Op door het NHG georganiseerde WONCA-congres van 1 tot 4 juni 2004 houden bijna 700 huisartsen en onderzoekers een verhaal of presenteren ze een poster over hun onderzoek of project. Hier selecteerden we 24 abstracts van jonge onderzoekers. Zo'n overzicht geeft geen volledig beeld van al het onderzoek dat er in Nederland en Europa gebeurt. Daarvoor moet u maar naar het congres. We selecteerden voor deze H&W vooral abstracts die een actueel thema aansnijden of die al enige feiten presenteren. In een aantal abstracts verhalen onderzoekers over de eerste resultaten van de Tweede Nationale Studie (NS-2), waarvan de resultaten voorafgaand aan de WONCA officieel bekend gemaakt werden.

Infectieziekten

Prescribing antibiotics for respiratory tract infections in general practice in the Netherlands: three studies

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Introduction There are no recent estimates of Dutch antibiotic prescription rates in patients with respiratory tract infections (RTI). Our aim was to assess prescription rates and type of antibiotics in patients with RTI based on data from three different studies containing information on Dutch general practice.

Methods We used 3 different databases:

- the Utrecht Antibiotics and Respiratory Tract Infections (ARTI-2) study, covering 84 GPs serving a population of 180,000 patients, and recording all consultations for RTI during three weeks in the winter of 2001/2002 (2,630 contacts)
- the Integrated Primary Care Information (IPCI) study, covering 150 GPs serving 250,000 patients, with data from all patient contacts during 2000 (74,475 RTI contacts)
- the second Dutch National Survey of General Practice (NS-2), covering 176 GPs serving 300,000 patients, with data from all patient contacts lasting 12 consecutive months between 2000-2002 (110,350 RTI-contacts).

Results Antibiotics were prescribed in one out of three consultations for RTI, with an antibiotic prescription rate ranging from approximately 70% in pneumonia and sinusitis to 27% in cough/bronchitis and 20% in upper RTI and exacerbations of asthma/COPD. Data from ARTI-2 and IPCI showed close correlation, though there were some discrepancies with NS-2. Amoxicillin and doxycycline were most frequently prescribed, while 17% were macrolides, mostly prescribed for lower RTI.

Conclusion Antibiotics were probably overprescribed in cases of sinusitis-like complaints, cough/ bronchitis and upper RTI. Type of antibiotics could be improved by prescribing more in accordance with guidelines.

'I think I know what you want'. Patients' expectations and doctors' perceptions in consultations for sore throat in general practice

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Introduction GPs often claim they prescribe antibiotics for self-limiting diseases because of patient demand. But what do patients want and how do they communicate this to their GP?

Methods A random sample of 7 peer review groups in the region of Belgian and Dutch Flanders was selected to participate in a questionnaire survey. All patients (>12 years) consulting for acute sore throat and their GPs were asked to fill out separate post-consultation questionnaires exploring illness perceptions and reasons for consultation.

Results A total of 343 consultations with 74 GPs were registered. The average age of patients was 36.9 years (42.3% males) and of GPs 47.2 years (80.4% males). A prescription for antibiotics was issued to 40.8% of patients, a first-choice antibiotic in only 22.8%. GPs claimed to have followed the guidelines in 79.4% of all antibiotic prescriptions. Patients consulted mainly for pain relief, information and clinical examination. A desire for antibiotics is one of the three least important reasons (out of a list of thirteen) for attending surgery and is seldom expressed during the consultation. The GPs' perceptions of the patients' wishes were poorly correlated and were significantly related to the outcome of antibiotic prescription. No difference in satisfaction was measured between patients with or without antibiotic prescription.

Conclusion Communication skills aimed at exploring the patient's expectations during consultation may assist in reducing the prescribing of antibiotics. The lack of GPs' awareness of their own 'over-prescribing' needs further exploration.

The treatment of acute infectious conjunctivitis with fusidic acid gel 1% in primary care: a randomised controlled trial

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Introduction The aim of the trial was to assess the effectiveness of fusidic acid gel compared to placebo for acute infectious conjunctivitis in primary care.

