

Safety in Sports

Safety Management Schemes in Basketball

- Implementation and Testing - (D9a)



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in collaboration with

SVENSK BASKET
Swedish Basketballl Federation

FIBA EUROPE We Are Basketball
European Basketball Federation

SBA
Slovak Basketball Association

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KfV Kuratorium für Verkehrssicherheit

EuroSafe European Association for Injury Prevention and Safety Promotion

Consumer Safety Institute

ARAG Insurance www.ARAG-Sport.eu

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1. Introduction

The present report „Safety Management Schemes in Basketball" (D9a) is part of the European Project "Safety in Sports" which has received funding from the EU, in the framework of the Public Health Programme 2003-2008. The main objective is to depict promising measures that contribute to the reduction of injury numbers and/or severity and to disclose meaningful and applicable strategies to promote them within the European basketball community. The aggregation of best prevention measures and most promising promotion strategies shall finally lead to "Safety Management Schemes" (SMS) in basketball – a basic guideline how to sustainably implement sports injury prevention into European basketball. Therefore, a previously selected choice of most promising prevention measures and promotion strategies was pilot tested in two collaborating national basketball federations (i.e. Slovak Basketball Association, Swedish Basketball Federation). Experiences made during these implementations were assessed with particular regard to increasing compliance and guaranteeing maintenance. The workflow and the contents of the Safety Management Schemes in Basketball are shown in table 1.

Both, compliance and maintenance are often described as key indicators for successful sports injury prevention (Finch 2011, 2006, Frisch 2009). Finch (2006) pointed out that prevention measures need to be acceptable, adopted and complied with the population they are targeted at. The pure existence of effective prevention measures does not strictly guarantee success in fighting sports injuries - even if there is clear scientific proof (e.g. mouth guards clearly reduce amount and severity of dental and orofacial injuries but still lack popularity due to missing comfort).

Sports injury prevention is a complex issue. The fact that an intervention works fine in a clinical setting does not consequently allow the conclusion that it is perfectly suited for the demands of real-world sports communities (i.e. European basketball federations). Indeed, a lot of scientifically proven prevention interventions are hardly applicable and thus lack acceptance and compliance within the target groups (Engebretsen et al. 2008, Steffen et al., 2008). Bridging the evidence-to-practice translation gap strictly needs the involvement of the respective sports community on all stages of safety management. For these reasons the basketball federations' perception and knowledge of the injury problem itself as well as their perspectives of handling the problem within their very own administrative structures were considered with particular regard to their demands and capacities.

Chapter 2 explains inevitable preliminary actions, which pave the way for further implementation activities. Consequently, chapter 3 briefly summarizes the methodological approach that has been applied to identify existing prevention measures and promotion strategies. Moreover, the consensus-based evaluation process that finally led to the choice of effective, applicable and acceptable measures and strategies for the pilot implementations in Swedish and Slovak basketball is briefly explained. A detailed description of this methodology is laid down in the preceding reports "Inventory of existing prevention measures and promotion

strategies in basketball" (D2a) and "Best injury prevention measures and promotion strategies in handball and basketball" (D5). Following this, chapter 4 illustrates the individually selected implementation strategies in Swedish and Slovak basketball on the basis of their respective as-is state in injury prevention as well as the federations' specific demands and philosophies. This includes a detailed description of the workflow and all undertaken activities. However, chapter 5 will concentrate on a qualitative analysis of the implementation activities. The implementation is mainly assessed by means of surveys among coaches and structured interviews with respective national experts in charge. Thus, potential effects can only be monitored in terms of changes in awareness and perception as well as reach and use of provided information. Finally, the results of the applied methodology will be discussed and summarized in chapter 6 to conclude with the Safety Management Schemes (SMS) in basketball, which may serve as a guideline for the sustainable implementation of effective, applicable and acceptable injury prevention in European basketball communities (i.e. FIBA Europe and attached national basketball federations).

Table 1 gives an overview where the herewith provided report and its contents can be classified in the workflow of the applied project methodology.

Tab. 1: Safety Management Schemes in Basketball – Workflow and Contents

<table>
<tr><td colspan="2">Inventory on the Burden of Basketball Injuries, Existing Prevention Measures and Safety Promotion Strategies (Workpackage 4), Report D2a</td></tr>
<tr><td colspan="2">Best Injury Prevention Measures and Safety Promotion Strategies in Basketball and Handball (Workpackage 5), Report D5</td></tr>
<tr><td colspan="2">Safety Management Schemes in Basketball (Workpackage 6), Report D9a
Based on test implementation in Slovak and Swedish Basketball</td></tr>
<tr><td>Injury Prevention Measures</td><td>Safety Promotion Strategies</td></tr>
<tr><td>Training & Physical Preparation
Basic Physical Preparation
Structured Warm-up Routines
Basic and Advanced
Technique Training
Neuromuscular Training

Technical & Political Approaches
Increase of Awareness
Adapation of the Education Framework
Reduction of Matches

Equipment & Facilities
Mouth Guards
External Ankle Support

Medical & Non-medical Support
Pre-Season Screenings</td><td>Athletes Information
Leaflets
Brochures
Websites

Trainer Education
Education Module „Injury Prevention“ (Theoretical & Practical)
Disseminators Education Module (Trainer Educators)

Information for Sports Federations
Information Module for Officials
Symposia on Injury Prevention
Expert Consultation meetings (Round tables)</td></tr>
</table>

2. Preliminaries

By the end of 2007, prior to the launch of the project “Safety in Sports”, collaboration with FIBA Europe was officially requested. After internal discussions FIBA Europe agreed to join the project. At that time there was no official prevention campaign running within the federation. Neither education in injury prevention nor other preventive contents had been promoted so far. However, the need for strengthening this area was significantly given.

The coaching department took over the responsibilities for all project activities. Strictly speaking, the FIBA Europe in itself had only limited personal capacities to prepare appropriate contents but had been running a web-based platform to promote training contents among registered coaches for a longer period. Additionally, ideological and administrative support was granted. Indeed, the FIBA intended to win over a “new” and an “old” European country for the project work. This idea would guarantee different experiences due to diverging basketball and education philosophies which was seen as an added value for the project outcomes. Thus, during regular board sessions main objectives and core work packages of the project were presented to the general secretaries of the attached European member federations. Following these sessions, the Slovak Basketball Association and the Swedish Basketball Federation agreed upon supporting the project with special regard to the national test (pilot) implementations of prevention measures and safety promotion strategies.

For the Swedish approach, the medical commission, the department of education and the national team programme took up the issue with clear support from the general secretariat. The Slovak Basketball Association put the Comenius University of Bratislava, Faculty of Physical Education and Sport in charge, which is traditionally responsible for the coaches’ education in Slovakia.

The following schedule shows up official activities that were undertaken within the FIBA Europe and the collaborating national basketball federations previously to the start of the implementation phase.

FIBA EUROPE:

- Letter of Intent (MS 4) (Jan 2008)
- Project Meeting with FIBA EUROPE Coaching Department (Feb 2009)
- Request for Collaboration of 2 National Pilot Associations (MS8) (Apr 2009)
- Delivery of Inventory Report in Basketball (D2a) (May 2010)

Swedish Basketball Federation:

- Request for Collaboration (Apr 2009)
- 1st Project Meeting (Aug 2009)
  Start of Baseline Survey (n = 101) (MS14)
- Letter of Intent (MS9) (Sep 2009)
- Inventory Report in Basketball (D2a) (May 2010)
- 1st Expert Consultation Meeting (ECM1) (May 2010)
- Partner Agreement (Sub-Contract, MS12) (Jul 2010)
- 2nd Expert Consultation Meeting &
  Discussion of Draft toolkits (ECM2) (D7) (Sep 2010)
- Test Implementation(T) (Aug 2010 – Apr 2011)

Slovak Basketball Association:

- Request for Collaboration (Apr 2009)
- 1st Project Meeting (Jul 2009)
  Start of Baseline Survey (n = 157) (MS14)
- Letter of Intent (MS9) (Sep 2009)
- Inventory Report in Basketball (D2a) (May 2010)
- 1st Expert Consultation Meeting (ECM1) (May 2010)
- Partner Agreement (Sub-Contract, MS12) (Jul 2010)
- 2nd Expert Consultation Meeting &
  Discussion of Draft toolkits (ECM2) (D7) (Oct 2010)
- Test Implementation(T) (Aug 2010 – Apr 2011)

Based on the findings from work packages 4 and 5, which gave a number of promising state-of-the-art prevention measures and safety promotion strategies for the test implementations, a joint work plan was developed for each pilot. Specific tasks, resulting from the applied methodology, were contractually agreed in the run-up of the implementation (cf. chapter 4.2 Partner Agreement, Subcontracts, Tasks and Activities). These subcontracts contain baseline and follow-up surveys to comprehend the potential impact of the implementations (cf. chapter 5 Testing the implementation), cooperation during elaboration and selection of the respective measures and strategies (cf. chapter 3 From evidence into Practice), and a documentation and evaluation as well as potential refinement of the toolkits with particular regard to increasing compliance and guaranteeing maintenance beyond project termination.

3. From Evidence into Practice

The purpose of this chapter is to briefly explain the methodology that finally led to a manifold offer of promising prevention measures and potential strategies for their promotion (Draft Toolkit, D7). This toolkit was provided to the pilot basketball federations as a non-binding proposal and inspiration in the run-up to the planned test implementation. The federations were then invited to pick up individual or multiple elements of this toolkit with regard to their specific demands and with view on potentially existing or already running prevention programmes in the respective federation. For a detailed description of the methodology and all references please see the preceding reports “Inventory of existing prevention measures and promotion strategies in basketball” (D2a) and “Best injury prevention measures and promotion strategies in handball and basketball” (D5) (Luig & Henke 2010).

3.1 Aetiology and burden of basketball injuries

First of all, a general understanding of basketball injuries, typical injury situations and injury mechanisms is necessary to tailor targeted injury prevention programmes. Generally, there is a rough distinction between acute/traumatic and chronic/overuse injuries. Acute/traumatic injuries result from specific, identifiable events whereas chronic/overuse injuries are caused by repeated micro-traumas without unique identifiable events responsible for the injury. Although chronic injuries, in particular chronic knee pain (jumper's knee), frequently occur among basketball players overuse injuries are not so well recorded yet. Hospital records, insurance statistics or national surveys that are mainly used for data collection tend to focus on acute injuries. Minor injuries and overuse injuries are mostly underrepresented. Therefore the injury characteristics described in this section relate predominantly to acute injuries.

Acute injury incidence rates in basketball are comparable to those in other team sports where one-on-one situations with inevitable body contact frequently occur, such as in handball or in football. Research indicates that the overall incidence is at about 3-6 injuries per 1000 hours of exposure. 1.7 million European citizens play basketball in an organized manner and regularly participate in competition. Conservatively estimated one has to expect at least 720,000 basketball-related injuries a year, excluding injuries during recreational basketball. One fifth of these injuries are severe knee injuries which cause an average of € 2,300 medical cost per case, while the average expenses of all other injuries are at around € 700 (cf. report D2a). A quick calculation suggests that basketball injuries cost approximately € 500 million a year, including knee injuries at a cost of around € 100-200 million/year. These estimations are quite conservative as the actual costs are probably higher as leisure time practice is not included and figures as to the magnitude of chronic injuries are underrepresented in current injury registrations.

In general, basketball match incidences are at least twice as high compared to training injuries. Injuries in competition gain more significance with advanced age: while in young players nearly two third of all injuries occur during training, among adolescents and adults almost half of all injuries occur in match plays even though with rising age more time is being spent in training compared to time spent in competition. There is no certainty as to possible differences in injury rates between popular and elite athletes.

Acute injuries can essentially be attributed to four body regions: Head, Hand/Wrist, Knee and Ankle (cf. fig. 1). Regardless of age, gender and performance level of players, there is a general tendency that the majority of all injuries affect the lower limbs with the ankle joint being the most affected body part. One third of all injuries pertain to the ankle joint. Women are clearly more prone to non-contact knee injuries possibly due to deficits in neuromuscular control as well as greater joint laxity and less muscular stiffness (Renstrom, 2008).

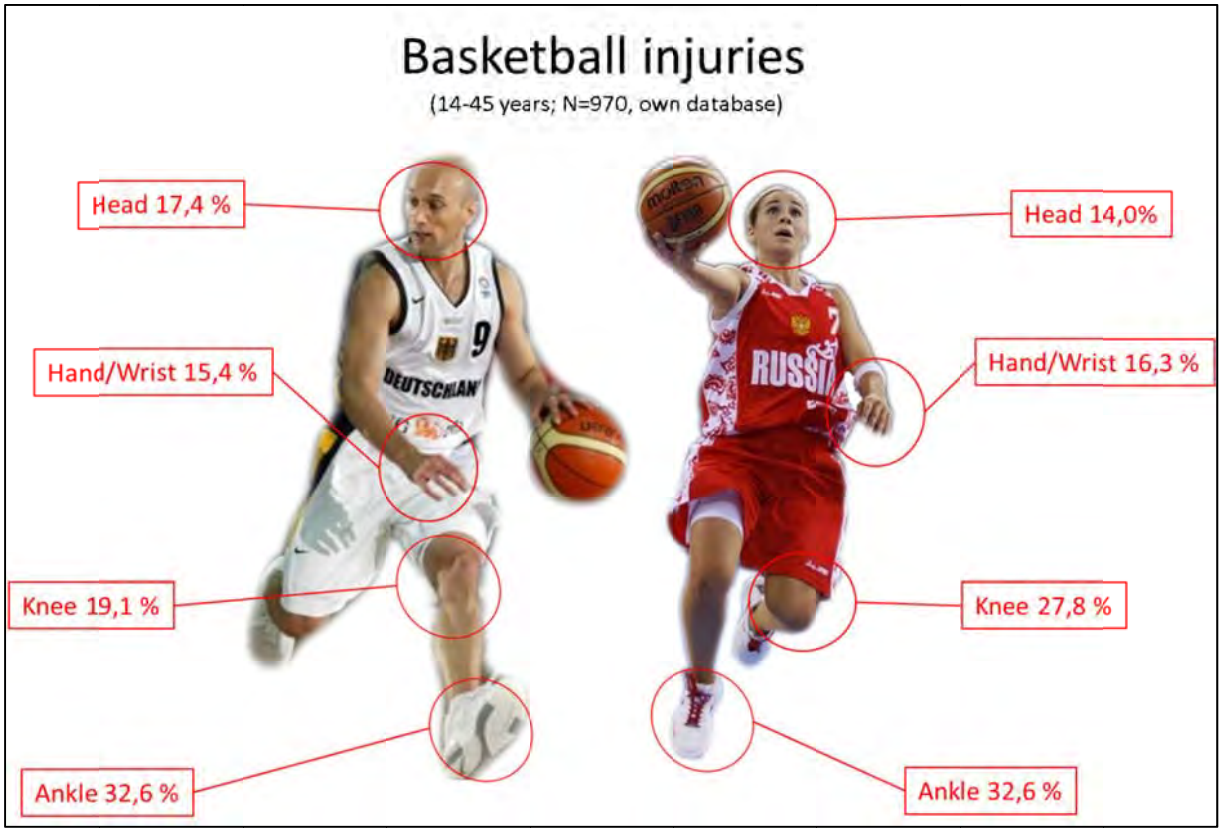


Fig. 1 Localisation of acute injuries among adolescents and adults

Younger athletes seem to be more prone to injuries of the upper body regions, especially finger injuries, resulting from incorrect ball handling, or head injuries. With advancing age there is an increase in injuries of the lower extremities, in particular in knee injuries. Throughout all age groups ankle injuries lead injury statistics.

Independently from age, gender and performance level, sprains (ankle, knee and finger joints) are the most common type of acute injury followed by muscle strains, contusions and fractures (Drakos et al. 2010, Borowski et al. 2008, Deitch et al. 2006,

McKay 2001, Powell & Barber-Foss 2000, Messina et al. 1999, Siebert et al. 1997, Gomez et al.1996). Younger athletes are typically more vulnerable to fractures than older athletes, in particularly affecting fingers or wrists. There is a subtle risk for concussions as well as for facial and dental injuries (Labella et al. 2002, Powell & Barber-Foss 1999).

Chronic injuries usually result from repetitive stress on biological tissues such as capsules, ligament or tendons, leading to instabilities of the affected joints. In basketball, the most common overuse injury is the so called jumper's knee resulting into patellar inflammation, patellar tendinopathy or anterior knee pain (Cumps et al. 2007, Siebert 1997).

3.2 Injury situations and risk factors

At least half of all injuries occur in contact with other players (Agel et al. 2007, Dick et al. 2007., Meeuwisse et al. 2003, McKay et al. 2001). Rebounding is the activity that most frequently leads to injuries (Borowski et al. 2008). Injuries typically occur while a player lands on the opponent's foot after a jump shot or rebound. Considering the upper body, head and finger injuries are predominantly due to contact with opponents or ball. The paint (or key) area, particularly below the boards, is a clear high-risk zone (Kofotolis & Kellis 2007, Meeuwisse et al. 2003). Knee injuries, in particular ACL injuries, often occur in situations while there is no immediate contact with another player, typically while running with quick direction changes, in cutting manoeuvres, in dynamic starts and stops, in twisting or turning and in single-leg landings (Krosshaug et al. 2007, Piasecki et al. 2003, Arendt & Dick 1995). However, many so-called non-contact injuries may have been provoked by some minor contact shortly before the injury event. It has been shown that even a minor contact during jumping phase, pivoting or feinting can make players loose body control. Center players are destined to collect most of the rebounds. In addition, they normally play most of their time in the key area, which is by definition a high risk area. Therefore it is not surprising to find that center players have higher incidences compared to guards and forwards who have more game action around the three point line (Cumps et al. 2007). In general, one can say that previous injuries are a major risk factor for recurring injuries.

3.3 Prevention approaches

Generally speaking, measures aiming at preventing sport injuries can be roughly divided into four more or less distinct categories, namely into measures focusing on 'training and physical preparation', 'technical and political approaches', 'equipment and facilities', and 'medical & non-medical support. A structured database and literature search identified 70 publications related to preventing injuries in basketball delivering a total number of 109 different recommendations as to the prevention of basketball injuries (cf. Tab.2). Half of the published recommendations were based on strong scientific evidence. All others were at least based on expert opinion.

Tab.2. *Distribution of preventive measures depending on category and validation level*

	Training & Physical Preparation	Technical & Political Approaches	Equipment & Facilities	Medical & Non-medical Support	
Multiple scientific validation	15	2	9	0	**26 (24%)**
Single scientific validation	15	3	11	3	**32 (30%)**
Science-based	10	6	9	2	**27 (25%)**
Multiple expert recommendation	4	2	4	1	**11 (10%)**
Single expert recommendation	7	1	4	0	**12 (11%)**
	52 (47%)	**14 (13%)**	**37 (34%)**	**6 (6%)**	**109**

The great majority of recommendations is related to training contents. Most of these training programmes are either concerned with balance or coordination exercise for the lower extremities, in particular with a focus on ankle and knee injuries and also women as vulnerable risk group, or core strengthening exercises. Another large share highlighted the importance of passive protection. Most of the measures presented address either preferably custom made mouth guards or ankle injuries prevention via bracing, taping or high top shoes. Promotion of appropriate behavior and fair play are core interests of 'technical and political approaches' rather than stricter officiating and rule changes. There is only a moderate call for medical screenings in terms of pre participation examinations (cf. report D2a).

3.4 Recommended measures

In order to better assess the value of these conclusions and recommendations from the database and literature search, experts in the field of basketball injury prevention was invited to join an expert panel (N=20) that reviewed each of the presented prevention measures on three criteria:

→ **potential EFFECTIVITY** in terms of reducing injuries (i.e. injuries become less frequent or less severe)

→ **potential APPLICABILITY** in terms of required effort for realisation (i.e. low time, financial, material and personnel expenditures)

→ **potential ACCEPTANCE** within the basketball community (i.e. execution in compliance with athletes, coaches and associations)

With regard to all three criteria preventive measures from the field of “Training & Physical Preparation” were judged as most promising approaches. Taking injury situations and risk factors into consideration, it seems appropriate to educate and train players in to successfully manage contact situations, to enhance technique and performance in typical basic motor patterns such as jumping, landing, feints and cutting that are frequently associated with increased injury risks, and to improve the general fitness level of the athletes. Athletic training and neuromuscular control, e.g. muscle strengthening, stabilization, balance and proprioception contribute to performance enhancement as well as injury prevention. Therefore, it is advised that training sessions should be tailored towards the prime interest of players in enhancing their athletic performance. This sort of training should be applied starting at early ages.

Out of 109 potential measures the following 12 more specific preventive recommendations were judged most valuable by the expert panel. There is only one top recommendation that does not address the training sector but passive protection.

- Training programmes consisting of very basic exercises dealing with stabilisation of the core, balancing and coordination practices and proper jumping and landing technique. Exercises are intended to be integral parts of the warm-up routine (10-15 min). Progressive intensification of exercises according to age and performance level.
- The use of balance training is recommended as a routine during basketball activities for the prevention of ankle sprains.
- A structured warm-up programme containing agility, balance, strength and playing technique exercises, designed to improve awareness and knee and ankle control during landing and pivoting movements prevents knee and ankle injuries among youth athletes. It is suggested that programmes focusing on technique (cutting and landing movements) and balance training (on wobble boards, mats or similar equipment) should already be implemented in players aged 10-12 years. Furthermore, preventive training should also be routine in Training & Physical Preparation for adolescents.
- Preventive Training & Physical Preparation should include strength and power exercises, neuromuscular training, plyometrics and agility exercises: They should be integrated into warm-up routine of the regular training. When properly executed they can serve to enhance performance and prevent injuries. Focus should be on performance of the hip-knee-foot line and ‘‘kissing knees’’ should be avoided. Sustainability and compliance (e.g. acceptance among athletes and coaches) are essential criteria for a successful programme. Ideally, these prevention programmes should be introduced as early as possible in the training period. In some sports this would be at the age of 6 -10 years.
- A 20 minutes prevention programme including warm up, stretching, strengthening, plyometrics, agility drills and cool down can improve flexibility,

strength and biomechanical properties that are associated with ACL injuries. Thus it may support in preventing ACL injuries.

- Neuromuscular training may assist in the reduction of ACL injuries in females athletes if (a) plyometrics, balance, and strengthening exercises are incorporated into a comprehensive training protocol; (b) the training sessions are performed more than 1 time per week; (c) the duration of the training programme is a minimum of 6 weeks in length.
- With regard to decreasing injury chances and enhancing performance both male and female athletes playing a predominantly jumping sport such as basketball can benefit from a supervised athletic conditioning programme that includes dynamic warm-up, agility/quickness drills, sport-specific plyometrics, functional weight training, core training and an appropriate cool down with static stretching.
- It is recommended that young female athletes in sports that entail jumping, pivoting, and cutting, such as basketball should participate in an effective preseason jump training programme that includes progressive resistance weight training for the lower extremities.
- A prophylactic neuromuscular and proprioceptive training programme may have direct benefit in decreasing the number of ACL injuries in female athletes when emphasizing proper landing technique. Landing softly on the forefoot and rolling back to the rear foot, engaging knee and hip flexion on landing and with lateral (cutting) manoeuvres, avoiding excessive genu valgum at the knee on landing and squatting, strengthening of the core, hamstrings, gluteus medialis and hip abductor, increasing dynamic balance ability and addressing proper deceleration techniques by the means of agility drills.
- Individualized season-attending athletic conditioning and technique training with particular regard to basic basketball-specific movement patterns that commonly lead to injuries.
- Ligament sprains and knee internal derangements may be at least partially preventable with interventions such as taping, bracing and neuromuscular training. Officials need to assess the increased tolerance for physical contact in men’s basketball seen over the past two decades.
- External ankle support (e.g. orthoses, tape, high- top shoes), in particular for the prevention of recurring injuries; stabilization training; sensorimotor training (e.g. balancing, jumping, landing on one or two legs, with or without unstable devices, with or without ball and partner.)

Detailed information on these recommendations such as the specific exercises of the individual training programmes were then delivered to both basketball federations for advanced review and further discussion on how to promote these ideas within the respective federation and its basketball community.

