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EGPRN

Abstracts from EGPRN meeting in GÖTTINGEN May 2005

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Presentation 1 - Theme Paper (6th MAY 2005)

Risk of myocardial infarction in patients on Cox 2 inhibitors or conventional non-steroidal anti-inflammatory drugs: population based nested case control analysis.

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Background: Cox 2 inhibitors were developed to provide pain relief without gastro-intestinal side effects and there is evidence they are equally effective as traditional NSAIDs in relieving pain. In the VIGOR trial, rofecoxib was associated within increased risk of myocardial infarction compared with the comparator drug (naproxen). Initially, it was not certain whether this reflects a true increase or an apparent increase due to a cardioprotective effect of naproxen. Now this particular drug has been withdrawn but uncertainty persists regarding the cardiovascular safety of the other selective NSAIDs.
Aims: To determine the comparative risk of myocardial infarction in patients taking Cox 2 and other non-steroidal anti-inflammatory drugs in primary care between 2000 and 2004; to determine these risks in patients with and without pre-existing coronary heart disease and in those on and off aspirin.
Methods: We conducted a nested case control study using 367 general practices contributing to the UK QRESEARCH database. The practices were spread throughout every Strategic Health Authority and each Health Board in England, Wales and Scotland. Cases were patients aged 25 or over with a first ever diagnosis of myocardial infarction during the four year study period (August 2000 to July 2004).Up to ten controls per case matched for age, calendar year, sex and practice.
We calculated unadjusted and adjusted odds ratios with 95% confidence intervals for myocardial infarction. Our main exposures were use of rofecoxib, celecoxib, naproxen, ibuprofen, diclofenac, and other selective and non-selective NSAIDS.
Results: We identified 9,218 cases with myocardial infarction and 86,349 matched controls. We found a significantly increased risk of myocardial infarction associated with current use of rofecoxib (adjusted OR 1.32, 95% CI 1.09 to 1.61) compared with no use within the last three years; with current use of diclofenac (adjusted OR 1.55, 95% 1.39 to 1.72) and with current use of ibuprofen (adjusted OR 1.24, 95% CI 1.11 to 1.39). There were increased risks associated with the other selective NSAIDs, with naproxen and with non selective NSAIDs although these were significant at the 0.05 rather than the 0.01 level for current use but significant <0.01 for the tests for trend. All these results were despite adjustment for potential confounders. There were no significant interactions between any of the non-steroid anti-inflammatory drugs and either aspirin or ischaemic heart disease.
Conclusion: We have found evidence to suggest an increased risk of myocardial infarction associated with current use of rofecoxib, diclofenac and ibuprofen despite adjustment for many potential confounders. We found no evidence to support a reduction in risk of myocardial infarction associated with current use of naproxen. The cardiovascular safety of all NSAIDs needs urgent evaluation.

Presentation 2 – Theme Paper (6th MAY 2005)

Effectiveness of antidepressant medication versus routine counselling for minor and mild-major depression in general practice; a randomised controlled equivalence trial.

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Background: The volume and costs of antidepressant medication is rising year by year. General practitioners are responsible for the largest part of antidepressant prescriptions, increasingly prescribing antidepressants for relatively mild depressive disorders. However, we suspected that antidepressants do not have any therapeutic value in minor or mild-major depression.
Research Question: Do antidepressants have any effectiveness in patients with minor or mild-major depression in general practice?
Methods: We conducted a randomised 'non-superiority' trial in general practice. 59 GPs recruited 181 depressed patients with 3-6 DSM-IV depressive symptoms with a minimal duration of 2 weeks (73% female, mean age 46 years [SD 16]). Patients were randomised to one of two conditions: either four 10-20 minutes sessions of routine counselling plus paroxetine 20 mg per day for 3 months (n=85), or four 10-20 minutes sessions of routine counselling alone (n=96). Main outcome measure was the change in Montgomery Asberg Depression Rating Scale (MADRS) score at 6, 13, 26 and 52 weeks follow up. The equivalence margin was set a priori at 5 points on the MADRS, which is 0.5 SD.
Results: The intention to treat analysis showed that the differences in MADRS change scores were -1.4 (95% CI -4.3; 2.4), -1.9 (-4.8; 2.0), -3.3 (-6.1; 0.4) and -1.8 (-4.4; 2.3) at 6, 13, 26 and 52 weeks respectively. Because the confidence intervals at 6, 13 and 52 weeks were entirely above the equivalence margin of -5, counselling plus paroxetine was 'non-superior' to counselling alone at 6, 13 and 52 weeks. However, non-superiority could not be established at 26 weeks. On the other hand, the two groups did not show any significant differences at any of the four follow up moments.
Conclusions: Paroxetine does not have any surplus effectiveness over routine counselling in patients with minor or mild-major depression in general practice.
Points for discussion at EGPRN:
1. Consequences for the conceptualisation of 'mild depressive disorders'

in general practice; 2. Consequences for clinical management of depressed patients in general practice.

Presentation 3 – Theme Paper (6th MAY 2005)

Escitalopram versus citalopram in late life depression: 12 months double blind randomised clinical trial

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Background: Around 15% of people in the community aged 65 years and over suffer from depression (2). An ideal antidepressant for older people could be described as, unaltered drug handling in old age, interaction free, safe in frail subjects with comorbid illnesses, simple dose regimen, well tolerated, rapid onset of antidepressant action (2). Citalopram is effective in preventing recurrence of depression in the elderly (3). Escitalopram found to be more effective with similar side effect profile than citalopram for the treatment of depression in primary care (4).
Research question: Is Escitalopram more/equal effective and tolerable as citalopram in late life depression? Does Escitalopram have an early effect and higher remission and recovery rates compared to citalopram with older patients treated for depression?
Method: Prospective, double blind, randomised, multicentered clinical study. Subjects will be randomized to citalopram or escitalopram treatment in a 1:1 ratio for 12 months after 1 week of single-blind placebo run-in period. Primary end-points will be response rate after 3 months and remission rate after 6 months of the treatment.
Inclusion criteria: Patients >65 and <75 years of age and diagnosed for depression [according to DSM-IV and, Montgomery Asberg Depression Rating Scale (MADRS) ≥22 and ≤40, Mini-mental test>25]. Patients with any other psychiatric or organic disorders having potential to interfere with the study results will constitute the exclusion criteria.
Sample size: If the minimum difference to detect is taken as %5 and estimated standard deviation is taken as 10, then 86 subjects are required in each study group at %95 CI and with % 90 power.
Measurements tools: Baseline and follow-up evaluation: MADRS, Geriatric Depression Scale, Hamilton anxiety scale, Instrumental Activities of Daily Living, Quality of Life WHOQOL-Brief, Physical Exam.Side Effect evaluation: UKU, Clinical Global Impression.

The study protocol has been approved by Marmara Medical School Ethical Committee.
Points for discussion at EGPRN:
What are the opinions of the experts about the barriers of holding a multicentre RCT in primary care study for depression among elderly patients?
a) ethical?
b) methodological?
c) technical?

Presentation 4 – Theme Paper (6th MAY 2005)

Analysis of feedback interventions: literature research.

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Background: In 2003 and 2004 all general practitioners in Belgium received a feedback-document on their prescribing behaviour for antibiotics. The purpose of this authorities-driven intervention was to enhance auto-evaluation and to promote peer review. Before evaluating this intervention, a literature search is done.

Research Questions: Is feedback intervention an effective intervention to improve prescribing behaviour?
Methods: We did a literature research in September 2004. We searched in the Cochrane Library and in Medline. Used keywords: feedback, audit, behaviour, prescription, antibiotics, antihypertensives, evaluation, impact, effect, assessment, evidence based medicine, recommendation, guideline, education, implementation, barrier, facilitator, primary care. On base of these results, a search for the most relevant authors and a search in Web of Science was done.
Limits: publication from 1998 on. No language restrictions. All types of articles are included.
Results
- There is no clear definition of the concept "feedback" used in the literature. This confusion makes it difficult to compare different feedback interventions. It is therefore important to describe the intervention very precise.
- Moreover, because of this inaccuracy it is difficult to evaluate the effectiveness of a feedback intervention. If measured, the effects are generally small to moderate. The effectiveness is related with the intrinsic factors of the intervention, the contextual factors, the aspectual factors and the possible barriers. To take into account all of this factors, it is recommended to make a plan-evaluation.
- Barriers and mechanisms for behaviours changing are important to explore.
- To evaluate the effectiveness of a feedback intervention there doesn't exit one single best-method.
- Several disciplines are needed to work out the evaluation of an intervention.

Conclusions: The concept feedback has to be more clearly defined.
If effectiveness is measured, the effects are generally small to moderate.
There doesn't exist one single best-method to evaluate feedback.
Points for discussion at EGPRN:
1. Is it feasible for authors and reviewers to describe feedback interventions more accurately in their publications?
2. Is it feasible for authors to make a plan-evaluation of their feedback intervention?

Presentation 5 – Freestanding paper (6th MAY 2005)

General practitioners and current data on HRT: from information to practice.

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Context: The medicalisation of the menopause was a major success story for over thirty years, up until July 2002, when randomised trials documented an increased risk of cardiovascular disease and breast cancer with HRT. In a few years the question "What are the contra-indications of HRT?" has become "What are the indications for HRT?".
Question: Do certain personal characteristics of doctors facilitate the implementation of recommendations regarding HRT?
Method: In-depth interviews with 15 general practitioners.
Thematic analysis of the content of these interviews.
Results: Every doctor is familiar with at least the broad outlines of the recommendations.
Their social perceptions of the menopause and HRT are bound up with both biological and cultural phenomena : the social practices of HRT (medical, cosmetic and symbolic) come up in all the interviews. According to doctors a vast amount of information on the subject is available to women, mainly through the media, though this information is subjected to various interpretations that need to be set in the current context.
Three variables (the effect of age, professional experience and period)

situate the menopause and its hormonal treatment in a social framework, interacting on the knowledge and practice of physicians. A typology based on these variables may be put forward. The "convinced" doctors are those who hold regular gynaecological consultations. Recently set up in practice, they are in favour of HRT for its benefits on both the health capital and the symbolic capital. The recent data have somewhat unsettled them but not really challenged their practice. The "cautious" are the older, more experienced male doctors, for whom the protection of the health capital takes precedence over the symbolic capital. They no longer prescribe HRT, unsure which argument to put forward in its favour. The "malleable" are mainly the older female doctors, who consider that there are few references to offer women, question their own practice and adapt to the recommendations without too much trouble.
Conclusion: The theme of the menopause and its hormone replacement therapy illustrates the difficulty in putting evidence-based medicine into practice. Prescribers' perceptions of the risks and benefits of HRT are a function of age, period and professional experience. They constitute the main criteria in deciding on treatment.

Presentation 6 – Theme paper (6th MAY 2005)

Availability of inhaled insulin promotes greater acceptance of insulin therapy in patients with type 2 diabetes.

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Background: Despite it has been demonstrated convincingly that improved glycemic control significantly reduced chronic diabetes-related complications, the current control of diabetes is unsatisfactory. Patients as many physicians are reluctant to use insulin therapy although it remains effective over the time if properly adapted to needs.
Research question: To examine the extent to which potential availability of inhaled insulin (INH) affects the perceived acceptability of insulin therapy among patients with uncontrolled type 2 diabetes.
Methods: Multi-centre single-blind randomised controlled trial. Patients with type 2 diabetes failing on diet or oral therapy (HbA1C≥8%) were recruited from primary and secondary care facilities across 7 countries. They were randomly assigned to receive either educational information on currently available treatments (diet, oral agents, subcutaneous insulin) (group A) or the same plus information on INH (group B). Patients were then asked to make a theoretical choice about their future diabetes therapy. The primary outcome was the proportion of patients in each group choosing insulin. It was analysed using Fisher's exact test and described using the odds ratio (OR) and 95% CIs. The Wilcoxon rank sum test was used for treatment preferences data.
Results: In group B, 43,2% (169 of 391) of patients opted for a treatment including insulin compared with 15,5% (60 of 388) in group A (OR 4.16 [95% CI:2.93-5.95;p<0.0001]). They were 35.3% (138 of 391) to choose INH. Significantly fewer patients in group B chose to make no change to their therapy (27.4%) compared with 43.3% in group A (OR 0.49 [95% CI:0.36-0.67;p<0.0001). The proportion of patients choosing insulin in both groups increased with the number of oral agents currently being taken.
Conclusion: In this study of theoretical treatment choices among patients with uncontrolled type 2 diabetes, patients were three times more likely to choose insulin therapy when inhaled insulin was available.

Points for discussion at EGPRN:
1. designing real world trials
2. real world trial of inhaled insulin

Presentation 7 – Poster (6th MAY 2005)

Comparative study of omeprazole and ranitidine hydrochloride for the management of laryngopharyngeal reflux in adults.

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Introduction: Proton-pump inhibitors (PPIS) as well as H2-antagonists constituted bedrock in the treatment evolution of both gastro duodenal ulcer (GDU) and gastroesophageal reflux disease (GERD). PPIs are powerful antisecretory factors which inhibit the action of the enzyme H+K+/ATPase, found on the membrane of stomach cells.H2-antagonist block H2-receptors of histamine on the membrane of stomach's parietal cells, thus inhibiting the acid secretion. Even though recent studies reveal an excellent therapeutic effect of PPIs on LPR in adults. The role of H2-antagonists in the treatment of LPR has not yet been explored.
Purpose: Of the present clinical controlled trial was the evaluation of the therapeutic value of a PPIs (Omeprazole) and an H2-antagonist (Ranitidine hydrochloride) in the management of laryngopharyngeal reflux (LPR) of adults.
Population and Methods of study: The population under study consisted of a random sample of 42 adult patients (P) who have been diagnosed with active LPR (according to Vitas Score and indirect laryngoscopy) and did not use any PPIs, H2-blockers or gastrokinetic drugs. Then followed watching of these patients in two groups, based on their personal characteristics (age, sex, body, mass index ~BMI~, smoking, sedentary life (SL), diabetes mellitus (DM), previous history of GDU or GERD). Omeprazole 20mg/24hs and ranitidine 150mg two times/24hs for three consecutive months were administered in the first and second group respectively, with both groups receiving similar dietary instructions, and after Ps" attendance program within 30 and 90 days , the evaluation of those two therapeutic forms was performed. For the statistical analysis of the available facts the software Statistical Package for the Social Sciences version 11, was used.
Results: 19 (45.2%) of the patients (P) were males of mean age (MA) 45.6±14.63 years and the rest 23 (54.7%) were females of MA 45.2±14.65% years (p NS). The study results, in the way they have been formed after the patients matching, are listed in the following table.