Methods Adults presenting with red eye and either (muco)purulent discharge or glued eyelid(s) were included in a double-blind randomised trial. The main outcome measures were the difference in proportions of patients cured at seven days, the difference in bacterial eradication rates at seven days, a survival time analysis of the duration of symptoms and the extent to which the 7-day cure rate in culture-positive patients differed from that in culture-negatives.

Results One hundred and eighty patients were randomised, 163 patients were analysed. At seven days, 62% of patients in the treatment group and 59% in the placebo group were cured, adjusted risk difference 4.7% (95% CI –11-18). There was no difference between the median duration of symptoms in the two groups. At baseline, the prevalence of a positive bacterial culture was 32%. Bacteria were eradicated in 80% (16/21) of patients in the fusidic acid group and in 41% (12/29) in the placebo group, risk difference 35% (95%-CI 9-60). In culture-positive patients, the treatment effect tended to be strong, adjusted risk difference 23% (95%-CI –6-42).

Conclusion At 7 days, cure rates in both the fusidic acid gel and placebo group were essentially similar. These findings do not support the current prescription practices of fusidic acid by GPs. However when a diagnostic technique becomes available that predicts the culture result at the time of presentation, selective prescription to test-positive patients may be useful.

Herpes zoster: determinants of treatment using a general practice research database

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Introduction Herpes zoster (HZ) is a common disease in general practice. The main complications of HZ include postherpetic neuralgia and, in cases of herpes zoster ophthalmicus, eye problems. Early treatment of HZ patients at risk for these complications may modify the course of disease and reduce the risk of complications.

Our aim was to assess the determinants for

treatment of HZ in general practice.
Methods Over a 1-year period a search for HZ was conducted in the Dutch National General Practice Research database (NS-2) comprising 104 general practices and representing 390,000 people. HZ patients were identified by searching the database for the ICPC code S70. Subsequently all the full-text medical records of the selected patients were reviewed.
Results A total of 1200 patients had been diagnosed with HZ (incidence 3.2/1000 patients/year). Most patients received analgesics. Antiviral drugs or steroids were prescribed to a minority of patients. Only a few patients were referred during the acute phase. Determinants for treatment policy (such as age, co-morbidity and localisation of HZ) are presented.
Conclusion Treatment of HZ in the Netherlands is mainly focused on short-term pain relief and slightly on the prevention of complications.

Hart- en vaatziekten

Self-management of anticoagulation: a randomised trial (SMART)

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Introduction The increased demand for oral anticoagulation has led to a need for alternative models of care. Patient self-management (PSM), analogous to diabetic self-care, has been proposed as one such alternative. This paper reports the first large-scale UK randomised trial of PSM compared to routine care. Outcome measures were in terms of both clinical and health economic measures.
Methods From 50 primary care centres all adult patients receiving warfarin for a long-term indication and who had been receiving warfarin for at least 6 months were invited to participate. Following consent, patients were randomised to either control or intervention. Intervention patients were trained in two 3-hour sessions to measure their own INR using a point-of-care testing device (Coaguchek S, Roche Diagnostics, UK) and to interpret their dose of warfarin using a hand-held algorithm. Patients completing training were followed up for 12 months.
Results Six hundred and seventeen patients were randomised (337 intervention/280 control, from 2470 invited). Intention-to-treat analysis revealed no significant difference in percent time in range (PSM 70% versus control 68%). There were no significant differences in adverse events. Cost-effectiveness data will be available for presentation.
Conclusion Whilst PSM is a feasible alternative to routine UK management, only 25% of patients were willing to participate and of these only 57% were able to complete 12 months of self-management.

Rational pharmacotherapy of chronic heart failure in general practice: analysis of the choice and dosage of drugs