3.5 Recommended promotion strategies

The Swedish Basketball Federation and the Slovak Basketball Association were encouraged to nominate national experts that have a keen interest in refining and adopting the above mentioned information according to the structure, philosophy, demands and capacities of the respective federation. These national expert consultation meetings (ECM Bb 1,2,3) should finally lead to a decision which best practices and which promotion strategies are best suited for the individual situation of each pilot federation.
As “Training & Physical Preparation” offers the most and – with regard to the expert evaluation – also the best opportunities to take measures against basketball injuries both federations independently came to the consensus that the education of coaches should get the highest priority in the pilots. Coaches are the best platform to deliver appropriate training programmes and they embody the link between theory and practice. The integration – if not integral part so far – and / or improvement and modification of injury prevention contents into the regular national coaches’ education curriculum is aspired as main aim. The evaluated measures will be sighted. Best promising training measures will be collected and adopted to the specific situation in the different target groups. Furthermore, the best judged measures from the other three prevention fields e.g. protective equipment will be collected and replenished to cope with other basketball specific injury mechanisms and to deliver a comprehensive education module that should also contain important theoretical information such as general knowledge on basketball injuries, risk factors and injury mechanisms. To satisfy other target groups such as athletes, parents or functionaries it is also considered to produce informative media e.g. handouts, brochures, DVDs with basic information covering all fields of injury prevention as displayed in the following table.

Tab.3. Prevention Matrix in Basketball

Gender	Age	Performance Level	Training & Physical Preparation	Technical & Political Approaches	Equipment & Facilities	Medical & Non-medical Support
Female	Children	low	Basic Technique Training, Balance, Strength & Stabilisation, Flexibility & Mobilisation, Agility	Fair Play & Respect	Shoe	
		medium	BTT, BAL, S, F, A	Fair Play & Respect	Shoe	
		high	BTT, BAL, S, F, A	Fair Play & Respect	Shoe	
	Youth	low	BTT, BAL, S, F, A	Fair Play & Respect	Shoe, Orth	
		medium	BTT, BAL, S, F, A	Fair Play & Respect	Shoe, Orth	
		high	Advanced Technique Training (with contact) BAL, S, F, A	Reduction of matches, Regeneration	Tape, Mouthgurads, Floor	Medical Check-Ups, Performance Diagnostics, Physio
	Adult	low	BTT, BAL, S, F, A	Fair Play & Respect	Tape, MG, Orth	
		medium	BTT, BAL, S, F, A	Fair Play & Respect	Tape, MG, Orth	
		high	ATT, BAL, S, F, A	Reduction of matches, Regeneration	Tape, MG, Floor, Orth	Medical Check-Ups, Performance Diagnostics, Physio
Male	Children	low	BTT, BAL, S, F, A	Fair Play & Respect	Shoe	
		medium	BTT, BAL, S, F, A	Fair Play & Respect	Shoe	
		high	BTT, BAL, S, F, A	Fair Play & Respect	Shoe	
	Youth	low	BTT, BAL, S, F, A	Fair Play & Respect	Shoe, Orth	
		medium	ATT, BAL, S, F, A	Fair Play & Respect	Shoe, Orth	
		high	BTT, BAL, S, F, A	Reduction of matches, Regeneration	Tape, MG, Floor, Orth	Medical Check-Ups, Performance Diagnostics, Physio
	Adult	low	BTT, BAL, S, F, A	Fair Play & Respect	Tape, MG, Orth	
		medium	ATT, BAL, S, F, A	Fair Play & Respect	Tape, MG, Orth	
		high	ATT, BAL, S, F, A	Reduction of matches, Regeneration	Tape, MG, Floor, Orth	Medical Check-Ups, Performance Diagnostics, Physio

4. Implementation Activities

Work package 6 generally aims at implementing and testing of safety management schemes in real world basketball. In this specific context implementation means that chosen elements of the elaborated injury prevention measures and promotion strategies from work packages 4 and 5 become documented parts in Swedish and Slovak Basketball. As aforesaid, the individual approaches of each pilot basketball federation were determined during repeated expert consultation meetings prior to the actual implementation phase.

The table below shows the staff, which was personally involved in the implementation activities.

Tab.4. Implementation in Basketball - Participants

FIBA Europe	Schwarz, Michael	Coaching Coordinator
Slovak Basketball Association	Hrisenkova, Natasha	General Secretary
	Tomanek, Lubor	Vice dean for study affairs
	Argajova, Jaraoslava	Student Assistant
	Mačura, Peter	Associate Professor
	Korbačková, Veronika	Student assistant
	Argaj, G.	Student assistant
	Zemkova, Erika	Associate Professor
	Bielik, V.	Student assistant
Swedish Basketball Federation	Wallin-Kantzy, Lena	General Secretary
	Jansson, Mats	Medical Committee
	Källmann, Per	National Team Program
	Sandberg, Jorgen	National Team Program
	Akyüz, Gökay	Head of Education

General tasks and activities that were essential to guarantee the proper implementation and to measure potential impacts of the implementation were stipulated in definite partner agreements (MS 12). The perception of potential changes in awareness of and attitudes towards injuries and their prevention as well as potential reach and

use of promoted materials was tested with the help of questionnaire based baseline and follow up surveys among Swedish and Slovak basketball coaches.

4.1 Injury Prevention and Safety Promotion in the Pilot Federations

For both pilots, primary safety promotion strategy is the education of coaches with regard to preventing basketball injuries. Among others, Saunders et al. (2010) highlight that in team sports particularly coaches can play a decisive role in translating the prevention evidence into practice. They are probably the best delivery platform for training and physical preparation programmes, which have been detected as the core pillar of effective, applicable and acceptable injury prevention in the course of this project. Nevertheless, further safety aspects such as equipment and medical screenings can also be promoted through coaches with good chances of success. Additionally, it became clear that in both federations one could already build on certain structures in the field of coaches' education. In Sweden there was already the "Basketsmart" knee prevention programme being promoted through coaching clinics and a website for clubs, coaches and athletes. In Slovakia, the education of basketball coaches is well-organized and goes back on a long history at universities, although injury prevention has not been a regular part of the curriculum so far. In the following, contractual tasks and effectively executed activities of the respective federations during the implementation phase are described:

4.2 Partner Agreements, Subcontracts, Tasks and Activities

The detailed tasks of the pilot associations prior to and during the implementation and testing period (1st August 2010 – 30th April 2011) were:

Task 1: Baseline survey among coaches and officials measuring the pre-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures.

- Elaboration and translation of the questionnaire provided by RUB
- Distribution of the questionnaire among Swedish and Slovak coaches and officials using multiple channels (hardcopy, email, online)
- Collection of returns and delivery to RUB for analysis

Task 2: Elaboration of draft toolkits of prevention measures and promotion strategies

- Denomination of appropriate experts for online evaluation of the inventory
- Participation in online evaluation of the inventory
- Discussion of the online evaluation results with RUB
- Selection of best measures in view of present demands in Swedish and Slovak Basketball
- Selection of best promotion strategies in view of present demands in Swedish and Slovak Basketball

Task 3: Pilot implementation of toolkits

- Implementation of chosen best measures via chosen best promotion strategies in Swedish and Slovak Basketball
- Reports on progress of pilot implementation to RUB
- Evaluation and refinement of toolkits reflecting experiences during pilot
- Documentation of applied measures and strategies in hardcopy or comparable form (e.g. booklet, brochure, leaflet for athletes and coaches) to guarantee a sustainable benefit for

Task 4: Follow-up survey among coaches and officials measuring the post-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures.

- Elaboration and translation of the questionnaire provided by RUB
- Distribution of the questionnaire among Swedish and Slovak coaches and officials using multiple channels (hardcopy, email, online)
- Collection of returns and delivery to RUB for analysis

Tab.5. Actually executed implementation activities by federation

Task	Activities Sweden	Activities Slovakia
1	Baseline survey among 101 coaches Coaches Seminar (hardcopy) Online Distribution	Baseline survey among 139 coaches Coaching Clinic (hardcopy) Online distribution
2	29 basketball experts were nominated for the online evaluation. Four of them finally took part. Discussion of the base: “Basketsmart Knee” – A structured warm-up routine. Rated #1 by experts in online evaluation. The programme includes strength, balance and coordination, both with and without the ball. Basketsmart has two levels, one basic warm up programme and one advanced programme with higher difficulty. Main idea is to update the “Basketsmart Knee” by adding further recommended contents from the online evaluation to have a greater variety of exercises and to improve compliance. Better dissemination of the programme is intended to increase reach and us. Additionally, the development of a “Basketsmart Foot” programme with focus on ankle injuries is intitiated. This programme will have a particular regard to preventing first time and recurrent injuries of the ankle. Finally, the development of a “Basketsmart Jump” programme with focus on correct jumping and landing technique is also kicked off. The main objective is to improve jumping and landing abilities of basketball players.	18 basketball experts were nominated for the online evaluation. Three of them finally took part. Discussion of the base: There is a regular coaching education for Slovak basketball coaches. The Comenius University of Bratislava, Faculty of Physical Education and Sport educates and qualifies basketball coaches on behalf of the Slovak Basketball association. Main idea is to develop an injury prevention part in the regular basketball coaches’ education of all levels. This programme will pick up main ideas of the provided draft toolkit. All fields of prevention should be included. This also includes theoretical background knowledge on injuries, risk factors and injury mechanisms.
3	Promotion of updated and new Basketsmart programmes on all levels of Swedish basketball coaches’ education through 18 Basketsmart instructors. Theoretical and practical education in injury prevention for coaches of all levels. Integration of injury prevention and Basketsmart pro-	Two initial coaching clinics with approximately 60 coaches each, containing all in all 7 theoretical and 5 practical sessions with injury prevention related contents. Critical assessment of the seminars and optimization of practical and theoretical lectures for future coaching clinics.

	grammes on all levels of coaches' education. Changes have been made in the policy documents (education curriculum) that determine the specific content of the courses. Injury prevention and Basketsmart are now structural elements in the regular education framework. Launch of injury surveillance including injury videos (if available) and follow up of injured players with regard to using Basketsmart or not. For maintenance reasons the official board of the Swedish Basketball Federation has one member in charge that takes care for the injury prevention in Swedish Basketball. Basketsmart is integrated into the national team programme. National teams of all levels and ages use Basketsmart programmes as regular warm-up routines. National team staff is educated in injury prevention in general and Basketsmart specifically. Annual screenings for players at risk during national team programme events and deduced individual athletic training plans to compensate deficits and tackle potential injury predispositions. Official recommendation to wear orthoses after initial ankle injury to prevent recurring ankle injuries. Web contents (videos, presentations) and print documents (basketball magazines) for dissemination of injury prevention material and information for clubs, coaches, athletes and further interested parties	Integration of injury prevention contents on all levels of coaches' education. There will be changes in the education curriculum that determine the specific content of the coaching clinics. Education of lecturers in the field of injury prevention for promotion of preventive contents in Slovak regions. Print documents (brochures) for participating coaches. Exercise book with preventive training contents and information on basketball injuries and general safety aspects planned. Further scientific publications on this issue envisaged.
4	Follow-up survey among 21 coaches	Follow-up survey among 51 coaches

5. Testing the implementation

The following chapter summarizes the different testing activities which have taken place in the pilot national federations with the intention to measure and evaluate the impact of the actions described in chapter 4. From the beginning of the project “Safety in Sports” it was obvious that due to the limited resources of the collaborating sports federations and the relatively short implementation phase a comprehensive methodical approach of testing was not fully realizable. This would have included

- Surveys (baseline, follow-up) of a representative sample of the affected populations (coaches, athletes, officials
- Surveys of the same population samples in the baseline and follow-up surveys
- Surveys of control groups

In fact, the major tools for testing the impact of the project “Safety in Sports” in the pilot associations have been a baseline survey on coaches at the beginning of the implementation, a follow-up survey on coaches at the end of the implementation and structured interviews with persons in charge of the respective federations during the implementation phase.

Therefore, with the gathered information only trends in awareness and attitude changes as well as potential reach and use of the provided information can be displayed.

5.1 Surveys

Starting with a description of the questionnaires developed and used aggregated results of the surveys are presented. The original questionnaires can be found in the annex.

Baseline survey

The baseline questionnaire consists of three different parts which focus on:

1. Background information about the person:

The questionnaire starts with questions concerning age, gender, nationality and coaching education. Moreover, the respondents are asked to give information about their team / teams (gender, age group, league, sessions/week).

2. Awareness and perception of injuries:

It is of great importance to display the awareness and perception of the injury problem and to detect the actual knowledge of the target group (i.e. coaches) in the field of injury prevention Therefore, this part consists of four questions focusing on the injury awareness, injury causes and prevention in general.

3. Knowledge on and application of prevention measures:

This part revolves around the knowledge on and application of preventive interventions. It consists of nine questions which broach the issue of injury prevention. The respondents are invited to give particulars about:

- How the number of injuries can be reduced
- Which preventive measures they carry out with their teams
- When and how they apply these preventive training measures
- How the players like it
- Whether they as a coach feel familiar and comfortable with applying these preventive training measures
- Whether their players use any other preventive measures
- Whether they know any specific injury prevention programmes
- Whether injury prevention should be integral part of coaches' education
- Whether they need further information about specific injuries and their prevention

4. Federation-specific questions

Additionally, each federation was invited to add questions of specific interest that somehow deal with the topic injuries and/or injury prevention.

The Follow-Up Survey

The Follow-Up Survey was arranged to recognize impact of project activities (e.g. if the participants have changed their opinions concerning basketball injuries and their prevention). The questionnaire consists of ten questions and an additional part which deals with statistical, socio-demographic data.

The follow-up questionnaire can be divided into four parts.

1. Follow-up

The first part of the questionnaire starts with four new questions which ask the respondents if they have already filled in a (baseline) questionnaire, if they have generally received any information and if anything has changed or if they have changed anything within the last twelve months. On account of these four questions it is possible to state if and how the target group was reached.

2. Knowledge on and application of prevention measures

The second part deals with the knowledge and application of prevention measures. Four questions are taken over from the baseline questionnaire. This part will show if the opinion of the coaches have changed concerning contents and frequency of carried out prevention measures, degree of esteem of their players and if they feel familiar and comfortable with applying these preventive training measures (self-efficacy).

3. Awareness and perception of injuries

The third part is about the awareness and perception of injuries. It consists of two questions concerning injury awareness and causes. These two questions are also known from the baseline questionnaire.

4. Background information about the person

At the end of the questionnaire the respondents can give some general information about their person (e.g. age, gender, nationality, coaching education, information about their teams/team).

In the baseline as well as in the follow-up survey most answers are coded as multiple choices capturing the intended range of responses and are replenished with free miscellaneous answer opportunities (short answer text boxes).

Considering the questions which focus on coaches' self-assessment, for example, if injuries are a major issue, if their players like preventive measures and if they feel familiar and comfortable with applying these measures, the Likert-scale, going from one point to five points, is used. In this way the respondents can express their direction and strength of their position towards the issue. In that case the results of the single questions from the baseline and follow-up questionnaire can be easily compared.

Results of the surveys

Slovakia

Tab.6. Descriptive Statistics of Baseline- and Follow-Up Survey in Slovak Basketball

		Baseline	Follow-Up Repetition	non-repetition
N		157	21	30
Age (average)		33	33	41
Gender	Male	75%	38%	73%
	Female	25%	62%	27%
Coaching Education	Level 1	6%	0%	14%
	Level 2	29%	35%	21%
	Level 3	30%	35%	50%
	Level 4	15%	25%	7%
	Level 5	13%	5%	7%
Already filled in a questionnaire	No	0%	0%	100%
	Yes	0%	100%	0%
Information generally	No	0%	14%	43%
	Yes	0%	86%	57%
Information by federation	No	0%	5%	73%
	Yes	0%	95%	27%
Changes	No	0%	48%	60%
	Yes	0%	52%	40%
Prevention (training measures)	Strengthening	63%	81%	67%
	Stretching	97%	91%	97%
	Cool-down	1%	19%	40%
	Warming-up	86%	81%	83%
	Balance training	37%	43%	53%
	Technique training	1%	62%	50%
	Athletic drills	56%	81%	70%
	Coordination exercises	59%	91%	73%
	Mobilisation	6%	48%	50%

Frequency of applied preventive training measures	**<u>Preaseason</u>**	0%	0%	0%
	Every session	93%	83%	86%
	Once a week	8%	17%	10%
	Less than once a week	0%	0%	3%
	<u>Season</u>	0%	0%	0%
	Every session	78%	53%	80%
	Once a week	22%	47%	17%
	Less than once a week	0%	0%	3%
Popularity	Dislike it	1%	0%	0%
	Like it less	14%	5%	13%
	Like it medium	51%	43%	57%
	Like it	26%	43%	17%
	Like it very much	8%	10%	13%
Self-evaluation	Need more instruction	23%	14%	33%
	Feel less familiar	23%	24%	27%
	Feel medium familiar	31%	0%	0%
	Feel familiar	15%	38%	20%
	Feel very familiar	8%	24%	20%
Awareness (Injuries as a problem?)	Not important at all	1%	0%	0%
	Less important	0%	0%	0%
	Medium important	12%	14%	3%
	Important issue	34%	19%	23%
	Very important issue	52%	67%	70%
Causes	Bad luck	25%	37%	45%
	Fouls	19%	16%	14%
	Collisions	41%	47%	21%
	Matches	10%	11%	7%
	Regeneration	83%	68%	55%
	Warm-up	53%	53%	72%
	Poor physical condition	59%	53%	35%

	Poor technique	1%	0%	17%
	Poor equipment	1%	0%	21%
	Previous injury	0%	21%	21%

157 coaches filled in the baseline survey and 51 coaches participated in the follow-up survey. Of these 51 coaches 21 have already participated in the baseline survey.

Question 1: Have you already filled in a questionnaire on injury prevention in basketball within the last twelve months?

21 coaches (38% male; 62% female) of the follow-up survey had also participated in the baseline survey. There were also 30 coaches (male 73%; female 27%) who filled in the follow-up survey without participating in the baseline survey.

Question 2: Have you generally received any information about injury prevention in basketball within the last twelve months?

From those coaches who had also filled in the baseline survey 86% and 57% who had not filled in the baseline survey have generally received any information about injury prevention within the last twelve months.

Question 3: Have you received any information about injury prevention in basketball by your federation within the last twelve months?

95% of the repetition group and only 27% of the non-repetition group have received any information about injury prevention by their federation.

Question 4: Has anything changed or have you changed anything since you received these information (e.g. training contents, equipment)?

Barely the half of the repetition group has recognized changes but considering the non-repetition group only 40% have recognized changes and 60% have not.

Question 5: Which preventive training measures do you carry out with your team?

The three most ticked answer opportunities in the baseline survey are stretching (97%), warming-up (86%) and strengthening (63%). The most given answers of the repetition group are stretching and coordination exercises (both 91%), athletic drills, strengthening and warming-up (each 81%). The most three ticked answer opportunities of the non-repetition group are stretching (97%), warming-up (83%) and coordination exercises (73%).

Question 6: When and how often do you apply these preventive training measures?

The coaches often apply these preventive measures every session in the pre-season. In the season they also apply these preventive measures every session. Only a few of them apply it once a week and less than once a week.

Question 7: On a 5-point scale, how do your players like these preventive training measures?

On a five-point-rating scale coaches can assess if their players like these preventive training measures. Barely the half of coaches in the baseline survey, 43% of the repetition group and 57% of the non-repetition group cannot really assess the popularity of these measures by their players. But approximately 30% of the respondents of the baseline survey and of the non-repetition group believe their players like it. Considering the repetition group (53%) even believe their players like it.

Question 8: On a 5-point scale, do you feel familiar and comfortable with applying these preventive training measures?

23% of the baseline respondents, 62% of the repetition group and 40% of the non-repetition group feel familiar with applying these preventive training measures.

Question 9: On a 5-point scale, do you think injuries are a major issue in basketball?

Nearly all respondents, regardless of which survey, recognize injuries as a major issue in basketball.

Question 10: What do you see as main causes for basketball injuries?

Coaches of the baseline survey see regeneration (83%), poor physical condition (59%) and collisions (41%) as main causes for basketball injuries. The repetition group sees regeneration (68%), warm-up and poor physical condition (both 53%) as prime causes. The non-repetition group regards warm-up (72%), regeneration (55%) and poor physical condition (35%) as principal reasons.

All in all there can be made following core statements:

- The provision of information about injury prevention in basketball has been done generally and especially by the federation.
- Within the last months changes have been noticed.
- Considering the preventive measures areas, such as strengthening, alethic drills, coordination exercises and mobilization have increasingly been carried out; the area stretching has been decreasingly carried out.
- There is a tendency to use preventive measures by players.
- Injuries are recognized as very important issue by more than a half.

Sweden

Tab.7. Descriptive Statistics of Baseline- and Follow-Up Survey in Swedish Basketball

		Baseline		Follow-Up	
				Repetition	Non-Repetition
N		27	74	6	15
Age (average)		n/a	36	42	45
Gender	Male	74%	68%	67%	53%
	Female	26%	32%	33%	47%
Coaching Education	Level 1	0%	45%	0%	21%
	Level 2	4%	28%	67%	21%
	Level 3	59%	21%	17%	43%
	Level 4	37%	6%	17%	14%
	Level 5	0%	0%	0%	0%
Already filled in a questionnaire	No			0%	100%
	Yes			100%	0%
Information generally	No			33%	27%
	Yes			67%	73%
Information by federation	No			33%	33%
	Yes			67%	67%
Changes	No			50%	20%
	Yes			50%	80%
Prevention (training measures)	Strengthening	69%	54%	50%	47%
	Stretching	39%	57%	67%	60%
	Cool-down	0%	19%	33%	33%
	Warming-up	46%	89%	83%	80%
	Balance training	4%	71%	50%	53%
	Technique training	0%	57%	50%	53%
	Athletic drills	8%	64%	67%	67%
	Coordination exercises	0%	73%	67%	87%
	Mobilisation	0%	51%	50%	53%
Frequency	**Preaseason**	n/a			

of applied preventive training measures	Every session		82%	50%	85%
	Once a week		15%	50%	15%
	Less than once a week		3%	0%	0%
	Season	n/a			
	Every session		68%	83%	79%
	Once a week		27%	17%	21%
	Less than once a week		5%	0%	0%
Popularity	Dislike it	4%	4%	17%	0%
	Like it less	52%	10%	17%	7%
	Like it medium	41%	50%	50%	53%
	Liket it	4%	26%	17%	33%
	Like it very much	0%	10%	0%	7%
Self-evaluation	Need more instruction	n/a	10%	0%	7%
	Feel less familiar		0%	33%	33%
	Feel medium familiar		43%	17%	27%
	Fell familiar		30%	17%	20%
	Feel very familiar		17%	33%	13%
Awareness (Injuries as a problem?)	Not important at all	33%	0%	0%	0%
	Less important	33%	10%	17%	0%
	Medium important	30%	43%	50%	33%
	Important issue	4%	30%	33%	40%
	Very important issue	0%	17%	0%	27%
Causes	Bad luck	0%	21%	17%	27%
	Fouls	4%	4%	0%	0%
	Collisions	19%	19%	0%	27%
	Matches	11%	10%	0%	0%
	Regeneration	33%	17%	0%	33%
	Warm-up	0%	49%	50%	33%
	Poor physical condition	93%	68%	100%	80%

	Poor technique	0%	31%	67%	40%
	Poor equipment	4%	6%	0%	0%
	Previous injury	0%	33%	33%	40%

27 coaches filled in the baseline survey in May 2010 and 74 coaches in April 2011. 21 coaches participated in the follow-up survey. 6 from those 21 participants have already filled in the questionnaire in the baseline survey.

Question 1: Have you already filled in a questionnaire on injury prevention in basketball within the last twelve months?

6 coaches (67% male, 33% female) have participated in the baseline and follow-up survey. 15 participants (53% male; 47% female) have not participated in the baseline survey.

Question 2: Have you generally received any information about injury prevention in basketball within the last twelve months?

67% of the repetition group and 73% of the non-repetition group have generally received any information about injury prevention,

Question 3: Have you received any information about injury prevention in basketball by your federation within the last twelve months?

67% of the repetition and non-repetition group have received information by their federation.

Question 4: Has anything changed or have you changed anything since you received these information (e.g. training contents, equipment)?

50% of repetition group and 80% of the non-repetition group have recognized changes.

Question 5: Which preventive training measures do you carry out with your team?

During training or before competition the first group of 27 coaches carry out strengthening (69%), warm-up (46%) and stretching (39%) as preventive measures. Considering the second group of the baseline survey 89% carry out warming-up, 73% coordination and 71% balance exercises.

