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Assessment of osteoporosis knowledge and its determinants among tuberculosis patients in tertiary care hospital Malaysia: A prospective study

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Abstract

Objective: Osteoporosis self-care knowledge is essential to encourage the patient's contribution towards controlling the disease. Osteoporosis incidence with various infectious diseases prompts us to conduct a study on osteoporosis knowledge among Tuberculosis (TB) patients. This study aimed to assess osteoporosis-related knowledge and its influencing factors among TB patients. Methods: A prospective cross-sectional study was conducted in the TB clinic of Hospital Pulau Pinang, Malaysia, and an osteoporosis knowledge test (OKT), a structured questionnaire, was used to collect data. TB patients aged 18 years and above with compromised bone health were included in the present study. Overall knowledge scores were dichotomized, calculating the mean score, descriptive statistics, and multivariate regression analysis was used to determine the influence of risk factors on knowledge scores. Results: Of 337 patients, 129(38.28 %) had good osteoporosis knowledge and 208(61.72 %) had poor knowledge. Among them, 231(68.54 %) were males, and 106(31.45 %) were females, with a mean age of 46.5 ± 17.1 years. The mean ± SD of OKT total score was 10.5 ± 2.0. The mean ± SD of the exercise knowledge score was 5.3 ± 3.4, while the nutrition knowledge score was 5.0 ± 3.2. Male gender (OR 3.86, 95 % CI 1.98–7.53), low-income level (OR 1.92, 95 % CI 1.12–3.30), rural residents (OR 2.49, 95 % CI 1.46–4.27) and participants with no formal education (OR 4.34, 95 % CI 1.11–16.84) or ≤12 years of education (OR 3.63, 95 % CI 1.52–8.65) were significantly responsible for poor OKT score. Conclusion: The results indicated that most TB patients had a poor perception of osteoporosis. More extensive strategies should be developed to enhance the campaign of awareness programs among TB patients to improve preventive measures of osteoporosis, such as calcium intake and exercise. © 2024 The Author(s)

Author Keywords

Malaysia; Osteoporosis; Osteoporosis knowledge test; Tuberculosis

Index Keywords

adult, age distribution, aged, Article, cross-sectional study, educational status, exercise, female, human, knowledge, lowest income group, major clinical study, Malaysia, male, medical information, nutrition, osteoporosis, osteoporosis knowledge test, prospective study, regression analysis, risk factor, rural population, sex difference, structured questionnaire, tertiary care center, tuberculosis

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