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Introduction The objectives of this study were to investigate in people with chronic heart failure (CHF): (a) the pattern of GP drug prescribing for treatment of CHF; and (b) whether prescribing practice follows recommended therapeutic guidelines.
Methods A representative model of prescribing in older patients with CHF in an outpatients setting in Ukraine was created.
Results Of the 235 (22.9%) patients on monotherapy, 123 (52.3%) were treated with angiotensin-converting enzyme (ACE) inhibitors, 72 (30.6%) with calcium channel blockers (CCB), 29 (12.3%) with digoxin and 11 (4.8%) with diuretics. Of the 1024 patients on mono- or combination therapies, 624 (60.9%) were treated with ACE inhibitors, 416 (40.6%) with diuretics, 384 (37.5%) with beta-blockers, 284 (27.7%) with digoxin, 218 (21.3%) with CCB and 195 (19%) with nitrates. Daily dosages of ACE inhibitors, beta-blockers and diuretics were somewhat high in a considerable proportion of patients on both mono- and combined therapies. A substantial proportion (8.1%) of patients on monotherapy were treated with immediate release nifedipine.
Conclusion The pharmacotherapy of CHF by general practitioners was found in some instances not to conform to recommended guidelines. The results of long-term randomised clinical trials published during the last decade have had a minimal impact on the clinical practice of GPs in Ukraine.

Heart failure in elderly COPD patients in general practice: an underestimated phenomenon

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Introduction Both heart failure (HF) and COPD are prevalent in elderly patients, and patients with these diseases are managed mainly in primary care. Diagnosing HF in primary care is, however, notoriously difficult, especially in patients with respiratory complaints. Our aim was to establish the prevalence of HF in elderly patients with a diagnosis of COPD in primary care and to assess the magnitude of under-diagnosis.
Methods Patients aged 65 years or older, classified by their GP as having COPD or chronic bronchitis were asked to visit our outpatient centre in a cross-sectional study. They underwent extensive diagnostic work-up, including standardised medical history, physical examination, chest X-ray, ECG, echocardiography, blood tests (including BNP) and pulmonary function tests. The consensus opinion of an expert panel was used as reference standard. The panel based the diagnosis of HF and/or COPD on the recent criteria for heart failure of the European Society of Cardiology (ESC) and the recent criteria for COPD of the Global Initiative for COPD (GOLD).
Results In total 405 patients visited the outpatient centre (response rate 25%). Previously unrecognised HF was detected in 83 (20.5%) participants. A total of 247 (61%) patients had COPD, including 56 (67%) patients with previously undetected HF. Of the remaining patients, 123 (30%) had persistent asthma and/or other pulmonary diseases, and 62 (15%) neither HF nor pulmonary disease.
Conclusion Under-diagnosis of HF in patients with a GP diagnosis of COPD is impressive. This emphasises the need for improvement of diagnostic assessment of these patients.

Is it possible to save time with the FAST test in potential thrombolysis (acute stroke) patients?

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Introduction An acute stroke patient is a potential thrombolysis patient (r-tPA therapy), but has to be hospitalised within 2 hours of the start of symptoms. Can the FAST test save time in acute stroke patients?
Methods Both general practitioners and public were given information on the (layman) FAST test. The GP applied the test by telephone and, when the test proved positive, an ambulance was called. For a period of 3 months all acute stroke patients were registered (2 hospitals, 220 GPs). Time (delay) between first symptoms of stroke and contact with GP, neurologist and/or emergency unit was recorded, as were stroke characteristics, patient characteristics and reasons for possible delay. Data were compared with computer registrations (GP unit, ambulance unit and hospital registers).
Results Two hundred and sixty-three potential stroke patients were identified. Eighteen percent of stroke patients had symptoms on awakening and were thus not eligible for thrombolysis. Patients older than 65 were significantly worse at recognising stroke symptoms (more patient delay in younger patients). Of (117) patients arri-

ving in hospital within 2 hours, 19 were thrombolysed. According to outcome diagnosis, a further 25 patients could have been thrombolysed but arrived too late because of patient delay, and 5 because of doctor delay. The FAST test was known to 11% of the patients. The GPs applied the test well; this made 70% of the ambulance trips 'true positive' (some patients were diagnosed TIA or otherwise).
Conclusion The FAST test can prevent doctor delay but should be more highlighted in a public campaign to prevent patient delay: the FAST test campaign was very limited in duration and funding.