In the follow-up survey the most ticked preventive measures of the repetition group were warming-up (83%), coordination exercises (67%), athletic drills (67%) and stretching (67%). The most commonly answers from the non-repetition group were coordination exercises (87%), warm-up (80%) and athletic drills (67%).

Question 6: When and how often do you apply these preventive training measures?

The results of the second baseline survey show 82% of coaches apply these preventive training measures every session in the preseason and 68% every session in the season.

50% of the repetition group participating in the follow-up survey apply these preventive training measures every session in the preseason and 83% every session in the season. 85% of the non-repetition group apply the preventive training measures every session in the preseason and 79% every session in the season.

Question 7: On a 5-point scale, how do your players like these preventive training measures?

Considering the first baseline survey more than the half of the players did not like the prevention measures. In the second baseline survey the half cannot really estimate if their players like prevention measures. Merely 36% suppose their players like prevention measures.

Results of the follow-up survey considering the repletion group show that 17% of the players dislike prevention measures. 50% are median and 17% like preventive training measures.

53% of the non-repetition group are median, 33% like and 7% like preventive training measures very much.

Question 8: On a 5-point scale, do you feel familiar and comfortable with applying these preventive training measures?

47% of the second baseline survey feel comfortable with applying these preventive measures but 43% feel uneasy.

In the follow-up survey the results of the repetition and non-repetition group show that they feel largely familiar with applying these preventive measures. Only few of both groups need more instructions.

Question 9: On a 5-point scale, do you think injuries are a major issue in basketball?

In the first survey more than 33% recognize injuries as not important and less important. In the second baseline survey nearly the half recognizes injuries as a major issue in basketball.

The repetition group answered that injuries are major issue (33%), a medium issue (50%) and injuries are not an issue (17%). In contrast almost all of the non-repetition group think injuries are an important issue.

Question 10: What do you see as main causes for basketball injuries?

The most mentioned causes in the first baseline survey are poor physical condition (93%), lack of regeneration / rehabilitation (33%) and collisions / body contact (19%). The most mentioned causes in the second baseline survey are poor physical condition (68%), warm-up (49%) and previous injuries (33%).

The most ticked causes for basketball injuries of the repetition group in the follow-up survey are poor physical condition (100%), poor technique (67%) and warm-up (50%). The non-repetition group regards poor physical condition (80%), poor technique and previous injury (both 40%) as main causes for injuries.

All in all there can be made following core statements:

- The provision of information about injury prevention in basketball has been done generally and especially by the federation.
- Within the last months changes have been noticed.
- Considering the preventive measures areas there is trend towards warming-up, athletic drills and coordination exercises.
- Injuries are recognized as important issue.

5.2 Structured Interviews

The interview consists of nineteen questions and can be divided into four parts. Detailed original forms of the interviews can be found in the annex.

1. Personal data

   In the first part of the interview general data as name, organization, country, function, date/time and age of the expert was written down.

2. Implementation

   The second part consists of twelve questions and mainly focuses on the implementation aspect. First of all, the experts were asked to give an overview about activities which were actually conducted in the different fields of injury prevention. In the next step they should mention which target groups have been addressed by the implementation and if relevant features (age; gender; level) have been identified. Moreover, questions followed whether they believe if they have reached their target group, the chosen activities are accepted, the preventive measures adapted and the benefits of the project “Safety in Sports” clearly recognized for the target group.

3. Project: “Safety in Sports”

   The third part focuses on the project “Safety in Sports”. The experts were asked whether

   - they understand the spirit and purpose of the project
   - the issue injury prevention existed before the project started
   - the area was strengthened through the project
   - they have recognized any effects through the project

4. Improvement

   In this last part of the interview the experts can give their opinion if they think the project was necessary, if they are satisfied with the supervision and have any suggestions for improvement.

The interview was structured through the above mentioned conversation guide. This conversation guide conduces as structure and orientation guide during the interview. Compared to a survey an interview is characterized through more frankness, flexibility and the response options are indefinite. The interviewed experts from the two different associations (Slovakia; Sweden) were videotaped. An advantage of videotaping is that the conversation and its content can be later inspected and can serve as basis for evaluation. The interview takes approximately 60-90 minutes.

Interview: Slovak Basketball Association

I. PERSONAL DATA

On the 20th March 2011 the interview was conducted with Tomanek Lubor being the vice dean for study affaires in the Slovak Basketball Association.

II. IMPLEMENTATION

The Slovak Basketball Association conducted a seminar two times which focused primarily on injury prevention. The contents of the two seminars addressed everyone but it was generally only planned for youth coaches. In the first seminar the main topic was stability training and in the second regeneration. Moreover, some sheets about taping, medical screenings and diagnostic are spread. Questionnaires were several times distributed to seminars or to university. Additionally, a lecture is planned for student's coaches as soon as possible. A book is also to be made containing three different parts (theory, diagnosis, practice).

The target group gave positive feedback about the seminars, so the contents have been suitable for their needs. The target group was satisfied with the seminars which can be a sign for the use and implantation of the demonstrated exercises in their training.

Considering the project "Safety in Sports" its benefits are clearly recognized and after the project's completion injury prevention should be a regular routine for the education. There are also other activities which will be initiated through the project, for example, the provision of materials for coaching clinics and associations.

An exact statement about the invested expenditures in terms of time/material/staff is not possible.

All in all, the Slovak Basketball Association is satisfied with the results because of improving the coaching education. To make the implementation of injury prevention easier the European association plays an important role. The main task of the European association should push it more. For example they can produce leaflets, DVDs coming out of the project to provide coaches with it.

III. PROJECT: "SAFETY IN SPORTS"

Considering the third part of the interview dealing with the project "Safety in Sports" it can be generally noted that the spirit and purpose of the project was easily understood. Moreover the project was quite necessary to strengthen this area. Before the project started there were not a lot of information about injury prevention. Since the project started there are more information available and especially through the seminars coaches think more about that issue and develop a special awareness of injuries. Positive effects which have been recognized are that exercises are implemented in the own training programme.

IV. IMPROVEMENT

The project “Safety in Sports” was quite necessary to strengthen this area. At the beginning of the project they were flooded with information and before the first meeting they missed the personal contact. But all in all they are very satisfied with the supervision and have no suggestions for improvement.

Interview: Swedish Basketball Federation

I. PERSONAL DATA

On the 25th March 2011 the interview was conducted with Mats Jansson working in the medical committee and Gökay Akyüz who is the head of education. Both are members of the Swedish Basketball Federation.

II. IMPLEMENTATION

In the field of physical preparation the Swedish Basketball Federation actually conducted the Basket Smart programme focusing on the prevention of knee injuries in all basketball teams. Considering the project some parts are replaced with some new ones dealing with the prevention of foot injuries and jumping and landing techniques. The foot lecture focuses on giving advises about appropriate shoes and the accurate use of tapes and orthoses. The programme is also part of the coaching education at all levels and addresses mainly children.

Spreading questionnaires and organizing seminars were also activities which were actually conducted. Physiotherapists are the main channel to get the information about injury prevention to the coaches. They hold lectures in summer camps and coach clinics. If it is desired teams and clubs can book them.

In the field of medical and non-medical support medical diagnostics were conducted primarily for national teams.

To reach their target group the programme Basket Smart was published in a Swedish magazine and additional produced papers went to every club in Sweden. But it is quite hard to check if coaches are using it. Especially in the category of elderly coaches who are working with young players. Through the upgrading of the Basket Smart programme the choses activities are more accepted by the target group because the variety is bigger.

Considering the Basket Smart programme they got positive and negative feedback. On the one hand some coaches believe that through the programme their players are more injured than before and on the other hand they got positive feedback through the participating coaches in the seminars who are very satisfied with it. After project’s completion there will be activities because it is fully part of the trainer education.

Regarding the expenditures in terms of time/material/staff it is worth mentioned that a lot of people were involved in the process and that the planning cost a lot of

time. Generally they are very satisfied with the results but more people have been involved from the beginning.

To implement those activities the FIBA is essential and has to force injury prevention in term of a license.

III. PROJECT: “SAFETY IN SPORTS”

The spirit and purpose of the project “Safety in Sports” was not understood since the beginning of the project. Only after the second meeting the purpose and spirit was quite clear. Before the project started injury prevention existed and through the project the association’s awareness considering that issue has risen. Effects through the project are only recognized of receiving feedback.

IV. IMPROVEMENT

All in all, the project was quite necessary to strengthen this area and they are absolutely satisfied with the supervision. Especially the contacting and emailing was good to remind them of doing something. Suggestions for improvement focus firstly on the templates of the online evaluation which were too long. Moreover the evaluation of templates should be more restricted for the experts. The second suggestion was that at the beginning of the project the contact was missing, particularly through the selection of studies.

6. Synopsis & Recommendations

This final chapter will give a comprehensive summary on methodical steps and essential activities in the framework of developing and implementing “Safety Management Schemes” in European basketball. Based on experiences made during the pilot implementations, recommendations on basic requirements, potential areas for refinement and improvement as well as opportunities to integrate, maintain and sustain “Safety Management Schemes” within the FIBA Europe and/or its attached national member federations are discussed.

6.1 General Aspects

Despite injuries being an apparent problem in sports communities, injury prevention still seems far away from being a high-priority issue. Injury prevention or prevention in general has a sensible negative perception as it is often connected with renunciation of joy and freedom. With regard to the sports sector prevention is frequently seen as therapeutic intervention that needs extra effort with no relation to the practiced sport. The fact that a sports injury is mainly a consequence of definable risk factors is not common knowledge. Still a large share of the sports community sees bad luck as main cause for getting injured. Indeed, today not only experts in public health but common people know the relation between physical inactivity or malnutrition and cardiovascular diseases. In the field of sports, the relation between certain risk factors and increased injury incidences has not fully reached public awareness. In the light of these considerations it is an ambitious aim to sustainably implement safety management schemes into sports communities. To reach this objective anyway, on the one hand, it is absolutely necessary to increase the perception of sports injuries as a more or less predictable incident rather than individual bad luck. On the other hand, one has to facilitate the fact that the probability of suffering an injury is depending on personal intrinsic and/or sport-specific extrinsic risk factors. Finally, to compensate the perceived restrictions in practicing sports through preventive interventions (e.g. modified training) it is of vital importance to promote these contents as contributions to individual performance enhancement. In fact, this is more or less an inevitable marketing ploy to increase the long-term compliance of preventive interventions, in particular when directly approaching coaches, clubs and federations. In case of preventive training & physical preparation it has become obvious that exercises that reduce the frequency and/or the severity of injuries and that propel sport-specific performance parameters at the same time have best chances of getting accepted. Moreover, successful and sustainable sports injury prevention has to be effective, applicable and acceptable at once.

6.2 Safety Management Schemes in Basketball

As already mentioned in previous chapters of this report and in the preceding reports D2a & D5, safety management schemes in sport, by definition, consist of specific prevention measures (detailed contents), which are disseminated and implemented by an appropriate (safety) promotion strategy. The following summarized and quite general recommendations on prevention measures and safety promotion strategies derive from the applied methodology of the project “Safety in Sports”.

6.2.1 Prevention Measures

In fact, the herewith proposed prevention measures are based on

- The inventory of existing prevention measures in basketball (D2a)
- The evaluation and ranking of these prevention measures by acknowledged (basketball) experts (D5) and
- The specific demands, needs and resources of the participating pilot federations

Thus, they have solid proof to be effective in preventing injuries, to be applicable in the respective sports setting and to find favor (acceptance) within the basketball community.

6.2.1.1 Training & Physical Preparation

Basic Physical Preparation

Dynamics in basketball have significantly increased. To meet the demands of the current game play and furthermore to prevent injuries due to fatigue, insufficient regeneration or athletic mismatching, players of all levels and ages need a proper basic athletic condition with regard to endurance, strength, flexibility and speed. On competitive level this is primarily achieved through structured and supervised athletic conditioning programmes that include individually adapted endurance training, functional weight training, dynamic mobilization and agility drills. Key period for basic physical preparation is during preseason but to stay physically in shape season attending programmes are clearly recommended. Athletes in bad athletic condition are significantly more vulnerable for acute injuries and in particular for developing overuse symptoms like jumper’s knee or low back pain.

Structured Warm-up Routines

General cardiovascular activation for 10-20 minutes prior to basketball sessions is essential. This is common knowledge. However, warm-up sessions are still in great need of improvement as they are perfectly suited for implementing preventive training contents. Beside basic running drills it is strongly recommended to apply neuromuscular, proprioceptive and balance exercises as well as core stabilization and coordination practices. Additionally, plyometrics and agility drills should be included at the end of warming up. Basic basketball movement patterns that are linked to increased injury risks can be trained perfectly during warm-ups. This means adding technique exercises that are designed to improve knee and ankle control

during jumping, landing and cutting activities. The big advantages of structured warm-up sessions that include the above mentioned elements are, first, that you do not need to spend lots of extra time on preventive training. Second, warm-up is a regular routine in training and competition and all the aforesaid elements need regularity to have a preventive effect.

Basic and Advanced Technique Training

Basketball includes crucial movement patterns that, on the one hand, are of highest importance for the athlete's game performance but, on the other hand, bears an increased injury risk. Main idea behind technique training is to improve player's performance in typical basketball elements. Good jumping capability is essential for shooting, rebounding and blocking. Quick feet are needed for feints, direction changes, turns, starts and stops on both ends of the floor. Good ball handling helps you passing, catching, dribbling and stealing. However, technique training is also needed to perform these tasks safer because these techniques also bear an increased injury risk. Proper jumping and landing technique in terms of knee and ankle control help athletes to sustain crucial situations like single-leg landings. Correct ball handling is an important factor to prevent numerous finger sprains and quick and controlled feet assist in coping pivoting movements. Technique training, if already applied starting with young ages, combines performance enhancement and aspects of injury prevention. Athletes and coaches should be aware of the correct techniques and potential consequences of insufficient technique training. With increasing age and performance level technique training should be adapted to the advanced demands of the athletes. This means for example, progressively adding controlled perturbations during execution of these movement patterns. Intense physical contact is inherent element of modern basketball and players should get used to it in training to cope with it during competition. Basically, this also helps athletes performing better e.g. better scoring efficiency during contested jump shots.

Neuromuscular Training

There is clear scientific evidence that neuromuscular training by means of proprioceptive balance training contributes to the reduction of injuries of the lower limbs. Exercises on unstable devices such as wobble boards, slings or mats in combination with core stabilization and plyometrics are helpful when conducted regularly (at least 1-2 times per week) during preseason and season. Neuromuscular training contents can be perfectly integrated into warm-up routines, in particular with regard to the fact that this kind of training has bigger effects in non-fatigued athletes.

6.2.1.2 Technical and Political Approaches

Increase of Awareness

The awareness of the injury problem and the perception of prevention as a positive contribution to sports performance is a key issue. Individual athletes and coaches on the basketball floors, and moreover, clubs and federations on policy level are main target groups for detailed information on basketball-specific injuries, risk factors,

injury situations and mechanisms as well as solid knowledge on effective, applicable and acceptable countermeasures.

Adaptation of the Education Framework

Athletes and in particular coaches should receive at least a basic education in basketball injury prevention. Safety management schemes should be definite parts of the education framework

Reduction of Matches

Match incidences are significantly higher compared to training incidences. On professional level, a revision of the competition schedule could help to shrink the dramatic number of injuries during and immediately after international competitions. At least a better arrangement of national and international competitions is desirable. Sufficient regeneration will reduce overuse symptoms and acute injuries due to fatigue or inadequate cured disorders.

6.2.1.3 Equipment & Facilities

Mouth Guards

There is a certain risk for dental and orofacial injuries as well as concussions. When occurring they are mostly of severe nature. It is therefore strongly recommended that basketball players, in particular center players should wear custom-made mouth guards. Custom-made mouth guards have shown to prevent dental and orofacial fractures as well as to reduce the severity of these injuries.

External Ankle Support

It is evident that ankle sprains are at least partially preventable when athletes use ankle braces, orthoses or taping as external protection. Especially, players with a history of ankle injuries should be advised to use external ankle support to prevent recurring injuries.

6.2.1.4 Medical & Non-medical Support

Pre-Season Screenings

At least for professional athletes it is recommended to have regular pre-season screenings to detect potential risk factors for injuries or damages e.g. cardiovascular diseases, muscular imbalances, athletic and neuromuscular deficits. Moreover performance diagnostics that identify the athletes' individual needs for improvement can assist in increasing physical condition and general performance and thus contribute to reducing acute and chronic injuries. A supervision of the athlete by athletic coaches and /or physiotherapists is seen as beneficial.

6.2.2 Promotion Strategies

Information

The federation's task is to publish the corresponding information without being advised from the media.

This might be particularly useful with a simultaneously distribution of preventive material. To provide athletes directly with information about injury prevention, it is necessary to produce a clipped and illustrated brochure and video clips which screen exercises and can be downloaded on the FIBA's Coaching Website.

For the respective basketball association it is also possible with assist of preventive contents to propagate it in the sense of marketing and that within the meaning of optimizing the performance, promoting health and the physical, social and cognitive development of youth.

Education

Considering the education two different modules can be regarded. Firstly, it is possible to implement an education module "Injury Prevention" which is theoretical and practical. If national associations want to use the educational module in their trainer education, it has to be translated into the national language.

Secondly, there might be a disseminator's education module which focuses on trainer education.

To accomplish that it is useful to prepare an applicable job advertisement or description for an official staff member. At best only one person can primarily concern with this issue. Most commonly it might be the one who is also responsible for the trainer education.

6.3 Troubleshooting and Recommendations for Future Work

The following chapter reflects experiences that have been made during the test implementation in Slovak and Swedish Basketball. Moreover, it lists aspects, which, firstly, have been recognized as key issues for implementing safety management schemes in basketball, and, secondly, potential solutions for encountered problems. The following considerations may serve as useful advices for further implementation approaches in European basketball (e.g. other national basketball federations).

Problem: National Sports Federations have different capacities and organizational structures, which may influence the progress in implementing safety management schemes.

Solution: It is essential to scan the available capacities and structures of each and every federation. The identification of persons in charge within the federations which

accompany and propel the issue injury prevention is a clear core issue. This may even lead to an outsourcing of tasks and responsibilities to federation-affiliated institutions and experts (e.g. University of Bratislava, Faculty of Sport and Physical Education). Furthermore, realistic planning - particularly in terms of time - is absolutely elementary. Moreover, a top-down approach (e.g. winning over high-level decision makers as supporters) can help to accelerate the progress of implementation in a setting which is typically occupied with multiple topics (e.g. game operations, talent diagnostics, national teams).

Problem: Sports communities and federations may have different “languages” and phrasing compared to science-related persons

Solution: Sport-specific language and phrasing in all ways of communication as well as contents and materials that have been adapted to the specific needs and demands of respective target groups, even if this means to use different communication channels and promotional materials for athletes, coaches, officials, clubs and federations.

Problem: Different philosophies and know-how regarding injuries and injury prevention

Solution: Detection of the actual state of knowledge in the respective federation. Seizing existing prevention approaches and available national know-how as fundament for implementation. One has to consider that there might already be thematic emphasis on specific issues (e.g. knee injuries) and that there are different national philosophies (e.g. obligation vs. voluntariness in education) in conveying diverse information (e.g. webpages, education modules, print material).

Problem: Low acceptance and compliance of prevention measures and promotion strategies in the dedicated target group

Solution: Adaptation of the chosen prevention measures and promotion strategies according the target groups’ requirements (e.g. age, performance level) and needs (e.g. performance enhancement, health aspects). The target group which is going to use the measures and which is addressed with the promotion strategy should be involved in the process of developing the measures and strategies itself. This also means to make all stages of implementation as transparent as possible (e.g. process of choosing the best suiting prevention measures and promotion strategies for each national federation).

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Appendix

A. Letters of Intents & Subcontracts

International Basketball
FIBA EUROPE
We Are Basketball
European Federation

Ruhr-University Bochum
Department of Sports Medicine and Sports Nutrition
Faculty of Sports Science
Attn.: Dr. rer. Nat. Thomas Henke

29 January 2008

EU Project „Safety in Sports"– FIBA Europe Letter of Intent

George Vassilakopoulos
President

Nar Zanolin
Secretary General

Bank Details:
HypoVereinsbank AG
Acct. No. 658 505 238
Bank code: 700 202 70
IBAN: DE 79 7002 0270 0658 5052 38
Swift address: HY VE DE MM
Steuer-Nr./Tax-No. 143/214/30199

Dear Dr. Henke,

Following our discussions regarding our potential involvement in your project, we are very pleased to inform you that the FIBA Europe Coaching Department intends to take part in the EU Project "Safety in Sports" (2008-1010).

The safety and injury prevention in basketball have always been major issues in the development of our sport. We also believe that the cooperation of team sport associations in Europe is essential in terms of networking concerning technical and promotional questions and therefore are hoping that other major European sports governing bodies will support your work.

For all further details on the project itself as well as the further procedure please contact Michael Schwarz, FIBA Europe Coaching Department (Phone: (+49-89) 78 06 08 -48
Fax: (+49-89) 78 06 08 -23, e-mail: mschwarz@fibaeurope.com).

We are looking forward to working with you on this exciting project.

Yours sincerely



Michael Schwarz
Coaching Coordinator

FIBA Europe e.V.
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Federal Republic of Germany

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Slovak Basketball Association
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www.basket.sk, e-mail: sba@slovakbasket.sk

Ruhr-University Bochum
Faculty of Sports Science
Department of Sports Medicine and Sports Nutrition
Overbergstr. 19
44780 Bochum

Dear Dr. Henke,

Following our discussions regarding our potential involvement in your project, we are very pleased to inform you that the Slovak Basketball Association intends to take part in the EU Project "Safety in Sports" (2008-2011).

Safety and injury prevention in basketball have always been major issue in the development of our sport. We also believe that the cooperation of team sport associations in Europe is essential in terms of networking technical and promotional questions.

For all further details on the project itself as well as the further procedure we have nominated

Mr. Mgr Lubor Tomanek from Comenius University Bratislava

as person in charge.

We are looking forward to working with you on this project.

Best regards,

Natasha Hrisenkova
Secretary General

PARTNER AGREEMENT

for the pilot implementation and testing of safety management schemes in Slovak Basketball

PARTNERS IN THIS AGREEMENT ARE:

- The Austrian Road Safety Board, Vienna, Austria (KfV), as coordinator of the project "Safety in Sports" and formal orderer,
- The Ruhr University Bochum, Department of Sports Medicine and Sports Nutrition, Bochum, Germany (RUB), as leader of work package 6 of the project and advisor, and
- The Slovak Basketball Association, Bratislava, Slovkia (SBA), as project partner regarding the pilot implementation and testing of safety management schemes in Slovak Basketball and formal contractor.

BACKGROUND AND PURPOSE:

Agreement between the Austrian Road Safety Board (KfV), Vienna, Austria, the Ruhr University Bochum, Department of Sports Medicine and Sports Nutrition, Bochum, Germany (RUB), as leader of work package 6 of the project "Safety in Sports" and the Slovak Basketball Association, Bratislava, Slovakia (SBA), as project partner regarding the pilot implementation and testing of safety management schemes in Slovak Basketball.

The project "Safety Management in High Risk Sports in Collaboration with European Sports Associations" ("Safety in Sports") has been contracted with the Executive Agency for Health and Consumers (EAHC) by the KfV, as leader of the project consortium. The project has been accepted for co-funding in the framework of the EU Health Programme 2008-2013, work plan 2007. The project is scheduled for October 2008 to September 2011. It is divided into several work packages, for which the consortium members, main beneficiary and associated beneficiaries, are responsible. The collaborating European Sports Federations are the European Handball Federation (EHF) and the European Basketball Federation (FIBA Europe).

Work package 6 generally aims at implementing and testing of safety management schemes in handball and basketball. It is led by RUB. In this specific context implementation means that chosen elements of the elaborated injury prevention measures and promotion strategies from work package 5 become documented parts in Slovak Basketball. The perception of potential changes in awareness of and attitudes towards injuries and their prevention will be tested with the help of questionnaire based baseline and follow up surveys in Slovak Basketball.

Selecting, coaching and supervising the national pilot handball and basketball associations in implementing and testing safety management schemes will be done by RUB as part of their responsibility for work package 6. Refund for successful implementation and test will be provided by KfV.