Teams	Men	Women	MV AGE	MV BMI	Smoking	SL	SD?	History GDU GERD
I	11	10	45,5	28,2	14	16	3	4
II	8	13	45,3	31,1	16	17	5	5

The score values of P in both groups at the onset of the study (OS), but also in the way they have been formed during the follow up (30-90days), are shown in the following table, together with the comparisons made:

Teams	Score OS	SCORE 30days	Score 90days
Ist (omeprazole)	171.102	100.912	35.12
IInd (ranitidine)	169.989	129.987	74.89
P (probability)	NS	0.01	0.002

The decrease in the score value (decrease of the clinical symptoms) in P of both groups is actually accompanied by analogous endoscopic findings.
Conclusions: The available facts are insinuation that the at once administration of omeprazole 20mg/24hs in adults with LPR under study, is proven to be the most ideal therapeutic choice in comparison to the use of ranitidine 150mg two times/24hrs.

Presenation 8 – Poster (6th MAY 2005)

Effect of β2 adrenergic receptor polymorphisms on reaction to inhalation of salbutamol in general practice patients with obstructive airway diseases.

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Background: Bronchial asthma and chronic obstructive pulmonary disease (COPD) are common diseases in general practice. Studies have found that genetic differences influence the treatment response in these patients (even with an obviously identical phenotype). Because of the high variability, general practitioners treat by trial and error. Pharmacogenetic studies may contribute to predict individual responses to drugs and may render therapy more rational.
Research question: Does the degree of broncholytic reaction to salbutamol depend on the genotype of the β2-adrenergic receptor in general practice patients with asthma or COPD ?
Methods: Electronic records from patients with asthma and COPD were extracted from 40 general practices in Germany. After general practitioners verified diagnoses and checked for exclusion criteria, patients were invited to participate. 328 patients from 39 practices were included and examined by a study nurse. 127 of them had current airway obstruction [FEV1 (forced expiratory volume in one second) < 80 %]. PEF (peak expiratory flow) and FEV1 values were measured before and after inhalation of salbutamol. Genetic polymorphisms of the β2-adrenergic receptor (Arg-16, Gly-16, Gln-27,Glu-27) were determined in a blood sample. Association between genotype and individual response to salbutamol (difference in pre- and post inhalation PEF and FEV1) was examined using a nonparametric ANOVA.
Results: For both polymorphisms, the observed distribution of homozygotes and heterozygotes confirmed to expectations based on Hardy-Weinberg analysis.
Homozygous carriers of the Arg-16 polymorphism did not react to salbutamol inhalation with regards to PEF values. Carriers of Gly-16/Arg-16 showed a PEF change of 12,1 % versus 13,6 % within the Gly-16/Gly-16 group. Heterozygous carriers of the polymorphism Gln-27/Glu-27 presented a PEF change of 17,0 % versus 7,9 % and 7,6 % of homozygous carriers of Gln-27 and Glu-27 respectively. The described differences were statistically significant. The FEV1 change values showed a similar pattern but the differences were not significant.
Conclusions: We showed a statistically significant association between presence of β2-adrenergic receptor polymorphisms and the reaction to inhaled salbutamol in patients with asthma and COPD. Our results may produce the necessary database for planning individual therapies based on genetic tests in general practice.

Points for discussion at EGPRN:
1. the relevance of pharmacogenetic studies in general practice.
2. why changes of PEF values were statistically significant, but not changes in FEV1 values.

Presentation 9 – Freestanding paper (6th MAY 2005)

Comparative longitudinal case study of living with diabetes: a feasibility study.

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Background: General practitioners gather physical, psychological and social information about patients and review their response to interventions. The focus of their observation is a particular patient or case.
General practice research methods include case studies. These generate a wealth of data about a case and case comparison may indicate important influences on outcome. Until recently the number of cases that could be systematically compared has been limited, as case comparison uses far more computer power than analysis of population variables.
Evidence for general practice currently uses studies of populations/groups. This evidence creates a dilemma for clinicians: how does it apply to a particular patient? Case based research could provide evidence more relevant for the individual patient. This study is the first of a series aiming to develop such research.
Research questions:
1. How should data be collected over time?
2. What data, from what sources should be included?
3. What qualitative analysis generates credible categorical data for comparative case analysis?

Methods: Six volunteers living with diabetes (cases), were interviewed (plus family member), kept diaries and were followed up over 3 months in UK. Similar data collection is commencing in Belgium for comparison between health systems. Ongoing qualitative analysis is identifying the characteristics of the cases and what happens to them, that makes a difference to their diabetes. We will systematically compare cases using innovative computer software (TOSMANA).
Results: Follow up interviews are important for clarifying issues. Family member interviews sometimes provide new data. Characteristics e.g. 'health literacy', 'locus of control', and influences e.g. healthcare provision, peer-support are important. Interaction between these characteristics and influences results in the uniqueness of each case. Categorical data can be generated using NVivo for export into TOSMANA.
Conclusion: The presentation will demonstrate the link between the qualitative and categorical data that makes the latter credible for use in comparative case analysis.

Points for discussion at EGPRN:
1. Would it be possible to use standardised instruments developed for survey research to generate categories that, in this feasibility study, relied on qualitative data?
2. How important is it to include qualitative methods of data collection for capturing the uniqueness of each case?

Presentation 10 – Freestanding paper (6th MAY 2005)

Thoughts of patients and family members about chronic disease.

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Background: As a result of past success in prevention and treatment, the primary care doctor is left with the symptomatic care and counselling of the patients suffering from chronic illnesses. On the other hand patients' and the "closest" family members' decisions have a tremendous impact on their health, because they direct the patients in the way of a "healthier" colleague. It works when the patient is active, and informed participation is reached.
Research question: Our research question was "what are the perceptions about chronic disease, duties of a care giver, expectations of them from the health professionals and assessment of self performances?" answers to these questions may help to implement a better understanding of patient education.
Method: A qualitative study including 6 semi-structured focus groups were undertaken. Participants of the focus groups were 18 patients with chronic diseases and 16 family members who were informed and accepted to be recorded. The same facilitator and 2 different observers attended all the meetings which lasted 40-60 minutes, all video recorded. Two other researchers coded all the transcripts. Emerging themes and categories were identified independently and an agreement was reached by discussion.
Results: Main categories that were covered in patients' talks were about drug adherence, need assessments, worries about using drugs for life long, difficulties about life style changes and effects of chronic disease on self perception. But family members who care for the patients preferred to talk about their duties, perception of chronic disease, their needs and the disease burden.
Conclusions: Both patient and family members do not know about how to overcome their needs and they are lack of knowledge of opportunities.

Points for discussion at EGPRN:
1. Were the selection criteria of the participants who attended the focus group satisfactory? How could it be (the validity of a qualitative research) be improved?
2. Any other expert opinion about the emerging themes?
3. What can be done to improve moderating skills? How can a focus group be more "focused"?

Presentation 11 – Freestanding paper (6th MAY 2005)

To what extent is the therapy for hypertension rational?

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Background: It is known that only in 60/65% of cases the theraphy for hypertension complies with the International Guidelines (GLs), but little is known on the reasons of this low compliance.
Research questions: What are the causes of overtreatment or of the delay in starting the hypertension therapy?
Method: To test the therapeutical orientation of the GPs of our province (327), a questionnaire, based on 8 fake clinical cases, was sent them. Patients were divided in two different categories: compliant (C) and non-compliant (NC). GPs were asked to state for each clinical case (blood pressure values, pathological records, associated risk factors) their therapeutical choice. Treatment indications and percentages of non compliance with the GLs were analysed according to the two different categories of patients. Clusters' analysis was also used.
Results: The rate of answers was 35%. The GLs compliance with "intention to treatment" reached, on the whole, 51.2% (range 18.3-88). The greatest non-compliance concerned two cases : a diabetic woman with pressure values 140/90 (GLs compliance suggests immediate pharmacological treatment, 18.3%, if the patient is considered C; 25% if NC) and an elderly woman with pressure values 170/100 without associated risk factors (GLs compliance 41.7% with a C patient and 18.3% with a NC patient)
Conclusions: This research was carried out in 2001, a period in which the 1999 WHO GLs were not yet well known, and the indication to value the "whole risk" of a patient affected by hypertension was not yet fully accepted. The GP's attention seems to be mostly concentrated on the pressure values and not much on the association with diabetes and cardiovascular pathologies. The doctor's opinion on the compliance of patients, highly influences his/her therapeutical approach: the patient who is considered NC generally receives, less information on the advisable life styles and, rightly or wrongly, more drugs (moreover, are we sure patients will take these drugs regularly?).

Presentation 12 – Freestanding paper (6th MAY 2005)

Auditimpact study. Will the improvement in quality of care in family practice result in an improvement on the status of our type II diabetic patients? The first step results: Which is the current quality level?

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Background: French national health agencies gave recommendations dealing with the follow-up quality of type II diabetic patients. Several French studies showed a lack of quality concerning the follow-up management of these patients in primary care.
Objectives: To appraise the efficiency of a quality of care improvement program. We will asses the change in GPs habits, and if these hoped improvements will be reflected in an decrease of HBA1c and others patients risk-factors. But first, we checked the baseline quality of care in management of diabetic patients.
Method: Sixty GPs were randomized into two groups. A student reviewed fifteen next successive charts of diabetic patients, for each GPs. The assessed the medical status of the patients and compared the follow-up with the recommendations. In the intervention group, the GPs received a personalised electronic or paper "reminder" implemented in each patient file and a feedback about his performance. In the control group, the GPs didn't receive any information after the first audit. One year later, an second audit will be held.
Results: 622 patients were included. History and risk factors were completely filled out in only 30% of the patient charts. Per year, feet examination was done for 13% of the patients, ophthalmologic examination for 27%, electrocardiogram for 46%, urine albumin for 50%, lipoproteines were measured for 62% and HBA1c was measured in the 4 later months for 59% of the patients. Among the available data, the medical objectives were not reached by 66 % of the population for HBA1c, 44% for blood pressure, 52% for LDL, 12 % for tobacco and 83% for BMI. For each patient, there was an average of 3 objectives to reach. There was no significant difference between the both groups.
Conclusion: However these results are better than those founded in former studies, "Auditimpact" exposes a lack of quality for all items, especially for filling out the medical charts, feet and ophthalmologic examinations.

Relevance to EGPRN: Does it really matter if a study dealing about quality of care is doctor randomized while the main outcome depends on the patient ? Would it possible to do otherwise ?

Presentation 13 – Poster (6th MAY 2005)

A study of reversible chronic renal failure in elderly patients without renal history in general practice.

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Background: The primary investigation of a uremic patient in general practice should establish the diagnosis and determine whether the kidney damage is reversible. Potentially reversible causes leading to CRF in elderly are: analgesic nephropathy, heavy metals and chemicals intoxication, hypercalcaemia, hyperuricaemia, hyponatraemia, infections, lower kidney perfusion, nephrotoxic drugs, urinary obstruction. But even treated hypertensive and diabetic elderly patients have also higher risk for developing CRF.
Research question: can the adequate and rational therapy be an improving factor for reversible CRF in elderly patients without renal history in general practice?
Methods: Analysis of the data of 564 patients, 65 years and older without previous renal diseases from 27 general practices of Varna region in North-Eastern Bulgaria in a 2 years study. In 78% they were hypertensive, in 63,12% diabetics type 2 and in 4,96% with chronic heart failure.
Results: The factors for deterioration of renal function and for reversible CRF in our patients were: infection of the urinary tract in diabetics (14,04%); late or inappropriate antibiotic treatment (aminoglycosides or drug resistance) for other infections in hypertonics (4,77%). In 7 pts with chronic heart failure the inadequate diuretic abuse and long-term sodium free regimens caused hyponatriaemia and hypokalaemia and later reversible CRF.
Conclusions: We found that all above mentioned reasons for deterioration of renal function are due to inadequate therapy. We recommend general practitioners to prescribe carefully therapy in elderly diabetics and hypertonics even without renal history; not to use any potentially nephrotoxic drugs and to precise the diuretic regimens in patients with chronic heart failure.

Points for discussion at EGPRN:
1. What are the main causes for reversible CRF in other European countries?
2. Can we make a difference between the main reasons for reversible CRF in the European countries?
3. We invite the EGPRN participants to share their experience with studies about inadequate prescribed therapy in general practice?

Presentation 14 – Theme paper (6th MAY 2005)

Health problems of people with intellectual disabilities (ID): more work for GPs?

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Background: People with intellectual disabilities (ID) have more health problems and consult their general practitioner (GP) more often. Their health problems remain frequently undetected. Now that institutions are closing down and people with ID are registered within general practices, data about consultation rates, nature of health problems and prescriptions by GPs in contacts with people with ID become relevant. However, exact figures are rare.
Research question: This present study highlights the consultation rate, the nature of health problems, and prescriptions given to people with ID in general practices.
Methods: This cohort study with control group is based on data from the Second Dutch National Survey of General Practice. GPs were asked to select their patients with ID. Every individual with ID was matched with five control persons without ID, equal for gender and age, and listed in the same general practice. Consultation rate, the nature of health problems and prescriptions given to people with ID were analysed.
Results and conclusion: People with ID paid 70% more visits to their GP. The profile of morbidity differs substantially from people without ID. They present a wide variety of health problems to the GP in particular for epilepsy and dermatological conditions. Because they consult GPs more often, they receive subsequently more prescriptions. Per consultation they do not receive more prescriptions. Outside contacts with GPs, however, almost four times as many prescriptions were given. People with ID in the general practice ask for more time of the GP. Even outside contacts GPs remain more busy with people with ID. People with ID do thus increase the workload of the GP.

Keywords: mental retardation, family practice, international classification of diseases, pharmacotherapy.