GGZ

Prevalence of depression in older persons in general practice. Preliminary results of the West-Friesland study

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Introduction Depression in older persons is an important health problem with a large impact on functioning, especially if it remains unacknowledged and is inadequately treated.
Aim To establish the prevalence of depressive symptoms and depressive disorder among consecutive older attendees of general practices in the Netherlands.
Methods Forty-five general practices in the west of the Netherlands took part in this study. Patients aged 55 and older visiting their general practitioner completed a widely used validated questionnaire, the 15-item Geriatric Depression Scale (GDS-15), to assess levels of depressive symptoms. The prevalence of depressive disorder was assessed in two steps: patients with a GDS-15 score of 5 and over were interviewed by trained lay interviewers using a structured and validated psychiatric interview for primary care (PRIME-MD). False negatives were estimated using a validation sample.
Results Eight thousand two hundred and fifteen (8215) patients were available for analysis (response 63.8%). Mean age was 68.3 (range 55.0 to 100.2), 57.4% were female. Depressive symptoms were seen in 1407 patients (17.1%; 95% CI 16.3 – 18.0). These patients were hardly any older (68.9 vs. 68.1; 95% CI 1.4 – 0.3; p=0.003), more often female (19.1% vs. 15.1%; OR 1.3; 95% CI 1.2 – 1.5) and lived more often in urban areas (p<0.001) than those without depressive symptoms. Depressive disorder was prevalent in 12.5% (95% CI 8.3 – 16.7).
Conclusion Depressive symptoms and depressive disorder are much more common among older GP attendees than expected. The GP should be on the alert not to miss the diagnosis because prognosis improves with adequate treatment.

Prescribing for depression: an exploration of the variation in prescribing by general practices in East London

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Introduction To examine whether concordance of ethnicity between doctors and patients affects prescribing rates for antidepressant and anxiolytic medications in general practice populations, taking into account demography, practice size and organisation.
Methods A cross-sectional general practice study in 139 East London (UK) practices, using practice level prescribing data for the period 2000-2002.
The main outcome measure was the annual practice prescribing rate for each group of drugs, calculated as the average daily quantity (ADQ).
Results In East London the median prescribing rate (ADQ) for antidepressants was 7.97 (interquartile range 4.91-10.76). This has doubled in five years, with the greatest increase in selective serotonin re-uptake inhibitors (SSRIs). There is a modest fall in prescribing rates for anxiolytics and hypnotics. There were significant differences in prescribing rates between UK and South-Asian practices; highest prescribing rates were found in practices with UK-trained GPs and low proportions of South-Asian patients. There were no differences in anxiolytic and hypnotic prescribing rates. Fifty-seven percent of prescribing variation could be explained by a model including place of GP qualification, proportion of registered women, older (>65) patients, and list size per GP.
Conclusion Prescribing for antidepressants continues to increase. Concordance between South-Asian practice populations and GP ethnicity is not associated with increased antidepressant prescribing. Lower prescribing rates in South-Asian practices occur regardless of the ethnicity of the practice population. Reasons for these differences are uncertain, but may include differences in framing presenting symptoms, and a less biomedical focus on management.

How is problem-solving treatment received during general practice residency? [kop 2]

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Introduction Patients in primary care frequently present with emotional symptoms, mental illness and/or unexplained symptoms. Treatment by Dutch GPs usually consists of medication and/or 'counselling'. As GP residents had not previously receive any specific training for counselling, a training course in Problem-Solving Treatment (PST), a brief psychological treatment for emotional symptoms, was introduced into their programme. The aim of the present study was to evaluate the feasibility of the PST programme.
Methods Observational study among third-year residents using PST in patients with emotional symptoms, psychosocial problems or unexplained symptoms. Intervention: PST training of residents, supervision of treatment during clinical work, and feedback. Outcomes: length of time used for self-study, training, and treatment; number of residents using PST and number of patients treated; data of focus group study of residents' opinions of PST, the training programme and their barriers in performance.
Results Twenty residents followed the two-day training course and treated 52 patients between April and September 2003. They received supervision and feedback in this period. Average length of first PST sessions was 51 minutes, of follow-up sessions 32 minutes. Number of sessions with each patient varied from 2 – 6 (mean: 3). More details and first data of focus group interviews (to be held February 2004) will be presented during de WONCA Conference.
Conclusion Although residents seem to appreciate the structure of the treatment and the active role of the patient, implementation during clinical practice seems to be an important barrier. When barriers in performance are taken into account, PST training is feasible during general practice residency.

