Results Eight teams [n=118 players; 83 males, 35 females] consented to participate. All control teams and 3/4 of the intervention teams completed all 6 sessions [median 88 days (range 42–102)]. No adverse events were reported. There were 6 concussions in the intervention group (n=65) and 4 in the control group (n=53). Exploratory univariate Poisson regression analysis adjusted for cluster by team revealed no difference in concussion risk between groups [incidence rate ratio (IRR)=0.99 concussions/100 players/season (95%CI; 0.28–3.48)]. For males alone, there was also no difference in IRR [IRRmales=0.37 (95%CI; 0.068–1.94)]. Both female teams were allocated to the intervention group.

Conclusions The implementation of a neuromuscular and sensorimotor training program with youth ice hockey teams was feasible and safe. Future evaluation in a larger sample over a longer training period to examine the effects of neuromuscular and sensorimotor training strategies on the risk of concussion in youth ice hockey players, including consideration of sex and age group is warranted.

Abstracts

178 THE EFFECT OF THE FÉDÉRATION INTERNATIONALE DE FOOTBALL ASSOCIATION (FIFA) 11+ KIDS INJURY PREVENTION PROGRAM ON REDUCING INJURY RATES IN CHILDREN’S SOCCER: A CLUSTER-RANDOMIZED CONTROLLED TRIAL

Background The Fédération Internationale de Football Association (FIFA) 11+ Kids injury prevention program is an exercise-based program developed by an international group of experts to prevent injuries among children’s soccer players.

Objective The objective of this study is to evaluate the effect of the FIFA 11+ Kids injury prevention program on reducing the incidence of injuries among children soccer players aged 7–13 years.

Design A cluster-randomized controlled trial.

Setting Children’s soccer.

Patients (or Participants) Ninety-four boys’ soccer teams (780) players (under 8 years, under 9 years, under 11 years, and under 13 years age groups) were randomly allocated into the experimental or a control group.

Interventions (or Assessment of Risk Factors) The experimental group performed the FIFA 11+ Kids injury prevention program as warm-up during training sessions for at least twice a week, and the control group performed their usual warm-ups. Participants were prospectively followed during one season.

Main Outcome Measurements The primary outcome was to investigate the incidence of initial, recurrent injury, mechanism of injury and injury severity.

Results A total of 43 injuries were reported among 391 players in the experimental group in 8353.33 hours of exposure (0.85 injuries/1000 exposure hours), and a total of 86 injuries were reported among 389 players in the control group in 7102.67 hours of exposure (2.01 injuries/1000 exposure hours). The injury risk ratio IRR was 0.43, which suggests that the injuries in the experimental group were 57% less in comparison to the control group.

Conclusions Implementation of the FIFA 11+ Kids injury prevention program reduced overall injury rates in boys’ soccer players more than the usual warm-up.