Points for discussion at EGPRN:
1. Discussion about practices loss-to-follow-up
2. Selection of patients included (Three not-standardised manners)
3. Translation of results to education for GP's and students

Presentation 15 – Freestanding paper (6th MAY 2005)

Effect of the german GP college's guideline "care for caregivers" on the work of general practitioners

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Background: Nearly half of the people who care for sick or invalid family members contact general practitioners (GPs) regularly due to own complaints. It is an important task for GPs to provide support for these caregivers.
Research questions: How do GPs perceive the influence of a guideline on their care for caregivers? How do they rate their own performance?
Methods: Family doctors have tested the german GP college's guideline "care for caregivers" in their office on a voluntary basis. They were asked about their specific experiences before the start of the test and 6 weeks as well as 6 months later. A standardized questionnaire was developed, which recorded the psychological, physical and social support offered to the family members by general practitioners. In addition the self-perceived competence of the GPs was measured by using a visual analogue scale.
Results: Twelve of the originally participating 24 GPs gave complete information. 92% of them declared an improvement in the psychological treatment of the care givers. In particular care givers were stabilized by meassures to reduce stress throughout the care process. Fewer improvements were achieved in optimizing caregivers physical capacities (50%). Through the use of the guidelines, self-perceived competence of the GPs increased from 5.9 to 8.0 on the visual analogue scale. After 6 months only 25% of the GPs still used the short version of the Guideline occasionally. Nevertheless the self-perceived competence of the GPs remained high.

Conclusions: The guideline was perceived as helpful by GPs in particular for the psychological treatment of family care givers. The self-perceived competence of GPs improved by using the guideline, however, only few GPs consulted the guideline "occasionally" six month later.

Points for dicussion:
- How can the efficacy of a complex guideline be evaluated?

Presentation 16 – Freestanding paper (6th MAY 2005)

Predictors for prescriptions of physiotherapy for low back pain (LBP) patients in general practice.

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Background: According to most evidence-based guidelines on LBP physiotherapy for affected general practice patients is appropriate after 4-6 weeks of pain. However physiotherapy is popular among patients and prescriptions of physiotherapy are increasing annually. In response to this development physiotherapy prescribing has recently been tightly regulated in Germany.
Research question: Determining factors and appropriateness of prescription of physiotherapy for LBP patients.
Methods: Data from 1378 patients presenting with LBP in general practice (GP) was collected. 117 practices recruited on average 11,8 (SD ±5,8) patients. Patients filled standardized questionnaires before and after consultation and were contacted by phone 4 weeks later for standardized interviews by study nurses. For statistical analysis Chi2-tests, T-tests and logistic regression models with control for interaction were performed.
Results: 448 Patients (32,5 %) received a prescription for physiotherapy; 60 % of those were seen by a GP and a specialist alike (mostly orthopaedic surgeons). Demographic data like gender, age, nationality, income, educational level, occupational status as well as disease related data such as pain intensity, radicular back pain or impairment had no influence on prescription for physiotherapy. The strongest predictors were duration of pain (OR 1,8)) and consultation of a specialist (OR 3,7) ($p < 0,05$). 170 (38 %) patients who received physiotherapy with less than 4 weeks of pain where 3 times more likely having consulted a specialist.
Conclusion: About one third of prescriptions for physiotherapy were probably inappropriate according to guidelines Patients with higher educational level or income were not advantaged. Receiving a prescription for physiotherapy with less than 4 weeks of pain or for first onset of low back pain was significantly associated with specialist consultation.

Points for discussion:
Indicators of appropriate prescribing of physiotherapy for low back pain beyond the time frame stipulated by guidelines.

Presentation 17 – Theme paper (6th MAY 2005)

Do we practice what we preach? Does antihypertensive drug treatment for the elderly in primary care comply with evidence based therapy guidelines?

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Background: In January 2002, the Turkish Ministry of Health issued evidence based guidelines for diagnosis and treatment of conditions/ diseases frequently encountered in primary care, including hypertension. The guidelines were accessible online and distributed in print to all primary health care institutions allied to the Ministry of Health.
Research question: What is the frequency of antihypertensive (AHT) drug prescribing for the elderly (≥65 years) according to drug classes during one month in PHC? Do prescribing habits for AHT medication in the studied setting comply with evidence based guideline recommendations for primary health care?
Materials and Methods: For this descriptive, cross-sectional evaluation, records of two primary health care centres (PHC) were screened during January 2003. Geriatric patient encounters of individuals with established diagnosis of hypertension were evaluated for AHT medications. The costs per antihypertensive prescription was calculated according to current price lists in YTL and converted to . Results are given as mean ± SD or median (range).
Results: Among a total of 1977 patient encounters during one month, 440 were induced by individuals in the geriatric age range. One hundred and forty seven (33.4%) of these records contained an established diagnosis of hypertension. The rate of antihypertensive drug prescriptions was 90% (n=132) with an average number of 1.3±0.5 AHT drugs per prescription and a median cost of 10.1 (range 1.7- 43.7) .More than half (n=81, 61,4%) of the AHT prescriptions contained one generic AHT drug class. The drugs of choice for AHT monotherapy were ACE-inhibitors (n=27 prescriptions, 33.3%) followed by Ca-channel blockers (n=24, 29.6%) and diuretics (n=12, 14.8%). The remaining 38.6% (n=51) of AHT prescriptions favoured the polypharmaceutic approach, where combined preparations (n= 24, 47.1%) of diuretics and AHT drugs were preferred. The favoured combined preparation was hydrochlorot hiazide+angiotensin receptor blockers (n=16, 66.7%).
Conclusion: The results of this study suggest a lack of implementation of evidence based guideline recommendations for antihypertensive pharmacotherapy in primary health care.

Point for discussion at EGPRN:
How to promote translation of "best research evidence", as included in evidence based primary health care guidelines, into "daily clinical practice" in primary care?

Presentation 18 – Freestanding paper (6th May 2005)

The impact of comorbidities on drug prescribing and hypertension control.

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Background: We do not know the impact of comorbidities on drug prescribing and hypertension control. We also do not know which group of factors has the largest impact on blood pressure control: patients', physicians' or organizational characteristics.

Research question(s): What is the impact of comorbidities on drug prescribing and blood pressure control in hypertensive patients and what is the impact of patients', physicians' and organizational characteristics on blood pressure control.
Methods: 42 family physicians registered all patients with the diagnosis of arterial hypertension among 300 consecutive regular office visits. We used questionnaire containing retrospective data about blood pressure values, therapeutic procedures in hypertension and comorbidities. Characteristics of physicians, patients and organization of the work were also collected.
Results: Data from 12596 patients were collected; 2752 (21.9 %) of them were assigned the diagnosis of arterial hypertension. Hypertensive patients were 21 to 97 years old (mean 64.1 years). 1467 (53.3 %) patients had at least one cardiovascular comorbidity (cardiovascular disease, diabetes, target organ damage in hypertension), while 2424 (88.1 %) of the study population had at least one chronic illness besides hypertension. Patients with cardiovascular comorbidities took more types of antihypertensive drugs (2.23 vs. 1.75, p<0.001), they rarely took antihypertensive drugs in monotherapy (28.7 % vs. 47.1 %, p <0.001), and they more frequently took renin-angiotensin blockers (84.2 % vs. 76.9 %, p<0.001). Systolic blood pressure control was poor in both groups (146.4 vs. 146.5 mm Hg, p=0.871), while diastolic blood pressure control was better (85.0 vs. 87.4 mm Hg, p<0.001). The patients' characteristics (higher age, higher body mass index, diabetes, hyperlipidemia) are the most important predictors of poor blood pressure control.
Conclusions: Comorbidities were common in hypertensive patients; older age is the most important risk factor. Patients' characteristics seem to be the most important predictor of poor blood pressure control.
Relevance to EGPRN: There are very few studies about the impact of comorbidities on drug prescribing and blood pressure control in hypertension, and also few studies that aim to recognize the factors, stemming from physicians, patients and organization of the work, that have impact on inadequate blood pressure control.

Points for discussion at EGPRN:
How to continue with data analysis?

Presentation 19 – Theme paper (6th MAY 2005)

A multidimensional classification system for medication errors in general practice.

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Background: Medication errors are one of the most common errors in general practice and have the potential to cause major harm. Currently several medical error reporting systems are emerging internationally (NRLS, National Reporting and Learning System, UK; CIRS, Critical Incident Reporting System, Switzerland; www.jeder-fehler-zaehlt.de, Germany) and a substantial number of reports about medication errors are to be expected. To analyse and compare these error reports an international, multidimensional classification method for medication errors is needed that satisfies the requirements in general practice.
Research questions: Which dimensions and details should a classification system for medication errors in general practice incorporate?
Methods: Current classification methods for errors in medicine are analysed, useful dimensions are chosen and adapted to the specific situation of medication errors in primary care. The classification system was tested with 204 medication errors that were reported by 99 primary care physicians in 7 countries during the PCISME (Primary Care International Study of Medical Errors).
Results: A classification system with following dimensions was developed:
1. ATC (anatomic-therapeutic-chemical classification) of drugs involved
2. Error / violation type (following the model of J. Reason)
3. Classification of stage within the process of prescription
4. Patient outcome / severity (adapted from NCC MERP)
5. Potential outcome (if no harm occurred)
6. Type of mistake in drug use (Hepler / Strand)

Medication errors form the PCISME were classified according to the developed system and consensus was reached between the primary researchers. Most frequently involved drug classes were: Antibiotics 14%, anticoagulants 8% and NSAR 6%. Severity scores showed that 30% of errors caused harm and 3% caused permanent or serious harm. The classification system is now ready for further testing of reliability.
Conclusion(s): A multidimensional classification system for medication errors in primary care was developed and tested. It will enable the comparison of international medication errors.

Presentation 20 – Freestanding paper (6th MAY 2005)

Co-existing psycho-social problems influence the prescription of psychotropic medication in affective disorders.

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Objective: To study the influence of co-existing psychosocial problems on the prescription of antidepressants and benzodiazepines.
Methods: A case control study in 124 patients with mood and anxiety disorders with and without co-existing psychosocial problems in 32 general practices in the Netherlands. Using the data of the electronic medical records the odd ratios for prescribing an antidepressant and/or a benzodiazepine were calculated.
Results: Patients with a mood disorder and psychosocial problems received more likely prescriptions for benzodiazepines and less for antidepressants compared to patients with a mood- or anxiety disorder alone. In the patients with anxiety disorders or a mixed mood-anxiety disorder, no association was found between the prescription of psychotropics and co-existing psychosocial problems
Conclusions: This is the first study which presents empirical data on the association between psychosocial problems and the prescription of psychotropic drugs. It shows that the presence of co-existing psychosocial problems turned out to be associated with the prescription of psychotropics by GPs. Poorer treatment outcomes in depressive patients with psychosocial problems are reported by others. It is not established whether single antidepressant drug treatment is beneficial in depressive patients with psychosocial problems. These findings combined with the results of our study indicates a need to study the clinical effectiveness of psychotropic drugs in general practice taking modifying effects of psychosocial problems in to account because.

Points for discussion at EGPRN:
1. From a general practice perspective it is rational to take patient context factors into account when deciding about prescribing psychotropic drugs in patients with depressive disorders
2 From a general practice perspective it is rational to take patient context factors into account when deciding about prescribing psychotropic drugs in patients with anxiety disorders.

Presentation 21 – Theme Paper (7th MAY 2005)

Outpatient antibiotic use in 2003 in Europe and S pneumoniae resistance.

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Background: In the context of antimicrobial resistance and inappropriate antibiotic use in humans, ESAC, European Surveillance of Antimicrobial Consumption, granted by DG/SANCO of the European Commission, is an international network of surveillance systems, aiming to collect comparable and reliable data on antibiotic consumption in 34 European countries, including all 25 EU countries and 4 current applicant countries.
Research questions: Does the total use and/or the use of different classes of antibiotics differ between European countries, and is antibiotic use correlated with resistance rates of *Streptococcus pneumoniae*?
Methods: In this cross-national database study outpatient antibiotic use for 2003 was collected, using the ATC/DDD methodology, version 2004. Results were expressed as DDD per 1000 inhabitants per day (DID). Detailed information on the sources of antibiotic use data can be found at www.ua.ac.be/ESAC. Resistance data for S pneumoniae were obtained from EARSS, European Antimicrobial Resistance Surveillance System. We expressed correlations with Spearman's coefficient (95% CI).
Results: Of the 34 participating countries 21 were able to deliver outpatient data. Outpatient antibiotic use varied with a factor of 3.2 between the countries with the lowest and highest consumption, e.q. the Netherlands (9.8 DID) and Greece (31.4 DID). Erythromycine and penicillin resistance in *S pneumoniae* is significantly correlated with macrolide (.59 (95%CI: .06- .86)) and penicillin (.71 (95%CI: .27 - .91)) use respectively (n=13).
Conclusions: There is a striking variation in total outpatient antibiotic use in Europe and in the use of different classes of antibiotics. This is partly due to inappropriate use of antibiotics.
These findings together with the significant correlation between antibiotic use and *S pneumoniae* resistance call for further study to deepen the knowledge of antibiotic consumption and for strategies to optimise antibiotic prescribing, taking into account possibly negative effects of change.

Points for discussion at EGPRN:
1. Can the success of national campaigns on antibiotic prescribing, e.g. in Belgium and France, be evaluated based on ESAC data?
2. Can ESAC data be used as antibiotic prescribing quality indicators, e.g. the proportional use of certain (classes of) antibiotics?
3. Can outpatient antibiotic use data be linked to patients' age and gender, the prescriber, the indication or to complication rates for your country?

Presentation 22 – Theme Paper (7th MAY 2005)

Converting habits of antibiotic prescribing in general practice: CHANGE cluster randomised intervention study.

