention should focus on these factors. The findings suggest that management or tertiary prevention of "persistent" CBP could focus on psychological health factors, while primary prevention of "new" CBP could focus on physical health factors. This study could not distinguish recurrent from continuous CBP, nor could it examine persistence of pain at any site other than the back. Further research is needed to explore this important and complex area.

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THE EFFECT OF BODY MASS INDEX (BMI) ON THE CHANGE IN DISABILITY AND PAIN IN HIP AND KNEE OSTEOARTHRITIS

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Background: High Body Mass Index (BMI) is a risk factor for incident hip and knee osteoarthritis (OA). Few studies have examined the effect of obesity on the pain and disability in established OA.
Objective: To establish whether there is a relationship between BMI and change in disability and pain in people with moderately severe hip/knee arthritis.
Methods: A prospective population-based study of individuals with moderately severe hip or knee arthritis in two counties in Ontario. Eligible subjects completed a baseline and follow-up questionnaire at 3±0.5 years and had no prior total joint replacement surgery. BMI was characterized as normal (<25), overweight (25-<30), or obese (≥30). Disability and pain were assessed by a standardized instrument, the WOMAC: changes were categorized as worsened by Minimal Clinical Important Difference (MCID)*, improved by MCID*, or no change. Logistic regression analyses were used to examine the association of BMI with changes adjusting for age, sex, county, smoking status, education, income, and living arrangements.
Results: In cross-sectional analyses, obese individuals had worse disability and pain as compared to those of normal weight at both time 1 and time 2 after adjustment for other variables. However, in longitudinal analyses, BMI was not associated with an MCID worsening in disability or pain. Increasing age and low education were the only significant predictors of worsening disability and pain respectively after adjustment for other predictors. Older age was the only significant predictor of improvement in both disability and pain in adjusted analyses.
Conclusions: In this population with established OA, obesity was not associated with change in pain or disability after adjustment for confounders, suggesting risk factors for incidence may be different from those for progression.

*Angst F, A Aeschlimann, G Stucki. Minimal Clinically Important Rehabilitation Effects in Patients with Osteoarthritis of the Lower Extremities. The Journal of Rheumatology 2002; 29 (1): 131-138.
Angst F, A Aeschlimann, G Stucki. Smallest Detectable and Minimal Clinically Important Differences of Rehabilitation Intervention with Their Implications for Required Sample Sizes Using WOMAC and SF-36 Quality of Life Measurement Instruments in Patients With Osteoarthritis of the Lower Extremities. Arthritis Care & Research 2001; 45: 384-391.

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PREVALENCE OF CHRONIC SYMPTOMS AND BRONCHIAL OBS-TRUCTION IN YOUNG ADULTS ACCORDING TO GOLD STAGES

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Introduction: The recently published Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines provide a new staging system for chronic obstructive pulmonary disease (COPD) from mild (stage I) to severe (stage III). As a new approach, the GOLD guidelines have introduced a stage 0 which represents absence of airflow obstruction but presence of chronic symptoms, e.g. cough and phlegm, and is meant to include subjects "at risk" for developing COPD later in life and to allow intervention while the disease is not yet a health problem. The aim of the present study is: i) to assess the prevalence of COPD severity stages, as defined in the GOLD guidelines, in developed countries; ii) to evaluate if subjects either belonging to stage 0 or to the more severe stages share a common pattern of risk factors and use of health care resources due to respiratory problems.
Methods: For the purposes of the present analysis, we used the data of the European Community Respiratory Health Survey (ECRHS), which collected information about respiratory health, lung function and a variety of factors known or hypothesised to be associated with COPD in more than 18,000 young adults (20-44 years), enrolled from 1991 to 1993 in 16 European and other industrialised countries. Data were summarised as prevalence rates (%) with binomial exact 95% confidence intervals. Multinomial regression models were used to assess the association between the GOLD stages (stage 0 and stages I+) and active/passive smoking exposure, respiratory infection in childhood, occupational exposure to vapours, gas, dust or fumes, socio-economic status and gender. The relative risk ratios (RRR) were also adjusted for the effect of the ECRHS country.
Results: The overall prevalence rates were: 11.8% (95%CI: 11.3-12.3%) for stage 0 (only chronic symptoms), 2.5% (95%CI: 2.2-2.7%) for COPD-stage I and 1.1% (95%CI: 1.0-1.3%) for COPD-stage II. Moderate-heavy smoking (= 15 pack-years) was significantly associated with both stage 0 (RRR=4.15; 95%CI: 3.55-4.84) and COPD (RRR=4.09; 95%CI: 3.17-5.26), while COPD patients had a higher likelihood of giving up smoking (RRR=1.39; 95%CI: 1.04-1.86) than stage 0 subjects (RRR=1.05; 95%CI: 0.86-1.27). Environmental tobacco smoke had the same degree of positive association in both groups. Respiratory infection in childhood and low socio-economic status were significantly and homogeneously associated with both stage 0 and COPD, whereas occupational exposure was significantly associated only with stage 0. All the GOLD stages were characterised by a significantly higher percentage of health care resources users than normal subjects (p<0.001), with no difference between stage 0 and COPD.
Conclusions: A considerable percentage of young adults already suffer from COPD. The GOLD stage 0 is characterised by the presence of the main risk factors for COPD and by the same high request for medical assistance.

