Change in Profile of Mood States scores among elite professional dancers following time-loss injury
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Context: Researchers suggest that increased depression is correlated to injury occurrence among athletes and that increased tension, depression, and lower vigor can indicate increased risk for injury. We propose that by looking at mood we can better understand the biopsychosocial factors that influence performance before and after injury. Objective: To determine if mood states change in conjunction with time-loss injury among professional dancers. Design: Data was collected within a longitudinal injury surveillance study utilizing the International Performing Arts Injury Reporting System (IPAIRS), including both time-loss injury reported by a clinician as well as monthly self-reported mood survey using the Profile of Mood States (POMS). Setting: Participants were part of a larger study that involves dancers from professional companies and collegiate dance programs. All participants remained onsite at their respective institutions. Participants: Among 119 dancers (23.9±5.7 years; 47 male, 72 female) from four professional ballet and modern dance companies and one pre-professional collegiate dance major program, 21 dancers experienced a time-loss injury during the survey period (Jan 2013–Aug 2014); six of those dancers provided enough data via monthly POMS to be included in this study. All six dancers (27.8±6.3 years; 1 male, 5 female) were in professional companies. One dancer experienced two injuries for a total of seven injuries (6 traumatic, 1 slow-onset). Interventions: Using an online Qualtrics survey platform, the POMS short form was distributed via an email link mid-month to all dancers and emailed again at the end of the month if responses were incomplete. Dancers could complete the survey voluntarily. POMS has been previously validated for adults and athletes. Measures: Independent variables included POMS scores for tension, depression, anger, fatigue, vigor, and confusion. Additional variables included date of survey and those collected via IPAIRS including injury type, date of injury, and date of return to dance. Results: For five of the seven injuries, changes in mood scores showed increased tension and depression, and decreased vigor, which is consistent with previous literature. Three of the seven dancers also appeared to demonstrate higher anger scores. Of the two dancers who did not appear to demonstrate expected changes, one was slow-onset with an elected stop and surgical procedure, the other consistently demonstrated abnormal POMS scores that did not appear to change post-injury. Those two were removed from preliminary analyses, which showed that dancers demonstrated higher post-injury tension (p=.032) and depression (p=.007); higher anger and lower vigor approached statistical significance (p=.091 and p=.072). Conclusions: Psychological states (specifically tension, depression) show changes in accordance with injury occurrence among dancers, and mood changes may remain until return to dance, consistent with athlete literature. Monitoring mood can help identify dancers at risk for injury and readiness to return to full dance post injury.

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