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Background: About half of all patients with acute cough are treated with antibiotics, although the available evidence shows at best a marginal benefit.
We found in prior studies that a considerable part of these antibiotic prescriptions are likely to be caused by a misunderstanding: Patients' complaints are often misinterpreted as a demand for antibiotics whereas patients only try to express their fear about the course of their illness.
Research question: Can an intervention encouraging doctors and patients to discuss the topic of antibiotics open-minded on the background of the available evidence reduce unnecessary antibiotic prescriptions for acute cough?
Methods: 104 GPs documented all their patients with acute cough (pre-test) in a 6 week period and were then randomised in a control- and an intervention-group. After pre-test documentation the GPs in the intervention-group received an educational peer outreach visit plus written information material and a poster addressing patients. 5 Peers (all experienced GPs) were trained in three sessions for their outreach visits. They were prepared to use specific techniques in addressing GPs in accordance to the elaboration-likelihood-model. The control-group received no intervention. After the intervention GPs again documented patients with acute cough (post-test) in a 6 week period.
Results: 18 GPs did not complete the post-test documentation. 42 GPs in the control-group (1069 patients) and 44 GPs in the intervention-group (1230 patients) completed the post-test documentation. Adjusted pre-test antibiotic prescription rate was 45.9%. Post-test antibiotic prescriptions decreased in the intervention group by 8.9% (p<0.002, 95%CI-3.7-14.1) and increased by 3.3% (p<0.002, 95%CI -1.8- 8.3) in the control group.
Conclusions: A multifaceted intervention focusing on patient-doctor communication can reduce antibiotic prescriptions for acute cough significantly. Its sustainability has yet to be proven.

Points for discussion at EGPRN):
1. Methodology
2. Generalization
3. Continuation

Presentation 23 – Theme Paper (7th MAY 2005)

How participation in a drug company-managed clinical trial influenced GPs' guideline adherence and drug preference: a register-based study.

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Background: Drug companies are frequently involved in clinical trials in general practice. To our knowledge, however, the effects on prescribing patterns of GPs' participation in drug company managed studies have not been evaluated.
Research question: Does participation in a company-managed clinical trial influence GPs' adherence to treatment recommendations and their use of the company's drugs?
Method: Observational cohort study evaluating GPs' drug treatment by means of a prescription database in the County of Funen, Denmark. Practices participating in a drug company-managed clinical trial on asthma medicine were compared with non-participating practices. The main outcomes were adherence to asthma guidelines estimated by the percentage of patients using inhaled corticosteroids among users of inhaled beta-2 agonists. Company preferences were measured as 1) preference for the trial drug among those prescribed a fixed combination of inhaled corticosteroid and long-acting beta-2 agonist, 2) preference for the company's inhaled corticosteroids, 3) preference for the company's inhaled beta-2 agonists, and 4) the company's share of the total volume of prescribed asthma drugs.
Results: Participation did not change the percentage of asthma patients using inhaled corticosteroids. After one year, preference for the trial drug had increased significantly more in trial than in control practices (18 percentage points, 95% confidence interval 1 to 34). After two years,

participating practices showed a larger increase than controls in preference for the company's inhaled corticosteroids (4, 1 to 9), inhaled beta-2 agonists (5, 2 to 7), and asthma drugs in general, measured as the share of the total prescribed volume (6, 2 to 11).
Conclusion: Participation in drug company-managed trials seems to have little impact on GPs' adherence to treatment recommendations, but significantly increases their preference for the managing company's drugs.

Points for discussion at EGPRN:
1. What is the mechanism behind these observations?
2. Are prescription registers suitable for measuring the quality of prescribing?
3. How can the drug industry's influence be counteracted?

Presentation 24 – Theme Paper (7th MAY 2005)

Are patients taking lipid-lowering drugs achieving guidelines targets? The SPOT Study.

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Background: Clinical guidelines on the management of hyperlipidaemic patients are based on large randomised trials which have demonstrated the efficacy of statins on cardiovascular morbidity and mortality, in both primary and secondary prevention. When guidelines are released they should be followed by an evaluation of practices. In our country, there have been few studies to evaluate the results of lipid-lowering treatment and no quantitative studies have evaluated the efficacy of lipid-lowering treatments on blood parameters.
Research question: Are patients taking cholesterol-lowering drugs achieving guidelines targets?
Method: Prospective epidemiological outpatient study on patients taking lipid-lowering treatment for at least 6 months. A blood sample was taken from each patient, and a sample of these was submitted for central analysis. Cardiovascular risk factors were determined in order to classify the patients into four categories, according to national guidelines. The main outcome measure was the number of patients achieving the guidelines targets, depending on their risk category. The secondary outcome measure was the correlation between the risk factors and the levels of LDL cholesterol recommended in the guidelines, by multivariate analysis using logistic regression.
Results: 641 physicians included 2 479 consecutive patients fulfilling the inclusion criteria. Patients were aged between 63 ± 11 years and had been taking lipid-lowering treatment for an average of 7.1 years. 95% of patients with 0 or 1 risk factor and 82.6% of patients with 2 risk factors (low to moderate risk) achieved the guidelines targets. 56.3% of patients with 3 risk factors and 72.3% of patients in secondary prevention (high or very high risk) were at goal.
Conclusion: Patients with low or moderate risk achieved the guidelines targets more often than high risk or very high risk patients, whereas it is the later groups that benefit much more from this treatment.

Point for discussion at EGPRN:
1. Do you know about such studies in your country?
2. Do all patients with low or moderate risk really need cholesterol-lowering drugs?
3. How to achieve the guidelines targets better in patients with high or very high risk in primary prevention?

Presentation 25 – Poster (7th MAY 2005)

Association between sedentary lifestyle, anthropometrical data and physical fitness in elementary school children.

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Background: Sedentary lifestyle causes obesity and cardiovascular risk. Many obese subjects can already be identified among children. Little is known about the extent of sedentary lifestyle and its association with anthropometrical data and fitness in schoolchildren.
Research question: How many h/day do first graders spend in sedentarily? Is there an association between sedentary lifestyle, anthropometrical data and fitness?
Methods: The study was offered to 1041 first graders in 16 schools of Erlangen. Complete data were obtained of 124 boys and 162 girls (27,5 %). We evaluated sedentary lifestyle by interview. Fitness was estimated by the Harvard Step Test. Anthropometrical data included weight, bio-impedance and blood pressure.
Results: Aside of sitting in school first graders spend 3,0 h/day sedentarily. They are watching television a mean 1,5 h/day. Sitting > 3 h/day was associated with higher weight (26.1 vs. 24.4 kg, $p<0.05$), increased body fat (15.5 vs. 12.7 %, $p<0,05$), and higher diastolic blood pressure (69 vs. 63 mmHg, $p<0.05$) in boys. Watching television > 1.5 h/day went along with higher mean heart rates in the Harvard Step Test (117 vs. 110/min, $p<0.05$). In girls, sitting > 3 h/day was similarly related to anthropometrical data (weight 25.0 vs. 23.7 kg, body fat 21.8 vs. 20.7 %) but only diastolic blood pressure differed significantly (65 vs. 61 mmHg, $p<0.05$). Watching television > 1.5 h/day led to higher heart rates (117 vs. 115/min) with only the 3 min rate being significantly different (178 vs. 170/min, $p<0.05$).
Conclusions: Obesity and cardiovascular risk are of increasing concern in children. Our results show that sedentary lifestyle may play a causal role and demonstrate the need for prevention in young age. It is one of the important tasks of family physicians to instruct parents to increase the physical activity of their children.

Presentation 26: - Poster (7th MAY 2005)

Quinapril-hydrochlorotyazide versus quinapril alone as first line treatment for severe essential hypertension.

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Background: Lowering blood pressure reduces risk for cardiovascular target organ damage.
Research question: To explore antihypertensive effect of quinapril as monotherapy versus combined therapy quinapril-hydrochlorotyazide for new revealed severe essential hypertension without target organ damage in outpatient settings.
Method: Study is statistical sub-analysis of prospective, observational, open label, multicentre study in 11 primary health care centres. Follow-up lasted 12 weeks. Main outcome was defined as achieved target blood pressure ≤140 for systolic blood pressure (SBP) and ≤90 for diastolic

blood pressure (DBP). Data selection criteria were severe hypertension (SBP ≥ 180 mmHg and DBP ≥ 110 mmHg), age over 40 years and no target organ damage. Out of 1146 patients included in original study the subset include 236 patients (Quinapril monotherapy group 130 and combined quinapril-hydrochlorotyazide 106 patients).
Results: Blood pressure was reduced by both treatments but the effects of combined quinapril-hydrochlorotyazide were more intensive than quinapril alone treatment . Primary main outcome achieved 60,50% in combined quinapril-hydrochlorothyazide and 39,50% in quinapril alone treatment. Baseline mean SBP of 198,25±13,96 and 114,56±6,75 for DBP was in quinapril monotherapy group. In combined quinapril-hydrochlorothyazide group baseline mean SBP was 202,45±21,24 and DBP 116,60±8,50. At the end of study in quinapril monotherapy group mean SBP was 152,47±14,60 and mean DBP 88,40±7,41. In combined quinapril-hydrochlorotyiazide group mean SBP was 142,83±13,36 and DBP 87,45±7,01. Statistical analysis revealed significant lowering of average systolic blood pressure ($p<0.001$) in combined quinapril-hydrochlorotyazide group.
Conclusions: According to the antihypertensive guidelines worldwide there is no specific first line treatment for severe essential hypertension unless there is concomitant disease but many trials showed that lower blood pressure reduce risk for cardiovascular target organ damage. This study reveal that combination therapy as first line treatment closely gets to the blood pressure target values than monotherapy and thus lower the risk for cardiovascular disease.

Presentation 27 – Poster (7th MAY 2005)

Aca sarà affidata ad un esperto in materia.o studio ed il loro corretto inserimento verrà ovrastimare la popolazilperlipelHypercholesterolemia, cardiovascular risk and therapeutic targets: adhesion to NCEP III guidelines in primary care.

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Background: Current guidelines recommend the use of lipid lowering drugs in patients with high levels of cardiovascular risk.
Research question: In practice, how effective is lipid-lowering treatment in achieving the NCEP III (National Cholesterol Education Program) guideline target levels in Primary Care patients?
Materials and methods: A sample of 194 hypercholesterolemic patients was randomly selected from amongst a cohort of patients registered with 9 family doctors in the Province of Caserta, Southern Italy, who had agreed to participate in this research project (about 30 patients for each doctor). Data concerning cardiovascular risk factors were collected and analysed using Epi Info Statcalc.®.
Results: The 194 subjects had a mean age of 62.0 years (range 25-80 years), 55% were males, 30% were smokers (>10 cigarettes/day), 71.3% suffered from hypertension, 46.3% were diabetics, 39.9% obese (BMI ≥ 30 Kg/m2) and 31.9% had a family history of coronary disease. Subjects who met the target level in the I, II e III NCEP classes were 10.4%, 30.4% and 59.1% respectively, whilst these percentages after treatment were 24.6%, 44.7% and 30.7 % respectively. Statin treatment effectively met the target level in a significant number of cases when compared to other modalities of treatment (p-value= 0,02). In our study rosuvastatin (10 mg/day) exhibited a greater effectiveness in reducing LDL cholesterol level compared to other statins ($p< 0.0001$, Odds Ratio10.8, 95% C.I. 3.9-30.2). 53.3% of subjects examined with System Score (Systemic Coronary Risk Evaluation) showed levels of cardio vascular risk between 5% and 19 % (the percent probability of having a CHD event in 10 years) and were therefore not eligible for the free prescription of lipid lowering drugs in Italy. This notwithstanding that European Guidelines recommend pharmacological treatment.
Conclusions: These data suggest that family doctors in Italy are not always allowed to treat their patients with high cardiovascular risk effectively.

Points for discussion at EGPRN:
The role of gate keeper and the effectiveness of treatment in Primary Care.

Presentation 28 – Poster (7th MAY 2005)

Antihypertensive therapy in Lithuania.

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Backround: Hypertension is the most common chronic illness in the Lithuania and is responsible for more physician visits than any other disease. It is troubling that only one fifth of patients nationally use medication to control their hypertension.
Research question(s): To investigate the use of various antihypertensive drugs among patients with hypertension and among patients with hypertension and prior acute myocardial infarction (MI) or congestive heart failure (CHF); and the lowering of blood pressure to a level below 140/90 mm Hg with various types of therapy.
Methods: Retrospective medical chart analysis. All patients seen between 1 December 2003 and 31 April 2004 by their primary care physician at primary care outpatient practice.
Results: Of the 1450 persons with hypertension, more than half take two or three antihypertensive medications. 36 % patients were treated with diuretics, 37 % with β blockers, 70.8 % with ACE inhibitors, 31.3 % with calcium channel blockers, and 2.9 % with other antihypertensive drugs.
Conclusions: In the study time period, care for hypertensive patients was based on the use of diuretics, β blockers, and ACE inhibitors (in accordance with national and Europe recommendations).

Presentation 29 – Poster (7th MAY 2005)

Relation between compliance to therapy and symptom relief in functional dyspepsia.

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Background: Functional dyspepsia is an important health problem among working women in our geographical area. New "symptom based diagnostic criteria" (Roma II) consequently permitted a differentiated treatment of functional gastrointestinal disorders. However the compliance to this therapy is low and causes frustration for GP's caring for their patients.
Objective: To investigate the relationship between symptoms relief and compliance to therapy of working women in Romania using standardized treatment methods and to find factors that influence compliance.
Method: In a cohort study, data were collected among female employees of a garment factory in Cluj Napoca, Romania. Based on informed consent, 70 women presenting functional dyspepsia and being at work took part in the study. Data on actual health status, working and social conditions were collected during first meeting using a self-administered questionnaire. Patient files available in the GP's practice were checked for chronic conditions. Diagnosis was established using symptoms checklist and endoscopies, according to Roma II diagnostic criteria. The follow up was done in GP practice for 6-8 months (at least two meetings and monthly phone calls). The therapy consisted of counselling, dietary and pharmacological recommendations adapted to type of dyspepsia.

Data was processed using SPSS 9. Influencing factors derived from characteristics of studied population were analysed in terms of means, SD, frequencies. Compliance to therapy was compared with symptoms relief using bivariate and logistic regression analyses.
Results: In 70 working women with functional dyspepsia, the relation between compliance to therapy and symptoms relief was statistically significant ($p < 0.01$), (OR=3.9, CI 1.3-11.8). However, an important number of women not compliant to treatment reported no symptoms relive. We expect to find that local social condition and low professional satisfaction will influence compliance to treatment.
Conclusions: Despite a strong relationship between compliance to therapy and symptoms relief, there is a group of working women with a discrepancy between 'compliance' and 'symptoms relief'.

Points for discussion at EGPRN:
Patients suffering of functional dyspepsia with no symptom relief still are not compliant to treatment.
The research presented is developed from PhD research data. We are working on an article concerning this topic and would like to get feedback from EGPRN.

Presentation 30 – Poster (7th MAY 2005)

Comparative study of omeprazole and pantoprazole for the management of laryngopharyngeal reflux in adults.

