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Implementing a Program at National Level to Prevent Sports Injuries in Adolescents

Jari Parkkari, MD, PhD

 UKK Institute

Injuries in Physical or Sportive Activity



- 7.000 fatal sport injuries in European Union (EU27)
- 600.000 hospital admissions in EU27
- 5.200.000 hospital outpatients in EU27
- Risk of injury among athletes is up to 1000-times higher compared to that in an average occupational setting.

Majority of these could be prevented!



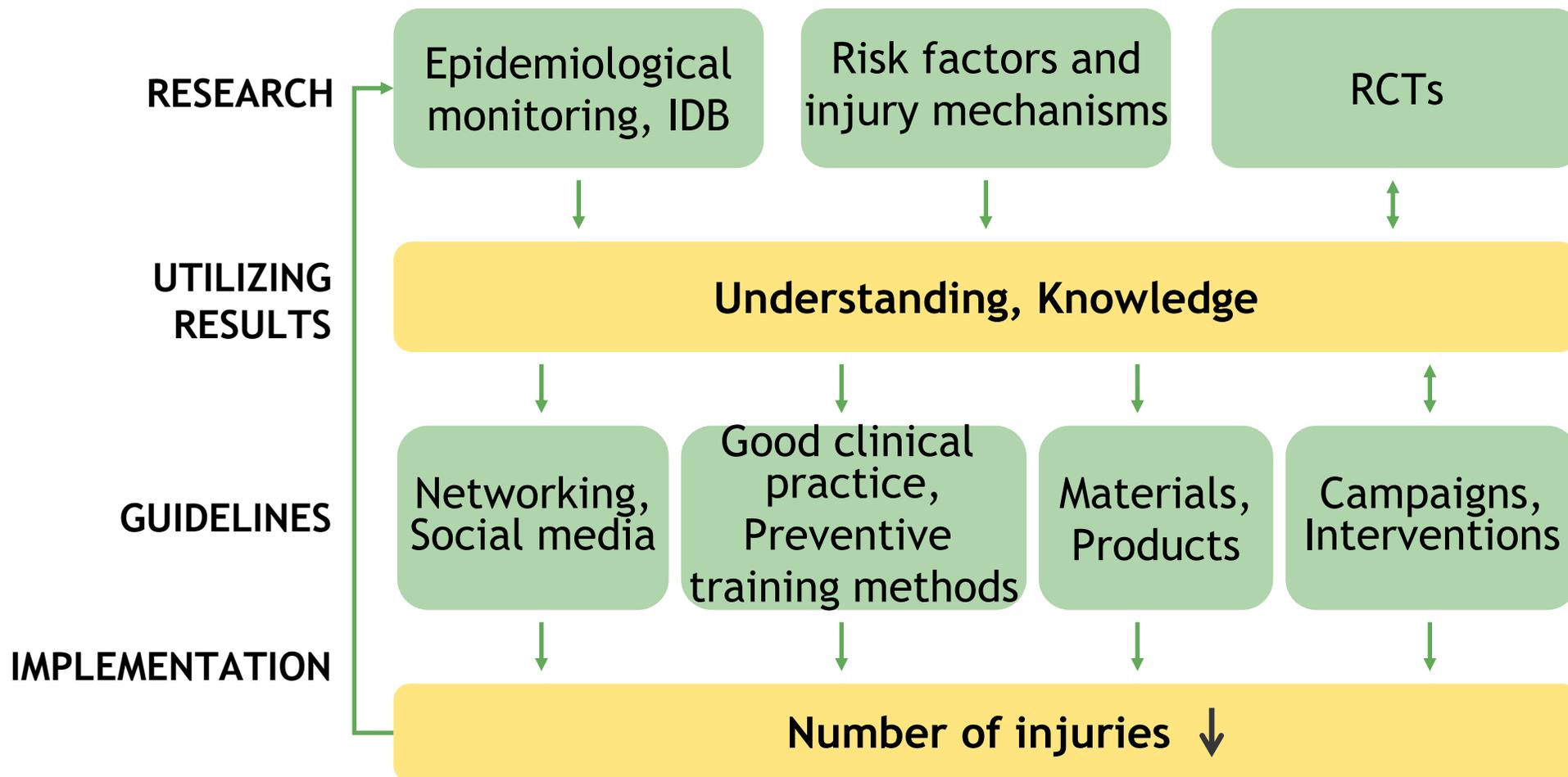
Injuries in Physical or Sportive Activity



- 25 % of the sport injuries affect young people in the age of 15 to 24 years in EU27.
- More men (67 %) are injured than women.
- 'Team ball sports' account for about 40 % of all hospital treated sports injuries in EU27
- Ranking order in EU27: soccer (74 %), basketball (8 %), volleyball (7 %), handball (3 %)
- Majority occur in non-organized sports.

