Prior Injury, Health-Related Quality of Life, Disablement, and Physical Activity in Former NCAA Division I Women’s Soccer Players
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Context: Former collegiate athletes may be at risk for negative health outcomes like lower health-related quality of life (HRQoL), higher disablement, and lower lifetime physical activity (PA) participation. A history of severe sports injury may play a role in these outcomes. Women’s soccer players experience high rates of injury yet most soccer-specific research has been with male players. Objective: To assess the role prior sports injury plays in self-reported HRQoL, levels of disablement, and PA behaviors of former Division I women’s soccer players. Design: Cross-sectional study.

Setting: Online Survey. Participants: A convenience and snowball sample of former NCAA Division I women’s soccer players who were no longer playing elite competitive soccer (e.g. collegiately, semi-professionally, professionally) were recruited through email and social media (e.g. Facebook, Instagram, Twitter). A total of 382 former players ranging in age from 22-58 ($M_{age} = 36.41 \pm 7.76$) were included for data analysis, including 372 who completed the full survey (completion rate = 79.6%) and an additional 10 participants who completed at least one main outcome measure. The participants played on average 3.87 years of Division I soccer and the majority of the sample ($n = 298; 78.0\%$) was 10 or more years removed from their NCAA playing career.

Interventions: Participants completed demographics, injury history, the Patient-Reported Outcomes Measurement Information System (PROMIS; HRQoL), the Disablement for the Physically Active Scale (DPA; disablement), and the Godin Leisure Time Physical Activity Questionnaire (PA). A history of previous severe soccer related injury (any injury that kept an athlete out of participation 21 or more days) was the independent variable. Main Outcome Measures: The dependent variables were physical and mental component summary scores for HRQoL and disablement, and frequency of moderate-to-vigorous PA. Independent t-tests were used to compare PA, disablement, and HRQoL between those who reported a history of severe injury and those who did not. Pearson’s correlations were used to assess associations among the main outcome variables.

Results: Participants with a history of severe injury ($n = 261$) reported worse physical summary scores for both HRQoL ($M_{diff} = 1.92 t(378) = 2.68; p = .008$) and disablement ($M_{diff} = -4.91 t(369) = -3.86; p < .001$) compared to those who did not suffer a severe injury ($n = 121$). Greater PA was associated with higher physical ($r = .310$) and mental ($r = .199$) HRQoL and lower levels of disablement ($r = -.152$ physical; $r = -.148$ mental). Disablement and HRQoL were inversely related ($r$ range = -.298 to -.655).

Conclusions: The majority of participants reported suffering a prior severe soccer-related injury, which may have a negative long-term impact on health outcomes for former women’s soccer players.