The effectiveness of patient-held medical records for people with schizophrenia receiving shared care

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Introduction Primary care plays an increasing role in the provision of health care for people with schizophrenia. Patient-held records (PHRs) are commonly used in the management of chronic physical illnesses. Their value in the management of SMI in primary care has yet to be established.
Aim To determine effect of a PHR on mental health and satisfaction with community mental health services for people with schizophrenia.
Methods Cluster-randomised RCT. Patients with schizophrenia in contact with primary

care and secondary care community mental health services (n=201). Patients recruited during routine community mental health key worker visits. Intervention: a pocket-sized PHR containing appointments, medication, general health issues, contact details and diary. Main outcome measures: (1) Mental Health rating (Krawiecka and Goldberg) (2) Satisfaction with community mental health services (VSSS-54). Secondary outcomes: primary care consultation rates, referrals to secondary care, admissions, home treatment episodes.

Results One hundred intervention and 101 control patients in 74 practices recruited during 1998/99. At 12-month study end, all patients were accounted for and outcome data were collected for 95%. Sixty-three (63/92 – 68.5%) patients still had PHR, 64/92 (69.6%) used it and 39 (60.9%) said it was regularly used by the key worker. However PHR had no significant effect on primary outcomes (VSSS-54: F1,116=0.06, p=0.801, K and G: F1,116=0.6, p=0.439) or use of services.

Conclusion The trial provides no good evidence that PHRs should be introduced as part of routine shared care for patients with schizophrenia. PHRs were acceptable and acted as a communication tool, particularly between patients and key workers.

Discontinuation of long term benzodiazepine use by sending a letter to users in general practice

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Introduction Minimal intervention strategies to decrease long-term benzodiazepine use have not yet been evaluated in large primary care-based studies with a blind control condition and a long follow-up period.

Methods A letter with benzodiazepine discontinuation advice was sent to long-term benzodiazepine users, followed by an invitation to consult the GP after 3 months. Prescription data were extracted from the GP electronic medical dossier. Primary endpoints were the amount of benzodiazepine prescription and the percentage of subjects without prescription (quitters). Long term benzodiazepine users in practices receiving no intervention served as controls. Duration of follow-up was 21 months.

Results The experimental group consisted of 2425 long-term benzodiazepine users, 1707 of whom were sent a letter with discontinuation advice. The control group consisted of 1821 long-term users. In the short term (6 months) a reduction in benzodiazepine prescription of 24% was observed in the experimental group, versus 5% in the control group (p<0.01). A comparably large reduction was still present at the end of the follow-up. Of the users in the experimental group, 536 (24% of study completers) quit completely at short term, versus 183 (12%) in the control group (p<0.01). Of the quitters, 42% in the control group and 56% in the experimental group remained benzodiazepine prescription-free in the follow-up period (p< 0.01).

Conclusion Sending a letter with discontinuation advice is an effective strategy to decrease long-term benzodiazepine use.

A short audit for detecting hazardous drinkers

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Introduction Different questionnaires have proved to be a sensitive and specific tool in the detection of hazardous drinkers. The Alcohol Use Disorders Identification Test (AUDIT) developed by WHO is considered to be 'the gold standard'. This ten-item questionnaire is difficult to use in a general history.

We evaluated the first 3 questions of the AUDIT (AUDIT-C) and the third AUDIT question (AUDIT-3) compared with the full AUDIT.

Methods Cross-sectional survey in a population of GP patients (data from WHO study on early identification and intervention for hazardous alcohol consumption). Using a principal components analysis, plus sensitivity and specificity indices, a two-stage screening test was developed. Outcomes measured were sensitivity, specificity, and predictive values for the AUDIT-C, and AUDIT-3.

Results Four thousand five hundred and sixty-nine patients were surveyed. Compared with the AUDIT, AUDIT-C and AUDIT-3 had areas under the receiver-operating characteristic curves (AUROC) of 0.966, and 0.935, respectively. When compared with a positive AUDIT score (>7), the AUDIT-C (score >6) and the AUDIT-3 (score >0) were 73% and 96% sensitive and 98 and 74% specific in detecting individuals as hazardous drinkers. The AUDIT–C and the AUDIT–3 have a positive predicted value of 88% and 36% and a negative predictive value of 96% and 99% respectively.