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Introduction: Proton~ pump inhibitors (PPIs) constituted a bed rock in the treatment evolution of both gastro duodenal ulcer (GDU) and gastroesophageal reflux disease (GERD). PPIs are powerful antisecretory factors which inhibit the action of the enzyme H^+ K^+/ATPase, found on the membrane of stomach cells. Recent studies however also reveal an excellent therapeutic effect of PPIs on LPR in adults.
Purpose: Of the present perspective study was the evaluation of the therapeutic value of two different PPIs (omeprazole/pantoprazole) in treatment of LPR in adults.
Populations and Methods of study: The population under study consisted of random sample of 52 adult patients (P) who have been diagnosed with active LPR (according to Vitas Score and indirect laryngoscopy) and did not use any PPIs , H_2 ~blockers or gastrokinetic drugs. Then followed matching of these P in two groups, based on their personal characteristics (age, sex, body mass index ~BMI~, smoking, sedentary life (SL), diabetes mellitus (DM), previous history of GDU or GERD). Omeprazole 20 mg/24hrs and pantoprazole 20mg/24hrs for three consecutive months were administered in the 1st and 2nd group respectively, with both groups receiving similar dietary instructions and after Ps" attendance program within 30 and 90 days, the evaluation of those two therapeutic forms was performed. For the statistical analysis of the available facts SPSS, version 11, was used.
Results: 24 (46.1%) of the P were males of mean age (MA) 46.7%±15.97 years and the rest 28 (53.8%) were females of MA 47.1±15.81 years (p NS). The study results, in the way they have been formed after the P matching, are listed in the following table:

Teams	Men	Women	MV AGE	MV BMI	Smoking	SL	DM	History GDU GERD
Ist	13	15	46.5	27.6	17	18	5	6
IInd	11	13	47.3	30.7	16	19	4	4

The score values of P in both groups at the onset of the study (OS), but also in the way they have been formed during the follow up (30~90 days), are shown in the following table, together with the comparisons made:

Teams	Score OS	SCORE 30days	Score 90days
Ist(Omeprazole)	174.236	101.099	36.87
IInd(Pantoprazole)	176.229	94.245	18.52
P(probability)	NS	0.078	0.02

The decrease in the Score value (decrease of the clinical symptoms) in P of both groups is actually accompanied by analogous endoscopic findings.
Conclusions: The available facts are insinuating that the at once administration of Pantoprazole (20mg/24hrs) in adults with LPR under study is proven to be the most ideal therapeutic choice in comparison to the use of Omeprazole (20mg/24hrs).

Presentation 31 – Poster (7th MAY 2005)

Evaluation of Vitas' score in the diagnosis of laryngopharyngeal reflux in adults.

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Introduction: During spring of the year 2002 a group of Greek physicians of North Greece, formed a special scoring system concerning the detection of laryngopharyngeal reflux (LPR), in adult patients. The outline and running of this scoring system was based on the analysis of the clinical symptomatology, in the way it has been stated by the attending patients, were the citation of the clinical characteristics of the disease was expressed in numerical form. For three consecutive years, were isolated patients mentioning strictly one or more of the following symptoms: 1.troat clearing, 2.dysphagia, 3.hoarse voice, 4.globus pharynges, 5.functional dysphonia, 6.pharyngalgia, 7.dry cough. The next step was to grade the intensity, duration and frequency of each (of the prementioned) symptoms. The multiplication product of these three characteristics corresponded to the final value for every symptom, which could solely range between 0.00-120. The results of the three year study were extremely encouraging and it was agreed for the scoring system to be named after the author responsible for the prodromal study mentioned above.
Purpose: of the present perspective study was the evaluation of Vitas Score in the diagnostic approach of LPR in adults in the first-degree health care environment.
Population - Method of study: the population under study consisted of a random sample of 426 consecutive adult's patients (P). For each of these patients was performed recording of their personal history, clinical examination, imaging control, indirect larygoscopy (IL), ECG and application of Vitas Score. However not included in the study were patients whose part or whole of the prementioned symptomatology was due to acute or chronic diseases of paranasal sinuses, lower respiratory system (asthma, bronchitis, emphysema, etc), allergic conditions (co-existence of ophtalmic or/and nasal catarrh or sneezing), virals or common cold, severe injuries , focused dystonias (tics), valvulopathies, heart insufficiency (NYHA III-IV), rate heart atrium hypertrophy, prediagnosed malignancies and swallowing of foreign bodies. Also excluded were those mentioning in their persional history previous systematic use of phenyntoin, Ca-channel blockers, H2–antagonists, proton-pump inhibitors (PPIs) during the last trimester or hand an endoscopically substantioted active gastroesophageal reflex disease. Constant parameters were expressed as mean values (MV) with a

standard deviation (±SD). For the statistical analysis of the available facts, the statistical package for the social sciences software, version 11 was used.
Results: the diagnosis of LPR was set in 52 patients (12.2%), 24 (46.1%) being males and 28 (53.8%) females. Out of the seven symptoms used as criteria for the detection of the disease 3.25±0.6 were found on average in P with LPR, while 3.11±0.5 (p NS) in the rest. The most frequently referred symptoms among P with LPR were the following: 1.throat cleaning (46P-88.4%), 2.dry cough (39P-75%) and 3.globus pharyngeus (28P-53.8%). Within the rest of the P (n=374), 311(83.1%) mentioned pharyngalgia, 298 (79.6%) dysphagia and 202 (54%) dry cough. In P with LPR, the MV of the final score for those mentioning just one symptom was 84.80±21.02, for those with two symptoms 207.20±32.42 points. The corresponding MV of the final score for the rest of P were 29.23±11.52 (p<0.0001), 57.90±14.91 (p<0.00002) and 83.99±16.29 (p<0.00001) respectively. After the analysis of the available facts, came out that the finding of the final score ≥48 in one or more of the three "major" clinical symptoms of LPR (without knowing the outcome of IL), correlated with a positive diagnostic value equal to 92%. At the same time, the negative diagnostic value of the test, always regarding a score ≥48 as border for the existence of LPR, was 99%. The major episcopic findings of IL, being indicative of the disease, in P with LPR were: 1. pachynsis of vocal cords (49P-94.2%), 2. pachyderma (45P-86.53%) and 3. vigorous secretions in the laryngopharyngeal region (27P-51.9%).
Conclusions: no P with LPR was found without mentioning at least one of the three "major" clinical symptoms of the disease and without having a final score <48 points in each of these symptoms. Vitas Score turned out to be an important tool for the detection of LPR in adults. In spite the validity provided by the specific scoring system to its users, the performance of IL should in every case substantiate the diagnosis of LPR.

Presentation 32 – Poster (7th MAY 2005)

Electronic patient records in general practice and epidemiological research: the difference of thyroidal disease between rural area versus urban area inhabitants and its correlation with thyroid disruptors used in agriculture.

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Background: The analysis of GPs' database, in which both clinical and personal data of patients have been stored, linked with the knowledge of GPs/Family Medicine about socio-cultural habits of their patients, allows to verify a preliminary working hypothesis. Many studies in vitro or with animals proved the role of thyroid disruptors of pesticides, biocides used in agriculture. The possible differences in prevalence of thyroidal diseases between patients that live in rural versus urban areas may confirm this preliminary hypothesis.
Research question: Is the prevalence of thyroidal diseases different in inhabitants in urban area, rural area, and farmers is?
Methods: Clinical data of thyroidal diseases and personal data (rural or urban residence) of patients that live in Maddaloni a town of 32000 inhabitants were extracted by database of their GPs. A questionnaire was administered to farmers about pesticides used in agricultural activities, another questionnaire to GPs to investigate differences of iodine in diet of patients.
Results: In this population (12246 patients), 10686 (87.3%) were resident in urban area, 1562 (12.7%) in rural area, 389 (3.2%) were farmers. All the GPs denied any difference in iodine diet in urban versus rural patients. All farmers confirm to GPs the use of many pesticides. Thyroid diseases were 667 (5.4%), 533 in urban patients with prevalence of 5%, 134 in rural patients with prevalence of 8.6%, 73 in farmers with prevalence of 18.8%.
The differences in three groups were significant(p < 0.000000): relative risk was 1.72 (CL between 1.43 and 2.06) in rural versus urban patients; relative risk was 3.95 (CL between 3.16 and 4.94) in farmers vs urban and 2.19 (CL between 1.68 and 2.84) in farmers vs rural patients.
Conclusions: This study confirms the preliminary working hypothesis: a specific study that evaluates the professional chemical exposition and research thyroidal dysfunction can be performed.

Point for discussion at EGPRN:
Electronic patients records in general practice are an important tool to rapidly explore working hypothesis in epidemiological studies, especially if associated with GPs' knowledge of their patients.

Presentation 33 – Poster (7th MAY 2005)

Reducing antibiotics use in acute otitis media – a feasibility test of the German guideline 'earache' for general practice.

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Background: Antibiotics are widely overused in acute otitis media (AOM). Only a minority of patients benefits from antibiotics use in a limited way. Therefore, delayed prescription was recently recommended in primary care [Little 2001, 2002]. The newly developed German guideline for earache adopts this therapeutic strategy in a country with traditionally high reliance on antibiotic drugs.
Research question: Is the guideline approach a feasible way to reduce antibiotic consumption in acute otitis media in German general practices?
Methods: Feasibility testing is an obligatory part of guideline development by the German Society for General Practice and Family Medicine (DEGAM). We tested the draft guideline in 22 general practices with consecutive patients during one month. Main research question was whether a strategy of delayed prescription was acceptable to doctors and patients and could result in a reduction of antibiotic prescriptions. As we couldn't find reliable data about course and outcome (e.g. duration of temporary hearing loss) of AOM treatment in general practice, we added a follow-up with the study participants after one month.
Results: Data collection is performed during four weeks in the months of February/early March in 22 practices. The follow-up will be completed early in April. The patients (their parents) are asked to present the prescription not earlier than 48 h after consultation unless symptoms worsen. Following results from international studies we expect that more than 60% of the prescriptions will not be used, resulting in a distinct reduction of antibiotics use. The results of the follow-up will be presented to the workshop.
Conclusions: Even in countries with high prescription rates like Germany a strategy of delayed prescription is accepted and expected to reduce the use. The presentation gives place to a discussion of experiences from different countries about reducing antibiotics use in respiratory infects at the workshop.

Points for discussion at EGPRN:
What could oppose the guideline approach to reducing the use of antibiotics in AOM in Germany?

Presentation 34 – Poster (7th MAY 2005)

Urostim – a rational therapy for patients with chronic urinary tract infections in general practice.

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Background: The stimulators of the immune system are often used in the last years in the treatment of chronic bacterial and viral infections. Urostim is a Bulgarian medicine from this group and it's used in the medication of the urinary tract infections.
Research question: Can Urostim be the rational medicine in the treatment of chronic recurrent urinary tract infections as an alternative to antibiotics?
Methods: We collected data from 53 patients (26 women and 27 men, age range 13-64 years from 16 general practices), which have had more than 4 recurrent urinary tract infections in the last 2 years. The regimen was 1 tablet per day for 3 consecutive months. We analysed in one year research the following parameters: before treatment, after the 1-st, 2-nd, 3-rd, 6-th month and at the end of the study: 3 urine samples for routine and microbiological cultural methods, secretory Ig A and T-cell immunity.
Results: At the beginning the local immunity was reduced in all pts. During the first month they were treated with suitable antibiotics simultaneously. In all pts the microbiological cultures of urine were sterile and T-cell immunity was slightly increased after the 3-rd month. The secretory Ig A was doubled after the 3-rd month and it was at the basic level after the 6-th month. The positive immunostimulating effects of Urostim extended at least 0,5 an year.
Conclusions: As all our patients didn't have any recurrent infection during the one year research, we recommend Urostim as a rational therapy for patients with chronic urinary tract infections.

Points for discussion at EGPRN:
1. How often we prescribe even inappropriate antibiotics in recurrent urinary tract infections in general practice?
2. Can we offer more useful treatment to our patients, if we prescribe more often immunostimulators as an alternative or simultaneously with antibiotics?
3. Have the other EGPRN participants experience in the discussed problems and can they share it with us?

Presentation 35 – Poster (7th MAY 2005)

Depression: Prescribing and referring in general practice.

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Background: Depression is a common mental disorder. The majority of patients with depression are first seen and treated by their general practitioner (GP). Therefore accurate diagnosis and effective treatment are imperative.
Research questions: What initial drug and dose are GPs prescribing? Are patients referred before therapeutic efficacy can be assessed?
Methods: 50 consecutive referrals with an ICD code of depression from all General Practitioners in the relevant catchment area were analysed retrospectively. Factors identified were drug and dose initially prescribed by GP, date of referral and date of initial outpatient visit, age, sex and co morbidities. The interval between initial prescribing and referral, and change in dose or class of drug were also identified. As this was a simple observational study statistical analysis was not deemed necessary.
Main Outcome Measures:
- Anti depressants most commonly prescribed
- Time allowed for therapeutic efficacy before referral
- Concomitant prescribing of sedatives and hypnotics
- Duration between date of referral and date of first outpatient appointment
- Any change from initial drug choice by GP or dose change.

Results: Referral patterns from General Practitioners vary substantially. Often patients are referred before efficacy of initial treatment can be assessed. Other problems identified in this study include failure to achieve adequate dosage levels prior to referral and inappropriate initial drug class. However, early referral is often predominantly to access support services such as psychology and counselling not available in general practice.
Conclusions: A significant number of patients are referred before adequate response to initial treatment can be assessed. Referral should be reserved for suicidal or unresponsive patients or for accessing support services not available in the community.

Points for discussion at EGPRN:
1. What factors prompt GPs to refer before adequate therapeutic efficacy is assessed?
2. What influences initial drug choice?
3. Should support services such as psychology and counselling be added to the primary care team?

Presentation 36 – Poster (7th MAY 2005)

Facilitated self-help for the treatment of anxiety and depression in primary care- an exploratory study.

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Background: Approximately 20% of consultations in primary care are associated with mental health problems. Systematic reviews of self-help materials suggest these have therapeutic value, and there is emerging evidence for the effectiveness of CBT delivered by computer for anxiety and depression.
Aims of the study:
- To assess the feasibility of delivering 2 facilitated self-help packages (computerised CBT and self-help booklets) for anxiety and depression.
- To investigate a role for Primary Care Mental Health Workers (PCMHWs) in facilitating self-help interventions in primary care.
- To develop and test the design of an RCT of the acceptability and effectiveness of these interventions within primary care.