AGREEMENT:

In accordance with the "Safety in Sports" grant agreement, work plan, budget and EAHC guidelines for subcontracting, the partners agree on the following:

1) RESPONSIBILITIES AND TASKS OF THE SLOVAK BASKETBALL ASSOCIATION DURING IMPLEMENTATION AND TESTING PERIOD (1st August 2010 – 30th April 2011)

Task 1: Baseline survey among coaches and officials measuring the pre-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures.

FINALISATION: latest by 15th October 2010

- Elaboration and translation of the questionnaire provided by RUB
- Distribution of the questionnaire among Slovak coaches and officials using multiple channels (hardcopy, email, online)
- Collection of returns and delivery to RUB for analysis

Task 2: Elaboration of draft toolkits of prevention measures and promotion strategies

FINALISATION: latest by 15th October 2010

- Denomination of appropriate experts for online evaluation of the inventory
- Participation in online evaluation of the inventory (latest by 15th July 2010)
- Discussion of the online evaluation results with RUB
- Selection of best measures in view of present demands in Slovak Basketball
- Selection of best promotion strategies in view of present demands in Slovak Basketball

Task 3: Pilot implementation of toolkits

FINALISATION: latest by 28th February 2011

- Implementation of chosen best measures via chosen best promotion strategies in Slovak Basketball
- Reports on progress of pilot implementation to RUB
- Evaluation and refinement of toolkits reflecting experiences during pilot
- Documentation of applied measures and strategies in hardcopy or comparable form (e.g. booklet, brochure, leaflet for athletes and coaches) to guarantee a sustainable benefit for Slovak Basketball

Task 4: Follow-up survey among coaches and officials measuring the post-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures.

FINALISATION: latest by 30th April 2011

- Distribution of the questionnaire among Slovak coaches and officials using multiple channels (hardcopy, email, online)
- Collection of returns and delivery to RUB for analysis

SBA is entitled and encouraged to make further use of experiences with safety management in sports associations, made during the collaboration in this project. SBA may further implement, modify and disseminate results developed with her contribution. Nevertheless, legal demands for the protection of copyrights of project products are to be observed. Any communication or publication about the project and its results, including at a conference or seminar, should indicate that the project and its results have received funding from the European Community.

SBA will take care of eventually requested taxes or social security fees. SBA will claim the compensation not later than 31st August; otherwise the claim becomes obsolete.

Organisation in charge: Comenius University in Bratislava, Faculty of Physical Education and Sport

Persons in charge: Mgr. Ľubor Tománek, PhD (Vice dean for study affair)

2) RESPONSIBILITIES AND TASKS OF THE RUHR UNIVERSITY DURING IMPLEMENTATION AND TESTING PERIOD (1st August 2010 – 30th April 2011)

RUB acts as agent for KfV and supervisor. RUB will provide the Slovak Basketball Association with expert advice and coaching services as needed for the fulfilment of the tasks mentioned and will assess completeness, quality and timeliness of the contractual tasks. RUB will also assist with the payment request to the KfV. Bank account for financial transaction is to be officially stated by SBA.

3) RESPONSIBILITIES AND TASKS OF THE AUSTRIAN ROAD SAFETY BOARD DURING IMPLEMENTATION AND TESTING PERIOD (1st August 2010 – 30th April 2011)

For the completion of the tasks listed, a compensation of € 6,199.- is granted including taxes eventually payable in Slovakia. This sum cannot, not under any circumstances, be exceeded. Prerequisite for any payment is the timely fulfilment of the agreed tasks, and the acceptance of the contracted documentation (deliveries) by RUB. 50% of the payment is done within three weeks after signing of the agreement and 50% within three weeks after completion of the tasks.

4) FINAL CLAUSES

The contract shall be governed exclusively by Austrian law. Agreed exclusive place of jurisdiction shall be the responsible court in Vienna. Eventual amendments to this contract require written form, also a waiver of written form. If a clause of this agreement should turn out as invalid, the validity of the rest remains unaffected. An invalid clause will be replaced by another one with the same effect.

Signatures:

[SBA] ..... ,
Ing. Natasa HRISENKOVA

Date: 14. 7. 2010

SLOVENSKÁ BASKETBALOVÁ ASOCIÁCIA
SLOVAK BASKETBALL ASSOCIATION
SBA
-1-
BRATISLAVA

[KfV] .....

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[RUB] .....
Dr. Thomas Henke

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Tel.: 02 34/32-2 40 99
Fax: 02 34/32-1 43 23

AMENDMENT TO PARTNER AGREEMENT

for the pilot implementation and testing of safety management schemes in Slovak Basketball

The Slovak Basketball Association has officially announced the Comenius University in Bratislava, Faculty of Physical Education and Sport as responsible organisation in charge for execution of agreed project tasks and recipient of financial funding. The Comenius University in Bratislava, Faculty of Physical Education and Sport is officially represented by Mgr. Ľubor Tománek, PhD.

Signatures:

[SBA]

Ing. Hrisenková Natasa

Date: 14.7.2010

[KfV]

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Safety in sports
Injury prevention

SVENSK BASKET

Stockholm 2009-09-08

Dear Dr. Henke,

Following our discussions regarding our potential involvement in your project, we are very pleased to inform you that the Swedish Basketball Federation intends to take part in the EU Project "Safety in Sports" (2008-2011).
Safety and injury prevention in basketball have always been major issues in the development of our sport. We also believe that the cooperation of team sport associations in Europe is essential in terms of networking concerning technical and promotional questions.

For all further details on the project itself as well as the further procedure we have nominated Gökay Akyüz gokay.akyuz@basket.se and Mats Jansson mats.jansson@basket.se as persons in charge.

We are looking forward to working with you on this project.

Yours sincerely

Gökay Akyüz (Head of Education)

Lena Wallin-Kantzy (Secretary General)

Swedish Basketball Federation

SVENSK BASKET

SWEDISH BASKETBALL FEDERATION
Idrottens Hus. SE-114 73 Stockholm, Sweden. Phone + 46 8 699 60 00. Fax +46 8 699 63 06. www.basket.se

PARTNER AGREEMENT

for the pilot implementation and testing of safety management schemes in Swedish Basketball

PARTNERS IN THIS AGREEMENT ARE:

- The Austrian Road Safety Board, Vienna, Austria (KfV), as coordinator of the project "Safety in Sports" and formal orderer,
- The Ruhr University Bochum, Department of Sports Medicine and Sports Nutrition, Bochum, Germany (RUB), as leader of work package 6 of the project and advisor, and
- The Swedish Basketball Federation, Stockholm, Sweden (SBF), as project partner regarding the pilot implementation and testing of safety management schemes in Swedish Basketball and formal contractor.

BACKGROUND AND PURPOSE:

Agreement between the Austrian Road Safety Board (KfV), Vienna, Austria, the Ruhr University Bochum, Department of Sports Medicine and Sports Nutrition, Bochum, Germany (RUB), as leader of work package 6 of the project "Safety in Sports" and the Swedish Basketball Federation, Stockholm, Sweden (SBF), as project partner regarding the pilot implementation and testing of safety management schemes in Swedish Basketball.

The project "Safety Management in High Risk Sports in Collaboration with European Sports Associations" ("Safety in Sports") has been contracted with the Executive Agency for Health and Consumers (EAHC) by the KfV, as leader of the project consortium. The project has been accepted for co-funding in the framework of the EU Health Programme 2008-2013, work plan 2007. The project is scheduled for October 2008 to September 2011. It is divided into several work packages, for which the consortium members, main beneficiary and associated beneficiaries, are responsible. The collaborating European Sports Federations are the European Handball Federation (EHF) and the European Basketball Federation (FIBA Europe).

Work package 6 generally aims at implementing and testing of safety management schemes in handball and basketball. It is led by RUB. In this specific context implementation means that chosen elements of the elaborated injury prevention measures and promotion strategies from work package 5 become documented parts in Swedish Basketball. The perception of potential changes in awareness of and attitudes towards injuries and their prevention will be tested with the help of questionnaire based baseline and follow up surveys in Swedish Basketball.

Selecting, coaching and supervising the national pilot handball and basketball associations in implementing and testing safety management schemes will be done by RUB as part of their responsibility for work package 6. Refund for successful implementation and test will be provided by KfV.

AGREEMENT:

In accordance with the "Safety in Sports" grant agreement, work plan, budget and EAHC guidelines for subcontracting, the partners agree on the following:

1) RESPONSIBILITIES AND TASKS OF THE SWEDISH BASKETBALL FEDERATION DURING IMPLEMENTATION AND TESTING PERIOD (1st August 2010 – 30th April 2011)

Task 1: Baseline survey among coaches and officials measuring the pre-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures.

FINALISATION: latest by 15th October 2010

- Elaboration and translation of the questionnaire provided by RUB
- Distribution of the questionnaire among Swedish coaches and officials using multiple channels (hardcopy, email, online)
- Collection of returns and delivery to RUB for analysis

Task 2: Elaboration of draft toolkits of prevention measures and promotion strategies

FINALISATION: latest by 15th October 2010

- Denomination of appropriate experts for online evaluation of the inventory
- Participation in online evaluation of the inventory
- Discussion of the online evaluation results with RUB
- Selection of best measures in view of present demands in Swedish basketball
- Selection of best promotion strategies in view of present demands in Swedish basketball

Task 3: Pilot implementation of toolkits

FINALISATION: latest by 28th February 2011

- Implementation of chosen best measures via chosen best promotion strategies in Swedish Basketball
- Reports on progress of pilot implementation to RUB
- Evaluation and refinement of toolkits reflecting experiences during pilot
- Documentation of applied measures and strategies in hardcopy or comparable form (e.g. booklet, brochure, leaflet for athletes and coaches) to guarantee a sustainable benefit for Swedish basketball

Task 4: Follow-up survey among coaches and officials measuring the post-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures.

FINALISATION: latest by 30th April 2011

- Distribution of the questionnaire among Swedish coaches and officials using multiple channels (hardcopy, email, online)
- Collection of returns and delivery to RUB for analysis

SBF is entitled and encouraged to make further use of experiences with safety management in sports associations, made during the collaboration in this project. SBF may further implement, modify and disseminate results developed with her contribution. Nevertheless, legal demands for the protection of copyrights of project products are to be observed. Any communication or publication about the project and its results, including at a conference or seminar, should indicate that the project and its results have received funding from the European Community.

SBF will take care of eventually requested taxes or social security fees. SBF will claim the compensation not later than 31st August; otherwise the claim becomes obsolete.

Persons in charge: Mr. Gökay Akyüz (Head of Education)
Mr. Mats Jansson (Member of Medical Committee)

2) RESPONSIBILITIES AND TASKS OF THE RUHR UNIVERSITY DURING IMPLEMENTATION AND TESTING PERIOD (1st August 2010 – 30th April 2011)

RUB acts as agent for KfV and supervisor. RUB will provide the Swedish Basketball Federation with expert advice and coaching services as needed for the fulfilment of the tasks mentioned and will assess completeness, quality and timeliness of the contractual tasks. RUB will also assist with the payment request to the KfV. Bank account for financial transaction is to be officially stated by SBF.

3) RESPONSIBILITIES AND TASKS OF THE AUSTRIAN ROAD SAFETY BOARD DURING IMPLEMENTATION AND TESTING PERIOD (1st August 2010 – 30th April 2011)

For the completion of the tasks listed, a compensation of € 6,199.- is granted including taxes eventually payable in Sweden. This sum cannot, not under any circumstances, be exceeded. Prerequisite for any payment is the timely fulfilment of the agreed tasks, and the acceptance of the contracted documentation (deliveries) by RUB. 50% of the payment is done within three weeks after signing of the agreement and 50% within three weeks after completion of the tasks.

4) FINAL CLAUSES

The contract shall be governed exclusively by Austrian law. Agreed exclusive place of jurisdiction shall be the responsible court in Vienna. Eventual amendments to this contract require written form, also a waiver of written form. If a clause of this agreement should turn out as invalid, the validity of the rest remains unaffected. An invalid clause will be replaced by another one with the same effect.

Signatures:

[SBF] .....
SECR GEN LENA WALLIN KÅNTELY

Date: JULY 13TH 2010

Svenska Basketbollförbundet
Idrottens Hus
114 73 STOCKHOLM
Tel. 08-699 60 00
Fax 08-699 63 06
Pg.25 98 08-4 www.basket.se

[KfV] .....

Kuratorium für Verkehrssicherheit
Schleiergasse 18 1100 Wien
T +43-(0)5 77 0 77-0
F +43-(0)5 77 0 77-1186
www.kfv.at

[RUB] .....
Dr. Thomas Henke

Ruhr-Universität Bochum
Fakultät für Sportwissenschaft
Lehrstuhl für
Sportmedizin und Sporternährung
Overbergstr. 19, D-44801 Bochum
Tel.: 02 34/32-2 40 99
Fax: 02 34/32-1 43 23

AMMENDMENT TO PARTNER AGREEMENT

for the pilot implementation and testing of safety management schemes in Swedish Basketball

The Swedish Basketball Federation has officially announced Mr. Gökay Akyüz (Head of Education) and Mr. Mats Jansson (Member of Medical committee) as responsible persons in charge for execution of agreed project tasks and equal recipients of financial funding.

Signatures:

[SBF] ..... SELK GEN LENA WALLIN KANTZY

[KfV] .....

[RUB] ..... Dr. Thomas Henke

Date: JULY 15TH 2010

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Fax: 02 34/32-1 43 23

B. Minutes

1st Meeting
"Safety in Sports – Injury Prevention and Safety Promotion in Slovak Basketball"

Draft minutes

Chair: Tománek, Lubor
Venue: Bratislava, Faculty of Physical Education and Sport, Comenius University
Date: July 22nd 2009, 09:30 – 13:30

Present (in alphabetical order)		
Name	**Organisation**	**Function**
Argajová, Jaroslava	**Comenius University (COM)**	**Student assistant**
Henke, Thomas	**Ruhr-University Bochum (RUB)**	**Project Manager "Safety in Sports"**
Korbačková, Veronika	**Comenius University (COM)**	**Student assistant**
Luig, Patrick	**Ruhr-University Bochum (RUB)**	**Assistant to Project Manager**
Tománek, Lubor	**Comenius University (COM)**	**Vice dean for study affairs**
Zemkova, Erika	**Comenius University (COM)**	**Associate Professor**

1. Welcome, agenda, who's who

Mr. Tomanek welcomes all participants to the meeting "Safety in Sports - Injury Prevention and Safety Promotion in Slovak Basketball" and thanks all participants for their availability. The agenda is adopted as proposed. Everybody introduces him/herself regarding his organisation, professional background, interest in the project and expectations for the meeting.

ACTION:

- RUB will provide draft minutes of the meeting to all participants for review.
- Mrs. Hrisenková (General secretary of Slovak Basketball Federation) is added as CC to the mailing list in order to get informed about meeting contents and ongoing project activities

2. Brief introduction of Ruhr-University Bochum

Mr. Henke introduces the Ruhr-University Bochum and illustrates some existing cooperation projects and collaborations with team sport federations as well as the European development and the perspectives in sports injury prevention (see annex *"Introduction"*).

3. Presentation of project "Safety in Sports"

Mr. Luig gives a presentation on the EU-Project "Safety in Sports", highlighting background information, intention, main working steps and objectives (see annex *"SafetyinSports Slovak"*).

ACTION:

- RUB will link the Faculty of Physical Education and Sports (COM) as collaborating partner to the official project website www.safetyinsports.eu
- Mr. Tomanek will provide an official logo and the link information

4. Formal expectations

Mr. Henke points out potential collaboration details, possible benefits for the Slovak Basketball Federation Sport and formal expectations arising from the project. He emphasizes the projects' politics to adjust the needs in compliance to the individual resources and demands of the cooperating national federation and their experts.

5. Joint scope of project activities and duties

Mr. Tománek and Mrs. Zemkova agree to support the project and to join the network "Safety in Sports". To make collaboration official a written declaration (letter of intent) of the Slovak Basketball Federation to support the project is needed. As coaches' education and advanced coaches' education in Slovakia is organised by COM, COM should officially be enshrined as delegated working party within the official letter of intent.
A baseline questionnaire concerning general awareness of and attitudes towards injuries and injury prevention as well as knowledge about and application of preventive measures in Slovak Basketball is envisaged as potential kickoff for project activities at West Slovakian Coaching Clinic in September 2009. The survey should be promoted as activity of the Slovak Basketball Federation or rather of COM as responsible working party to ensure a real baseline survey. The data typing work will either be done by COM or optionally, if wanted by RUB. In the latter case Slovak partners will receive a SPSS data file for their own use. Free-text fields within the questionnaire should be kept to a minimum to reduce translation work. Possible findings will only be published after consultation and review of Slovak partners.

ACTION:

- RUB will hand out an english draft questionnaire
- Mr. Tománek will check how the questionnaire can be distributed best possible in the Slovak Republic (e.g. internet-poll, mailing list or printed questionnaire) and which particular questions for Slovak Basketball Federation's demands might be added or combined with this questionnaire
- COM will take care for translation of the questionnaire
- RUB will request official letter of intent of Slovak Basketball Federation via Mr. Schwarz (FIBA Europe) and directly via general secretary Mrs. Hrisenková
- Mr. Tománek will identify and inform appropriate national candidates who might be considered to join the network of experts and who might be invited to the 2nd meeting.
- It is intended to hold a 2nd meeting within the six months to discuss advanced project activities in detail
- COM will internally discuss which implementation opportunities (e.g. coaches education, leaflets, DVDs, website) seem most promising for promoting preventive ideas in Slovak Basketball

6. Subcontracts

Mr. Henke explains contract modalities for subcontracting on the basis of a first subcontracting draft The agreement and commitment to test injury prevention measures and strategies in Slovak Basketball as a project pilot and in order to gain access to financial support out of the project budget will become definite by closing subcontracts with the project consortium. The Slovak Basketball Federation is officially foreseen as contracting partner although COM has been announced as working party for project activities in Slovakia.

ACTION:

- RUB will modify subcontracts to the special demands of COM (financial flow, denomination of COM as official partner)
- In Terms of subcontracting RUB will directly negotiate with Mrs. Hrisenková from Slovak Basketball Federation regarding the above mentioned aspects

1st Expert Consultation Meeting
"Injury Prevention and Safety Promotion in Slovak Basketball"

Draft minutes

Venue: Bratislava, Faculty of Physical Education and Sport, Comenius University
Date: May 25th 2010, 13:00 – 17:00

Present (in alphabetical order)		
Name	**Organisation**	**Function**
Henke, Thomas	**Ruhr-University Bochum (RUB)**	**Project Manager "Safety in Sports"**
Argajová, Jaroslava	**Comenius University Bratislava (COM)**	**Student assistant**
Luig, Patrick	**Ruhr-University Bochum (RUB)**	**Assistant to Project Manager**
Mačura, Peter	**Comenius University Bratislava (COM)**	**Associate Professor**
Tománek, Lubor	**Comenius University Bratislava (COM)**	**Vice dean for study affairs**
Zemkova, Erika	**Comenius University Bratislava (COM)**	**Associate Professor**

1. Welcome, agenda

Mr. Henke, project manager, and Mr. Tománek, host, welcome all participants to the 1st Expert Consultation Meeting "Safety in Sports - Injury Prevention and Safety Promotion in Slovak Basketball" and thank them for their availability. The agenda is adopted as proposed by RUB.

ACTION:

- RUB will provide draft minutes of the meeting to all participants

2. Project status report, baseline surveys, inventory

Mrs. Argajová gives a brief summary of previous project activities that have taken place at the Comenius University since project start. Due to the delay in producing the basketball inventory COM had to cancel a planned coaching clinic, where first preventive ideas could have been implemented. Communication will be intensified between both parties to prevent further periods of low activities. In the following Mr. Henke presents a retrospective report on conducted and ongoing project activities and outlines intended proceedings *(see annex: Safety in Sports Bratislava.pdf).* The inventory of existing prevention measures and safety promotion strategies is finalized. 69 preventive ideas from more than 20 countries are considered. To identify best measures an online evaluation tool was developed and launched in May 2010. Therefore, accredited experts were invited to find a consensus with the help of this web based evaluation process. This procedure should be completed by mid of July 2010 (appointed deadline: 15th July 2010). Methods, intentions and usage of the tool are clarified upon request. Slovak Basketball Federation has already performed an initial baseline survey during one single coaching clinic. 85 questionnaires are available by now. It is intended to proceed with baseline survey until implementation is started. However, some minor changes in the questionnaire seem necessary (e.g. email dissemination).

ACTION:

- COM: Mr. Tománek will prepare a list of Slovak experts (incl. Mr. Mačura, Mrs Zemkova) that will participate in the online evaluation process.
- RUB: Mr. Luig will arrange accounts for named basketball expert and will invite them directly via email.
- COM: Further coaching clinics or lecturer meetings should be considered for continuous baseline surveying. In addition, online channels e.g. mail should be considered for baseline surveys
- COM: Discussion if own contents, questions, etc. should be added to the questionnaire
- RUB: Preparation of an pdf questionnaire that can be used as email or online surveys
- RUB: Evaluation of survey results
- RUB: Dissemination of results to COM

3. Discussion on best prevention measures (toolbox) leading to potential approaches for Slovak pilot

It is firstly discussed which preventive measures seem to be most promising and furthermore which promotion channels could work best possible in Swedish Basketball. Mr. Henke introduces a prevention matrix (see figure 1) that should be used to specify existing and missing fields of prevention in view of age, gender and performance level. There is a general consensus that injury prevention has to be promoted in terms of performance enhancement to establish compliance amongst athletes and coaches (e.g. how to perform/train a feint, jump shot), in particular considering main injury mechanisms and situations in basketball. With regard to training core stabilization, coordination, balancing exercises seem most promising alongside with increased awareness for injuries and coaches' or lecturer education. Producing an educational block (e.g. 1h theoretical part, 2h practical part) for national and regional coaching clinics seems to be a good basis for implementation of preventive contents in Slovak Basketball. There should be a certain focus on education of youth coaches. It may be attractive to invite a prominent international lecturer for the first initial coaching clinic. The education block should be well documented incl. preventive recommendations from all areas. A "light" version (e.g. leaflet or brochure) could be distributed to coaches, the more comprehensive one (booklet, coaching report) could be used as lecturer handbook for continuous education of coaches.

Gender	Age	Performance Level	Training & Physical Preparation	Technical & Political Approaches	Equipment & Facilities	Medical & Non-medical Support
Female	Children	low				
		medium				
		high				
	Youth	low				
		medium				
		high				
	Adults	low				
		medium				
		high				
Male	Children	low				
		medium				
		high				
	Youth	low				
		medium				
		high				
	Adults	low				
		medium				
		high				

Figure 1: Prevention matrix – Fields of prevention depending on gender, age and performance level

ACTION:

- RUB: Potential contents for the prevention matrix will be filled in regarding results from online evaluation process.
- COM: Internal discussion about what is necessary (demands that can be saturated within the frame of the project) and how it can be promoted (e.g. coaches' education block, training contents, appropriate lecturer, online coaches' corner)
- COM/RUB: Decision which fields (cells of prevention matrix) should be covered definitely within the project. This step is approached on the basis of the results of the online evaluation. A separate meeting for this step is envisaged for autumn 2010.

4. Detailed elaboration of subcontracts

The agreement and commitment of the Slovak Basketball Federation to test selected injury prevention measures from offered fields of injury prevention (cells of prevention matrix, toolbox) and to promote them through discussed channels (as a project pilot) and in order to gain access to financial support out of the project budget will become definite by closing subcontracts with the project consortium. Before signing the final contract it needs detailed elaboration of contents with regard to de facto tasks and contents within implementation phase.

ACTION:

- RUB: Elaboration of a provisional time schedule including specific joint tasks (such as continuous baseline surveys, participation in online evaluation, advanced joint meeting for detailed discussion of implementation, implementation of chosen strategy, follow-up surveys) as fixed contractual contents
- RUB: Preparation of final subcontracts, handed out to Mr. Tománek for review
- RUB: Reviewed contract will immediately forwarded to Mrs. Hrisenkova for signing

Beside above mentioned aspects it has emerged that the implementation phase should be finished latest by March 2011; the affiliated follow-up survey latest by April 2011.