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THE ECONOMIC COST OF CURRENT ASTHMA IN THE ITALIAN YOUNG ADULT GENERAL POPULATION. RESULTS OF THE ITALIAN STUDY ON ASTHMA IN YOUNG ADULTS (ISAYA)

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Introduction: Asthma is a common illness in industrialised countries, with a high socio-economic burden due to productivity losses in young subjects, avoidable deaths, hospitalisation and daily drug treatment. The aim of the present study is: i) to assess the total, direct and indirect costs of current asthma in Italy; ii) to highlight the components of total cost; and iii) to evaluate the determinants of cost variations.
Methods: In 2000, a cost-of-illness (COI) study on the economic impact of current asthma was carried out in the frame of the Italian Study on Asthma in Young Adults (ISAYA), a multicentre cross-sectional survey on respiratory health in the Italian young adult general population (20-44 years). The COI study involved 527 current asthmatics with doctor diagnosis screened out of the 15591 responders in 7 Italian centres. Each patient provided detailed information on direct medical expenditures (general practitioner and specialist visits, laboratory tests, use of medicines, Emergency Department visits, hospital admissions), productivity losses (working days lost according to occupation) and leisure time forgone (days with impaired daily life activities other than work), which were valued by rates, market prices (pharmacological treatment) and market daily wages according to occupation. Leisure time forgone was valued by the market hourly wage of domestic help.
Results: In 2000, the mean annual cost per patient was 741 EUR: direct medical expenditures and indirect costs represented 43% (317 EUR) and 57% (424 EUR) of total costs, respectively. The main component of direct medical expenditures was pharmacological treatment (150 EUR), whereas hospitalisation accounted for less than one fourth of direct costs (73 EUR). Productivity losses accounted for 63% of indirect costs (266 EUR). The mean annual cost per patient with poor control of symptoms was more than three times as much as the cost per patient with an optimal control of the disease (1342 vs 378 EUR). The annual total cost estimated in Italian young adults was of about 650,000,000 EUR. About 50% of total cost was attributable to patients with a poor control of symptoms, who were responsible for about 55% of the total cost due to hospitalisation and 33% of the total cost due to pharmacological treatment. According to a logistic regression analysis, high use of health resources (>350 EUR) was positively associated with sex (females) and negatively associated with the control of symptoms; the risk of production losses and leisure time forgone was lower for 'white collars' and decreased according to the control of symptoms.
Conclusions: In 2000, indirect costs were the most relevant component of the total cost of current asthma in Italian young adults. Direct medical expenditures were mainly generated by pharmacological treatment. The failure in controlling symptoms was the main determinant of cost variations.