Methods: The self help packages were computerised CBT ('Beating the Blues') and self-help booklets. Both were facilitated by a PCMHW. Recruitment was from 2 'clusters' of practices (7 in total), by self-referral (response to leaflets) or via GPs. Screening was carried out by the PCMHW and consenting subjects were randomised to Beating the Blues, Self-help booklets or TAU.
Results: These will be presented in terms of:
- Uptake of services, eg patterns of referral and attrition rates
- Patient, primary care staff and PCMHW experience of the service (using qualitative and quantitative approaches)
- Clinical measures (CORE, BDI, BAI, WASA) at baseline and 12 wks (post treatment)
- Cost-related measures (including referrals to other services, staff time, medication)

Conclusions: The results suggest that it is feasible to implement facilitated self-help interventions in primary care and that this is a realistic role for a PCMHW. The service appeared acceptable to patients and primary care staff. Both interventions in this pilot study showed significant drop-out rates, however, and this needs further investigation.
Patients can be recruited into a randomised controlled trial and followed up, suggesting that it is feasible to carry out a larger scale trial in this area.

Points for discussion at EGPRN:
1. Feedback on the findings of the study prior to publication
2. Discussion of experience of use of self help materials for depression/anxiety in general practice

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Presentation 37 – Poster (7th MAY 2005)

General practice seen through the eyes of future general practitioners: a qualitative study of general practice trainees' views.

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Background: Evolution within health care systems and society have challenged general practice which is in the process of redefining itself.
Research questions: What are final-year general practice trainees' perceptions of their future career, of their chosen profession and of its future?
Methods: Five focus groups were conducted in Belgium and in France. Transcripts were independently analysed using the immersion-crystallisation method. Preliminary analyses were submitted to other researchers including a sociologist ad a social worker for triangulation.
Results: 25 final-year trainees, 1 second-year trainee and 3 recently qualified GPs took part (n= 28). Participants saw general practice as a clinical discipline of integration centred on the doctor-patient relationship. This relationship was seen as a source of both motivation and tensions. Although they considered themselves to be an undervalued asset to the health care system they were reluctant to act as gate-keepers or to manage the system, roles that could jeopardize their advocacy function. Training settings offer traditional models of practice that sometimes led trainees to feel estranged from a profession they felt needs to reorganize itself.
Discussion: Participants' descriptions generally coincided with official definitions of GPs' tasks except for management aspects (managing their practice and managing the healthcare system). They accepted the burden of general practice as long as responsibility could be shared in group practices and as long as their freedom to progress flexibly along a modern career track was guaranteed. The profession and its academics need to take into account the motivations and expectations of its "young" workforce when developing its vision of the future of general practice.
Conclusions: General practice is at a crossroads with a new generation unwilling to sacrifice personal fulfilment and hoping to change working arrangements. A generation gap may be developing between established practitioners (and therefore trainers) and the newly trained GPs.

Points for discussion at EGPRN (max. 3):
1. Relevance of findings to other European countries.
2. Impact of findings on training centres.
3. Impact of findings on new definitions of general practice.

Presentation 38 – Poster (7th MAY 2005)

Quality of care for patients with osteoporosis - what measures can be derived from electronic patient records in German general practice?

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Background: While the epidemiological and socio-medical relevance of osteoporosis is well understood, there is not much information available on patients at risk in the primary care setting. In lack of systematic data collection, knowledge on quality of care is scarce.
Research question: Are electronic patient record (EPR) data routinely collected in German general practices apt to provide valid prevalence estimates of osteoporosis and risk indicators, and to assess quality of care for patients at risk?
Methods: EPR from 109 general practices covering an 18-month consultation period (04/2001 to 09/2002) were pseudonymized and transferred to a relational database. Using patient characteristics (year of birth; sex), ICD-10 and ATC codes as well as free text searches, queries were computed to identify men and women 60 years and older with relevant diagnoses and/or prescription drugs. Within this data subset, the search was then extended to describe medical therapy, osteoporosis/fall-related risk indicators, comorbidity, and specific diagnostic procedures, such as osteodensitometry.
Results: N=62.894 patients 60 years and older (29.8% of all patients) saw a general practitioner in the period documented, n=7419 with osteoporosis. On the basis of these data we computed a prevalence of osteoporosis of 12% (women 17.5%, men 2.9%). Prevalence estimates linearly rose with age for patients 60-82 years. Most common long-term prescriptions were minerals and vitamin D with 86.5%, followed by hormone therapy or selective oestrogen receptor modulators among women (6.5%), bisphosphonates (5.9%) and calcitonin (1.1%). There is no documented systematic monitoring of risk indicators, diagnostic procedures and fragility fractures.
Conclusions: Based on current EPR keeping, general practice prevalence estimates for osteoporosis reflect known epidemiological data and confirm the magnitude of the health problem. Quality of care assessment is hampered by a lack of diagnostic coding (e.g. fragility fracture) and incomplete recording of relevant risk indicators, comorbidity, and diagnostic procedures.

Presentation 39 – Poster (7th MAY 2005)

Does the early adopter of all new drugs exist?

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Background: Increasing drug expenditures call for better understanding of the mechanisms involved in the adoption of new drugs.
Research question: To analyse associations between different indicators for adoption of new drugs, and to explore the theory that physicians' early adoption of new drugs is a personal trait independent of drug groups.
Method: In a population-based cohort study using register data we analysed the prescribing of new drugs by Danish general practitioners. As indicators of new drug uptake we used adoption time (time to first prescription), cumulative incidence, preference proportion, incidence rate, and prescription cost and volume. For each measure, we ranked the general practices. Ranks were pair-wise plotted and Pearson's correlation

coefficient (r) calculated. Next, we analysed the correlation between ranks across different classes of drugs.
Results: For all indicators, the general practitioners' adoption of one group of drugs was poorly associated with adoption of others ($r \leq 0.49$), indicating that early adoption of one type of drugs is not associated with early adoption of another. For all drug groups, adoption time adjusted for practice size was only weakly associated with other indicators (r: -0.56 to -0.27). Indicators, based on cost and volume, were highly correlated (r: 0.96 to 0.99) and the others correlated reasonably well (r: 0.51 to 0.91).
Conclusions: Within drug groups, indicators of drug adoption, except for adoption time, correlate reasonably well. However, the theory that physicians' early adoption of new drugs is a personal trait independent of the type of drug could not be confirmed. The notion of the early drug adopting GP may be mistaken.

Presentation 40 – Poster (7th MAY 2005)

Practice profile and consultation time of Slovenian family practitioners.

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Background: Until now, in Slovenia there were no data about how many and which tasks family physicians (FPs) are doing, about the quality of process of care in the most frequent health problems in family practice, and what is the consultation time in the office.
Research questions: Which factors, stemming from the FP, the patient and the organization of the work in the practice, influence the rate of home visits, prescriptions and referrals? What is the impact of the workload on the quality of process of care in the most frequent health problems in general practice in Slovenia.
Methods: In the cross-sectional study, each of 42 family physicians registered 300 regular consecutive office visits between October 1st 2003 and the end of March 2004. We used a questionnaire, containing general characteristics of the patient and of the visit, and for each contact the consultation time is measured within the half-minute accuracy. We also gathered daily data about number and structure of the visits, about other daily workloads, about the FP and about the office organization.
Results: 42 family physicians registered 12596 contacts, including home visits. Only 0.8% of all the contacts held place at the patients' homes. At each contact, a FP dealt with 1 to 8 different health problems (mean 1.5). In 20.2% of all the contacts, the patients were referred to a clinical specialist. The most frequent therapeutic measure was prescription of a drug (58%); patients got 1.95 prescriptions in average. The average time of the contact was 7.1 minutes. The average daily frequency of visits was 45.6. Higher workload increases drug prescribing, decreases number of home visits, but doesn't have impact on referral rate.
Conclusions: The consultation time is short; a family physician has to cope with more than one medical problem during a single visit. Referral rate is high and the most frequent therapeutic measure is drug prescription. Workload could be a factor having impact on the quality of work in Slovene general practice.
Relevance to EGPRN: This is the first study in Slovenia that assesses quantity and quality of work in family practice using data about individual office visits and consultation times, while taking into account also patients' characteristics and organization of work. A comparison with similar studies in Europe will help us in planning the education and organization of work in family medicine.

Points for discussion at EGPRN:
How to continue with data analysis?

Presentation 41 – Poster (7th MAY 2005)

Patient's self care and non-adherence – can we change it?

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Background: Adherence to long-term medication regimen is often suboptimal, and socioeconomically disadvantaged populations have greater adherence barriers. Primary non-compliance, in which the patient doesn't cash the prescribed medication, was described in 6-20% prevalence. In a preliminary study in MHHC*, where care is provided to low-medium class patients, we found a 24% rate of primary non-adherence to the prescribed medications in chronically ill patients. Their doctors were often surprised and their opinion ranged from "possible severe implication" to "justified decision", which is possible in the era of empowering the patient and speaking of self-care.
During the last 2 years we experienced some "research start-ups" which failed in exploring the agenda of the non-adherent patients. It was concluded that "nothing is new": The reasons repeated the already known doctor/patient behaviour and doctor-patient relationship. In the proposed study we proceed to the active zone.
Research question:
1. Can the patient decide on its medication regimen properly?
2. Does information to the doctor can influence on its patient's adherence?

Aims:
1. To define the rate of primary non-adherence in the MHHC chronic ill patients
2. To evaluate the significance of non-adherence
3. To evaluate the patients' judgment
4. To determine whether informing the doctors could influence on the adherence

Methods: The study is prospective cross-sectional. The main source of information is the pharmacy. The pharmacists will mark on the prescription the medications which won't be cashed.
The medical records would be the source of information related to the chronic illnesses and its status of control.
A sample of patients, adherent and non-adherent would be invited to the doctors for evaluation. Summarizing the visit the doctor would decide whether to renew the medication, to stop or change it.
The change in adherence would be determined in a 3 and 6 month follow-up.

Points for discussion-what we ask ourselves:
1. Should we select patients from certain disease, or more? The choice is between Diabetes Mellitus, Hypertension, Dislipidemia which are measurable?
2. Should we narrow it for certain group of patients, like elderly?
3. Should we add economic markers to the data, like the monthly expense for medications, receiving income maintenance or old age pension?

Presentation 42 – Poster (7th MAY 2005)

Most common side effects of drugs noticed by general practitioners.

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Background: Prescribing habits of general practitioners (GP) are determined by their knowledge, ability of gathering proper information and rational clinical arguments. They are also often influenced by pharmaceutical industry and patient expectations. One of the prerequisite for rational prescribing is proper knowledge about drugs side effects.

Research question: To explore what are the most common side effects of drugs noticed by GP.
Methods: The study was performed in GP office with 1560 patients in care. During the period from June, 1 1999 to May, 31 2000 the occurrence of side effects was prospectively noticed by GP. In that period GP recorded 8513 consultations. Side effects of drugs were classified according to Karch-Lasagna algorithm.
Results: The total number of side effects of drugs was 145, and they occurred in 121 patients. Side effects of drugs were the main reason for 1,4% of all encounters. Most common side effects were related to antibiotics (43,35%), antihypertensive drugs (19,13%), and NSAID (17,24%). The majority of side effects were related to skin (34,48%) and gastrointestinal system (31,04%), and most of them occurred in one week after drug intake. According to Karch-Lasagna algorithm 64% of noticed side effects were classified as very possible caused by drug.
Conclusion: Continuous tracking of side effects is beneficial for patients and physicians as well as pharmaceutical industry, and GP-s have to pay much more attention to side effects of drugs, due to their position in health care system. The results of this study should initiate further studies organized on the national level.

Points for discussion at EGPRN:
1. What are the benefits of reporting side effects which are already known?
2. How to simplify process of reporting side effects for GP-s?

Presentation 43 – Poster (7th MAY 2005)

Patients' and physicians' perspectives on pharmacogenetic testing.

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Background: Pharmacogenetic testing will become increasingly relevant in prescribing decisions. Acceptance by general practitioners (GPs) and their patients will largely influence their implementation in primary health care. Thus it is important to learn more about doctors' and patients' perspectives on pharmacogenetic testing.
Research question: What attitudes as well as hopes, fears and information needs do GPs and their patients have regarding to pharmacogenetic testing?
Methods: Based on an extensive literature review of empirical and theoretical studies describing psychological, family-related, social, and ethical consequences of pharmacogenetic testing, we conducted telephone interviews with 196 patients (51% of the participants of a larger research project analysing the impact of genetic polymorphisms on asthma) and 81 GPs (response rate: 23%; GPs were not related to participating patients) in a northern region of Germany.
Results: Nearly all patients (96%) would consent to pharmacogenetic testing whereas fewer GPs would (54%). By means of pharmacogenetic testing, patients hoped to avoid side effects (63%) or unfavourable medication (75%). Concurrently, they expressed the fear of discrimination at work (69%) or violation of privacy (66%). In this matter, patients considered GPs to be their most important contact persons (78%). More GPs (90%) than patients (44%) were pessimistic that pharmacogenetically tested patients might suffer disadvantages at insurance agencies or might feel "deficient" (63% vs. 29%). Similarly, compared to patients, less GPs regarded knowing one's genetic disposition (61% vs. 94%) as beneficial. However, GPs expect to get useful information for rational drug therapy (86%).
Conclusions: Patients seem to be more enthusiastic about pharmacogenetic testing than GPs. Apart from apparent advantages, patients and GPs express concerns relating to negative psychosocial consequences, discrimination or violation of privacy. Due to its great complexity, understanding of test results and explanation of their impact pose new challenges for GPs and physician-patient relations.

Points for discussion at EGPRN:
1. The discrepancy between patients' and physicians' perspectives.
2. Implications for physician-patient relations as well as for patient education concerning pharmacogenetic testing.

Presentation 44 – Poster (7th MAY 2005)

The relationship between educational level and diabetes control in a Rural Practice in Southern Italy.