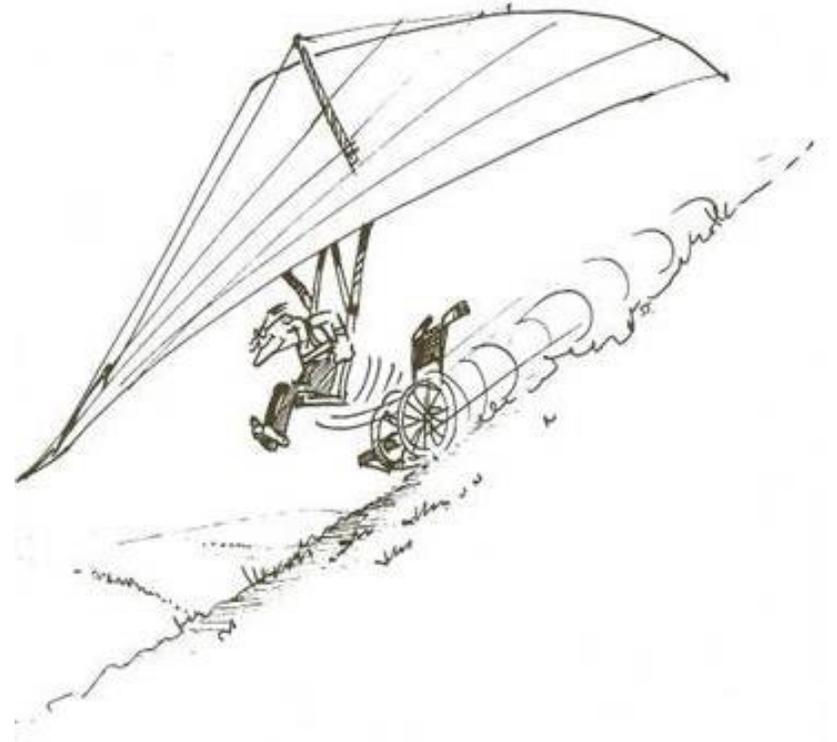
Sports and Exercise Safety in Finland (LiVE)

Steps in Sports Injury Prevention



Means of Injury Prevention

- Changes in rules and legislation
- Changes in environment and equipment
- Changes in behaviour (voluntary, e.g. training)



A Systematic Literature Review and Meta-analysis of Randomized Controlled Trials



- Sports injury prevention method, which effectiveness has been most clearly shown by RCTs, include specific neuromuscular training (NMT).
- The effective training improves the motor skills and movement control of adolescents and makes loading of their joints and ligaments safer.
- Neuromuscular training programs can be implemented as a part of a warm-up without additional equipment, and have positive effects for not only to reduce injuries but also to improve sports performance.

Injury Preventing Warm-up Program



- Warm-up sessions are carried out just before practices with low-to-moderate intensity.
- The program should include different types of exercises:
 - 1) Running technique exercises 5–7 min
 - 2) Balance and body control exercises 5–7 min
 - 3) Plyometric exercises 5–7 min
 - 4) Strengthening exercises 5–7 min
- The exercises should have different variations with diverse difficulty and intensity.
- One warm-up session takes 20–30 minutes.





Sports and Exercise Safety in Finland Programme 2006–2016

Funding

- Ministry of Social Affairs and Health
- Ministry of Education and Culture
- Federation of Finnish Insurance Companies



3 Nationwide Safety Implementation Programmes



HEALTHY ATHLETE

HEALTHY ATHLETE
13+ YEAR-OLDS
2006-



SAFETY IN SCHOOL SPORTS
10-15-YEAR-OLDS
2010-



**SAFETY IN VOCATIONAL
SCHOOLS**
16-19-YEAR-OLDS
2014-

Frameworks of the Programmes



HEALTHY ATHLETE

Ten-point circle provides information and know-how on smart, healthy and safe sports and exercise.



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SAFETY IN SCHOOL SPORTS

The Element-wall is a framework for the Implementation programme.



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SAFETY IN VOCATIONAL SCHOOLS

The Element-wall is a framework for the implementation program.



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Dimensions: physical – psychic – social

Healthy Athlete



Aims

- to foster coaching and training which
 - supports physical, psychic and social growth of the adolescents
 - develops motor skills widely
 - promotes health and wellbeing & prevents injuries
- to implement information and know-how to daily practises in sports clubs

Main target group

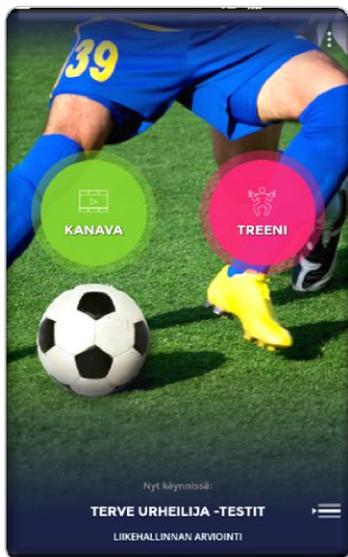
- coaches and instructors
 - young athletes (13+ years) and their families
- ❖ Healthy Athlete tutors
- ❖ Sport nutrition professionals' network