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ASSESSING DIFFERENCES BETWEEN CO-MORBIDITY AND MULTIMORBIDITY

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Background and Aim: The presence of multiple diseases is an emergent health problem because of the ageing of population and the related increase of the prevalence of chronic diseases. Although there has been increasing interest in research on multiple diseases, during recent years co-morbidity and multi-morbidity are frequently used as synonymous terms. We aimed assess differences between multi-morbidity and co-morbidity when the index disease is stroke in a longitudinal study in Catalonia, Spain.
Methods: We used data from the Catalonian Health Interview Survey Follow-up Study (CO-HESCA) 1994-1998, a population-based cohort. We obtained complete follow-up from 11,704 participants, and we analysed 7,077 persons aged 40-84 years old. The questionnaire included information for 16 chronic conditions (as present/absent). The analysis of co-morbidity and multi-morbidity was carried out in three sequential ways. First, we assessed differences in descriptive analysis based on crude prevalence of chronic diseases in multi-morbidity approach and related with stroke in co-morbidity approach. Second, we adjusted logistic regression models to compute the relative risks of death (RR and 95% confidence interval [CI]) according to index disease (stroke) in the co-morbidity approach and all chronic conditions in the multi-morbidity approach. We fitted the models separately for both sexes and we adjusted all models for age.
Results: In multi-morbidity approach crude prevalences, respectively for men and women, are: suffer from stroke 2,5% and 2,1%, suffer from hypertension 21,1% and 29,6%, suffer from hearth diseases 9,8% and 9,7%, suffer from diabetes 7,5% and 8,3% and suffer from depression 8% and 20,2%. In co-morbidity approach, prevalences of suffering from stroke and other chronic diseases, respectively for men and women, are: with hypertension 53,2% and 65,4%, with hearth diseases 41,8% and 49,4%, with diabetes 13,9% and 23,2%, and with depression 27,8% and 41,5%. In the multi-morbidity approach, the RR of death for suffer from stroke is 2,04 (95%CI:1,15-3,62), for hypertension 1,09 (95%CI 0,8-1,49), for hearth diseases 1,45 (95%CI 1-2,09), for diabetes 1,22 (95%CI 0,79-1,87) and for depression 1,24 (95%CI 0,77-2,01) for men. For women, are 3,20 (95%CI 1,76-5,79), 1,04 (95%CI 0,75-1,44), 1,49 (95%CI 0,99-2,22), 2,22 (95%CI 1,49-3,31) and 0,86 (95%CI 0,56-1,32) respectively. In the co-morbidity approach, the RRs of death by stroke adjusted for age and the 4 co-existent diseases is 2.2 (95%CI 1,26-3,86) for men and 3,22 (95%CI 1,81-5,75) for women.
Conclusion: Prevalence of multiple chronic diseases in the same person could be expressed in different ways according with objectives and study design. In our study, the use of co-morbidity instead of multi-morbidity provided more accurate information.

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SWEDISH MULTIPLE SCLEROSIS REGISTRY. IT'S CONCEPT, STRUCTURE, PURPOSE AND APPLICATION AREAS

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Objectives: The SMS-registry is a solution integrating a concise, standardized clinical description of MS patients accepted nationwide, with the local needs expressed in specialized tests or paraclinical examinations. It supports a specific design with a simple user interface, comprehensive query generator, tools for system management, built-in on-line help, security mechanisms and flexibility in many aspects. The SMS-registry, in its local and web-based versions, has been developed at the Division of Neurology, Huddinge University Hospital, Karolinska Institute in collaboration with the MS Database Co-ordinating Group.
Main purposes of the system: SMS-registry has been designed for clinical and research related purposes. It primarily aims to: 1) provide "condensed" patient information helping in clinical settings, 2) standardize and ensure the quality registration and clinical handlings, 3) guarantee the use of current therapy guidelines in MS treatment, 4) evaluate the short and long term effects of MS treatment, 5) estimate the quality of life, 6) improve the MS-related health care. It can also be: a source of information necessary for different research projects; a base for epidemiological studies; a help in finding the suitable patients to clinical trials.
System design: The important concept in the design of the Interactive Database system for MS (IDMS) is its modular structure. It is built around a standardized kernel of basic, personal information, with modules of clinical data, immunomodulating treatment and bout events. When an MS patient visits a neurological clinic, the essential information is collected in these modules. The kernel includes description of disease onset, current MS diagnosis/course together with additional, clinically relevant information like current EDSS value, pathologic CSF and MRI, or familial MS. User defined modules have been designed to meet the needs of gathering paraclinical data and collecting information originating from a number of research projects. Selective access to data of different type was an important feature in planning of the system. This resulted in several specialized modules of MRI findings, quality of life, or functional scores proposed by the MS Database Co-ordinating Group.
Use of IDMS program and SMS registry: The IDMS system is used at all university, neurological clinics in Sweden and at some larger neurological centers. It is offered to all MS-related health institutions. The last gathered nationwide data of October 2002, comprised 4100 patients - approximately 1/3 of the whole expected prevalent MS-population in Sweden. SMS-registry is governed by the MS Database Coordinating Group, consisting of the annually elected, MS-related healthcare personal. SMS-registry is approved by The National Board of Health and Welfare (Socialstyrelsen) together with 50 other quality registries in Sweden. Because of the increasing importance of quality registers in improvement of health care, and all the health-political aspects related to them, the SMS-registry is economically supported by Socialstyrelsen. The activity reports concerning the SMS-registry are annually presented to Socialstyrelsen (http://www.sos.se/mars/kvaflik.htm).