Conclusion One question ('Do you ever drink more than 6 glasses at one occasion') can identify >60% of patients as either hazardous or non-hazardous drinkers. When a patient answers 'never' to this question about binge drinking, the complete AUDIT will hardly ever be positive. A second stage makes use of two more questions to categorise the rest. This version of the AUDIT may be useful as an initial screen for assessing hazardous drinking behaviour.

Bewegingsapparaat

The course of neck and upper extremity complaints in general practice

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Introduction Musculoskeletal complaints affecting the neck and upper extremity are common in general practice. Information on the clinical course of these complaints is scarce. The objective of this study was to describe the course of musculoskeletal complaints affecting the neck and upper extremity in adults seen in general practice.

Methods Ninety-six Dutch GPs recruited 727 patients consulting for a new (episodes of) complaint of the neck or upper extremity over a period of 12 months (NS-2). At baseline and after 3, 6, and 12 months of follow-up, data were collected by means of self-administered postal questionnaires. The response was 88% for the baseline questionnaire and 73% for the 12-months follow-up questionnaire. Outcome measures were self-reported recovery, pain, disability, perceived general health and perceived overall quality of life.

Results Localised pain, restricted to only one area in the neck or upper extremity was reported by 47% of all patients. More than half of the patients reported more generalised symptoms. After 12 months, less than half of the patients with localised pain and only a third of the patients with more generalised pain reported recovery of symptoms. Both pain and disability diminished by 32%-53%. No significant changes in perceived general health and overall quality of life were found.

Conclusion After 12 months, more than half the patients who had consulted the GP for neck or upper extremity symptoms reported persistent complaints.

A randomised controlled trial of the effectiveness of a clinical guideline for low back pain

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Introduction The German Society for General Practice and Family Medicine (DEGAM) recently released an evidence-based guideline for the management of low back pain (LBP) in primary care. The effectiveness of this guideline is evaluated here using a randomised controlled implementation trial.

Methods 117 practices were recruited and randomised. General practitioners (GPs) in

the intervention arms (A, B) participated in three quality circles on LBP. Additionally practice nurses in intervention arm B received training in motivational counselling to increase physical activity of back pain sufferers. GPs in the control group (C) received the guideline by mail, which is known to be ineffective for dissemination. Each practice was asked to recruit 16 patients. Patients completed standardised questionnaires before and after consultation and were contacted by phone 4 weeks later for standardised interviews.
Results 579 patients from 57 practices were recruited (A: 206, B: 192, C: 181). Patients in the intervention arms (A, B) were more frequently advised to remain active and they received fewer injections, fewer prescriptions for massage and fewer X-rays ($p<0.05$). Patients in the motivational counselling arm (B) received fewer prescriptions for physical therapy ($p<0.05$).
Conclusion Quality circles are effective in implementing a guideline on LBP in primary care. Including practice nurses in the intervention can increase compliance with guideline recommendations.

A controlled trial on the effectiveness of a training course in collaboration between general practitioners and occupational health physicians on treatment of low back pain patients
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Introduction To determine the effectiveness of a training course to increase collaboration between general practitioners (GP) and occupational physicians (OP) in the treatment of low back pain (LBP) patients.
Methods A collaboration protocol was developed, based on the clinical guidelines on LBP for GPs and OPs. The intervention consisted of a joint training course for GPs and OPs, based on this protocol. The intervention was compared with normal care in a control region. Participating physicians enrolled LBP patients on sick leave for 3-12 weeks. Participating patients filled out three questionnaires: at inclusion, at three months and at six months later. Information on sick leave was gathered from occupational health services. All analyses were performed on an intention-to-treat basis.
Results Participating physicians enrolled 56 LBP patients in each region. There was little collaboration between physicians during the project. Patients in the intervention region returned to work significantly later ($p=0.004$) but were significantly more satisfied with their OP ($p=0.01$). These differences could not be explained by means of the measured variables. No differences were found between the intervention and control patients for pain, disability, quality of life, and medical consumption at both follow-up moments.
Conclusion Our study showed no positive effect of the training course on increase collaboration between GPs and OPs. The intervention did not result in better outcomes on patient level in the intervention group. The training course may not have improved collaboration enough to influence the prognosis of LBP.

