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Fracture risk factor in post-menopausal women with deterioration of bone density

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Abstract

Background: Most of the aged women experience the deterioration of bone due to the gradual decrease in bone mineral density (BMD). According to different studies, a continuous progressive decline in bone density results in risks of fractures. **Aims:** The study aimed to identify the fracture risk factors among post-menopausal women with the deterioration of bone density. **Settings and Design:** Cross-sectional study design was used, and was conducted clinic at Hospital Tengku Ampuan Afzan (HTAA) Kuantan, Pahang, Malaysia. **Methods:** In total, 116 post-menopausal women were selected as a sample from a public hospital in Malaysia. An assessment checklist on fracture risks; including age, menopause year, BMD, serum calcium level, balance and gait score, body mass index (BMI) was used to collect data. Descriptive statistics and Pearson correlation were used to analyze data. **Results:** Findings showed that 87.1% participants confidently performed daily activities. Normal TUG score was revealed for 76.7%, and Fall Free Prevention Questionnaire (FFPQ) findings show that no risk of falling prevailed. Pearson correlation showed negative weak correlation between BMD with the age of respondents, year of menopause and TUG ($r = -.373$), ($r = -.284$) and ($r = -.237$). Moderate correlation was found between BMD in BMI status ($r = .343$) and weak correlation was found between BMD and ABC scale ($r = .200$). **Conclusions:** The study emphasized on instigation of the intervention to improve population literacy related to menopause and bone density deficiency. © 2022 American Institute of Physics Inc.. All rights reserved.

Author keywords

Body mass index; bone density; Malaysia; menopause

Indexed keywords

EMTREE drug terms

calcium

EMTREE medical terms

adult; aged; appendicular skeleton; Article; body composition; body equilibrium; body mass; bone densitometry; bone density; calcium blood level; controlled study; cross-sectional study; fall risk; falling; female; fracture; fracture risk assessment; gait; hip; human; major clinical study; Malaysia; middle aged; obesity; osteopenia; physical examination; postmenopause; postmenopause osteoporosis; practice guideline; risk factor; spine; underweight

Device trade names

Commercial names given to devices, used for branding and differentiation in the market, commonly referenced in scientific and clinical research.

Body Scale M-400

Chemicals and CAS Registry Numbers

Unique identifiers assigned by the Chemical Abstracts Service (CAS) to ensure accurate identification and tracking of chemicals across scientific literature.

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