
OBJECTIVE: To validate the differences of the prevalence of rheumatic symptoms between the north and south part of China and to investigate the associated risk factors for rheumatic complaints in Shantou, China. METHODS: Four samples together comprising 10,638 people ≥ 16 years of age were surveyed in 1987, 1992, 1995, and 1999. The protocol of the ILAR-China Collaborative Study or the WHO-ILAR COPCORD Core Questionnaire was implemented. Data on rheumatic symptoms that were part of these surveys were collected and analyzed. RESULTS: The prevalence rate of rheumatic complaints was increasing in the Shantou area during the recent decade (in 1987 11.6%, 1992 12.5%, 1995 16.0%, and 1999 19.8%). However, it was still lower than the rate in Beijing, China, in 1987 (40.0%). Rheumatic symptoms were more prevalent in women than in men, and were more frequently seen in the elderly than in young people. The most frequently involved site was the low back followed by the knee and neck. Lumbar pain was more frequent among rural residents, while neck pain was more prevalent in the urban school-age population group. The prevalence of knee pain was significantly higher in people living in multi-story buildings without elevators compared with those living in single-story houses. The peak value of bone mineral density (BMD) in the Shantou population was 0.839 +/- 0.085 g/cm2 in men, and 0.723 +/- 0.064 g/cm2 in women, significantly higher than that reported in 13 other provinces and cities of China including Beijing. The sense of seeking a physician's care was higher in the population with a higher prevalence of rheumatic symptoms than that in the group with a lower prevalence of complaints. However, no significant difference was found in the rate of disability among the different population samples. CONCLUSION: The prevalence rate of rheumatic complaints was lower in Shantou than in Beijing. Socioeconomic status, environmental differences (e.g., Shantou in the southern and Beijing in the northern part of China), sex, age, occupation, ergonomics, BMD, and awareness of seeking medical care might all be risk factors associated with the prevalence of rheumatic complaints.