Palliatieve zorg

Communication about end-of-life decisions with patients dying at home: development of guidelines for general practitioners
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Introduction Communicating 'bad news' and discussing end-of-life issues is an important but difficult aspect of health care. Physicians often feel insecure about how to inform patients and how to discuss these issues with them. The aim was to develop a guideline for GPs to improve communication about end-of-life decisions with competent patients dying at home.
Methods A review of the literature and qualitative research based on focus groups and a quality circle with GPs, nurses and surviving relatives were used to develop a first version of a prototype guideline. This version was refined with results of interviews with 17 patients and their next of kin. GPs, nurses, specialists and other experts reviewed the guideline.
Results From the qualitative research, 4 themes seemed essential to optimise communication at the end of life: communicating the diagnosis and prognosis, exploring patients' preferences about manner of dying, disproportionate treatments in cases of an unfavourable prognosis and dealing with a terminal patient's request for euthanasia. GPs preferred a standard format for each theme, including a definition, instructions, pitfalls and checklists.
Conclusion The interviews with patients and group discussions with care providers and surviving relatives suggest a serious gap between actual and expected care. Several obstacles to appropriate communication and useful suggestions for improvement are identified. Evaluation research is needed to appraise whether the application of this guideline will reduce existing uncertainty among GPs in the communication with patients dying at home and requesting end-of-life decisions.

Education in palliative care: a questionnaire survey of Irish GP trainees
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Introduction General practitioners play a central role in palliative care, yet research continues to reveal room for improvement in symptom control at home. Our aim was to evaluate the training in palliative care received by GPs completing vocational training in Ireland.
Methods A questionnaire survey was conducted among final year GP trainees in all 10 Irish GP training schemes. Questions addressed experience and training received, while interviewees were undergraduate, postgraduate and GP trainee students, in a list of twenty palliative care topics. They were questioned about the stresses involved in caring for this patient group and were asked to rate their level of confidence in this area and to indicate what further training they required.
Results Respondents suggested that palliative care training could be improved by more formal teaching at undergraduate and postgraduate level. Teaching in the GP training schemes was formal and comprehensive; trainees claimed to have at least some confidence in most of the topics listed. However over 40% admitted having no confidence in use of the syringe driver, management of stoma problems, bereavement in children and euthanasia; 57% indicated that further practical training in palliative care was of high priority for them. Trainees indicated that dealing with their own emotions was a significant source of stress; almost 30% indicated their medical training had not given them the necessary skills to cope with this.
Conclusion There is a continuing need for medical education in palliative care. Particular attention should be paid to the basic education of medical students and the training of junior doctors.

Diversen

Differences in self-reported perceived health and morbidity in overweight and obese children
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Introduction An increasing trend of increasing childhood obesity has been observed in the Netherlands and little is known about the immediate health consequences of overweight in children. Our objective was to examine differences in self-reported health and health problems presented in general practice.

Methods During a representative survey of morbidity in Dutch general practice in 2001 (NS-2), a random sample of 2719 children aged 2 – 17 years responded to a health interview. BMI was calculated using self-reported weight and height. Interview data were linked to morbidity presented in general practice.
Results Eight percent of all children were overweight; obesity varied from 2 to 8% (combined: 11.7%, 319/2719). Overweight and obese children aged 12 – 17 years reported poorer perceived health and presented more health problems to general practice than non-overweight children. Parents of overweight and obese children aged 2 – 11 years (proxy interview) did not report poorer health for their children but did consult the general practitioner more often. Morbidity patterns of overweight children differed from children without overweight; they reported more ear problems (12.9% vs. 8.5%, p=0.02); had higher incidence rates of respiratory (311 vs. 217/1000 person-years, p<0.01) and ear diseases (178 vs. 105/1000 person years, p=0.02).
Conclusion Overweight and obesity is a health burden for children on a day-to-day basis, resulting in short-term health consequences. This finding reinforces the need for preventive strategies in childhood.

