

Title: Epidemiology of running-related injuries in the Korean population: a cross-sectional survey of 1046 runners

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Aims: Running is the oldest form of exercise in human history and the most popular exercise in the world.(1) While running can improve physical fitness and reduce chronic health problems such as obesity and cardiovascular disease, it is also associated with injuries in lower extremities.(2) However, because there was no consensus definition of running-related injury, the prevalence and incidence of running-related injuries had been reported to vary between 19% and 92%.(3) Moreover, epidemiology of running-related injuries in Asian populations has been rarely investigated. Therefore, this study was first to use the consensus definition of running-related injuries published in 2015 (3) and investigated the epidemiology of running-related injuries in the Korean population.

Methods: In cross-sectional design, an online survey was circulated among various running communities in Korea. The questionnaire contained information on presence and location of pain attributed to running, demographic characteristics, weekly running mileage, training intensity, running pace, type of shoes, foot strike, reason for running, and exercise experience prior to running.

Results: Among 1046 runners (male=624, female 422) who responded, 94.7% experienced some kind of pain while running, but only 37% were categorized to have running-related injuries. The most common site of injury was the knee followed by ankle. Exercise experience prior to running (OR 1.57 95% CI 1.13-2.21), setting of specific running goals (OR 1.57 95% CI 1.08-2.27), and mileage increases from 20-30km to 30-40km (OR 1.66 95% CI 1.06-2.63) were associated with significant increases in running-related injuries.

Conclusion: In order to avoid running-related injuries, runners should be careful in increasing weekly mileage. Moreover, runners with previous exercise experience may need to approach running more cautiously. Setting goals may be motivating but at the same time can increase the risk of running-related injuries.

References:

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