Background Use of SEBTm can identify athletes with risk of injury and help to set up prevention strategies.

Objective To identify subjects at risk of lower limb injuries (LLI) with SEBTm after a specific prevention training.

Design Cluster randomised controlled trial.

Setting French elite soccer youth academy.

Patients (or Participants) 36 healthy female athletes (aged 15–19 years old) were included and assigned to the 'Control Groupe' (CrtGrp) or 'Prevention Training Group' (PrevGrp) by a cluster randomised controlled trial.

Interventions (or Assessment of Risk Factors) Both groups performed normal 5 weeks pre-season training, but in the 'intervention' we implemented a specific prevention protocol based on international recommendations.

Main Outcome Measurements Composite score (CS) of SEBTm were measured in both group at baseline (T0), after 5 weeks (post-protocol) and 3 months after the end of the protocol. Furthermore a 10 month follow up questionnaire post protocol was used to asses LLI in the two groups.

Results After 5 weeks and exclusion criteria, 28 players completed the all study (16 in the control group and 12 in the intervention group). After the protocol period, CS increased significantly in the PrevGrp (p = 0,03). In the CrtGrp, no difference was seen between the 2 testing sessions (p=0,68). Based on injury risk factors, 19 subjects were identified as 'at risk' at T0. Of these, 4 players had at-least 1 LLI after 10 months (RR=0,67). Moreover, 2 subjects who were not identified 'at risk' sustained a LLI during during the 10 months period. After 5 weeks, 2 of the 12 subjects in the PrevGrp exceeded the SC cut-off, compare to 0 on 16 players in the CrtGrp.

Conclusions This study suggests that the prevention training program seems to improve the SC at SEBT. This could leed to a diminished risk to sustain an LLI. These results needed to be confirmed with larger sample size studies.

278   USING INFOGRAPHICS AND VIDEO TO PREVENT INJURIES AND ILLNESSES IN ATHLETICS

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Background Injuries and illnesses represent a health problem affecting athletics athletes' training and performance. Recently, research on injury and illness epidemiology and risk factors have provided some insights to help implement prevention strategies. The next step is presenting the science, in an engaging form that can assist medical teams, coaches and athletes understand and implement these strategies.

Objectives To produce resources in order to disseminate knowledge on injuries and illnesses epidemiology and risk factors, and highlight potential prevention strategies.

Participants Researchers and practitioners working in athletics injury and illness prevention collaborated with athletes.

Main Outcome Measurements Resources/communication assets, for example infographics, animations, video, were produced and shared with medical teams, athletes and coaches.

Results Infographics, animation and engaging knowledge translation tools/educational materials on illness epidemiology during international athletics championships were produced. These took the scientific knowledge, made it specific for the context of athletics, and provided easily digestible, visually rich information. These were shared with athletes at events such as the European Athletics Indoor Championships.

Conclusions We developed resources to be shared to all stakeholders working with athletics athletes, providing tips and practical recommendations on injury and illness prevention. Having share these to athletes and their teams, the next step is to evaluate the documents and tools for and by athletes and involved actors, and the effectiveness of these interventions. These strategies may be relevant to provide athletes with engaging information on preventing injury and illness in other sports.

279   FIELD HOCKEY INJURIES AND PERSONAL PROTECTIVE EQUIPMENT: A STATUS SURVEY OF GERMAN NATIONAL TEAMS

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Background In order to prevent sports injuries, it is necessary to know the number of injuries and injury mechanisms of sports-related injuries. In addition, acceptance and use of personal protective equipment (PPE) should be examined. The results give a better overview in German elite hockey.

Objective Data on injury frequencies and injury patterns in field hockey as well as on the wearing behavior of PPE in training and competition.

Design Questionnaire-based retrospective total survey. Players were instructed to fill out one general and, in case of at least one time loss injury (at least 1 training or competition missed) during a 3-year-period (February 2016 – April 2019), one additional questionnaire per injury.

Setting National elite hockey level. Participants were member of the German national teams including A-, U 21- and U 18- men and women teams (age range 16–32y).

Participants 127 players took part in the survey.

Main Outcome Measurements Exposure, injured body parts, incidence, time loss, wearing of PPE

Results 89 players sustained 114 injuries. Incidence: Competition: Men: 5.79 injuries per 1000h; Women: 7.99 injuries per 1000h. Training: Men: 0.51 injuries per 1000h; Women: 0.31 injuries per 1000h. Body parts: Men: 77.6% lower extremities, 8.95% upper extremities. Women: 75% lower extremities, 16.7% upper extremities. Severity defined by Fuller et al. (2006): Men: 53.3% severe, 30% moderate, 10% mild and 6.67% minimal. Women: 47.8% severe, 37% moderate, 13% mild and 2.17% minimal. PPE: Fielders: Men: leg protection 96.6%, mouthguard 88.1% and gloves 66.1%. Women: leg protection 98%, mouthguard 94% and gloves 94%. Goalkeeper: carry more PPE in addition to mandatory PPE.