Prevalence and correlates of nocturia in men, a large community-based study

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Introduction Prevalence estimates of nocturia have varied due to different population samples and definitions. Our objectives were to establish prevalence estimates of nocturia in a Norwegian population of approximately 30,000 men and to investigate how the prevalence varies depending on the definition.
Methods All citizens aged ≥20 years in a region of Norway were invited to participate in the survey. Questions included demographic variables, lifestyle factors, current medications, and urinary history (including questions about nocturia and prostatic enlargement). Clinical measurements, including blood pressure and waist/hip ratio, were also performed. Prevalence estimates for nocturia were calculated using three different definitions; having to get up to void one or more, two or more, or three or more times at night. Relevant variables from the health survey were included in logistic regression analyses to identify correlates of nocturia that may also be risk factors for the condition.
Results The participation rate was 70%. The prevalence of nocturia increased gradually from 26% in men aged 20-30 to 88% in those aged <80. Multiple logistic regression analyses showed that in addition to age, independent correlates of nocturia were prostatic enlargement and, to a lesser extent, use of antihypertensive drugs and waist/hip ratio. Risk of nocturia was, somewhat surprisingly, inversely associated with systolic blood pressure and smoking.
Conclusion Nocturia is a highly prevalent condition in men, and the prevalence increases with age. Self-reported prostatic enlargement is a significant predictor of nocturia. Nocturia is negatively associated with smoking and blood pressure. These findings warrant further investigations.

Prevalence of prostate cancer is equal in men aged 50 and over with and without lower urinary tract symptoms

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Introduction The effectiveness of screening for prostate cancer has not been established. Moreover no clear relation has been described between lower urinary tract symptoms (LUTS) and prostate cancer. Nevertheless many GPs perform prostate specific antigen (PSA) tests in older men, especially in those with LUTS. We determined the prevalence for prostate cancer and its relation to LUTS in a population-based study of men aged 50 years and over.
Methods Data were collected in 1688 men aged 50-78 years from Krimpen aan den IJssel (Netherlands). Measurements included self-administered questionnaires (including the international prostate symptom score [IPSS] to rate LUTS) and measurements taken at a health centre and in a urology outpatient department. Prostate biopsies were taken according to a described protocol, independently of the presence or severity of LUTS, based on PSA level, digital rectal examination and transrectal prostatic ultrasound.
Results According to the protocol, 182 biopsies were advised, of which 171 were actually performed. The biopsies revealed 57 prostate cancers (prevalence 3.4%). The prevalence increased strongly with advancing age, but did not depend on LUTS severity. Tumour stage and grade did not differ between age groups or between men with moderate to severe LUTS and those without LUTS or with mild symptoms.
Conclusion The prevalence of prostate cancer is equal among older men with and without LUTS. Performing a PSA test based only on the presence of LUTS equals unselected screening. Until the effectiveness of screening has been established, PSA testing should have no place in general practice. The focus should rather be on patient education.

How GPs interpret laboratory test results; a qualitative interview study

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Introduction Laboratory results can be interpreted using calculations with pre-test probability, sensitivity and specificity. However clinicians do not use these calculations explicitly in daily practice. Informal methods predominate, but what they are and how they work is unknown. Our aim was to explore how GPs interpret laboratory results.
Methods We held a qualitative semi-structured interview with 21 GPs regarding the last 10 received laboratory results. Interviews were transcribed verbatim and coded independently by two researchers. Concepts and hypotheses emerged during analysis and were revised and refined during ongoing analysis.
Results The laboratory result and the diagnostic hypothesis are concepts each consisting of several dimensions. The dimensions interact and are constantly involved in interpreting results. Some examples of important dimensions include: one single test result as well as groups of tests are not interpreted dichotomously but on a continuous scale; laboratory test reference values can be regarded as too strict for patients in a GP population; GPs often do not have a specific diagnosis, the purpose being to exclude clues pointing to some disorder; GPs estimate the probability of a disorder in qualitative terminology. The dimensions interact with the most particular effect, that laboratory results falling outside reference values cause no problems if the GP expects no disorder.
Conclusion The interpretation of laboratory results is a complex interaction of dimensions that can be distinguished in the laboratory result and the diagnostic hypothesis. Designers of interventions to improve the use of laboratory tests should be aware of how GPs actually interpret results.