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■ Letter

Comparison of Cancer Prevalence in Physicians with That of the General Population, and Important Considerations

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To the Editor

We read with great interest the article by Kim et al.[1] entitled "Cancer prevalence among physicians in Korea: a single center study" published in the March issue of the journal. The authors reported that in Korea, physicians have a higher prevalence of cancer compared to the general population, and that cancer prevalence in male and female physicians was 2.47-fold and 3.94-fold higher, respectively, than the expected prevalence of the general population.[1] However, we have some concerns about this comparison procedure. In most studies, age is considered a predictor for cancer development, and so age is an important confounder in crude comparisons.[2,3] Therefore, we propose that controlling for age in this case must be done using an indirect age adjustment.

Indirect adjustments are used for age adjustment of morbidity data when the numbers of events for each age-specific stratum are not available.[4] In the study by Kim et al.,[1] the age-specific stratum were: <35 years, 35–45 years, 45–55 years, 55–64 years, and ≥65 years. The expected number of cancers in physicians must be calculated by applying the standard rate (incidence rates of cancer in each age-specific stratum in the general population), and multiplying by the number of physicians in each stratum of the study. Subsequently, for each age-specific stratum, the ratio of the total number of observed events and the expected numbers of cancers provides an estimate for comparing cancer prevalence in physicians to that in general population, which serves as the source of the reference rates; this ratio is known as the standardized incidence ratio.

In conclusion, we think that this article makes valuable points about cancer among physicians, but that comparisons with the general population must adjust for age using an indirect age adjustment to eliminate the potential confounder.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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