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Epidemiology of musculoskeletal disorders among iranian adults: results from a non-communicable disease cohort study

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Abstract

Background Persistent pain and reduced mobility and dexterity are the typical characteristics of Musculoskeletal disorders (MSDs). We aimed to determine the prevalence of back and joint pain, back, and joint stiffness, arthritis, and osteoporosis among adults and their distribution according to sociodemographic characteristics and comorbidities.

Methods This cross-sectional study was conducted on 9,520 participants aged 35–65 years from baseline data of the Ravansar Non-Communicable Disease (RaNCOD) cohort study, in the west of Iran. MSDs were evaluated by the RaNCOD cohort study physician using a standard questionnaire. Binary logistic regression was used to determine associations and reported by odds ratios (OR) and 95% confidence intervals (CI).

Results The MSDs in women were significantly more than in men (59.06% vs. 40.94%, $P < 0.001$). Skeletal muscle mass (SMM) was significantly lower in subjects with MSDs, and waist circumference (WC) and visceral fat area (VFA) were higher than in the non-MSDs ($P < 0.001$). MSDs were significantly more common in urban men and women (OR = 1.33; 95% CI: 1.14–1.50 and OR = 1.59; 95% CI: 1.39–1.82, respectively). Obesity increased the odds of MSDs in women (OR = 1.57; 95% CI: 1.33–1.84), whereas there was no association between BMI and MSDs in men. Men with high socioeconomic status (SES) had lower odds of MSDs than men with weak SES (OR = 0.77; 95% CI: 0.64–0.92).

Conclusion The MSDs were more prevalent among older people, women, obese people and urban dwellers. Lifestyle modification, especially weight loss may be helpful in reducing and controlling MSDs.

Keywords Musculoskeletal disorders, Joint pain, Back pain, Non-communicable disease

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Epidemiology Of Musculoskeletal Disorders

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Epidemiology of Musculoskeletal Disorders Among Dentists in Hanoi, Vietnam Ma Quang Dung, Mahāwitthayālai Mahidon, Mahāwitthayālai Mahidon. ASEAN Institute for Health Development, 2009

Modern Occupational Diseases Diagnosis, Epidemiology, Management and Prevention Ki Moon Bang, 2022-09-22 Occupational disease is an important public health problem of the 21st century Occupational disease still accounts for many preventable illnesses and injuries in the workplace It is important to incorporate modern knowledge of disease epidemiology and cutting edge diagnostic methods and treatment with the most recent developments in the management and prevention methods to better control work related diseases and injuries This book covers a selection of the common occupational diseases and injuries It offers accurate current information on the history causes diagnosis management and prevention of several occupational diseases Key features 14 chapters contributed by more than 30 experts in occupational and preventive medicine Comprehensive treatment of the history causes diagnosis management and prevention of many important occupational diseases including asbestosis silicosis work related asthma occupational cancer mesothelioma arsenic and other diseases Each chapter highlights the latest research findings and cutting edge technologies References for further reading Modern Occupational Diseases Diagnosis Epidemiology Management and Prevention serves as a useful guide for all readers interested in occupational diseases The suggested readership includes trainees in occupational medicine general practitioners medical students graduate students in public health programs occupational health nurses and professionals involved in occupational health and safety roles at public and private levels

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