2nd Expert Consultation Meeting
"Injury Prevention and Safety Promotion in Slovak Basketball"

Draft minutes & work plan

Venue: Bratislava, Comenius University, Faculty of Physical Education and Sport
Date: October 13, 2010 09:00 – 12:30

Present (in alphabetical order)		
Name	**Organisation**	**Function**
Argaj, G.	Comenius University Bratislava (COM)	Student assistant
Argajová, Jaroslava	Comenius University Bratislava (COM)	Student assistant
Bielik, V.	Comenius University Bratislava (COM)	Student assistant
Henke, Thomas	Ruhr-University Bochum (RUB)	Project Manager "Safety in Sports"
Luig, Patrick	Ruhr-University Bochum (RUB)	Assistant to Project Manager
Mačura, Peter	Comenius University Bratislava (COM)	Associate Professor
Tománek, Lubor	Comenius University Bratislava (COM)	Vice dean for study affairs
Zemkova, Erika	Comenius University Bratislava (COM)	Associate Professor

The present partners agreed upon following items:

- The baseline surveys among coaches measuring the pre-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures will be continued till official start of implementation.

  Tasks:
  - **Jaroslava Argajová will translate the prepared English questionnaire into Slovak and – beyond that – tailor it to the demands of Slovak Basketball (e.g. additional questions). already done**
    The Slovak questionnaire should be provided to RUB latest by September 10, 2010. already done
  - **Patrick Luig will convert the file into two ready-made e-questionnaires (one for direct coaches group, one for indirect coaches group) and send them back to COM for final test and – if test works out fine – for further provision in Slovak basketball via e-mail and webpage.**
    The online distribution of the questionnaires should start latest by November 1, 2010.
  - **RUB is responsible for processing of the questionnaires and will report results to COM regularly.**

- Elaboration of draft toolkits of prevention measures and promotion strategies

  Tasks:
  - **On the basis of the online evaluation results COM will discuss and elaborate a coaching module on injury prevention consisting of theoretical information on injuries and their prevention (presentation) and demonstration of performance enhancing prevention measures (practice). This module aims at increasing coaches' knowledge on integration of preventive ideas into regular training routine e.g. through optimized warm-ups.**
  - **On the basis of the existing prevention programmes COM will provide advanced theoretical (e.g. physical demands and etiology of injuries, equipment, (non)medical support) and practical contents (training & physical preparation) to RUB for review and discussion.**
    This draft toolkit should be available latest by November 17, 2010.
  - **RUB will assist COM in elaborating this module. Making best prevention recommendations from online evaluation (pdf files of original full text sources) and DVDs from Swedish Basketball Federation available will help COM to get an impression which further preventive aspects should be added to the existing prevention programme. However, COM should always keep its national demands and expectations in mind. An internal round table with Slovak experts is therefore strongly recommended.**

- Pilot implementation of educational module

  Tasks:
  - **Elaborated education module will be tested/applied on various occasions such as upcoming coaches' and lecturer education seminars e.g. Coaching Clinic on November 17 in Bratislava.**
  - **Critical reflection of and – if necessary – reasonable refinement of applied education module with regard to sustainable implementation into Slovak basketball coaches education.**
  - **Documentation of test implementation in hardcopy or comparable form (e.g. booklet, brochure, leaflet, posters for athletes and coaches, presentations, videos) to guarantee a sustainable benefit for Slovak basketball.**
  - **COM will try implement their prevention programme into official Slovak coaches education curriculum**
  - **Further (already existing) injury prevention initiatives should also be documented. Preferably as pdf files.**
  - **A first draft work plan on planned activities (seminars) should be provided to RUB latest by November 17, 2010**
  - **RUB will provide COM on behalf of Slovak Basketball Association with advice and support as needed for the fulfilment of the tasks mentioned and will assess completeness, quality and timeliness of the tasks**

- Follow-up survey among coaches measuring the post-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures

  Tasks:
  - **COM will use the same e-questionnaires for the follow up survey (direct and indirect groups) and guarantees distribution latest by end of April, 2011.**
  - **RUB is responsible for processing of the questionnaires and will report results to COM regularly.**

1st Meeting
"Safety in Sports – Injury Prevention and Safety Promotion in Swedish Basketball"

Draft minutes

Venue: Swedish Basketball Federation, Fiskartorpsvägen 15A, Stockholm, Sweden
Date: August 5th 2009, 10:00 – 15:00

Present (in alphabetical order)		
Name	**Organisation**	**Function**
Akyüz, Gökay	**Swedish Basketball Federation**	**Head of Education**
Dr. Henke, Thomas	**Ruhr-University Bochum (RUB)**	**Project Manager "Safety in Sports"**
Jansson, Mats	**Swedish Basketball Federation**	**Medical Committee**
Källmann, Per	**Swedish Basketball Federation**	**National Team Programme**
Luig, Patrick	**Ruhr-University Bochum (RUB)**	**Assistant to Project Manager**
Schulz, David	**ARAG Sports Insurance**	**Head of Off. for Sports Injury Analysis**

1. Welcome, agenda, who's who

HENKE and KÄLLMANN welcome all participants to the meeting "Safety in Sports - Injury Prevention and Safety Promotion in Swedish Basketball" and thank all participants for their availability. The agenda is adopted as proposed. Everybody introduces himself regarding his organisation, professional background, interest in the project and expectations for the meeting.

ACTION:

- RUB will provide draft minutes & documents of the meeting to all participants for review.
- AKYÜZ and JANSSON will inform secretary general WALLIN-KANTZY about meeting details.

2. Brief introduction of Ruhr-University Bochum

HENKE introduces the Ruhr-University Bochum and the Department of Sports Medicine, which is responsible for the project "Safety in Sports" and for sports injury issues in general. He illustrates existing cooperation projects and collaborations with team sport federations as well as the European development and the perspectives in sports injury prevention (see annex *"Introduction"*).

3. Presentation of Swedish prevention programme

KÄLLMANN and JANSSON give an account of the Swedish National Team Programme, in which injury prevention, medical support and coaches/leaders education are important parts of the overall concept. The BASKETSMART programme for ACL injury prevention has already played an essential role in daily basketball practice of all national teams. An advanced promotion of BASKETSMART via multiple channels (e.g. website, hardcopies, educational modules) is aspired.

ACTION:

- It should be discussed if above mentioned intentions can even be achieved within the frame of project.

4. Presentation of project “Safety in Sports”

LUIG gives a presentation on the EU-Project “Safety in Sports”, highlighting background information, intention, main working steps and objectives (see annex *“SafetyinSports Sweden”*).

5. Formal expectations

HENKE and LUIG point out potential collaboration details, possible benefits for the Swedish Basketball Federation and formal expectations arising from the project. They emphasize the projects’ politics to adjust the needs in compliance to the individual resources and demands of the cooperating national federation and their experts.

6. Joint scope of project activities and duties

AKYÜZ, JANSSON and KÄLLMANN see big opportunities in supporting the project and joining the network “Safety in Sports”. Before making collaboration official the Swedish Basketball Federation will internally discuss if and if so, how to accomplish joint project work in terms of financing and manpower.

A written declaration (letter of intent) of the Swedish Basketball Federation highlighting the federations’ intention to officially support the project will be necessary to document the collaboration.

A baseline questionnaire concerning general awareness of and attitudes towards injuries and injury prevention as well as knowledge about and application of preventive measures in Swedish Basketball is envisaged as potential kickoff for project activities during next coaches/leaders education meeting in November. The survey should be promoted as activity of the Swedish Basketball Federation to ensure a real baseline survey. The data typing work can be done by RUB. Swedish partners will receive a SPSS data file for their own use. Free-text fields within the questionnaire should be kept to a minimum to reduce translation work. Possible findings will only be published after consultation and review of Swedish partners.

ACTION:

(If collaboration becomes definite)

- RUB will hand out an English draft questionnaire.
- GÖKAY will check how the questionnaire can be distributed best possible in Sweden (e.g. internet-poll, mailing list or printed questionnaire) and which particular questions for Swedish Basketball Federation’s demands might be added or combined with this questionnaire.
- Swedish Basketball Federation will take care for translation of the questionnaire.
- Swedish Basketball Federation will formulate an official Letter of Intent.
- RUB will hand out a sample version of above mentioned Letter of Intent (s.annex “Example Letter of Intent”).
- GÖKAY, JANSSON and KÄLLMANN will identify and inform appropriate national candidates who might be considered to join the network of experts and who might be invited to the 2nd meeting.
- It is intended to hold a 2nd meeting within the next six months to discuss advanced project activities in detail.

7. Subcontracts

Mr. Henke explains contract modalities for subcontracting on the basis of a first subcontracting draft. The agreement and commitment to test injury prevention measures and strategies in Swedish Basketball as a project pilot and in order to gain access to financial support (6.199 €) out of the project budget will become definite by closing subcontracts with the project consortium. Potential production and travel costs are eligible in addition to this funding.

1st Expert Consultation Meeting
"Injury Prevention and Safety Promotion in Swedish Basketball"

Draft minutes

Venue: Swedish Basketball Federation, Idrottenshus, Fiskartopsvägen 15A, Stockholm, Sweden
Date: May 26th 2010, 16:00 – 20:30

Present (in alphabetical order)		
Name	**Organisation**	**Function**
Akyüz, Gökay	**Swedish Basketball Federation (SBF)**	**Head of Education**
Henke, Thomas	**Ruhr-University Bochum (RUB)**	**Project Manager "Safety in Sports"**
Jansson, Mats	**Swedish Basketball Federation (SBF)**	**Medical Commitee**
Luig, Patrick	**Ruhr-University Bochum (RUB)**	**Assistant to Project Manager**

1. Welcome, agenda

Mr. Henke, project manager, and Mr. Akyüz, host, welcome all participants to the 1st Expert Consultation Meeting "Safety in Sports - Injury Prevention and Safety Promotion in Swedish Basketball" and thank them for their availability. The agenda is adopted as proposed by RUB.

ACTION:

- RUB will provide draft minutes of the meeting to all participants

2. Project status report, baseline surveys, inventory

Mr. Henke presents a retrospective report on conducted and ongoing project activities and outlines intended proceedings *(see annex: Safety in Sports Stockholm.pdf).* The inventory of existing prevention measures and safety promotion strategies is finalized. 69 preventive ideas from more than 20 countries are considered. To identify best measures an online evaluation tool was developed and launched in May 2010. Therefore, accredited experts were invited to find a consensus with the help of this web based evaluation process. This procedure should be completed by mid of July 2010 (appointed deadline: 15th July 2010). Methods, intentions and usage of the tool are clarified upon request. Swedish Basketball Federation has done an initial baseline survey during one single coaches' seminary.
Mr. Akyüz presents prepared results of this survey. 27 questionnaires are available by now. It is intended to proceed with baseline survey until implementation is started. However, some changes in the questionnaire seem necessary. Furthermore, the Basketsmart programme, an already existing campaign primarily aiming at preventing knee injuries and focusing on a standard warm-up routine. It consists merely of basic exercises dealing with stabilisation of the core, balancing and coordination practices and proper jumping and landing technique is discussed as starting point for project implementation. The programme is particularly suited for young athletes up to the age of 16. It is provided to youth coaches during education seminaries. Basketsmart is yet missing in the inventory but should be included as soon as possible.

ACTION:

- SBF: Mr. Jansson will prepare a list of appropriate Swedish experts that will participate in the online evaluation process.
- RUB: Mr. Luig will arrange accounts for named basketball expert and will invite them directly via email.
- SBF: Further coaches' seminars or lecturer meetings should be considered for continuous baseline surveying. In addition, online channels e.g. mail should be considered for baseline surveys
- SBF: Discussion if own contents, questions, etc. should be added to the questionnaire
- SBF: Mr. Akyüz will provide some comments on the existing questionnaire
- RUB: Preparation of an pdf questionnaire that will be used during planned email or web survey
- RUB: Evaluation of survey results
- RUB: Results will be presented in certain intervals
- SBF: Mr. Jansson will send out an English translation of the Basketsmart programme
- RUB: Basketsmart will be added in the online evaluation

3. Discussion on best prevention measures (toolbox) leading to potential approaches for Swedish pilot

It is firstly discussed which preventive measures seem to be most promising and furthermore which promotion channels could work best possible in Swedish Basketball. Mr. Henke introduces a prevention matrix (see figure 1) that should be used to specify existing and missing fields of prevention in view of age, gender and performance level. There is a general consensus that injury prevention has to be promoted in terms of performance enhancement to establish compliance amongst athletes and coaches (e.g. how to perform/train a feint, jumpshot), in particular considering main injury mechanisms and situations in basketball. With regard to training core stabilization, coordination, balancing exercises seem most promising alongside with increased awareness for injuries and coaches' or lecturer education. The Basketsmart programme seems to be a good basis for further activities. Main target direction should be the education of young athletes, probably in particular with regard to females aged 12-16.

Gender	Age	Performance Level	Training & Physical Preparation	Technical & Political Approaches	Equipment & Facilities	Medical & Non-medical Support
Female	Children	low				
		medium				
		high				
	Youth	low				
		medium				
		high				
	Adults	low				
		medium				
		high				
Male	Children	low				
		medium				
		high				
	Youth	low				
		medium				
		high				
	Adults	low				
		medium				
		high				

Figure 1: Prevention matrix – Fields of prevention depending on gender, age and performance level

ACTION:

- RUB: Potential contents for the prevention matrix will be filled in regarding results from online evaluation process.
- SBF: Internal discussion about what is necessary (demands that can be saturated within the frame of the project) and how it can be promoted (e.g. coaches' education, training contents, DVD, online coaches' corner e.g. svenskbaskettelevision.se).
- SBF/RUB: Decision which fields (cells of prevention matrix) should be covered definitely within the project. This step is approached on the basis of the results of the online evaluation. A separate meeting for this step is envisaged for autumn 2010.

4. Detailed elaboration of subcontracts

The agreement and commitment of the Swedish Basketball Federation to test selected injury prevention measures from offered fields of injury prevention (cells of prevention matrix, toolbox) and to promote them through discussed channels (as a project pilot) and in order to gain access to financial support out of the project budget will become definite by closing subcontracts with the project consortium. Before signing the final contract it needs detailed elaboration of contents with regard to de facto tasks and contents within implementation phase.

ACTION:

- RUB: Elaboration of a provisional time schedule including specific joint tasks (such as continuous baseline surveys, participation in online evaluation, advanced joint meeting for detailed discussion of implementation, implementation of chosen strategy, follow-up surveys) as fixed contractual contents
- RUB: Preparation of final subcontracts, handed out to Mr. Akyüz for review
- SBF: Mr. Akyüz will forward final subcontracts to general secretary Mrs. Lena Wallin-Kantzy

Beside above mentioned aspects it has emerged that the implementation phase should be finished latest by March 2011; the affiliated follow-up survey latest by April 2011.

2nd Expert Consultation Meeting
"Injury Prevention and Safety Promotion in Norwegian Handball"

Draft minutes & work plan

Venue: Swedish Basketball Federation, Idrottenshus, Stockholm, Sweden
Date: September 1, 2010 12:00 – 15:30

Present (in alphabetical order)		
Name	**Organisation**	**Function**
Akyüz, Gökay	**Swedish Basketball Federation (SBF)**	**Head of Education**
Henke, Thomas	**Ruhr-University Bochum (RUB)**	**Project Manager "Safety in Sports"**
Jansson, Mats	**Swedish Basketball Federation (SBF)**	**Head of Medical Commitee**
Luig, Patrick	**Ruhr-University Bochum (RUB)**	**Assistant to Project Manager**

The present partners agreed upon following items:

- The baseline surveys among coaches measuring the pre-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures will be continued till official start of implementation.

  Tasks:
  - **Mats Jansson will translate the prepared English questionnaire into Swedish and – beyond that – tailor it to the demands of Swedish Basketball (e.g. additional questions).**
    The Swedish questionnaire should be provided to RUB latest by September 10, 2010.
  - **Patrick Luig will convert the file into a ready-made e-questionnaire and send it back to SBF for final test and – if test works out fine – for further provision in Swedish basketball via e-mail and webpage.**
    The online distribution of the questionnaires should start latest by September 17, 2010.
  - **RUB is responsible for processing of the questionnaires and will report results to SBF regularly.**

- Elaboration of draft toolkits of prevention measures and promotion strategies

  Tasks:
  - **On the basis of the online evaluation results SBF will discuss and elaborate a coaching module on injury prevention consisting of theoretical information on injuries and their prevention (presentation) and demonstration of performance enhancing prevention measures (practice). This module aims at increasing coaches' knowledge on integration of preventive ideas into regular training routine e.g. through optimized warm-ups.**
  - **On the basis of the existing Basketsmart programme SBF will provide advanced theoretical (e.g. physical demands and etiology of injuries,**

equipment, (non)medical support) and practical contents (training & physical preparation) to RUB for review and discussion.
This draft toolkit should be available latest by November 12, 2010.

- **RUB will assist SBF in elaborating this module. Making best prevention recommendations from online evaluation available (pdf files of orginal full text sources) will help SBF to get an impression which further preventive aspects should be added to the Basketsmart programme. However, SBF should always keep its national demands and expectations in mind. An internal round table with Swedish experts is therefore strongly recommended (e.g. during coaches' education weekend (November 5-7, 2010)**

- Pilot implementation of educational module

Tasks:

- **Elaborated education module will be tested/applied on various occasions such as upcoming coaches' and lecturer education seminars e.g. youth education seminars and basic physio course (December 27-30, 2010), further coaching clinics in February 2011 (??)**
- **Critical reflection of and – if necessary – reasonable refinement of applied education module with regard to sustainable implementation into Swedish basketball coaches education.**
- **Beside physiotherapists more coaches should be prepared as instructors of the final advanced programme to increase acceptance and circulation within the Swedish basketball community**
- **Documentation of test implementation in hardcopy or comparable form (e.g. booklet, brochure, leaflet, posters for athletes and coaches, presentations, videos) to guarantee a sustainable benefit for Swedish basketball.**
- **Further (already existing) injury prevention initiatives (basketsmart, knäkontrol) should also be documented. Preferably as pdf files.**
- **A first draft work plan on planned activities should be provided to RUB latest by end of September, 2010**
- **RUB will provide the Swedish Basketball Federation with advice and support as needed for the fulfilment of the tasks mentioned and will assess completeness, quality and timeliness of the tasks**

- Follow-up survey among coaches measuring the post-implementation perception of and attitudes towards injuries as well as knowledge and application of prevention measures

Tasks:

- **SBF will use the same e-questionnaire for the follow up survey and guarantees distribution latest by end of April, 2011.**
- **RUB is responsible for processing of the questionnaires and will report results to SBF regularly.**

C. Questionnaires

Safety in Sports.EU
European Network for Sports Injury Prevention

INJURY PREVENTION IN BASKETBALL

Questionnaire for basketball coaches

Dear participants. We are interested in your experiences and opinions concerning basketball injuries and their prevention. Please, support our survey by filling in this questionnaire.

First of all, some general information about your person

Your age: ☐ Your country: ☐

Your gender: ☐ Male ☐ Female

Coaching Education: ☐ None ☐ License ☐

☐ Sports Scientist ☐ Sports Physician ☐ Physiotherapist

Which teams do you coach?

1.	2.	3.
☐ Men ☐ Women	☐ Men ☐ Women	☐ Men ☐ Women
☐ Senior team (18+)	☐ Senior team (18+)	☐ Senior team (18+)
☐ Youth team (14+)	☐ Youth team (14+)	☐ Youth team (14+)
☐ Children	☐ Children	☐ Children
League ☐	League ☐	League ☐
Sessions/week ☐	Sessions/week ☐	Sessions/week ☐

The following questions deal with your personal perception of basketball injuries

1. On a 5-point scale, do you think injuries are a major issue in basketball?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

very important issue ***not important at all***

3. Which specific injuries do you see as the biggest problem in basketball? (3 answers max.)

☐ Head injuries ☐ Finger Injuries ☐ Knee injuries ☐ Ankle injuries

☐ Other ☐

4. What do you see as main causes for basketball injuries? (3 answers max.)

☐ Bad luck ☐ Too little regeneration ☐ Bad technique

☐ Fouls / unfair play ☐ Insufficient warm-up ☐ Poor equipment

☐ Body contact ☐ Poor physical condition ☐ Previous injuries

☐ Too many matches ☐ Other ☐

5. Do you think that basketball injuries are preventable?

☐ No (please, go to question 11) ☐ Yes, basketball injuries are preventable

This part of the questionnaire broaches the issue of injury prevention in basketball

6. How can the number and/or the severity of basketball injuries be reduced? (3 answers max.)

☐ Better athletic preparation ☐ Modification of rules ☐ Stricter officiating
☐ Longer regeneration ☐ Protective equipment ☐ Less matches
☐ Medical Screenings ☐ Better equipment ☐ Preventive training measures
☐ Physiotherapy ☐ Other _____

7. Do you carry out any preventive training measures with your teams?

☐ No (please go to question 11) ☐ Yes, by means of **(multiple answers possible)**:

☐ Strengthening ☐ Warm-up ☐ Athletic drills
☐ Stretching ☐ Balance exercises ☐ Coordination exercises
☐ Cool down ☐ Technique Training ☐ Mobilisation exercises
☐ Other _____

8. When and how often do you apply these preventive training measures?

☐ During preseason: ☐ every session ☐ once a week ☐ less than once a week
☐ During season: ☐ every session ☐ once a week ☐ less than once a week

9. On a 5-point scale, how do your players like these preventive training measures?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

like it very much ***dislike it***

10. On a 5-point scale, do you feel familiar and comfortable with applying these preventive training measures?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

feel very familiar with it ***need more instruction on this issue***

11. Do your players use other prevention measures?

☐ No (please go to question 12) ☐ Yes, by means of **(multiple answers possible)**:

☐ Physiotherapy ☐ Mouthguards ☐ Taping
☐ Orthoses ☐ Protectors ☐ Medical Screenings
☐ Massage ☐ Other _____

12. Do you know any specific programmes to prevent injuries in basketball?

☐ No ☐ Yes, namely _____

13. Do you think that injuries and their prevention should be integral part of coaches' education in basketball?

☐ No ☐ Yes

14. Do you need more information on basketball injuries and their prevention?

☐ No ☐ Yes

Submit questionnaire

THANKS FOR YOUR SUPPORT!!

PREVENCIA ZRANENÍ V BASKETBALE

Dotazník pre basketbalových trénerov

Milí tréneri. Zaujímajú nás Vaše skúsenosti a názory v oblasti výskytu a prevencie zranení v basketbale. Prosím podporte náš výskum vyplnením tohto dotazníka. Výsledky budú spracované a použité pri zostavovaní študijných materiálov, ktoré Vám budú nápomocné pri Vašej práci.

Na úvod všeobecné informácie o Vašej osobe

Váš vek: ☐

Vaše pohlavie: ☐ Muž ☐ Žena

Trénerské vzdelanie: ☐ Žiadna úroveň ◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5

Prípadné vedecké vzdelanie: ☐ Športový vedec ☐ Športový lekár ☐ Fyzioterapeut

Poznámka k trénerskému vzdelaniu:

NOVÉ OZNAČENIE	STARÉ OZNAČENIE
Trénerský kvalifikačný stupeň	***Trénerská kvalifikačná trieda (nadobudnutá a priznaná ZT SBA do 1.12.2008)***
bez	bez preukazu ZT SBA
1.	*tréner čakateľ
2.	III. trieda
3.	II. trieda
4.	*I. trieda • získaná (D)ŠT I. triedy, • absolvent bakalárskeho štúdia trénerstva** – špecializácia basketbal
5.	*I. trieda • získaná v rámci magisterského štúdia TV, • získaná (D)ŠT I. triedy po magisterskom štúdiu TV, Diplomovaný tréner • absolvent magisterského štúdia trénerstva** – špecializácia basketbal

* len pre potreby tohto dotazníka

** aj medziodborového štúdia trénerstva a učiteľstva TV

Družstvá akej vekovej kategórie trénujete?