Wide Range of Activities and Materials Mobile Applications



Terve Urheilija (Healthy Athlete) Mobile Application

- Videos and training programs on assessment and improvement of movement control
- Videos available also at [program websites](#) and in YouTube on [Terve Urheilija channel](#)



(Developer: Sport Connect)

Safety in School Sports (TEKO)



Aim

- to promote sport safety in school settings.

Main target group

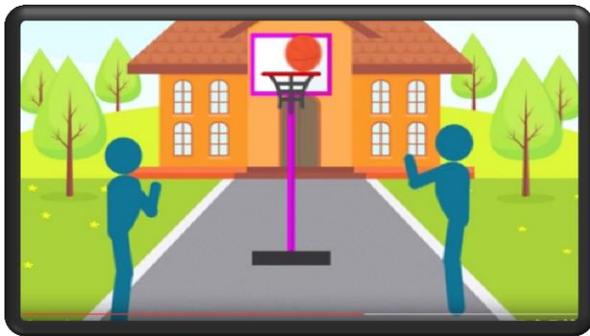
- PE and health education teachers
- ❖ Large network with national co-operators; Schools on the Move -program, universities, teacher and sport federations



Wide Range of Activities and Material Videos

Large range of videos to support learning:

- sitting: disadvantages and ways to reduce sitting and sedentary time
- PA: importance and ways to add physical activity
- sport safety: aspects of safety, warm-up and first aid of sports injuries
- nutrition: meal frequency and healthy snacks for adolescents



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[Animated video on sports safety](#)

[Playlist in YouTube](#) 



Smart Moves

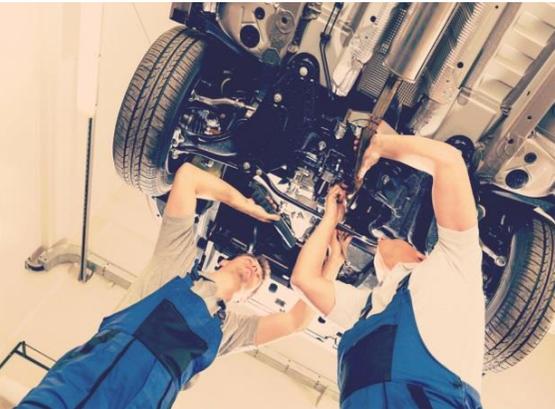


Aim

- increasing healthy and safe PA
- reducing sedentary behaviour
- preventing sports and free time accidents and injuries

Main Target Group

- PE and health education teachers in vocation schools
 - young adults studying in vocational schools
- ❖ Students of different professions are involved strongly in the program implementation.

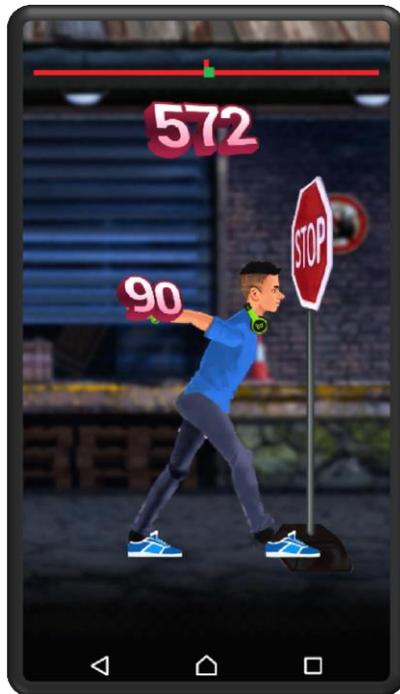




Wide Range of Activities and Material Mobile Games

Freely available for Android smart phones

- SpineBlast Inc: ergonomics
- Safety Santa: sports injury prevention



Other game themes:
PA, sitting breaks,
nutrition, sleep and
work ability



(Developer: Peto)



Programmes in Web and Social Media



Web page visits year 2015



198 000



121 000



13 000

YouTube

videos 180

views 380 000

Facebook followers



2 000



500



180

Twitter followers



500



150

Newsletter subscribers



1 400



1 700



300

Population 5,5 M



- The reach of the target groups has been promising (web and social media).
- The contents of free electric material has received good feedback from the target groups (target group inquiries).
- Continuous updating of the material on the basis of scientific evidence is needed.
- Continuous development of the implementing (digitalization) and teaching methods is needed.



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Accidents Don't "Happen" – Know the Dangers and Control Them!



Safety 2016
World Conference