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Background: Diabetes is a common chronic condition that requires regular and attentive treatment. Optimal glucose control reduces the risk of complications. People in higher social classes have better chances for maintaining good health.
Even in Italy, social position has been shown to be inversely related to certain types of unhealthy lifestyle , and to access to high quality care.
Research question: Is educational level a factor which seriously affects the care of diabetics in our rural practise in Southern Italy?
Methods: The setting of our quantitative study is a rural practice in the Province of Caserta.
Data will be collated from the electronic lists of diabetic patients (Type II) of 6 family doctors for a total of approximately 450 diabetics.
Patients who have received steroids or a mayor surgery in the last three months, patients who suffer from dementia ,and patients on insulin therapy will be excluded.
The patients will be divided in two groups according to their educational level.
The level of glycated haemoglobin A1c (HbA1c) as an indicator of good control of diabetes mellitus will be measured.
The optimal target for our patients is: HbA1c < 7.0%
To reduce costs, and to make the study easy to carry out, a sample of this population of diabetics will be considered. (Epi Info Statcalc.®)
Epi Info ® (Epi3.3) and SPSS 11® will be used to perform statistic tests.
Statistical methods will include bivariate distribution tables, odds ratio with its confidence interval, chi square test ($\chi 2$) to assess the significance of the difference in proportions and logistic regression.
Discussion and Conclusion: If our study confirm the association between low educational level and poor control of diabetes an educational campaign towards low educated diabetics should be introduced by our local health authority.

Points for discussion at EGPRN:
1. Research methods
2. Relevance of the study.

Presentation 45 – Freestanding paper (7th May 2005)

The estimation of the denominator in general practice.

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Background: To determine the denominator or the 'population at risk' is a problem which has been long encountered in general practice

epidemiological research. It is important for calculating epidemiological figures. In the past decades some mathematical models are used but none of them were satisfying.
Research question: We will examine a new method for calculating the denominator, starting from the number of patients who contacted their GP in the period of one year.
Method: The department of General Practice at the Catholic University of Leuven (Belgium) has at its disposal a database called Intego, containing information about morbidity in the first line. The data are obtained from 47 family practices. Once a year all diagnoses, medication prescriptions and laboratory results are copied from the practice of the GP and imported into a database. It is possible to calculate the number of patients who contacted the practice in the course of a year. On the other hand there is the information available from the Health Insurers in Belgium with the percentage of the population that consults a general practitioner during a particular period.
Results: Using this information we defined a correction factor based on a stratified population by age-group, gender and district. With this factor it is possible to calculate the practice population in the Intego-database. On the basis of figures for 2003, the Intego register has a yearly contact group in 2003 of 64,161 patients. The estimated practice population corresponding to this, amounts to 80,094. The age and gender distribution of this practice population largely corresponds to the figures for the Flemish population.
Conclusion: The method of a correction factor makes it possible to calculate a reliable practice population. This kind of approach will probably be usable in other countries in Europe.

Points for discussion at EGPRN:
Will this method be usable in other countries?

Presentation 46 – Freestanding paper (7th MAY 2005)

First report of the EGPRN Electronic Patient Records research group.

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Background: At EGPRN Malta, the theme of the meeting was "Research using EPR in General Practice". Discussions developing from the theme presentations, keynote lectures, pre-conference workshops and informal participant interactions were formulated into a proposal to form a special interest group to develop interests in this important area of GP research. Work on this group has started, and the group will meet formally for the first time during the Gottingen EGPRN.
Research questions: How can research using Electronic Patient Records be actively and effectively promoted and developed within EGPRN to support the clinical and academic development of general practice in Europe?
What are group members' experiences, both positive and negative, of EPR-derived GP research in each of the participating countries?
What data elements and indicators, and research methodologies, should and could be retrievable from or applicable to EPR in order to optimise their research potential?
Method: Members of the special interest group have been recruited at the EGPRN meeting and via personal contacts. An agenda for future work has been formalised.
The group will meet at a pre-conference workshop prior to the Gottingen EGPRN, and discuss aims and objectives. These include relations to other projects (eHID, surveillance networks, morbidity registration networks, etc); relations to (and support from) EGPRN; and specific projects to develop (a European GP dataset; new morbidity registration networks, quality assessment projects, health economic studies, etc).
A future meeting is planned for 2006, when the group would meet for two or three days to discuss existing projects, share experiences, and implement a concrete plan of action. This process would move towards developing and implementing the recommendations of the Gottingen workshop.
Concrete research projects are planned for the near future. These include a proposed European GP dataset position paper, fostering the birth of new morbidity registration networks and collaboration with other existing and developing projects.
Results: The proceedings of the pre-conference workshop will be summarised and presented to the workshop for discussion.
Conclusions: Interest in research using EPR is growing within EGPRN, and is being crystallized within a new group. This relatively new experience for EGPRN would hopefully act as a catalyst for new research, sharing experiences and building research capacity.

Points for discussion at EGPRN:
1. How can research using Electronic Patient Records be actively and effectively promoted and developed within EGPRN to support the clinical and academic development of general practice in Europe?
2. What are group members' experiences, both positive and negative, of EPR-derived GP research in each of the participating countries?
3. What data elements and indicators, and research methodologies, should and could be retrievable from or applicable to EPR in order to optimise their research potential?

Presentation 47 – Theme paper

Are patients better sooner if their GPs give them a sound diagnosis and say that they will easily recover?

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Background: Among the non-specific effects of treatments an optimal doctor-patient relationship is considered important. However, we are not sure of this placebo effect. It is said that a positive consultation makes much sense, but we have only one example of empirical proof (Thomas in BMJ, 1987).
Research question: Are pain patients better sooner if their GPs give them a sound diagnosis and say that they will easily recover?
Method: Our trial was done in Limburg (Netherlands and Belgium). 128 Pain patients were randomised. All were reassured that they probably had no serious underlying disease. Half of them got a positive consultation (see above). The others were told by their GPs he did not know; they were advised to come back later if that was necessary. For 78 patients everything went exactly as we had intended it.
Results: The study could not show any positive effect. The Kaplan-Meier curves of patients with positive and negative consultations ran nearly parallel. 55% of the patients with positive consultations and 59% with negative consultations were better after 14 days. After 28 days this was 81% and 78%. The Cox regression hazard ratio was 0.97 (95% precision interval 0.69, 1.41). In the optimal subgroup after 14 days 57% and 58% were better; after 28 days this was 80% and 73%. The accompanying hazard ratio was 0.91 (95% PI 0.57, 1.46).
Conclusions: We cannot rule out a modest effect. Our findings contrast with those of the earlier trial. We think that symptomatic patients mainly want to hear there is no serious problem. Often, they will miss the extra information that they get. And in that case they can certainly not benefit from it.

Presentation 48 – Freestanding (7th MAY 2005)

General practitioners, their patients and the Internet–a qualitative study of opinions, attitudes and their interrelation with the doctor-patient relationship.

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Background: The Internet has a potentially large influence on the doctor-patient relationship, which however, has received little attention in Internet research.
Research question(s): Which are the opinions and experiences on using the Internet for health information purposes of both patients and general practitioners (GPs), and its influence on their relationship?
Methods: design: Qualitative study.
study populations and data-collection:
1. 24 semi-structured interviews with patients who had used the Internet for health information purposes during the previous year.
2. a semi-structured group discussion by 9 GPs with different personal characteristics and Internet experience; 4 of them were among the GPs with whom the interviewed patients were registered.

Results:
1. Internet information is not discussed with the GP in case of minor complaints, if no news from the GP is expected, or if the patient has searched after the consultation.
   Considerations to discuss the information with the GP are doubts about the information, the desire to play a more active role during the consultation, and to take responsibility for one's own health. Patients mention it sometimes openly, but often informally.
   Most patients think being better informed will lead to a more equal relationship.
2. The GPs discussed their emotional reactions, the consequences for daily routines, and the consultation techniques. Most GPs have a positive attitude towards patients using the Internet. Some wish to stimulate this. However, others are concerned about being overruled, and consequently becoming an instrument instead of an independent professional. The GPs discussed several ways to deal with this problem, e.g. by use of communication skills.

Conclusion(s): Most patients are positive about the Internet; GPs are less unanimous. However, they do not seem to be aware of each other's opinions. As a consequence, both patients and GPs seem to miss opportunities by not openly discussing Internet information.
Relevance for the EGPRN: In the Netherlands health information found on the Internet is not often discussed during consultation of the general practitioner. General practitioners are often unaware of the way their patients use the Internet for health information purposes. This may cause unnecessary discomfort by both parties involved.
We expect the doctor-patient relationship to vary widely between different countries and different cultures, and would like to discuss the following questions with our EGPRN-colleagues:
1 Are these results specific for (our part of) The Netherlands, or can (some of) these be generalised?
2 How do other EGPRN-members view our results in relation to their own experiences, health system, and culture?

Presentation 49 – One slide/five minutes (7th MAY 2005)

Appropriateness of benzodiazepine prescriptions in general practice.

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Aim: To determine the appropriateness of benzodiazepine prescription: Do the mental health problems diagnosed by GPs justify the prescription of benzodiazepines, also taking into account the duration of benzodiazepine prescription?
Method: In a cross-sectional survey of 1813 patients at 32 general practices, the appropriateness of benzodiazepine prescription was assessed using two criteria: a mental health problem was present for which a benzodiazepine is considered to be effective according to guidelines and the prescription was for no longer than 90 days.
Results: Benzodiazepines had been prescribed to 94 patients (5%) in the 90 days prior to the start of the study. In 67% of these patients, no mental health problem was present for which benzodiazepines are considered to be effective. In the remaining 33% of the patients, a mental health problem was present for which benzodiazepines could be effective. Benzodiazepines had been prescribed for too long in most of these patients.
Conclusion: In a minority of the patients, the prescription of benzodiazepines was considered to be appropriate. We recommend that GPs improve their benzodiazepine prescription practice using the ESCAPE acronym.
Evidence-based reason to start prescribing a benzodiazepine
Short-term prescription and set end-point
Check effectiveness of benzodiazepine treatment
Apply active weaning intervention
Propose other treatment options
Evaluate effectiveness of new treatment

Points for discussion at EGPRN:
Are medication records of GPs suitable to determine appropriateness of prescriptions?

Presentation 50 – One slide/five minutes (7th MAY 2005)

The price you pay.

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Objective: To assess
1. The practice of generic prescribing among general practitioners
2. The potential cost savings from generic prescribing by general Practitioners

Design and Setting: 100 Consecutive scripts dispensed by one local pharmacy, prescribed by General Practitioner's. Both public and private scripts were included.
Main outcome measures:
1. What proportion of drugs were prescribed
   - Generic;
   - Branded Generics;
   - Proprietary Brands
2. Was there a cheaper alternative to the drug dispensed
3 If an alternative was available was there a cost saving and how much was it.
4. What the projected savings would be.

Results: 100 Prescriptions were studied. Two thirds were GMS and one third were private.
10 items (3.75%) were prescribed using their Generic Name.

29 items (10.9%) were prescribed using their Branded Generic Name.
227 items (85.33%) were prescribed under their proprietary name.
In total 110 items of 266 dispensed had branded generic versions available. 37 Branded Generics (34%) were dispensed of 110 potential.
The total *actual cost* of the 100 prescriptions was €5364.12.
The total *potential cost* from using cheaper branded generic versions of the same drug was €5148.62. The total *potential savings* from this was €215.50.
The pharmacy deals with an average of 150 Prescriptions per day. Thus the projected savings for a day would be €323.25.
For one year savings would be €117,986.
Conclusions:
1. Very few GP's are prescribing generically. Use of Branded Generics in place of Proprietary brands where possible is also very low.
2. Many proprietary brands have branded generic versions available.
3. Increased use of generic drugs would lead to significant savings for the patient, the GP, the taxpayer and the Department of Health.

Presentation 51 – One-slide/five minutes (7th MAY 2005)

The effect of fermented papaya preparation (FPP) on the antibody response to influenza vaccine in the elderly : a randomised double-blind controlled study.

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Background: The complication and mortality rates for influenza are highest in adults aged 65 and over. Influenza vaccination is recommended for this age group. However, only 50-60% of those receiving the vaccine develop a protective antibody level. FPP is produced by the fermentation of the tropical fruit papaya. Research has shown its ability to activate T-cell and B-cell activities, macrophages and natural killer cells. In addition FPP has been shown to have free radical scavenging activity.
Objective: To examine the effect of FPP on the antibody response of adults to conventional influenza vaccine.
Methods: Thirty-nine community-dwelling elderly men and women, all in a stable medical condition, were randomised into intervention and control groups. The participants took 6 grams of FPP or placebo (sucrose) each evening for 21 days prior to the influenza vaccination. They were then given an intramuscular injection of 0.5ml of the conventional influenza vaccine for the year 2004. The inactivated viruses included in the vaccine were A/New Calidonia (NC), A/Wyoming and B/Jiangsu. Five cc's of blood were drawn prior to vaccination and 3 and 8 weeks after vaccination. The antibody titers against the 3 viruses were determined prior to as well as 3 and 8 weeks after immunization.
Results: There were no significant differences between the sero-conversion rate of the placebo and FPP groups. Both the FPP and the control groups achieved sero-protective levels of >80% for the NC and Wyoming viruses.
Although the serum hemagglutinin inhibition titers for the NC and Jiangsu viruses were higher in the FPP group, the differences were not statistically significant.
Conclusions: Preliminary findings in this study show no benefit in the use of FPP on the antibody response to influenza vaccination.

Presentation 52 – one-slide/five minutes (7th MAY 2005)

The effect of an educational program on metabolic control and quality of life of patients with type 2 diabetes mellitus.

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Background: The complexity of type 2 diabetes represent special challenge for physicians whose aim is to prevent or reduce complications. Patient education is a cornerstone of diabetes care.
Research questions: The effect of the educational program on:
1. Metabolic control
2. Quality of life
Proposed methodology: Design of the study: randomised, prospective study including n=101 persons of both sexes with type 2 diabetes and registered with one general practitioner.
The experimental group will include n=50 patients which will go through a 4 day, of 90-120 minutes per day, educational program for type 2 diabetes, using the modified German model. Education will be done by the team using the interactive approach and working in small groups of 8-12 patients. Metabolic control will be based on the glycaemia values, HbA1C, cholesterol, HDL, LDL cholesterol and triglycerides. The quality of life will be evaluated by using the questionnaires for QoL. The control group n=51 will include type 2 diabetes patients which will not go through the educational program. The mentioned parameters will be set before the education, immediately after the education and 3 months after the completion of the educational program.

