Title

The sustainable health of professional athletes: what's beyond severe musculoskeletal injuries?

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Introduction and aim

In elite sports, all stakeholders should bear in mind that they must protect and promote the physical, mental and social health of athletes, both during and after their career. To present time, most of the scientific medical studies have been directed towards the physical health of elite athletes, especially severe musculoskeletal injuries. Recently, mental health problems were shown to be prevalent in both current and former elite athletes. Consequently, the assumption is that a better understanding of the interaction between physical and mental health problems among current and former elite athletes can lead to a better medical care and support. The aim was to explore the relation between severe musculoskeletal injuries, osteoarthritis and mental health problems (distress, anxiety depression, sleep disturbance) among former elites athletes retired from cricket, football, Gaelic sports, ice hockey and rugby.

Material and methods

Cross-sectional analyses were performed on the baseline questionnaires from five prospective cohort studies in elite cricket, football, Gaelic sports, ice hockey and rugby. Several Patient Reported Outcome Measures (PROMs) were collected: number of career-related severe musculoskeletal injuries (>4 weeks out of training/competition), osteoarthritis diagnosed by a medical professional, and symptoms of distress, anxiety depression and sleep disturbance. Data analyses (descriptive and analytic) were conducted for the whole group of participants.

Results

A total of 624 former elite athletes were enrolled (mean age 37 years old). Participants had incurred up to 15 severe musculoskeletal injuries during their career, while prevalence of confirmed osteoarthritis was 33%. Mental health problems were reported by 22 to 27% of the participants. The number of sports career related severe musculoskeletal injuries was correlated with post-sports mental health problems, and osteoarthritis was statistically associated with distress (OR=1.7, 95% CI 1.2-2.6) and sleep disturbance (OR=1.6, 95% CI 1.1-2.3).

Discussion and conclusion

Our findings might contribute largely to raising the self-awareness of the different stakeholders in professional i.e. elite sports about the interaction between physical and mental health problems among former elite athletes. Our study emphasise also the importance of applying a multidisciplinary approach to the clinical care and support of elite athletes, while their health and safety should be placed in a life span perspective.