OBJECTIVE: To evaluate process and effects in an implementation study after the RCT, regarding a health education and physical exercise program for older adults with osteoarthritis (OA) of the knee. Implementation studies are recommended to assess the feasibility and effectiveness in real life conditions of health education programs, after being tested in RCTs. METHODS: Three types of primary health care providers co-operated in the study, as well as four major health insurers, anticipating the future integration of the program in their insurance policy. Local branches of the providers (n = 18) supported with a program manual and implementation guidelines, delivered the program to 157 subjects. Inclusion criteria were older adults of >55 years of age, with diagnosed OA of knee. Implementation activities were monitored with registration forms, questionnaires and interviews with the providers. Program-participants completed questionnaires before and immediately after participation. This design was thought to be adequate, given the objective to identify the effects of the program in real life conditions after the RCT. Outcome parameters were pain, mobility, self-efficacy and OA-knowledge and health care utilisation. RESULTS: Positive effects occurred for pain (p = 0.06), self-efficacy (p = 0.06), OA-knowledge (p = 0.00), use of medication (p = 0.00), treatment by physiotherapist (p = 0.01) and consultation of the general practitioner (p = 0.01). Effect sizes reported in the former RCT and the current study, were comparable. All three kinds of providers contributed to an equal extent to the outcomes. The implementation strategy contributed to the fidelity in program delivery. CONCLUSIONS: This implementation study emphasised that planned co-operation between researchers, practitioners and policy-makers can contribute to the transfer of research results. In doing so, a widely recognised gap between research and practice can be bridged.

ADAPTATION OF THE RAQOL FOR ESTONIA
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OBJECTIVE: To adapt and validate an Estonian version of the RAQoL. The measure, developed in the UK, assesses rheumatoid arthritis (RA) specific quality of life (QoL). The aim of the cultural and linguistic adaptation of the RAQoL is to produce a version with equally good psychometric properties to existing language versions. METHODS: Translation consisted of two stages. The first involved six Estonians with non-medical backgrounds and good English who worked together to agree a first translation of the questionnaire. The group was attended by one of the authors of the RAQoL who advised on the precise meaning of items. The appropriateness of wording and clarity of content of the translation were then evaluated by six healthy people of average educational level. In the next stage of adaptation 15 RA patients were interviewed to determine face and content validity. RESULTS: No major problems were found in translating the questionnaire into Estonian. Patient interviews indicated that the content of the RAQoL was highly appropriate for Estonian patients, despite differences in health service provision and culture from the UK. CONCLUSION: This is the first occasion on which a disease-specific QoL questionnaire has been adapted into Estonian and the results are very encouraging. The final stage of the adaptation will be a formal survey of reproducibility and construct validity of the adapted measure. The novel aspect of the survey is that data will be collected by means of patient interview and will include a clinical assessment of functional status and disease activity at the time of interview. It is intended that the RAQoL will be used to evaluate interventions and to be included with the HAQ in a register of patients with rheumatoid arthritis.

UTILITY VALUATION FROM THE PATIENT PERSPECTIVE OF TREATMENT OUTCOMES IN OSTEOARTHRITIS
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OBJECTIVES: The aim of this study was to use patients currently being treated for osteoarthritis to determine the utility values for different health outcomes associated with the use of non-steroidal anti-inflammatory drugs (NSAIDs) or paracetamol. METHODS: A total of 85 patients currently being treated with NSAIDs and/or paracetamol were recruited to value five health state scenarios using the Assessment of Quality of Life (AQoL) multi-attribute utility (MAU) instrument. The five health states described various health states of osteoarthritis with varying possible NSAID-related side effects. The health states were developed using published clinical trial data and expert opinion. The participant, using the AQoL MAU, valued each health state. Mean utility values were derived for each health state using the AQoL scoring algorithm. RESULTS: Osteoarthritis without gastrointestinal (GI) side effects produced the highest mean utility score (0.69) while the complicated perforation, ulcer or bleed (PUB) health state produced the lowest utility (0.20). Higher utility values were seen in the uncomplicated PUB (0.38) and minor NSAID-type GI complications (0.48) health states. The health state describing osteoarthritis managed with paracetamol produced a lower utility than the health state describing osteoarthritis managed with traditional NSAIDs (0.36 vs 0.69)—a result consistent with the relative efficacy of NSAIDs and paracetamol in the treatment of osteoarthritis. CONCLUSION: The results suggest that there is potential to improve the quality of life of osteoarthritis
OBJECTIVE: To develop an epidemiological model of osteoporosis and its sequelae to estimate the current and future prevalence of osteoporotic fractures in females aged 45 years and over, in different European countries. METHODS: A decision-analytic model employing a Markov process was constructed using MS Excel. Country-specific population projection figures were combined with data from major European epidemiological studies to estimate the current and future prevalence of osteoporotic fractures in women. Regional prevalence data came from the European Vertebral Osteoporosis Study (EVOS) and incidence data from the follow-up European Prospective Osteoporosis Study (EPOS). Results for France, Germany (Western Europe), Italy, Spain (Southern Europe), Sweden, and Finland (Scandinavia) will be presented. RESULTS: A total of 1.8 million osteoporotic fractures are estimated to occur in women aged 45 years and older in these 6 countries in 2003. Vertebral fractures are the most common type, accounting for almost 1.1 million of all fractures. It is also estimated there will be almost 250,000 wrist fractures, 220,000 hip fractures and 290,000 “other” fractures. The overall rates of fractures are substantially higher for the Scandinavian countries than for the other countries: France 28.2/1000, Germany 28.4/1000, Italy 28.8/1000, Spain 31.0/1000, Finland 61.9/1000, and Sweden 71.0/1000 women. CONCLUSIONS: Osteoporotic fractures are an important cause of morbidity in these countries. Vertebral fractures are the most common type, thus warranting study of their economic and health impact. The variations in rate of fracture between regions reflect predominantly the differing prevalence and incidence rates found in the EVOS and EPOS studies, and to a lesser extent, the country-specific age structures.