1.	**2.**	**3.**
☐ Muži ☐ Ženy	☐ Muži ☐ Ženy	☐ Muži ☐ Ženy
☐ Seniori (18+) ☐ Mládežníci (14+) ☐ Deti (do 13)	☐ Seniori (18+) ☐ Mládežníci (14+) ☐ Deti (do 13)	☐ Seniori (18+) ☐ Mládežníci (14+) ☐ Deti (do 13)
Súťaž: ☐ Počet TJ v týždni: ☐	Súťaž : ☐ Počet TJ v týždni : ☐	Súťaž : ☐ Počet TJ v týždni : ☐

Poznámka: **(18+) – 18-roční a starší**

(14+) – 14-roční a starší

(do 13) – 13-roční a mladší

Nasledovné otázky sa zaoberajú Vašim osobným vnímaním zranení v basketbale

1. **Na 5 – bodovej škále ohodnoťte za ako významný problém považujete zranenia v basketbale?**

   ○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

   veľmi dôležitý problém ***vôbec nie dôležitý problém***

2. **Ktoré špecifické zranenia sú podľa Vás najväčším problémom v basketbale? (max. 3 odpovede)**

   ☐ Zranenia hlavy ☐ Zranenia prstov ☐ Zranenia kolien ☐ Zranenia členkov

   ☐ Iné _____

3. **Aké sú podľa Vás hlavné príčiny zranení v basketbale? (max. 3 odpovede)**

   ☐ Nešťastné okolnosti ☐ Nedostatok regenerácie ☐ Zlá technika

   ☐ Fauly/nefér hra ☐ Nedostatočné rozcvičenie ☐ Zlé vybavenie (obuv,palubovka)

   ☐ Telesný kontakt ☐ Zlá fyzická kondícia ☐ Predchádzajúce zranenia

   ☐ Priveľký počet zápasov ☐ Iné _____

4. **Myslíte si, že je možné predchádzať zraneniam v basketbale?**

   ☐ Nie (prosím pokračujte otázkou 10) ☐ Áno, zraneniam v basketbale je možné predchádzať:

Táto časť dotazníka navodzuje problematiku prevencie zranení v basketbale

5. **Ako môže byť zredukovaný počet a/alebo závažnosť zranení v basketbale? (max. 3 odpovede)**

   ☐ Lepšou atletickou prípravou ☐ Upravením pravidiel ☐ Prísnejším rozhodovaním

   ☐ Dlhšou regeneráciou ☐ Ochrannými pomôckami ☐ Redukciou počtu súťažných zápasov

   ☐ Lekárskymi vyšetreniami ☐ Lepším vybavením ☐ Fyzioterapiou

   ☐ Preventívnymi tréningovými opatreniami (tréningové metódy)

   ☐ Iné _____

6. **Vykonávate preventívne tréningové opatrenia s Vašimi družstvami?**

   ☐ Nie (prosím pokračujte otázkou 10) ☐ Áno, a to: **(viacnásobná odpoveď možná)**:

   ☐ Posiľňovanie ☐ Rozcvičenie ☐ Atletické cvičenia

   ☐ Strečing ☐ Rovnovážne (balančné) cvičenia ☐ Koordinačné cvičenia

   ☐ Ukľudnenie ☐ Tréning (nácvik) techniky ☐ Kompenzačné cvičenia

   ☐ Iné _____

7. Kedy a ako často aplikujete tieto preventívne tréningové opatrenia?

☐ Počas prípravného obdobia	☐ každý tréning	☐ 1-krát/týždeň	☐ menej ako 1-krát/týždeň
☐ Počas sezóny	☐ každý tréning	☐ 1-krát/týždeň	☐ menej ako 1-krát/týždeň

8. Na 5 – bodovej škále ohodnoťte ako Vaši hráči majú radi (príjmajú) tieto preventívne tréningové opatrenia?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

veľmi radi ***vôbec ich nemajú radi***

9. Na 5 – bodovej škále ohodnoťte, či je pre Vás aplikovanie preventívnych opatrení dobre známe a bezproblémové?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

dobre známe ***potrebujem viac inštrukcií týkajúcich sa tohto problému***

10. Využívajú Vaši hráči nejaké iné preventívne opatrenia?

☐ Nie (prosím pokračujte otázkou 11) ☐ Áno, a to: **(viacnásobná odpoveď možná)**:

☐ Fyzioterapiu	☐ Chrániče zubov	☐ Tejping
☐ Ortézy	☐ Chrániče	☐ Lekárske prehliadky
☐ Masáž	☐ Iné:	

11. Poznáte nejaké konkrétne programy prevencie vzniku zranení v basketbale?

☐ Nie ☐ Áno (vymenujte):

12. Myslíte si, že vznik a prevencia zranení by mali byť neoddeliteľnou súčasťou vzdelávania trénerov v basketbale?

☐ Nie ☐ Áno

13. Potrebujete viac informácií o vzniku a prevencií zranení v basketbale?

☐ Nie ☐ Áno

ĎAKUJEME ZA VAŠU PODPORU!!

Odoslať dotazník

Odoslať dotazník

PREVENCIA ZRANENÍ V BASKETBALE

Dotazník pre basketbalových trénerov

Milí účastníci. Prevencia zranení v basketbale je problémom súčasnosti. Vaše osobné názory na túto tému sú pre nás veľmi dôležité. Ocenili by sme Vašu podporu vo forme vyplnenia tohto dotazníka. Dopíšte, resp. zakrúžkujte Vaše odpovede.

1. **Vypĺňali ste dotazník týkajúci sa prevencie zranení v basketbale v období posledných dvanástich mesiacov?**

   ◯ Nie ◯ Áno

2. **Dostali ste nejaké informácie týkajúce sa prevencie zranení v basketbale od Vašej asociácie (SBA prostredníctvom FTVŠ UK) v období posledných dvanástich mesiacov?**

   ◯ Nie ◯ Áno, prostredníctvom
   ☐ Internetu ☐ Vzdelávania trénerov ☐ Tlačených médií
   ☐ Iné _____

3. **Dostali ste vo všeobecnosti nejaké informácie o prevencií zranení v basketbale v období posledných dvanástich mesiacov?**

   ◯ Nie ◯ Áno, prostredníctvom
   ☐ Internetu ☐ Vzdelávania trénerov ☐ Tlačených médií
   ☐ Iné _____

4. **Zmenilo sa niečo, alebo zmenili ste Vy niečo v oblasti prevencie zranení (napr. tréningové cvičenia, ochranné pomôcky, uvedomelosť) odkedy ste obdržali tieto informácie?**

   ◯ Nie ◯ Áno, menovite: a) _____
   b) _____
   c) _____

5. **Vykonávate preventívne tréningové opatrenia s Vašimi družstvami?**

   ◯ Nie (prosím pokračujte otázkou 9) ◯ Áno, a to: **(môžete uviesť viacero odpovedí)**:

   ☐ Posiľňovanie ☐ Rozcvičenie ☐ Atletické cvičenia
   ☐ Strečing ☐ Rovnovážne (balančné) cvičenia ☐ Koordinačné cvičenia
   ☐ Ukľudnenie ☐ Tréning (nácvik) techniky ☐ Kompenzačné cvičenia
   Iné

6. **Kedy a ako často aplikujete tieto preventívne tréningové opatrenia?**

   Počas prípravného obdobia: ☐ každý tréning ☐ 1-krát/týždeň ☐ menej ako 1-krát/týždeň
   Počas sezóny: ☐ každý tréning ☐ 1-krát/týždeň ☐ menej ako 1-krát/týždeň

7. **Na 5 – bodovej škále ohodnoťte ako Vaši hráči majú radi (príjmajú) tieto preventívne tréningové opatrenia?**

   ◯ 5 ◯ 4 ◯ 3 ◯ 2 ◯ 1
   veľmi radi ***vôbec ich nemajú radi***

8. **Na 5 – bodovej škále ohodnoťte, či je pre Vás aplikovanie preventívnych opatrení dobre známe a bezproblémové?**

   ◯ 5 ◯ 4 ◯ 3 ◯ 2 ◯ 1
   dobre známe ***potrebujem viac inštrukcií týkajúcich sa tohto problému***

9. Na 5 – bodovej škále ohodnoťte za ako významný problém považujete zranenia v basketbale?

◯ 5 ◯ 4 ◯ 3 ◯ 2 ◯ 1

veľmi dôležitý problém ***vôbec nie dôležitý problém***

10. Aké sú podľa Vás hlavné príčiny zranení v basketbale? (max. 3 odpovede)

☐ Nešťastné okolnosti ☐ Nedostatok regenerácie ☐ Zlá technika

☐ Fauly/nefér hra ☐ Nedostatočné rozcvičenie ☐ Zlé vybavenie (obuv,palubovka)

☐ Telesný kontakt ☐ Zlá fyzická kondícia ☐ Predchádzajúce zranenia

☐ Priveľký počet zápasov ☐ Iné ☐

<u>Všeobecné informácie o Vašej osobe</u>

Váš vek: ☐

Vaše pohlavie: ◯ Muž ◯ Žena

Trénerské vzdelanie: ◯ Žiadna úroveň ◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5

Prípadné vedecké vzdelanie: ☐ Športový vedec ☐ Športový lekár ☐ Fyzioterapeut

Poznámka k trénerskému vzdelaniu:

NOVÉ OZNAČENIE	**STARÉ OZNAČENIE**
Trénerský kvalifikačný stupeň	***Trénerská kvalifikačná trieda (nadobudnutá a priznaná ZT SBA do 1.12.2008)***
bez	bez preukazu ZT SBA
1.	*tréner čakateľ
2.	III. trieda
3.	II. trieda
4.	*I. trieda • získaná (D)ŠT I. triedy, • absolvent bakalárskeho štúdia trénerstva** – špecializácia basketbal
5.	*I. trieda • získaná v rámci magisterského štúdia TV, • získaná (D)ŠT I. triedy po magisterskom štúdiu TV, Diplomovaný tréner • absolvent magisterského štúdia trénerstva** – špecializácia basketbal

* len pre potreby tohto dotazníka

** aj medziodborového štúdia trénerstva a učiteľstva TV

Družstvá akej vekovej kategórie trénujete?

1.	**2.**	**3.**
◯ Muži ◯ Ženy	◯ Muži ◯ Ženy	◯ Muži ◯ Ženy
☐ Seniori (18+) ☐ Mládežníci (14+) ☐ Deti (do 13)	☐ Seniori (18+) ☐ Mládežníci (14+) ☐ Deti (do 13)	☐ Seniori (18+) ☐ Mládežníci (14+) ☐ Deti (do 13)
Súťaž: ☐ Počet TJ v týždni: ☐	Súťaž : ☐ Počet TJ v týždni : ☐	Súťaž : ☐ Počet TJ v týždni : ☐

Poznámka: (18+) – 18-roční a starší

(14+) – 14-roční a starší

(do 13) – 13-roční a mladší

ĎAKUJEME ZA VAŠU PODPORU!!!

SVENSK BASKET

SKADEFÖREBYGGANDE ÅTGÄRDER INOM BASKETEN

Frågeformulär för basketränare

Du som ledare inom svensk basket är utvald att delta i denna undersökning. Studien kommer inte bara göra svensk basket bättre utan även europeisk. Vi är intresserade av dina erfarenheter och åsikter om basketskador och hur de kan förebyggas. Enkäten kommer fyllas i av utvalda coacher i andra länder också. SNÄLLA, stöd oss i vår undersökning genom att fylla i denna enkät.

Först av allt, en del allmän information om dig

Ålder: ☐

Kön: ☐ Man ☐ Kvinna

Coachutbildning: ☐ Ingen utbildning Steg: ○ 1 ○ 2 ○ 3 ○ 4

☐ Idrottsforskare ☐ Idrottsläkare ☐ Sjukgymnast

Vilka lag tränar du?

1.	**2.**	**3.**
☐ Män ☐ Kvinnor	☐ Män ☐ Kvinnor	☐ Män ☐ Kvinnor
☐ Seniorlag (18+)	☐ Seniorlag (18+)	☐ Seniorlag (18+)
☐ Ungdomslag (14+)	☐ Ungdomslag (14+)	☐ Ungdomslag (14+)
☐ Barn	☐ Barn	☐ Barn
Serie:	Serie:	Serie:
Träningar/vecka:	Träningar/vecka:	Träningar/vecka:

Följande frågor tar upp din personliga uppfattning om skador inom basketen.

1. Tror du, på en 5-gradig skala, att skador är en stor del av basketens vardag?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

mycket viktig ***inte alls viktig***

2. Vilka specifika skador ser du som det största problemet inom basketen? (3 svar max.)

☐ Skallskador ☐ Fingerskador ☐ Knäskador ☐ Fotledsskador

☐ Andra Skador ☐

3. Vad anser du är huvudorsaken till basketskador? (3 svar max.)

☐ Otur ☐ För kort återhämtning ☐ Dålig teknik

☐ Fouls/Ojuste spel ☐ Otillräcklig uppvärmning ☐ Dålig utrustning

☐ Kroppskontakt ☐ Dålig fysisk form ☐ Tidigare skador

☐ För många matcher ☐ Andra orsaker ☐

4. Tror du att basketskador kan förebyggas?

☐ Nej (Var vänlig, gå till fråga 10) ☐ Ja, basketskador kan förebyggas

Denna del av frågeformuläret tar upp frågan om skadeförebyggande metoder inom basketen

5. Hur kan antalet skador och/eller graden av skador inom basketen minskas? (3 svar max.)

- ☐ Bättre fysisk förberedelse
- ☐ Ändring av regler
- ☐ Hårdare domare
- ☐ Längre återhämtning
- ☐ Skydd (ex. fotled, tand)
- ☐ Färre matcher
- ☐ Medicinsk undersökning
- ☐ Bättre utrustning
- ☐ Förebyggande träning
- ☐ Sjukgymnastik
- ☐ Andra _____

6. Utför du någon skadeförebyggande träning med ditt lag?

- ☐ Nej (gå till fråga 10)
- ☐ Ja, med hjälp av **(flera svar möjliga)**
  - ☐ Styrketräning
  - ☐ Uppvärmning
  - ☐ Kroppsstyrka
  - ☐ Stretching
  - ☐ Balansövningar
  - ☐ Koordinationsövningar
  - ☐ Nedvarvning
  - ☐ Teknikträning
  - ☐ Rörlighetsövningar
  - ☐ Andra _____

7. När och hur ofta använder du den skadeförebyggande träningen?

☐ Under försäsongen:	☐ Varje träning	☐ En gång i veckan	☐ Mindre än en gång i veckan
☐ Under säsongen:	☐ Varje träning	☐ En gång i veckan	☐ Mindre än en gång i veckan

8. På en 5-gradig skala, vad tycker dina spelare om den skadeförebyggande träningen?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

Tycker om den mycket ***Tycker inte om den***

9. På en 5-gradig skala, känner du dig bekväm med och känner du att du behärskar att tillämpa skadeförebyggande träning?

○ **5** ○ **4** ○ **3** ○ **2** ○ **1**

känner väl till ***behöver mer undervisning i denna fråga***

10. Använder dina spelare andra skadeförebyggande åtgärder?

- ☐ Nej (gå till fråga 11)
- ☐ Ja, med hjälp av **(flera svar möjliga)**:
  - ☐ Sjukgymnastik
  - ☐ Tandskydd
  - ☐ Tejpning
  - ☐ Ortoser/skydd
  - ☐ Protectors/skydd
  - ☐ Medicinsk undersökning
  - ☐ Massage
  - ☐ Andra _____

11. Känner du till några särskilda program för att förhindra skador i basketen?

☐ Nej ☐ Ja, nämligen _____

12. Tycker du att skador och deras förebyggande ska integreras som en del i baskettränarutbildningen?

☐ Nej ☐ Ja

13. Behöver du mer information om skador inom basketen och hur skador kan förebyggas?

☐ Nej ☐ Ja

Denna del av frågeformuläret tar upp frågan om BASKETSMART

14. Har du hört talas om Basketsmart?

☐ Nej ☐ Ja

15. Använder du dig av Basketsmart?

☐ Nej ☐ Ja

16. Har du fått utbildning i Basketsmart?

☐ Nej (gå till fråga 27) ☐ Ja

17. När gick du utbildning i Basketsmart?

☐ 2008 ☐ 2009 ☐ 2010

18. Vilken instruktör hade du?

☐ Jörgen Sandberg ☐ Malin Larsson ☐ Mats Jansson ☐ Emad Karandish

☐ Annan eller kommer inte ihåg

19. Har du använt dig av Basketsmart sedan utbildningen?

☐ Nej ☐ Ja

20. Vid hur många av dessa kör ni Basketsmart?

☐ 0 ☐ 1 ☐ 2 ☐ 3 eller flera

21. Hur går du till väga med att instruera spelarna vid de praktiska momenten?

☐ Visar ☐ Muntlig instruktion ☐ Använder deltagare

☐ Annat

22. Hur har upplägget fungerat?

☐ För långt ☐ För kort ☐ Svårt att hinna med

☐ För mycket fokus på något moment i programmet

☐ Annat

23. Har du stött på några svårigheter/problem i utövandet av Basketsmart? Beskriv.

24. Vad tycker dina spelare om att värma upp med Basketsmart? (flera svar möjliga)

☐ Roligt ☐ Tråkigt ☐ Spelarna förstår varför ☐ Förstår inte varför

☐ ”Nödvändigt ont” ☐ Långtråkigt ☐ Inspirerande

25. **Hur många knäskador har ni haft sedan ni började använda er av basketsmart (med knäskada avses akut förseelse som lett till kontakt med sjukvården eller frånvaro från träning i minst en vecka).**

☐ 0 ☐ 1 ☐ 2 ☐ 3 eller flera

26. **Hur många korsbandsskador har ni haft sedan ni började använda er av basketsmart?**

☐ 0 ☐ 1 ☐ 2 ☐ 3 eller flera

27. **Utför du någon form av hoppträning idag? I så fall vilken?**

☐ Nej ☐ Ja, nämligen **(flera svar möjliga)**:

☐ Häckhoppning ☐ Rephoppning ☐ Plyometriska hopp ☐ Hopp i trapp

☐ Andra

STORT TACK FÖR ATT DU TOG DIG TID ATT FÖRBÄTTRA SVENSK BASKET!

Returnera frågeformuläret

Skicka in

SKADEFÖREBYGGANDE ÅTGÄRDER INOM BASKETEN

Frågeformulär för basketttränare

Kära deltagare. Att förebygga skador i basket är en aktuell fråga. Din personliga åsikt om detta ämne är mycket viktigt för oss. Vi skulle verkligen uppskatta ditt stöd genom att fylla i denna enkät

1. **Har du redan fyllt i en enkät om skadeförebyggande i basket under de senaste tolv månaderna?**

   ◯ Nej ◯ Ja

2. **Har du fått någon information om förebyggande av skador inom basket genom ditt förbund under de senaste tolv månaderna?**

   ◯ Nej ◯ Ja, med hjälp av

   ☐ Internet ☐ Tränarutbildning ☐ Tryckt material

   ☐ Annat _____

3. **Har du i största allmänhet fått någon information om skadeförebyggande i basket under de senaste tolv månaderna?**

   ◯ Nej ◯ Ja, med hjälp av

   ☐ Internet ☐ Tränarutbildning ☐ Tryckt material

   ☐ Annat _____

4. **Har något förändrats, eller har du ändrat något angående att förebyggande personskador (t.ex. utbildning, övningar, skyddsutrustning, medvetenhet) då du fått detta material?**

   ◯ Nej ◯ Ja, nämligen: a) _____

   b) _____

   c) _____

5. **Utför du någon skadeförebyggande träning med ditt lag?**

   ◯ Nej (gå till fråga 9) ◯ Ja, med hjälp av **(flera svar möjliga)**

   ☐ Styrketräning ☐ Uppvärmning ☐ Kroppsstyrka

   ☐ Stretching ☐ Balansövningar ☐ Koordinationsövningar

   ☐ Nedvarvning ☐ Teknikträning ☐ Rörlighetsövningar

   ☐ Andra _____

6. **När och hur ofta använder du den skadeförebyggande träningen?**

   Under försäsongen: ☐ Varje träning ☐ En gång i veckan ☐ Mindre än en gång i veckan

   Under säsongen: ☐ Varje träning ☐ En gång i veckan ☐ Mindre än en gång i veckan

7. På en 5-gradig skala, vad tycker dina spelare om den skadeförebyggande träningen?

◯ 5 ◯ 4 ◯ 3 ◯ 2 ◯ 1

Tycker om den mycket *Tycker inte om den*

8. På en 5-gradig skala, känner du dig bekväm med och känner du att du behärskar att tillämpa skadeförebyggande träning?

◯ 5 ◯ 4 ◯ 3 ◯ 2 ◯ 1

känner väl till *behöver mer undervisning i denna fråga*

9. Tror du, på en 5-gradig skala, att skador är en stor del av basketens vardag?

◯ 5 ◯ 4 ◯ 3 ◯ 2 ◯ 1

mycket viktig *inte alls viktig*

10. Vad anser du är huvudorsaken till basketskador? (3 svar max.)

☐ Otur ☐ För kort återhämtning ☐ Dålig teknik
☐ Fouls/Ojuste spel ☐ Otillräcklig uppvärmning ☐ Dålig utrustning
☐ Kroppskontakt ☐ Dålig fysisk form ☐ Tidigare skador
☐ För många matcher ☐ Andra orsaker ☐

Först av allt, en del allmän information om dig

Ålder: ☐

Kön: ◯ Man ◯ Kvinna

Coachutbildning: ◯ Ingen utbildning Steg: ◯ 1 ◯ 2 ◯ 3 ◯ 4

☐ Idrottsforskare ☐ Idrottsläkare ☐ Sjukgymnast

Vilka lag tränar du?

1.	**2.**	**3.**
◯ Män ◯ Kvinnor	◯ Män ◯ Kvinnor	◯ Män ◯ Kvinnor
☐ Seniorlag (18+)	☐ Seniorlag (18+)	☐ Seniorlag (18+)
☐ Ungdomslag (14+)	☐ Ungdomslag (14+)	☐ Ungdomslag (14+)
☐ Barn	☐ Barn	☐ Barn
Serie: ☐	Serie: ☐	Serie: ☐
Träningar/vecka: ☐	Träningar/vecka: ☐	Träningar/vecka: ☐

STORT TACK FÖR ATT DU TOG DIG TID ATT FÖRBÄTTRA SVENSK BASKET!

Skicka in

D. Media of pilot implementations

UNIVERZITA KOMENSKÉHO V BRATISLAVE
Fakulta telesnej výchovy a športu
Nábr. arm. gen. L. Svobodu č.9, 814 69 Bratislava
http://www.fsport.uniba.sk
Ďalšie formy vzdelávania – Trénerská akadémia

POZVÁNKA

na seminár pre basketbalových trénerov

Kondičná príprava ako prostriedok prevencie zranení v basketbale

Safety in Sports.EU
European Network for Sports Injury Prevention

realizovaný s podporou Európskej komisie
v rámci medzinárodného projektu „SAFETY IN SPORTS“

Lektori: **M. Molnár, profesionálny kondičný tréner**
dlhoročný tréner bratov Rančíkovcov
V. Bielik, *Katedra športovej kinantropológie FTVŠ UK*
Ľ. Tománek, *Katedra hier FTVŠ UK*

Termín: ***17. novembra 2010 (streda) – od 10.00-16.00 hod.***

Miesto: ***FTVŠ UK, Nábr. L. Svobodu 9, Bratislava***

Poplatok za seminár:
členovia ZT SBA, študenti a zamestnanci FTVŠ – **vstup voľný**
ostatní účastníci - 5 ,- Eur

Pre prihlásených a prvých 50 zaregistrovaných bude zabezpečené občerstvenie a odborný materiál.

FIBA EUROPE We Are Basketball

SBA

Združenie Trénerov

Program seminára:

Streda 17.11.2010:

9. 00 – 10.00	**Registrácia**	**Aula FTVŠ UK**
10.00	Otvorenie seminára	Aula FTVŠ UK
10.10.– 11.40	**Ľubor Tománek, Viktor Bielik**	
	Kondičná príprava ako prostriedok prevencie zranení v basketbale	
	teoretické prednášky	Aula FTVŠ UK
11.45 – 13.00	Obedná prestávka a prezliekanie	
13.10 – 15.50	**Maroš Molnár**	
	Príklady programov rozvoja kondičných schopností v basketbale	
	praktický workhop	Športová hala prof.Rovného
	možnosť aktívneho zapojenia účastníkov seminára	

Účastníci seminára: *doneste si športové oblečenie a vhodnú (indorovú) obuv*

Parkovanie: *odporúčame pod mostom Lafranconi*

Prihlasovanie sa: *na emailovú adresu:* ***akademia@fsport.uniba.sk***

(emailom s uvedením mena a priezviska, klubu, kategórie, osobného emailu)

Pre prihlásených a prvých 50 zaregistrovaných bude zabezpečené občerstvenie a odborný materiál.

Tešíme sa na Vašu účasť!

