Incidence pattern and spatial analysis of breast cancer in Iranian women: geographical Information system applications


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Sir,

We read with interest the recent paper by Ali Ahmadi et al. (1). We appreciate the authors of this valuable work for their contribution to knowledge in the field of breast cancer. They first calculated crude incidence rates for each province then used the World Health Organization (WHO) standard population to estimate Standardized Incidence Rates (ASR). Finally, they tried to perform a spatial analysis to determine the incidence pattern of breast cancer in the Islamic Republic of Iran. The mean (± standard deviation or SD) age of patients was 50.9 (12.6) years. There was a clustering pattern in ASR of Mazandaran, Tehran, Alborz, Isfahan and Markazi Provinces and a significant cluster of high incidence rates of breast cancer in Iranian women.

After reading this paper we think it worthwhile to note some important methodological issues to prevent misinterpretation and misleading messages. But before anything, it should be noted that this study is not the first that attempts to examine the clustering of breast cancer incidences in the Islamic Republic of Iran, as mentioned by the authors in the discussion (2,3). First, the authors may have been mistaken in their use of clustering techniques, reporting the results of the global Moran I index (a spatial autocorrelation index that assigns an amount between –1 to +1 to all studied units [provinces], merely to rule out the spatial randomness and not mapping the studied units, as mentioned in this study Moran’s index = 0.579, P

References


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