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Urbanization Theory for Growing Trend of Multiple Sclerosis Prevalence among Iranian Population

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Dear Editor-in-Chief

Dehghani et al. well elucidated the role of urbanization and life style on epidemiology of multiple sclerosis (MS) dispersal in Iran based on the ecological research data. The authors have raised the issue of "Urbanization" and attributed the growing prevalence of MS to the environmental factors, the rising trend of migration to urban areas and changes of lifestyle (1).

Currently, there are interesting debates regarding this issue and various hypotheses have been suggested. Although, urbanization by itself cannot increase the prevalence of MS and its effect is due to change in life style including: diet changes, modernization, living in apartments and less exposure to sun and etc. which were interpreted in literatures. In a recent systematic review, the epidemiology of MS in Middle East and North African countries based on all available data elucidating trends in the incidence, prevalence and natural history of MS in these areas. The increase in epidemiologic variables was attributed the probable roles of lifestyle and to environmental related factors including: smoking, sun protection products, levels of vitamin D and air pollution in MENA countries (2).

In both two large studies, the authors truly underlined the trend of urbanization in Iranian. According to population-based data in Iran, the rural population in the middle of 20th century was 70% while in the last decade, this equation was reversed and the urban population of Iran become around 70%. Transition from rural to urban living and different levels of urbanization was associated with MS incidence in a genetically stable population (3). In addition, in Persian Gulf, neighboring Arab countries the dramatic economic development resulted in higher socioeconomical levels. Different socioeconomic status in each province of larger countries such as Iran is another predisposing factor for the differences reported (4).

It seems that the need for detailed analysis of genetic predisposition and environmental factors associated with MS among Iranian population may lead to interesting findings. Maybe the epidemiology of MS and clinical features in Iran is beyond the demographical related etiologies.

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