UNIVERZITA KOMENSKÉHO V BRATISLAVE
Fakulta telesnej výchovy a športu
Nábr. arm. gen. L. Svobodu č.9, 814 69 Bratislava
http://www.fsport.uniba.sk
Ďalšie formy vzdelávania – Trénerská akadémia

P R O G R A M

semináru pre basketbalových trénerov 17. novembra 2010 (streda)

Kondičná príprava ako prostriedok prevencie zranení v basketbale

Safety in Sports.EU
European Network for Sports Injury Prevention

realizovaný s podporou Európskej komisie
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10.00	Otvorenie seminára	Aula FTVŠ UK
10.10.– 10.50	**Ľubor Tománek**	
	Kondičná príprava ako prostriedok prevencie zranení v basketbale	
11.00 – 11.40	**Viktor Bielik**	
	Fyziologické aspekty rozvoja pohybových schopností v basketbale	
11.45 – 13.00	Obedná prestávka a prezliekanie	
13.10 – 15.50	**Maroš Molnár, Miroslav Záhradný**	**Športová hala**
	Príklady programov rozvoja pohybových schopností v basketbale	
	praktický workhop - aktívne zapojenie účastníkov seminára	

FIBA EUROPE We Are Basketball

SBA

Združenie Trénerov

Kondičná príprava ako prostriedok prevencie zranení v basketbale

- **9. 00 – 10.00** **Registrácia**
- 10.00 Otvorenie - dotazník

- **10.10.– 10.50** **Ľubor Tománek**
  Kondičná príprava ako prostriedok prevencie zranení v basketbale
- **11.00 – 11.40** **Viktor Bielik**
  Fyziologické aspekty rozvoja pohybových schopností v basketbale

- 11.45 – 13.00 Obedná prestávka a prezliekanie – šatňa Športová hala

- **13.10 – 15.50** **Maroš Molnár, Miroslav Záhradný**
  Príklady programov rozvoja pohybových schopností v basketbale
  praktický workhop - aktívne zapojenie účastníkov seminára

Kondičná príprava ako prostriedok prevencie zranení v basketbale

Ľubor Tománek
Katedra hier FTVŠ UK v Bratislave

17.novembra 2010

Projekt EÚ

- **Financovaný v rámci „Public Health Programme“ 2008 - 2013**
- **Realizovaný v spolupráci s:**
  - **Ruhr University Bochum,**
  - **FIBA Europe, SBA, Swensk Basket,**
  - **EuroSafe, KfV, CSI, ARAG Insurance**

www.safetyinsport.eu

Výhody pre trénerov

- **Sprostredkovanie najnovších poznatkov a skúseností v oblasti prevencie zranení**
- **SBA sa cez FTVŠ UK spolupodieľa na vytváraní preventívnych nástrojov a opatrení**
- **Prenos poznatkov do praxe formou vzdelávacích programov (letákov, webu, brožúr, DVD...)**
- **Upriamenie pozornosti na starostlivosť o hráčov**
  - **na ich potenciál – na perspektívu**

Harmonogram

- **vstupný monitoring – 09/2009**
- **hodnotenie vedeckých a odborných materiálov – 03-07/2010**
- **príprava odborných materiálov a vzdelávanie – 08-11/2010**
- **výstupný monitoring – 01-02/2010**



Zranenia v basketbale

Monitoring poznatkov basketbalových trénerov

Kondičná príprava v basketbale

Preventívne programy v basketbale

Rozcvičovanie v basketbale

Zranenia v basketbale

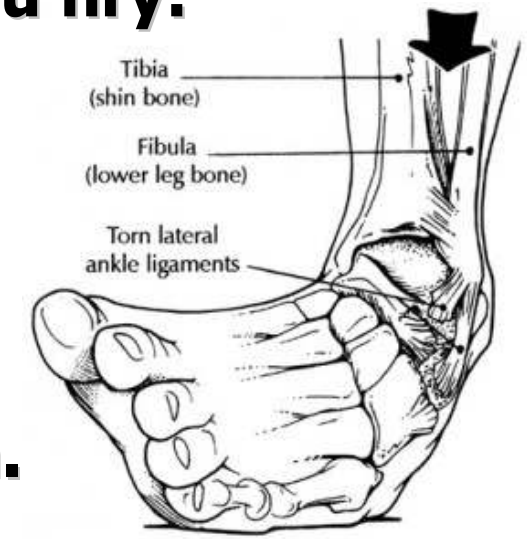
Riziko zranení vyplýva z charakteru hry:

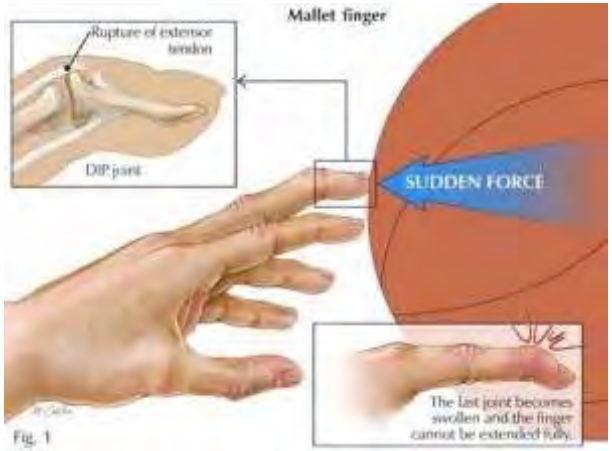
- dynamický pohyb,

- rýchle zmeny smeru,

- telesný kontakt, nárazy, údery,

- dopadanie do nestabilných polôh.





Zranenia v basketbale

Početnosť zranení u zaregistrovaných hráčov

- Európa 720 000 / rok (70% ŠH)

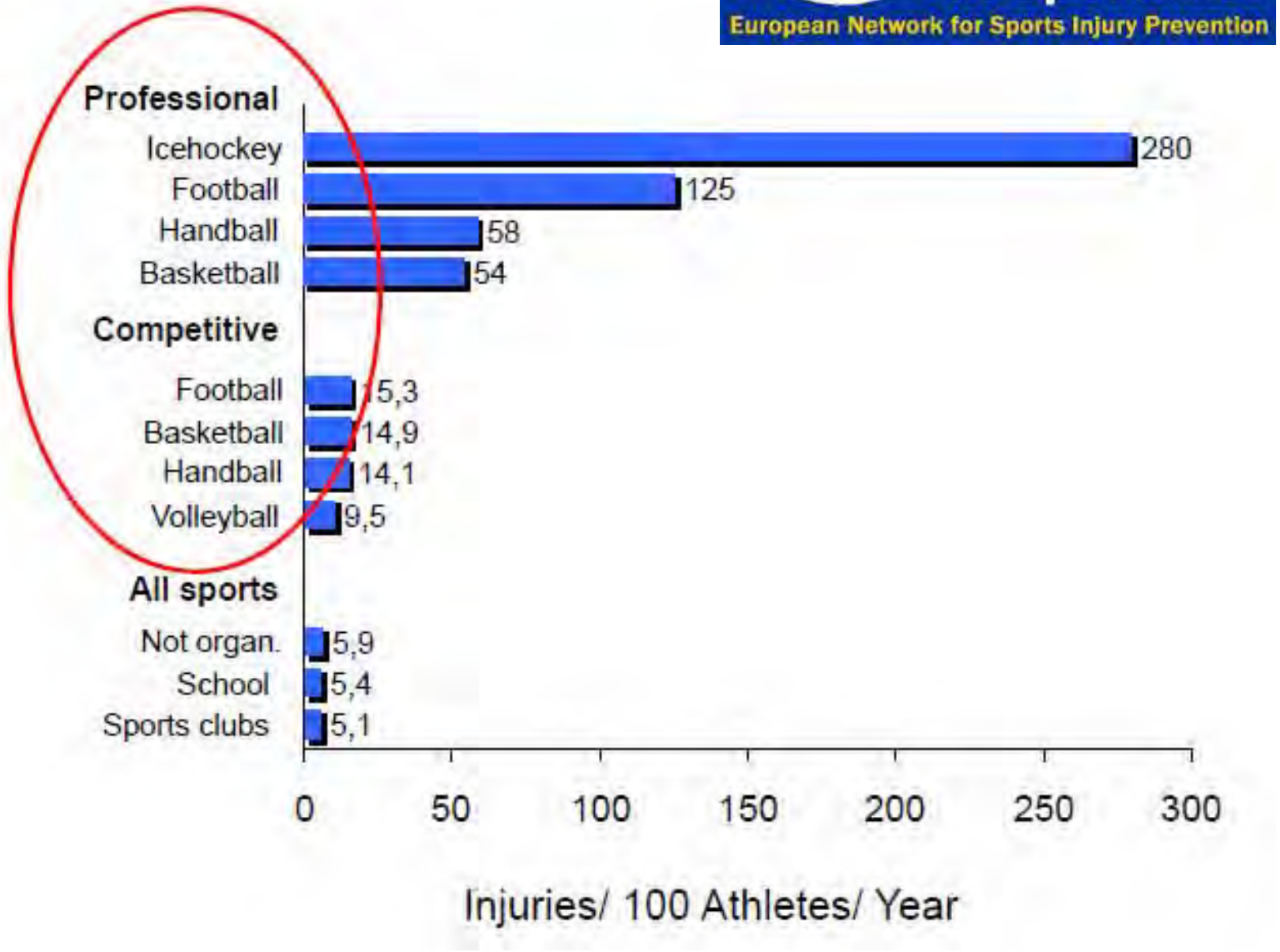
Finančné straty spôsobené zraneniami

- kompenzáciu v hodnote 500 miliónov eur / rok

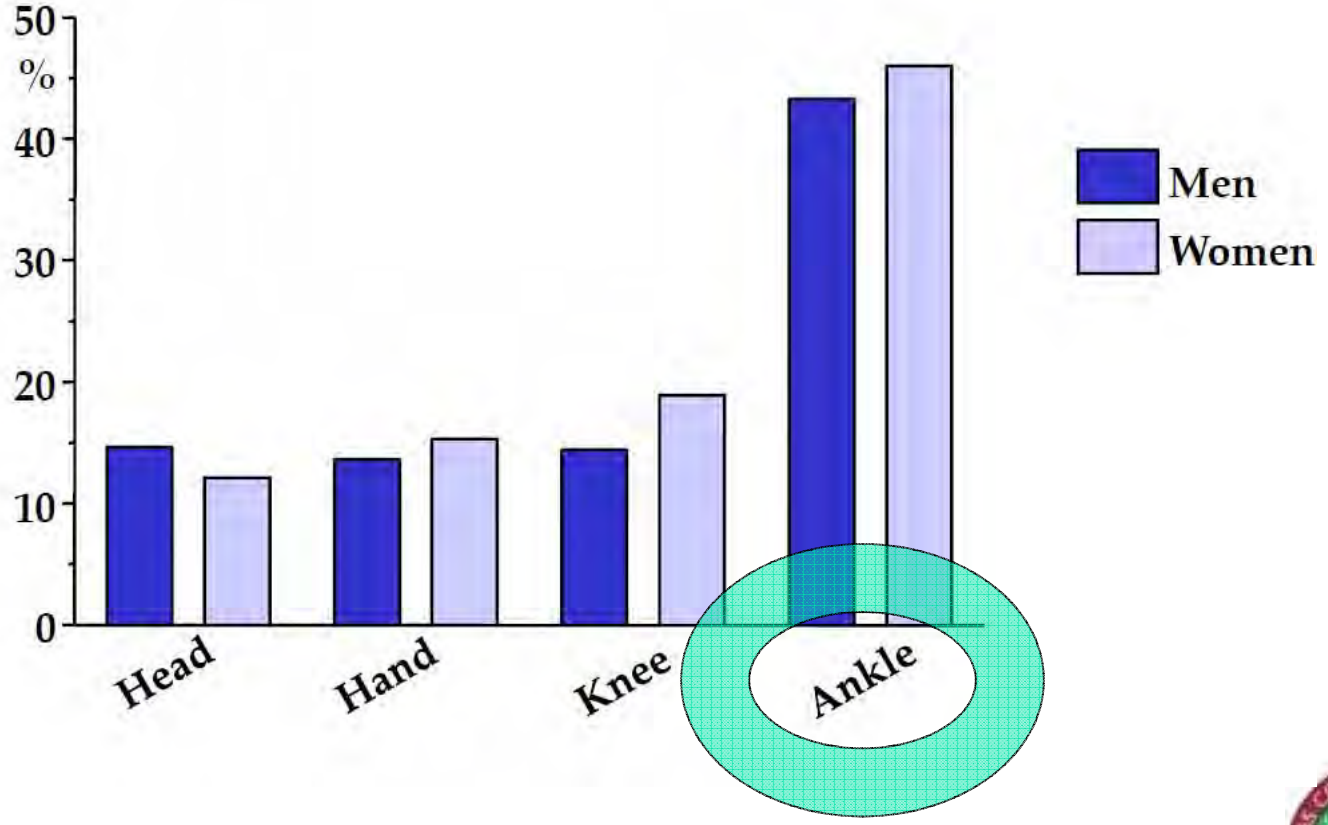
Ovplyvnenie hernej výkonnosti

- absencia - náhrada

- zníženie výkonnosti - rehabilitácia


Professional
Icehockey
Football
Handball
Basketball
Competitive
Football
Basketball
Handball
Volleyball
All sports
Not organ.
School
Sports clubs
280
125
58
54
15,3
14,9
14,1
9,5
5,9
5,4
5,1
0
50
100
150
200
250
300
Injuries/ 100 Athletes/ Year

% Podiel častí tela na zraneniach v basketbale



Príčiny zranení v basketbale

Head: 60%

Collision with elbow



Hand: 84%

Finger vs. ball

One-on-one situation

Knee: 70%

Cutting/stopping

Landing

Collision

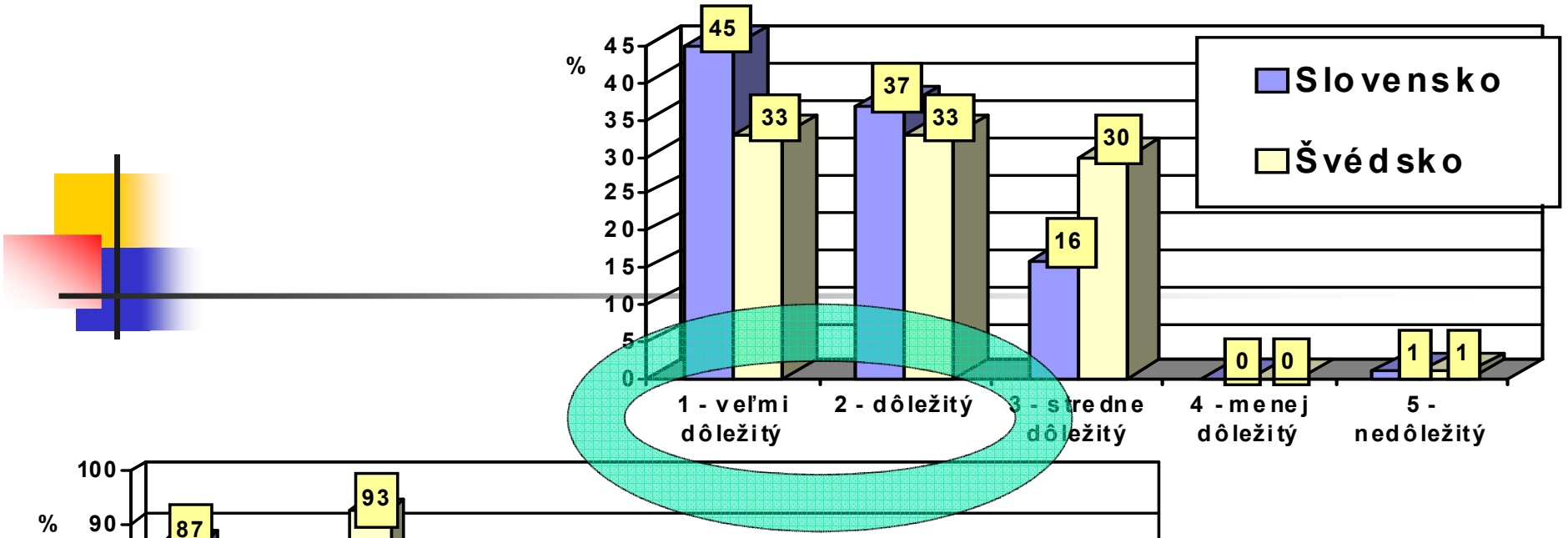
Ankle: 70%

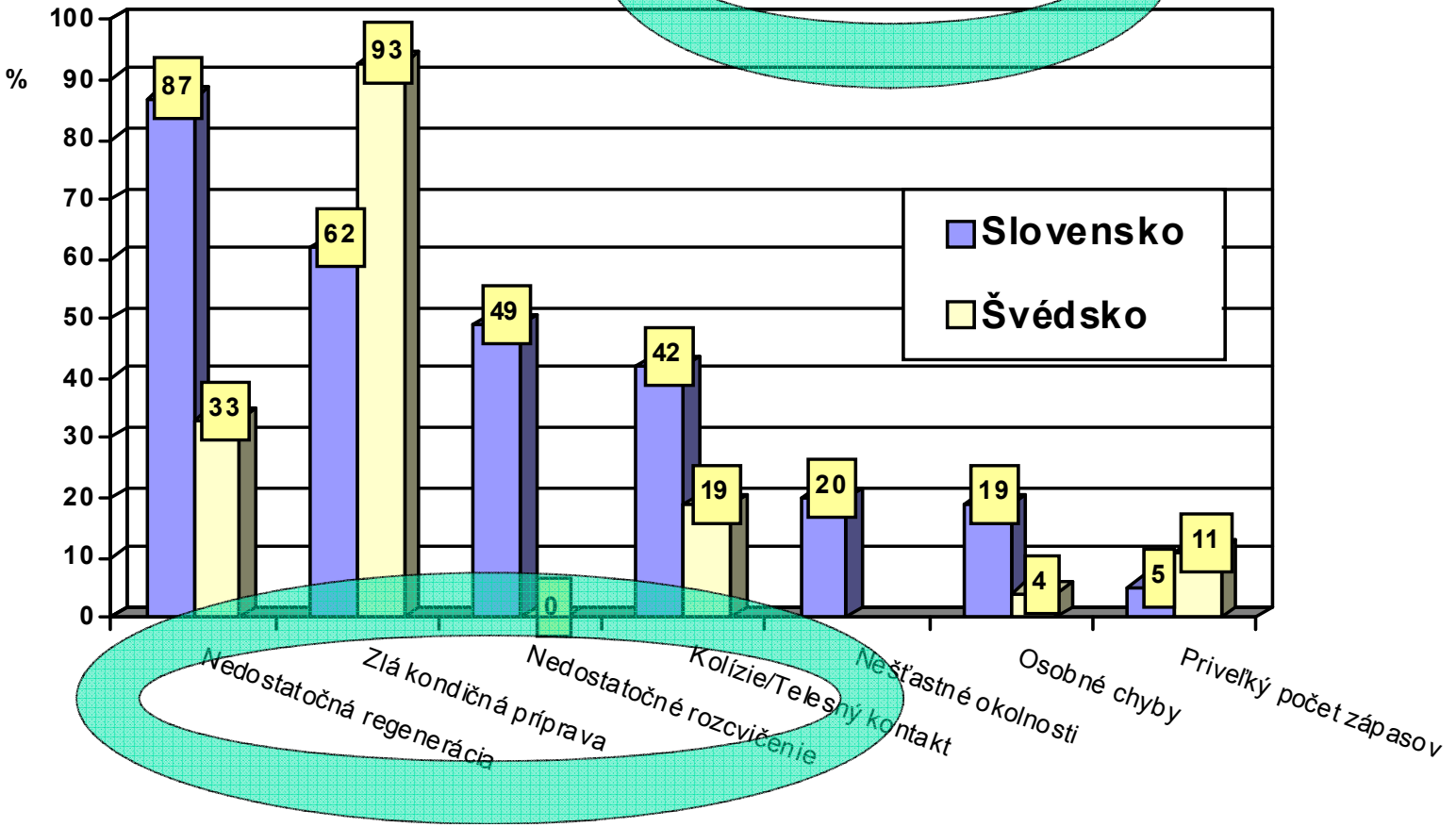
Without external cause

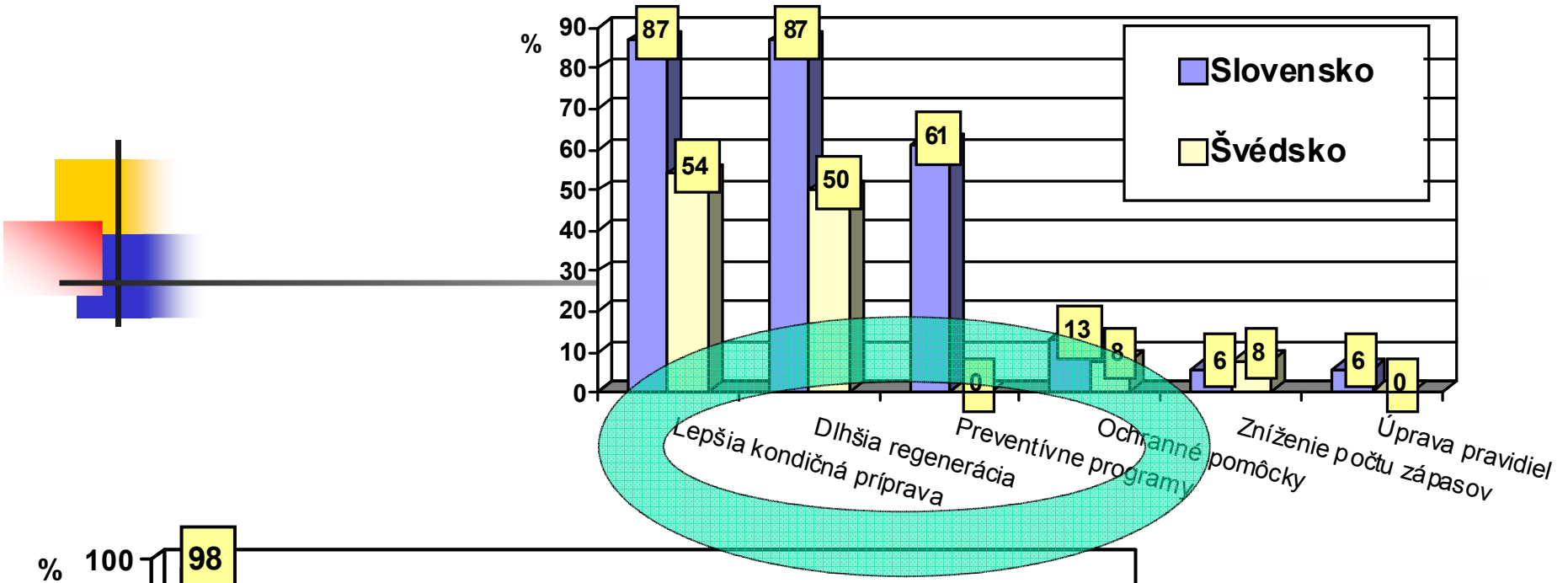
Landing on opponent's foot

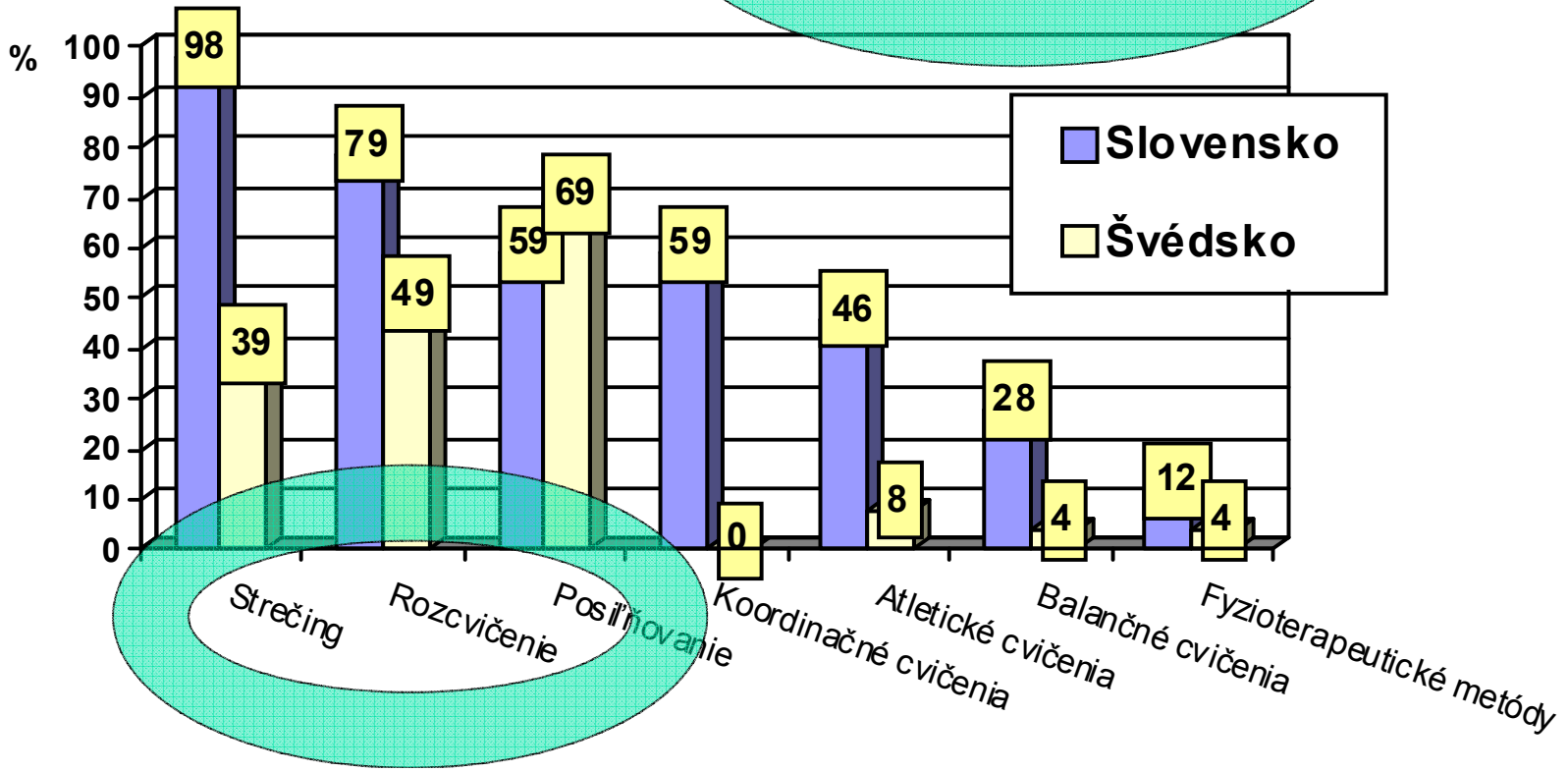
Monitoring poznatkov basketbalových trénerov