Presentation 53 – One-slide/five minutes (7th MAY 2005)

Project-Plot: Management of neck pain in primary care.

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Background: Neck pain in general practice patients is common and frequently disabling. Its treatment is difficult and costly. There is no epidemiological data on neck pain in Germany. Due to the lack of primary care guidelines, the high variability in diagnosis and treatment leads to an economic burden for the German Health Care System.
Research question/Aim: The aim of the planned study is to describe the management of patients with neck pain in primary care using electronic patient records (EPRs) – as a first step to a German primary care guideline.
Method: In the region of Göttingen in northern Germany, 100 general practitioners (GPs) have been recruited. Technical supporters extracted (anonymised) electronic medical data via a standardised interface. Patients with neck pain will be identified from these records including medication, referrals and physical treatment. In a second step, data about the same topics will be collected by chart reviews in general practices. In a third step semi-standardised interviews will show GPs' attitudes towards neck pain and present barriers in management.
Results/Conclusions: This study should produce some basics for a German guideline, and on the long run contribute to improvement of health care quality.

Points for discussion at EGPRN (max. 3):
1. Among the EGPRN participants, is there any interest of cooperation?
2. Are there any methodical suggestions about the planned project?

Presentation 54 - One-slide/five minutes (7th MAY 2005)

Drug therapy between recommendations of the profession and possibilities of the society in prevention of coronary heart diseases.

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Background: Coronary heart diseases (CHD) are the leading cause of death in Croatia. In the scope of preventive activities and prescribing of drug therapy in patients with higher risk factors, general practitioner should act according to the recommendations of professional societies. Financial possibilities of the society have a big role in their applications.
Aims: To study the prevalence of hypertension, hypercholesterolemia and diabetes mellitus, cost of drug therapy for the period of one month among the mentioned risk factors, compare it to the approved drug expenditures by the Croatian Institute for Health Insurance (CIHI).
Methodology: Prevalence of hypertension, hypercholesterolemia and diabetes mellitus in the offices of three general practitioners in Zagreb area was registered in 4916 patients. Costs for their drug therapy during one month was calculated and compared to the approved amount for the drugs determined by the CIHI.
Results: Hypertension was diagnosed in 1112 (22.6%) examinees, hypercholesterolemia in 324 (6.5%) and diabetes mellitus in 359 (7.3%). It was noticed that monthly expenditure for the prescribed drugs in those examinees was 177.609,25 kn what is 81.2% of the approved amount for prescribed drugs by the CIHI. The amount for antihypertensive drugs was 111.678,47 kn. (51.1%), antidiabetic drugs 25.636,24 kn. (11.7%) and statins 40.294,54 (18.4%). Those drugs were prescribed most frequently by the oldest age group of patients 98.937,16 kn (93.6%)
Conclusion: Great number of patients with risk factors for CHD remained unrecognised. The approved amount for the total drug prescription determined by the CIHI is hardly sufficient for drug treatment in order to prevent CHD. It is necessary to influence the general practitioners to detect the patients with risk factors and to re-examine financial possibilities for implementation of those activities.

Points for discussion at EGPRN:
1. How to improve prevention implementation?
2. How to co-ordinate the expenditures of the prescribed drugs with financial possibilities of the society?

Presentation 55 – Freestanding (7th MAY 2005)

Are multiresistant microorganisms present in GPs' offices?

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Background: Some guidelines exist to deal with hygiene in medical units to avoid the transfer of germs to patients .Some studies have been carried out to observe how these are practised. There is no study about the reality of pathologic bacteria in GP's office.
Research question: are there dangerous micro organisms on doctor's tools?
Method: A study has been carried out amongst fifty GPs in LYON to evaluate the situation of potentially dangerous contaminations by tools of GPs.
Three samples were realised in each case and several questions were asked about disinfection in their offices.
The samples were collected from (i) the diaphragm of the stethoscope, (ii) the tensiometer armband, and (iii) the fingers of GP's.
Results: 150 samples were realised, 14 of them were contaminated, 13 of them with staphylococcus and one of them with enterobacter cloacae. None of them were found to be multiresistant.
100% of GP's had a sink in their office but only 40% in the examination room.
60% of GP's did not have adequate soap, and 62% of them had a cotton hand towel
Only 44% of GP's washed their hands after examining each patient.
Stethoscopes and tensiometer armband were rarely cleaned but GP's adapted their hand washing to events like injection, infiltration etc.
Bins were standard in 92% of the cases.
This study has been carried out with the help of a town laboratory and the "institut Merieux " both of whom provided us with the sample kit.
Conclusion: Despite a lack of referential health application, no multiresistant microbes was found on the instruments used in the GPs' offices during this study.
Nevertheless, some progress seems to be needed towards a better organisation of the doctors' offices, providing education for the cleaning staff and increasing awareness and respect of the health rules.

Presentation 56 – Freestanding (7th MAY 2005)

Epidemiological surveillance of influenza and RSV infection in general practice in France or routine health monitoring data: two different ways to tell almost the same story?

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Background: In 1993, SFMG created the OMG (Observatoire de la Médecine Générale), a national computerized network of general practitioners (GP) recording their daily medical practice on a common database.
The GROG, a sentinel surveillance network set up in 1984, is primarily an alert system based on the weekly comparison of clinical indicators and detection of flu and RSV viruses in rhinopharyngeal samples, taken at regional level in community practices.
Objective: To compare epidemiological information on influenza and bronchiolitis recorded through the OMG and specific information based on the GROG surveillance.
Method: Study period: October to march from 1995 to 2003.
Selected diagnoses based on clinical case definitions: GROG: Acute Respiratory Infections (ARI) and bronchiolitis. SFMG: fever syndrome, rhinopharyngitis and acute bronchitis.
Virological data: GROG swabs analysed for influenza and RSV in the national reference centres for influenza.
Quantitative, chronological evolution and graphical appearance of the 5 diagnoses incidence will be analysed and compared in the light of the virological results.
Results: Data for 9 seasons have been collected. Analysis is in process but preliminary results show similar clinical incidence and impact of RSV infections in young children. For influenza, chronological evolution of indicators is similar and correlated with the virological data in the two systems. However, quantitative impact of ARI and fever syndrome is different. Further analyses will try to better define the combination of SFMG diagnoses leading to a more comprehensive comparison with the GROG ARI.
Conclusion: The two monitoring systems are able to reflect the reality of the epidemiological variations due to viral respiratory diseases. Surveillance networks integrating clinical and virological data are however more reliable alert tools for these diseases. Nevertheless,

reporting of clinical data from continuous health information systems are less time consuming and can be able to enhance geographical representativeness of specific systems or to give information on emerging health problem.
Relevance to EGPRN: Increasing place of computerized tools in medical records is a new opportunity to obtain health information from GPs not involved in specific surveillance systems. Precise role and task partition between these two monitoring schemes will have to be clearly defined.

Presentation 57 – Freestanding (7th May 2005)

Efficacy of a vaccination against influenza among general practitioners 2nd winter period.

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Background: The clinical benefit of an influenza vaccination among GPs is not easy to demonstrate, because GPs already practising during some years have built up a high basic immunity against influenza, but an influenza vaccination of GPs might possibly prevent the transmission of influenza from GPs to patients.
Research questions: Are GPs vaccinated with an inactivated influenza vaccine better protected against the flu and can we detect lesser influenza viruses in nose and throat among these vaccinated GPs?
Method: In the winter period 2003-2004 we compared in a cohort study 100 GPs vaccinated with Alpharix in October 2003, with 40 not vaccinated GPs, living in Flanders. Serum blood samples have been taken before, 4 weeks after vaccination and after the influenza period. During the influenza period (starting November, 20th 2003) every GP had to register daily his symptoms in a dairy during 60 days and had to take nose and throat swabs on themselves on day 1, 2, 3 and 4 when suffering from the least respiratory tract symptoms. The effect of vaccination was established on influenza virus replication, 2.5 and 4- fold serological titre raise and flu symptoms.
Results: From the 140 participants 79 were male. We received all the results (diary, blood samples and swabs) from 121 GPs. 67/140 (47.9%) had respiratory symptoms at least one time during the flu period; there is no significant difference between vaccinated and unvaccinated GPs (RR = 1.05; 95%CI: 0.74 – 1.50). Eighteen out of 67 ill GPs had one or more positive swabs, 10 of them were vaccinated, 8 not (RR = 0.73 (95%CI: 0.49 – 1.10)). After the influenza period 10 out of 84 vaccinated GPs and 11 out of 37 unvaccinated GPs had a 2.5 fold titre raise (RR = 0.50 (95%CI: 0.29 – 0.84)).
Conclusions: Influenza vaccination among GPs does not prevent suffering from respiratory tract infections. The presence of flu viruses in nose and throat is slightly less (not significantly) in the vaccinated group and vaccination prevents an IgG rise after the influenza epidemic.

Points of discussion:
1. What kind of multivariate analysis I need to do? Which variables should I take into account?
2. Which topics are interesting to focus on in publications?

Presentation 58 - Freestanding paper (7th MAY 2005)

Management of mental health problems by Slovenian general practitioners.

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Background: Slovenia has a relative high rate of suicide. Depression is an important one of the predisposing factors of suicide. There is no published material available about the prevalence of mental health problems in Slovenia. Little is known about how Slovenian general practitioners are managing mental health problems.
Research Questions:
1. What is the prevalence of mental health problems in Slovenian general practice?
2. What are the differences in the prescription pattern of the Slovenian general practitioner for different groups of patients?

Methods: 50 randomly selected general practitioners in Slovenia were asked to fill out a questionnaire randomly for about 300 patients per practice. The data was entered in a SPSS file. We used one sample with two variables. The group diagnosed explicitly by their general practitioners with a mental health problem and the group that could be diagnosed implicitly through their medication that is linked to mental health problems. Statistical analyses were performed.
Results: 5,2% of total is diagnosed explicitly by the general practitioner, half of them has a prescription for medication. Another 5,0% of total is having a prescription for psychotropic medicines, without an explicitly diagnosed mental health problem. Patients with mental heath problems are overall getting more medicines prescribed.
Conclusion: There can be made improvements in the quality of care for Slovenian patients visiting their general practitioner. Perhaps general practitioners should be able to give more time to their patients which could result in less prescriptions. General practitioners should maybe also be aware of the patients demands for prescriptions. Besides they perhaps should upgrade their knowledge of mental health problems regularly. More research should be done if intervention programmes could be useful in the future to improve the quality of care in Slovenian health care.

Points for Discussion:
1. What could be a reason for the fact that Slovenian general practitioners are prescribing more psychotropic drugs to patients without a mental health problem diagnosis than to patients with a mental health problem diagnosis.
2. Why are patients with depression getting more medicines prescribed than patients with another psychological diagnosis, or than patients without any psychological diagnosis?

Presentation 59 – Freestanding Paper (7th MAY 2005)

Impact of continuing medical education on identification of major depressive disorder. A randomised controlled trial.

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Background: Recognition of Major Depressive Disorder (MDD) by general practitioners (GPs) remains poor. Continuing Medical Education (CME) has been shown to be effective in changing professional behaviour, but not yet in identifying MDD.
Research question(s): To assess the effectiveness of CME in improving recognition of MDD by GPs. To compare different potentially units of analysis upon which to base the contrasts.

Methods: In this cluster randomised trial, 33 voluntary GPs were randomly assigned to an intervention group (a 16 hours of interactive and didactic CME) or to a control group (without intervention). Data were collected on a regular basis by physicians using electronic patient records. The main outcome was the proportion of physicians who achieved a MDD relative recognition rate increase by at least 50% (positive impact) three months after randomisation. We also assessed the impact of different choices of unit of analysis (patients or physicians) on the statistical significance.
Results: 8 GPs in the intervention group (n=17) and 4 GPs in the control group (n=16) increased their recognition rate of MDD by 1.5. The difference between positive impact's percentages was 22%; the 95% confidence interval (95CI) of the difference was [-9,7 ;53,9]. P value was non significant (0.28; Fisher's exact test) . Comparison of the weighted average rates of MDD gave a difference of 0.28% with a CI95=[-0.85 ;1.40]. P value was 0.31 (T-test). Lastly, if we had act as if patients were randomly allocated to both groups, the difference would have been 0.3% with CI95=[0.05 ;0.5]. P value (Fisher's exact test) would have been 0.02, reaching the significance.
Conclusion: The choice of the right unit of analysis is of great concern in trials that attempt to influence practice. Even though respected, we couldn't show efficacy of formal CME for improving recognition of MDD.

Presentation 60 – Freestanding (7th May 2005)

Prevalence of depression among the elderly with mental disorders in primary health care
settings

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Background: Depression among the elderly not only causes distress and suffering but also leads to impairments in physical, mental, and social functioning. Despite being associated with excessive morbidity and mortality, depression often goes undiagnosed and untreated.
Research question: What is prevalence of depressive symptoms and syndromes among adults with mental disorders over 60-year-olds in Bosnia and Herzegovina? Is depression screening in primary care useful?
Method: This descriptive study used the SIMON'S screening questionnaire for early detection of mental disorders. 714 patients over 60 from three family medicine practices in the Sarajevo region of Bosnia and Herzegovina were interviewed Questionnaires were evaluated, and patients who had the positives scores for mental disorders were invited back to the clinics for a GDS –short form screening interview and additional clinical evaluation. Data collection took place throughout 2003-2005.
Results: Mental disorders were identified in 437 (61 %) of participants. Of those, in 34 % of cases, disorders were graduated as "marked", while in 66 % as "severe". According to GDS and clinical evaluation, 185 (42 %) exhibited depression. Gender, age, educational level and environment were statistically significant for depression. Marital and social statuses were not statistically significant. 85 % of patients with depression suffered from different chronic diseases.
Conclusions: Screening for early detection of mental disorders, i.e. depressive disorders among the elderly in Bosnia and Herzegovina revealed depression in 42 % of cases, previously undiagnosed what demonstrates the usefulness and importance of the depression screening. By using GDS screening tool, primary care physicians could better diagnose depression and other depressive disorders in their patients, and take appropriate action to treat it, thereby improving the quality of life of a great many people in the country and consequently decrease use of health care resources.