AN ASSESSMENT OF THE ECONOMIC BURDEN OF BENZODIAZEPINE-ASSOCIATED HOSPITAL TREATED FALL INJURIES IN THE EUROPEAN UNION

Objective: To estimate the hospitalisation costs of accidental injuries in the European Union (EU) resulting from the use of benzodiazepines. METHODS: Design: A case-control study on the association between accidental falls and benzodiazepines. Setting: Community–dwelling inhabitants over 55 years of defined areas in The Netherlands covering the period 1985–2000. All analyses were performed from the perspective of a third-party payer. Studies: Risk and exposure data were obtained from the Dutch PHARMO system, a population-based register of drug-dispensing records and hospital records. The population attributable risk (PAR) was calculated with the age specific prevalence estimates of benzodiazepine use and the corresponding odds ratios (OR) obtained from a case

THE BURDEN OFOSTEOPOROSIS IN EUROPE: AN EPIDEMIOLOGICAL MODEL

Objective: To develop an epidemiological model of osteoporosis and its sequelae to estimate the current and future prevalence of osteoporotic fractures in females aged 45 years and over, in different European countries. METHODS: A decision-analytic model employing a Markov process was constructed using MS Excel. Country-specific population projection figures were combined with data from major European epidemiological studies to estimate the current and future prevalence of osteoporotic fractures in women. Regional prevalence data came from the European Vertebral Osteoporosis Study (EVOS) and incidence data from the follow-up European Prospective Osteoporosis Study (EPOS). Results for France, Germany (Western Europe), Italy, Spain (Southern Europe), Sweden, and Finland (Scandinavia) will be presented. RESULTS: A total of 1.8 million osteoporotic fractures are estimated to occur in women aged 45 years and older in these 6 countries in 2003. Vertebral fractures are the most common type, accounting for almost 1.1 million of all fractures. It is also estimated there will be almost 250,000 wrist fractures, 220,000 hip fractures and 290,000 “other” fractures. The overall rates of fractures are substantially higher for the Scandinavian countries than for the other countries: France 28.2/1000, Germany 28.4/1000, Italy 28.8/1000, Spain 31.0/1000, Finland 61.9/1000, and Sweden 71.0/1000 women. CONCLUSIONS: Osteoporotic fractures are an important cause of morbidity in these countries. Vertebral fractures are the most common type, thus warranting study of their economic and health impact. The variations in rate of fracture between regions reflect predominantly the differing prevalence and incidence rates found in the EVOS and EPOS studies, and to a lesser extent, the country-specific age structures.

AN ASSESSMENT OF THE ECONOMIC BURDEN OF BENZODIAZEPINE-ASSOCIATED HOSPITAL TREATED FALL INJURIES IN THE EUROPEAN UNION

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OBJECTIVES: To estimate the hospitalisation costs of accidental injuries in the European Union (EU) resulting from the use of benzodiazepines. METHODS: Design: A case-control study on the association between accidental falls and benzodiazepines. Setting: Community–dwelling inhabitants over 55 years of defined areas in The Netherlands covering the period 1985–2000. All analyses were performed from the perspective of a third-party payer. Studies: Risk and exposure data were obtained from the Dutch PHARMO system, a population-based register of drug-dispensing records and hospital records. The population attributable risk (PAR) was calculated with the age specific prevalence estimates of benzodiazepine use and the corresponding odds ratios (OR) obtained from a case