

Common Soccer Injuries and Its Risk Factors: A Systematic Review

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Abstract : Background: Soccer is one of the most common sports in the world. It is associated with a significant chance of injury either during training or during the course of an actual match. Studies on the epidemiology of soccer injuries have been widely conducted, but methodological appraisal is lacking to make evidence-based decisions. Objectives: The purpose of this study was to conduct a systematic review of common injuries in soccer and their risk factors. Methods: A systematic review was performed based on the Joanna Briggs Institute procedure for conducting systematic reviews. Databases such as SPORT Discus, Cinahl, Medline, Science Direct, PubMed, and grey literature were searched. The quality of selected studies was rated, and data extracted and tabulated. Plot data analysis was done, and incidence rates and odds ratios were calculated, with their respective 95% confidence intervals. I^2 statistic was used to determine the proportion of variation across studies. Results: The search yielded 62 studies, of which 21 were screened for inclusion. A total of 16 studies were included for the analysis, ten for qualitative and six for quantitative analysis. The included studies had, on average, a low risk of bias and good methodological quality. The heterogeneity amongst the pooled studies was, however, statistically significant (χ^2 -p value < 0.001). The pooled results indicated a high incidence of soccer injuries at an incidence rate of 6.83 per 1000 hours of play. The pooled results also showed significant evidence of risk factors and the likelihood of injury occurrence in relation to these risk factors (OR=1.12 95% CI 1.07; 1.17). Conclusion: Although multiple studies are available on the epidemiology of soccer injuries and risk factors, only a limited number of studies were of sound methodology to be included in a review. There was also significant heterogeneity amongst the studies. The incidence rate of common soccer injuries was found to be 6.83 per 1000 hours of play. This incidence rate is lower than the values reported by the majority of previous studies on the occurrence of common soccer injuries. The types of common soccer injuries found by this review support the soccer injuries pattern reported in existing literature as muscle strain and ligament sprain of varying severity, especially in the lower limbs. The risk factors that emerged from this systematic review are predominantly intrinsic risk factors. The risk factors increase the risk of traumatic and overuse injuries of the lower extremities such as hamstrings and groin strains, knee and ankle sprains, and contusion.

Keywords : incidence, prevalence, risk factors, soccer injuries

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