Prevalence of rheumatic diseases in Taiwan: a population study of urban, suburban, rural differences.

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OBJECTIVE: To determine the prevalence of symptomatic rheumatic disease in rural, urban and suburban areas of Taiwan by a 2-staged population survey. METHODS: Nine thousand subjects over 20 years old were sampled proportional to age and sex for the area from 3 administrative areas in Taiwan. A pretested questionnaire to screen for potential rheumatic disorders and/or disability was administered in the communities by health workers. Subjects who screened positive were examined by a rheumatologist who assigned a final diagnosis based on established criteria. RESULTS: A total of 8998 persons over age 20 residing in Hen-San (rural area), Sien-Dien (suburban), and Cu-Tien (urban) were studied. Twenty-five percent (2272) of the population indicated rheumatic problems: 1124 of 2271 were evaluated by a rheumatologist with serological and radiological testing. The response rates were 49.7% in Hen-San, 50.7% in Sien-Dien and 48.5% on Cu-Tien. After age and sex adjustment, the prevalence of rheumatic symptoms in Hen-San, Sien-Dien, and Cu-Tien was 24.3, 18.4 and 26.3% respectively. It was significantly higher in rural Hen-San and urban Cu-Tien than in Sien-Dien. The prevalence of rheumatoid arthritis (RA) in Hen-San, Sien-Dien, and Cu-Tien was 0.26, 0.78, and 0.93%, osteoarthritis (OA) was 6.3, 5.8, 5.1%, ankylosing spondylitis (AS) was 0.54, 0.19, 0.4%, gout was 0.16, 0.67, 0.67%, respectively. The prevalence of RA in Sien-Dien and Cu-Tien was significantly higher than in Hen-San (p < 0.05) but were not statistically different for OA, AS and gout among those 3 sites. Only one case of systemic lupus erythematosus (SLE) was found in urban Cu-Tien for a prevalence of 0.033%. CONCLUSION: Our results suggest that the prevalence of RA and AS is similar to that reported in Caucasians. We could not confirm anecdotal reports that SLE was common or that it is more common than RA in people of Chinese ancestry. The prevalence of OA of the hip is comparatively uncommon in our population. The difference in prevalence of rheumatism, RA, OA and gout in these areas suggests areas of further study.