Self-help mutual group was the most appreciated free service, in which participants shared personal stories and perspectives thoughtfully and courageously. The training initiatives organized in collaboration with physicians helped them to learn tips for a better lifestyle management, diet and exercise, and psychosocial techniques but above all helped to overcome concerns and frustration regarding the lack of understanding in the medical community. The network succeeded to increased awareness and understanding of FMS across the public opinion and GPs.

References:

How to communicate effectively with the patients

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Background: To improve quality of care for patients with hip and knee osteoarthritis (OA), a structured model for integrated OA care was developed and implemented among general practitioners (GPs) and physiotherapists (PTs) in primary care. The model was developed based on international treatment recommendations. After 6 months, patient-reported quality of care and satisfaction with care were greater, more patients were referred to physiotherapy and fewer to orthopaedic surgeon, and more patients fulfilled physical activity criteria among OA patients receiving the new model of care compared to the usual care control group.

Objectives: To assess the long-term effects 12 months after implementing the model in primary care.

Methods: A cluster-randomised controlled trial with a stepped-wedge design was conducted in six Norwegian municipalities (clusters). The intervention included implementation of the model, facilitated by interactive workshops for GPs and PTs. The main components of the model were a PT led, 3 hour patient education programme followed by 8-12 weeks of individually tailored, supervised exercise. Patient participants were ≥45 years with symptomatic hip or knee OA. The model was developed based on international treatment recommendations. After 6 months, patient-reported quality of care and satisfaction with care were greater, more patients were referred to physiotherapy and fewer to orthopaedic surgeon, and more patients fulfilled physical activity criteria among OA patients receiving the new model of care compared to the usual care control group.

Results: In all, 40 of 80 GPs and 37 of 64 PTs attended the workshops. A total of 393 patients with hip and knee OA were included, with 284 in the intervention and 109 in the usual care control group. In the intervention group, 92% attended the OA education programme and 64% completed ≥8 weeks of exercise. At 12 months the intervention group reported significantly higher quality of care (score 58 vs. 41, mean difference: 17.6; 95% CI 11.1, 24.0) compared to the control group. The intervention group reported significantly higher satisfaction with care (Odds ratio (OR) 7.8; 95% CI 3.55, 17.27) and a significantly larger proportion (OR: 4.0; 95% CI 1.27, 12.63) met the recommendations for physical activity compared to the control group. A smaller proportion was referred to orthopaedic surgeon (OR 0.5; 95% CI 0.29, 1.00) and a smaller proportion received joint replacement surgery in the intervention (4%) compared to the control group (11%) (OR 0.3; 95% CI 0.14, 0.74). The proportion of patients referred to physiotherapy or MRI and the proportion with overweight were similar between the groups.

Conclusion: Implementation of a structured model for OA care led to improved quality of care, higher satisfaction with care and higher physical activity levels after 12 months. These results are comparable to the 6 months results, which indicate a long-term persistence in the beneficial effects of the intervention. The lower surgical rate in the intervention compared to the control group suggests that higher uptake of OA recommendations in primary care may reduce or postpone the need for surgery in people with hip or knee OA.
The cost-opportunity of screening: osteoporosis in the general population


Background: Osteoporosis is a growing public health problem worldwide, which is increasingly recognized as a major cause of mortality and morbidity. The need for accurate and efficient strategies in the identification of patients at risk is evident. The aim of this study was to assess the cost-opportunity of screening osteoporosis in the general population.

Methods: This study was conducted in the region of Murcia (Spain). A total of 18,000 participants, aged 50-80 years, were invited to participate in the study. The participants were divided into two groups: one group underwent a bone mineral density (BMD) test and the other group did not. The cost of the BMD test was estimated, and the cost-effectiveness analysis was performed.

Results: The participants who underwent the BMD test had a significantly lower incidence of osteoporosis compared to those who did not. The cost-effectiveness analysis showed that the cost of the BMD test was lower than the cost of not screening, indicating that the strategy of screening is cost-effective.

Conclusion: The cost-opportunity of screening osteoporosis in the general population is a cost-effective strategy. Further research is needed to confirm these findings and to identify strategies to improve the cost-effectiveness of screening.

References: None

Disclosure of Interests: None declared


Clustering of Fragility Fractures by Site in Patients Referred for Bone Mineral Density Estimation: An Observational Study

OP0324

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Background: Fragility fractures (FF) are those resulting from mechanical forces equivalent to a fall from standing height or less [1]. They most commonly occur in the spine (vertebrae), forearm, and femur, but also occur at other sites. Prevalence markedly increases with age, due to age-related and menopause-related bone loss. FF cause substantial pain and disability, and are associated with decreased life expectancy. While many studies have investigated risk factors associated with FF, there are few data on the association between FF sites in at-risk patients.

Objectives: 1. Establish the most common sites of FF in patients presenting for bone mineral density (BMD) estimation. 2. Identify patterns of co-existing FF in the above cohort by applying cluster analysis.

Methods: We retrospectively reviewed the clinical records of 28868 patients presenting for BMD estimation at a district general hospital in North West England, 2004-2016, identifying those who had sustained one or more FF. Site(s) of FF were recorded for each patient, categorised as: ankle, elbow, femur, forearm, humerus, pelvis, ribs, spine, tibia or fibula (recorded as “tibfib”). Cluster analysis was performed on fracture sites, using Jaccard similarity coefficient. Results were plotted on a dendrogram and divided into clusters, as per results derived from elbow and silhouette cluster methods.

Results: Out of 28868 patients presenting for BMD estimation, 11003 were identified as having sustained one or more FF. 84.6% patients were female, with overall mean age 67.5 years and median T-score -1.12 SD. The most common site of FF was the forearm (n=5045), most commonly co-existing with fractures of the tibia or fibula. Frequencies of the most common and co-existing FF sites are shown in Figure 1 (top). Cluster analysis identified 3 clusters: ankle and elbow; forearm, tibia/fibula, ribs, and spine; pelvis, femur, and humerus. The second half of Figure 1 displays the dendrogram of cluster analysis results, with Jaccard similarity measure.

Conclusion: We applied cluster analysis to a large cohort of patients presenting for BMD estimation. Our results are in keeping with previous studies demonstrating the FF to most commonly occur in the forearm, and in those with osteopenia (T-score -2.5 < -1 SD) [2]. To our knowledge, this is the first study to apply cluster analysis to sites of FF. Results may be due to differences in cortical and trabecular bone structure, and have potential to aid prevention, monitoring, and management in at-risk patients.

References: