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## P987

### MEASUREMENT TOOLS FOR ATTRIBUTES OF LOCOMOTOR CAPACITY IN OLDER PEOPLE: PROTOCOL FOR A SYSTEMATIC REVIEW OF AVAILABLE TOOLS WITH ASSESSMENT OF QUALITY OF TOOLS AND EVIDENCE-BASED RECOMMENDATIONS

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**Background:** Locomotor capacity is an important factor for well-being in older age, and one of the five domains of the construct of intrinsic capacity, as defined by the World Health Organization (WHO). In the context of public health challenges being induced by the increasing ageing of the World population, there is a need to find ways to measure healthy ageing, including measure of locomotor capacity.

**Objectives:** This study aims to identify all the available tools that were developed and/or validated for measurement of specific attributes of locomotor capacity in older people, and to assess the methodological quality of the studies and psychometric properties of the tools. The findings of this research will then be used to provide evidence-based recommendations for use of these tools in research and clinical practice.

**Methods:** We will perform a systematic literature search of Patient-Reported Outcome Measures (PROMs) that were developed and/or validated for measurement of specific attributes of locomotor capacity in older people, using highly sensitive search strategies combining free vocabulary words and specialized terms. Our literature search will cover the databases Medline (via Ovid), Embase, Scopus, CINAHL and PsycINFO (via Ovid). The study will be conducted following recommendations in the Cochrane handbook for systematic literature reviews (for screening and selection of studies), as well as the ten steps recommendations for conducting a systematic review of PROMs provided by the COnsensus-based Standards for the selection of health Measurement Instruments (COSMIN) guideline (for assessments of methodological quality of studies and measurement quality of tools, as well as for making recommendations).

**Expected results:** This systematic literature review is expected to identify at least one measurement instrument, for each specific attribute of locomotor capacity, that have good measurement properties to assess locomotor capacity in older people, and that may be recommended for use in clinical practice and research.

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### BONE MINERAL DENSITY AND NUTRITIONAL STATUS IN RHEUMATOID ARTHRITIS PATIENTS

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**Objective:** to evaluate an association between bone mineral density and nutritional status in women with rheumatoid arthritis (RA).

**Material and methods:** 158 women aged 40 and over (mean age 58.6±8.8 years) with confirmed RA according to ACR/EULAR criteria (2010) were enrolled in the study. Dual-energy X-ray absorptiometry (DXA) of the lumbar spine (LS), the femoral neck (FN) and the total hip (TH) was performed. The nutritional status was determined using body mass index (BMI), mid-upper arm (MUAC), calf (CC) and waist (WC) circumferences, the Mini Nutritional Assessment Short Form (MNA-SF) and daily dietary calcium intake (CaI). The percentage of body total fat (BTF) and lean mass (LM) were quantified by DXA of total body. Spearman's correlation test and univariate linear regression was performed.

**Results:** BMD of LS positively correlated with BMI ( $r=0.22$ ,  $p=0.007$ ) and LM ( $r=0.31$ ,  $p<0.001$ ). BMD of FN correlated with BMI ( $r=0.35$ ,  $p<0.001$ ), LM ( $r=0.48$ ,  $p<0.001$ ) and CC ( $r=0.31$ ,  $p<0.001$ ). BMD of TH correlated with BMI ( $r=0.37$ ,  $p<0.001$ ), LM ( $r=0.44$ ,  $p<0.001$ ), CC ( $r=0.27$ ,  $p=0.001$ ) and MUAC ( $r=0.40$ ,  $p<0.001$ ). No correlations between BMD at any site and MNA-SF, CaI, WC and BTF were found.

In the univariate linear regression BMI was associated with BMD of LS, FN, TH ( $\beta=0.26$ ,  $p=0.001$ ;  $\beta=0.38$ ,  $p<0.001$ ;  $\beta=0.41$ ,  $p<0.001$ , respectively) and with AMM/AMI ( $\beta=0.67/\beta=0.79$ ,  $p<0.001$ ). Total fat also was associated with BMD of LS, FN, TH ( $\beta=0.36$ ,  $\beta=0.37$ ,  $\beta=0.48$ ,  $p<0.001$ , respectively) and with AMM/AMI ( $\beta=0.69/\beta=0.63$ ,  $p<0.001$ ). RMR was associated with BMD of LS, FN, TH ( $\beta=0.40$ ,  $\beta=0.49$ ,  $\beta=0.52$ , respectively,  $p<0.001$ ) It wasn't founded associations between MNA-SF score, CaI and BMD and AMM.

**Conclusion:** Higher values of BMI, CC, MUAC and LM, but not BTF and MNA-SF, corresponded to higher BMD rates in various parts of the skeleton in RA patients.

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### DOSE RESPONSE TO VITAMIN D SUPPLEMENTATION IN A GREEK POPULATION: A PROSPECTIVE STUDY

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**Objective:** The main aim of this prospective comparative trial was to study the effect of increasing doses of vitamin D3 on serum 25OHD levels.

**Material and methods:** A total of 146 subjects (31men and 115 women) who met the eligibility criteria, signed informed consent forms and were assigned to 1 of 3 vitamin D3 doses (1000,2200,4000 IU/d) (Solgar, Leonia, NJ, United States) according to baseline 25OHD serum levels and their physician decision for 6 months. Serum levels of 25OHD were measured at baseline and at 3 and 6 months after treatment. A safety panel including albumin adjusted serum calcium ,phosphorus ,creatinine,and PTH levels were done at baseline and 3 and 6 months. In addition 24-hour urine samples were also collected baseline at3 and 6 months to measure calcium and creatinine levels. At each visit were also collected data on harms. An