

EPIDEMIOLOGY OF INJURY IN ENGLISH WOMENS SUPERLEAGUE FOOTBALL: A COHORT STUDY

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Introduction: The epidemiology of injury in male professional football has been well documented (Ekstrand, Hägglund, & Waldén, 2011) and used as a basis to understand injury trends for a number of years. The prevalence and incidence of injuries occurring in women's super league football is unknown. The aim of this study is to estimate the prevalence and incidence of injury in an English Super League Women's Football squad.

Methods: Following ethical approval from Leeds Beckett University, players (n = 25) signed to a Women's Super League Football club provided written informed consent to complete a self-administered injury survey. Measures of exposure, injury and performance over a 12-month period was gathered. Participants were classified as injured if they reported a football injury that required medical attention or withdrawal from participation for one day or more. Injuries were categorised as either traumatic or overuse and whether the injury was a new injury and/or re-injury of the same anatomical site.

Results: 43 injuries, including re-injury were reported by the 25 participants providing a clinical incidence of 1.72 injuries per player. Total incidence of injury was 10.8/1000 h (95% CI: 7.5 to 14.03). Participants were at higher risk of injury during a match compared with training (32.4 (95% CI: 15.6 to 48.4) vs 8.0 (95% CI: 5.0 to 10.85)/1000 hours, $p < 0.05$). The most common sites of injury was the anterior thigh (13/43, 30.2%) and knee (11/43, 25%). There were eleven (25.6%) discrete quadricep muscle injuries (4 traumatic 36.4%; 7 overuse 63.6%) and eight (18.6%) discrete ligament injuries (8 traumatic 100.0%).

There were two minimal injuries (4.7%; 1-3 days), twenty-five mild (58.1%; 4- 7 days), twelve moderate (27.9%; 8 – 28 days) and four severe injuries (9.3%; > 28 days) of which there were three non-contact anterior cruciate ligament (ACL) injuries. The epidemiological incidence proportion was 0.80 (95% CI: 0.64 to 0.95) and the average probability that any player on this team will sustain at least one injury was 80.0% (95% CI: 64.3% to 95.6%).

Discussion: This is the first report capturing exposure and injury incidence by anatomical site from a cohort of English players and is comparable to that found in Europe (6.3/1000 h (95% CI 5.4 to 7.36) Larruskain et al 2017). The number of ACL injuries highlights a potential injury

burden for a squad of this size. Multi-site prospective investigations into the incidence and prevalence of injury in women's football are required

References

Ekstrand J, Hägglund M, Waldén M. (2011). *BJSM*, 45, 553–558

Larruskain J, Lekue J. A, Diaz N, Odriozola A, Gil S. M. (2017) *Scand J Med Sci Sports* 28 (1), 237-245

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