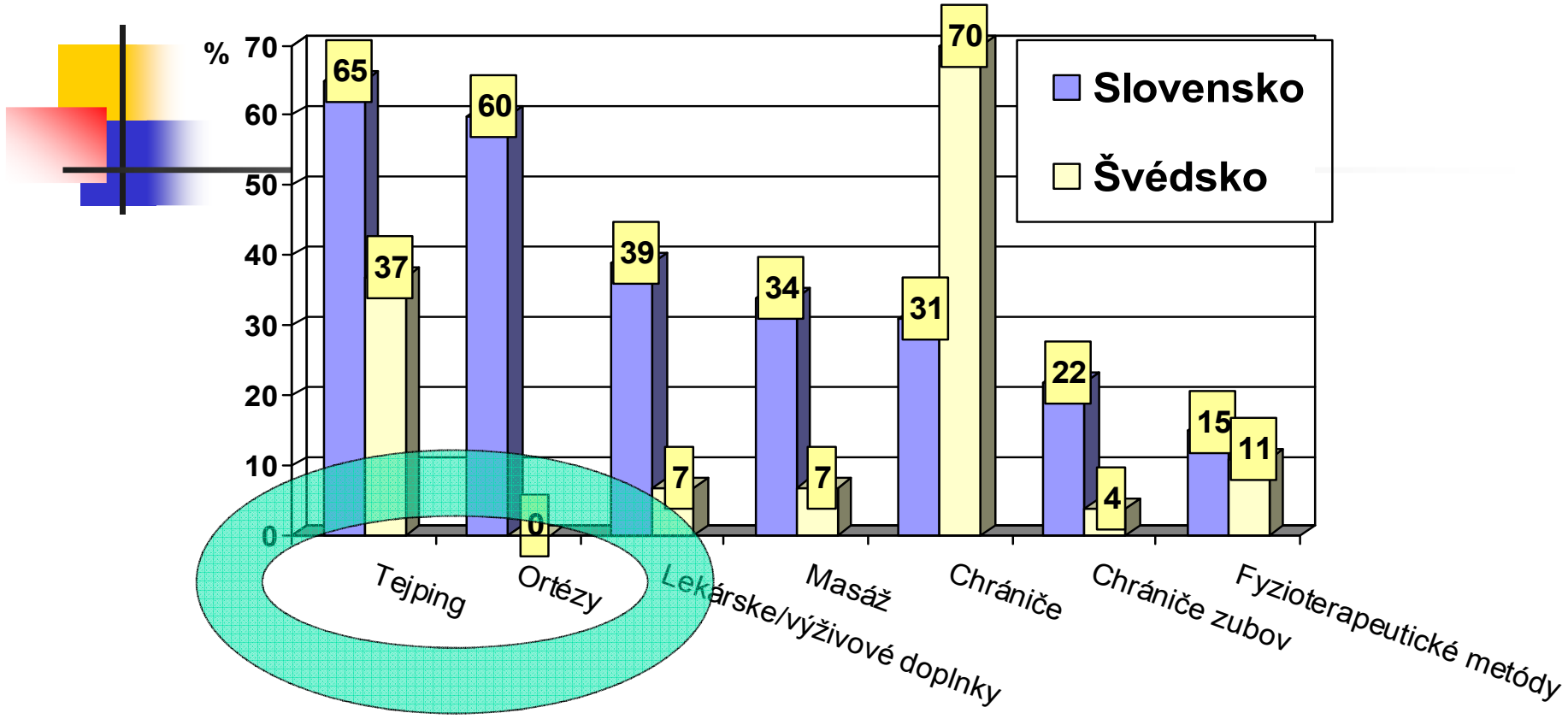
- poznatky a ich uplatňovanie basketbalovými trénermi v oblasti prevencie zranení
- porovnanie medzi slovenskými a švédskymi trénermi
- názory na najčastejšie príčiny zranení...
- východiská pre seminár / workshop


%
45
40
35
30
25
20
15
10
5
0
45
33
37
33
16
30
0
0
1
1
Slovensko
Švédsko
1 - veľmi dôležitý
2 - dôležitý
3 - stredne dôležitý
4 - menej dôležitý
5 - nedôležitý


%
100
90
80
70
60
50
40
30
20
10
0
87
33
62
93
49
0
42
19
20
19
4
5
11
Slovensko
Švédsko
Nedostatočná regenerácia
Zlá kondičná príprava
Nedostatočné rozcvičenie
Kolízie/Telesný kontakt
Nešťastné okolnosti
Osobné chyby
Priveľký počet zápasov


%
90
80
70
60
50
40
30
20
10
0
87
54
87
50
61
0
13
8
6
8
6
0
Slovensko
Švédsko
Lepšia kondičná príprava
Dlhšia regenerácia
Preventívne programy
Ochranné pomôcky
Zníženie počtu zápasov
Úprava pravidiel


%
100
90
80
70
60
50
40
30
20
10
0
98
39
79
49
59
69
59
0
46
8
28
4
12
4
Slovensko
Švédsko
Strečing
Rozcvičenie
Posilňovanie
Koordinačné cvičenia
Atletické cvičenia
Balančné cvičenia
Fyzioterapeutické metódy


%
70
60
50
40
30
20
10
0
65
37
60
0
39
7
34
7
31
70
22
4
15
11
Slovensko
Švédsko
Tejping
Ortézy
Lekárske/výživové doplnky
Masáž
Chrániče
Chrániče zubov
Fyzioterapeutické metódy

Zhrnutie a ďalšie východiská

- Zhoda experti a názory trénerov
- Rozdiel medzi SVK a SWE
- 1. seminár + leták
  - Kondičná príprava – stabilizačné a rovnovážne cvičenia
- Publikácia – metodický materiál
- 2. seminár
  - Regenerácia / Agilita, Explozívnosť

Zameranie kondičnej prípravy v basketbale

Herný výkon v basketbale - kondičné charakteristiky:

- **Vonkajšie zaťaženie (3-5 km)**
- **šprint a výskoky 14%, 31% behy v trvaní 1,7-1,9 s,**
- **Vnútorné zaťaženie PF % pásma - intenzita**
- **Pomer AER : ANAER 15-25 : 85-75 (Fox, 1979; Brittenham, 1996; Matković et al., 2003)**
  - **70 % v 4-5 pásme (SF 175-205)**



Rozvoj pohybových schopností – špecifických prejavov

- SKo – rovnováha – postoje, pozície, návraty
- RS – explozívnosť, odraz.výbušnosť, výskoky
- RKo – agilita – rýchle zmeny smeru, reakcie, zrýchlenia, obraty
- VR – opakovanie, (V - báza, regenerácia)
- O – rozsah pohybu, technika – ballhandling



Metódy rozvoja pohybových schopností

- SKo – stabilizačné a rovnovážne cvičenia
  - – balančné dosky, bosu platne, fit lopty...
- RS – plyometria
- RKo – agilita – intervalový tréning
- VR – intervalový tréning
- O – statický a dynamický strečing



Preventívne programy

Stabilizačné cvičenia

- statické – izometrické polohy
- udržanie východzej polohy tela
- posiľnenie hlbokého stabilizačného svalstva trupu

Rovnovážne cvičenia

- balančné dosky, bosu platne



vestibulárny aparát, proprioreceptory

návraty do východzej polohy tela

Rozcvičenie v basketbale

Všeobecné

- **gymnastické, atletické**
- **strečing – statický / dynamický**

Špeciálne

- **ballhandling**

Kombinované

- pred zápasom





Ďakujem za pozornosť

GAME TRAINING AND CONDITIONING
AS A MEANS OF INJURY PREVENTION IN BASKETBALL

Doc. Erika Zemková, PhD., Mgr. Ľubor Tománek, PhD., Mgr. Matej Vlašič, Mgr. Jaroslava Argajová

Educational material for coaches workshop 20/03/2011

Presented educational material is a part of the international project "Safety in Sports", coordinated by Ruhr University Bochum. The project is funded under the EU Public Health Programme 2008 - 2013, implemented under the auspices of FIBA Europe in cooperation with SBA. It is focused mainly on finding appropriate preventive measures by means of monitoring and processing of educational and scientific studies, as well as their dissemination through training programs for coaches.

The most common injuries are damages to ankles and knees. Main causes of injuries are lack of regeneration and insufficient conditioning. Players who sustain high intensity loads are not able to cope with - often in the finish of a match - a sharp change of direction and there occur disruptions of the dynamic equilibrium (balance).

Speed motion response significantly affects game performance in basketball. Ability to efficiently process the signal from the external environment and carry out the movement on its basis, applies in almost every second of basketball game.

This ability is called disjunctive reaction-speed ability, also world widely called: agility. Fast response to stimuli, however, does not consist only of the movement that we observe. After our nervous system records (mainly) visual stimulus there starts a chain reaction whose end result is a motor performance - physical response. It is preceded by the processing of stimulus and the choice of the most effective motion strategy. So we can find here sensory and decision-making component. On one hand we have to process a signal as quickly as possible, then evaluate it and choose the right move and on the other hand respond – by means of movement as quickly as possible (motor component).

Agility is also characterized as the ability for rapid and explosive changes of direction while maintaining balance and control (Sigmon, 2003). In basketball, we know not only moves forward, backward and sideways, which require a high level of agility, but also complex movements, such as keeping the ball at the maximum speed and the subsequent vertical jump while shooting for a goal. Another example is the transition from defense to the maximum speed for fast break, when your teammate steals the ball.

High level of these skills applies in the prevention of injuries in basketball. Broadly applied are elements of the neuro-muscular and inter-muscular coordination, through which we can quickly, efficiently, but above all correctly answer to external stimuli. We choose the proper motion strategy in a short time period and thus avoid the injury mechanisms that may occur.





Player reacts to command 1-4 by stepping to the cone as fast as possible. While waiting for a command player performs the „taping"





Reaction to the colour command







Visual stimulus – pointing to the side, player perform the pelvis and lower limbs rotation by jumps. We can use a rotation of the whole body – cone between the legs. We can also use the „taping" between commands.




1-4 commands, fast run to the cone, hand touch. To the rear cones we use defensive slide.





Cones placed in the shape of letter „T". Player runs to the middle cone, then slides from side to side and to the idle cone again and from the middle cone runs backwards to the start position.





Player catches a bounce pass after standing up. Stimulus for player is a touch of the ball with ground.



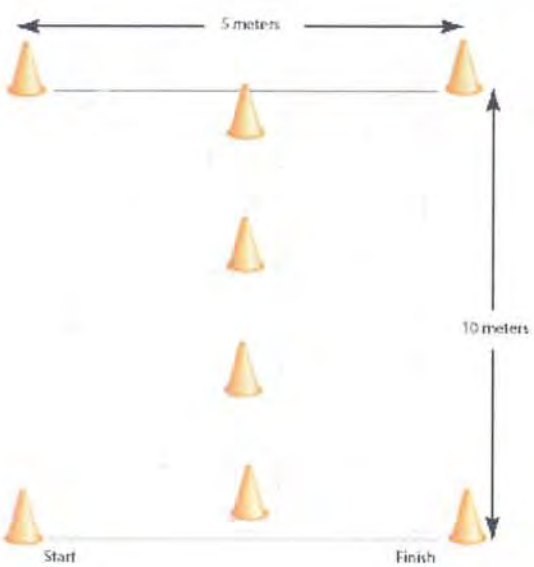


Player performs „*skipping*" over the meanwhile dribbling, ends by lay-up.





Player performs dribbling with changing of direction between the cones ending by „*stop-jump*"



Illinois Agility Test (Getchell, 1979) • **purpose:** to test running agility

• **equipment required:** flat non-slip surface, marking cones, stopwatch, measuring tape, timing gates (optional)

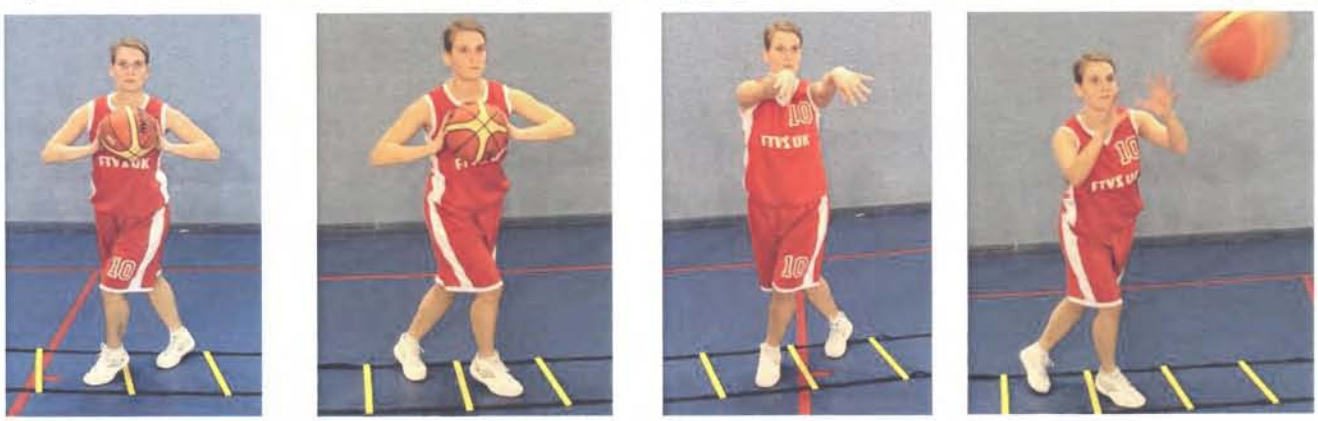
• **procedure:** The length of the course is 10 meters and the width (distance between the start and finish points) is 5 meters. Four cones are used to mark the start, finish and the two turning points. Another four cones are placed down the center an equal distance apart. Each cone in the center is spaced 3.3 meters apart. Subjects should lie on their front (head to the start line) and hands by their shoulders. On the 'Go' command the stopwatch is started, and the athlete gets up as quickly as possible and runs around the course in the direction indicated, without knocking the cones over, to the finish line, at which the timing is stopped.



Player enters by both legs each box of the agility ladder by means of *skipping* and moving to the side.



Player enters the boxes of the athletic ladder by means of *skipping* with moving forwards, backwards or diagonally.



Player catches a pass meanwhile performing the cross step in the athletic ladder.



Player is dribbling and skipping, moving two boxes forwards, and one backwards. We can also include a step to the side.

CONDITIONING
AS A MEANS OF INJURY PREVENTION IN BASKETBALL

Doc. Erika Zemková, PhD., Mgr. Matej Vlašič, Mgr. Ľubor Tománek, PhD.

Educational material for coaches workshop 17/11/2010



Presented educational material is a part of the international project "Safety in Sports", coordinated by Ruhr University Bochum. The project is funded under the EU Public Health Programme 2008 - 2013, implemented under the auspices of FIBA Europe in cooperation with SBA. It is focused mainly on finding appropriate preventive measures by means of monitoring and processing of educational and scientific studies, as well as their dissemination through training programs for coaches.

Even though dr. Naismith defined basketball primarily as non-contact game to his students, the game evolved to a dynamic and very physically demanding sport with frequent physical contact. Therefore, today's basketball is a sport with a lot of injuries not only in professional players but also in children and youth or junior categories.

The most common injuries are damages to ankles and knees.

In the case of ankle injuries there are common sprains or ligament ruptures. In the case of knee injuries there are frequent sprains and associated possibility of damage to the lateral ligaments. In serious cases, there are eventually damaged the menisci and ultimately front crossed ligaments, which end in surgery. Main causes of injuries are lack of regeneration and insufficient conditioning, particularly the low level of the dynamic stabilization of the joints at different segments.

Exercises in the training program aimed at preventing injuries combine the functional needs of the organism to prevent them. In the first part of the macro-cycle, we focus on the development of general movements and abilities such as strength and endurance. Furthermore, we use the method of sensorimotor training, for example, the Balance Trainers. We try to engage deep muscles of the stabilization system in exercises and we focus on maximum dynamic stabilization of the joints.

The presented material can be an initial inspiration for the individual exercises of power, stability and balance in static and dynamic positions, with the exercise tools, but also with one's own body weight.

Let us not forget the basic rule, that the technique in such training is more important than quantity and volume. We try to motivate players to be fully concentrated in order to understand the functions of individual muscles. Concentration and positive motivation are considered to be the key moment of the entire training process.

STATIC EXERCISES WITHOUT TOOLS



1. deep breath out – transversus abdominal



2. scapula and pelvis stabilization



3. position stabilization in slow movement







4-6. pelvis fixation in starting position – slowly spread arms and breathe in







7-9. Pelvis fixation by gluteal muscles, and hamstrings activation



10. abdominal muscles





11-12. Lover back fixed to the ground, with expiration change of position - raise arm and extend leg

STATIC EXERCISES WITH TOOLS







1-5. **Bosu Ball** – stabilization of stance by abdominal muscles, centration of knee joint





1-3. **Pilates Roller** – fixation of lower back to the ground, axial position of lower limbs





1-3. **Fit Ball** – fixation of scapula and shoulder, loading of abdominal muscles





4-6. **Fit Ball** – activation of gluteus and hamstring muscles with raise arms (pectoral muscles)







1-2. **Extreme Balance Board** – ankle stabilization 3-5. **Bosu Ball** – knee joint centration with arms forward raise

DYNAMIC EXERCISES WITHOUT TOOLS





1-3. one leg hops with 90˚ side rotation (with stabilization break in start position)





4-6. side to side jumps with 180˚ rotation (with stabilization break)

DYNAMIC EXERCISES WITH TOOLS





1-3. **Aqua Hit** – one leg hops with 90˚ rotation




4-5. **Bosu Ball** – one leg hops





1-3. **2x Bosu Ball** – two leg jumps, alternating front leg with stabilization break



PROJECT STATUS REPORT

06/2010 – 10/2010

- 04-06/2010 - nominating experts
  - In cooperation with Coaches Association
- 07/2010 – online evaluation process of inventory materials
  - problems:
    - Late nominations
    - Lenguage and digital level of choosing experts

- 08/2010 - evaluation of coach´s demands/knowledge (analysis of the questionnaire – cooperation with RUB)
- Finishing subcontracting details (SBA)
- 09/2010 - article + presentation at the international science conference (Science and Research in Sport Games, COM Bratislava)

Safety in Sports.EU
European Network for Sports Injury Prevention

- 09/2010 – internal meeting – strucure of publication about preventive mesures
  - Draft - 3 parts:
    - Prevention in Basketball
    - Diagnostics of Conditioning in Basketball
    - Examples of Development Conditioning abilities/skills – excercises
- 05-10/2010 – preparation of coaches clinic/workshop in 17th november 2011 – Bratislava FPES.

NEAR FUTURE PLANS

- 10-11/2010 – implementation into educational basketball coaches qualificational program (I., III. level, FPES COM)

- 10-11/2010 – second round – baseline questionnaire with coaches in qualificational programs and FPES COM students of basketball coaching
- specialization

BASKETSMART PÅ SOMMARLÄGRET

SVENSK BASKET

Svenska Basketbollförbundet ger nu föreningar med sommarlägerverksamhet möjligheten att utbilda sina tränare i Basketsmart och i att screena* sina spelare.

Basketsmart är en utbildning som är basketspecifik och den är baserad på forskning. Till en början låg fokus på knäkontrollsövningar. Under det senaste året har programmet utökats med löpning och hopp. Dessutom ingår det numera information om hur fotledsvrickningar kan undvikas.

Basketsmartinstruktören håller teoretisk och praktisk utbildning för era tränare i

- Uppvärmning
- Skadeförebyggande övninga, som olika typer av knäböj och hopp med knäet i rätt vinkel.
- Prestationshöjande övningar som löpning med rätt teknik samt styrkehöjande övningar
- Nedvarvning

Detta utbildningspaket är gratis för föreningen tack vare Idrottslyftet.

** Med screening menar vi att man skall kunna förutse vilka spelare som har en ökad risk för skada så att man kan sätta in skadeförebyggande träning på den individen.*



Kontakt
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aila.menguc@basket.se

BASKETSMART FOT

FÖREBYGG

FOTLEDSSKADOR

Mats Jansson

SVENSK BASKET

EPIDEMIOLOGI

- Vanligaste skadan i all idrott (25%)
- Ledband på utsidan i 85%av skadorna.
- Vanligaste skadan i basket
- Restsymtom hos 50 % av de basketspelare som skadat foten mer än en gång.

(Tik-Pui Fong et al 2007)

EPIDEMIOLOGI

Skadas man upprepat är det mer än 25 % risk för

- Funktionsnedsättning
- Kronisk smärta
- Instabilitet



(Bahr R)

SVENSK BASKET

RISKFAKTORER

Kvinna som inte stukat sig (män)	JA
Kvinna som stukat sig (män)	NEJ
Minskad rörlighet i foten	JA
Vikt och längd	NEJ
Dominant ben	Oklart

(Hertel, 2000. Williams 2005. Norhona 2005)

RISKFAKTORER

Dominant ben	Oklart
Fottyp	Oklart
Laxitet	Nej
Skor	Oklart
Muskelstyrka	Oklart
Match (träning)	Ja
Postural svaj	Ja
Tidigare stukad fot	JA!!!



50% större risk än andra!

(Hertel, 2000,)

SVENSK BASKET

SKADEMEKANISMER

- Yttre faktorer!
- Vid kontakt I 3-sekundersområdet
- Vid landning från hopp
- Utan skydd eller tejp efter fotledsskada



KAN MAN VETA VEM SOM KOMMER SKADA SIG?

Tidigare skada = dubbelt så stor risk att skada sig igen!!!!!!

<u>Åtgärd</u>

- Rehabilitering
- Regelbunden träning av balans och proprioception
- Fotledsskydd eller tejp alltid!

BASKETSMART FOT

Onormal balans (Posturalsvaj)

Onormal balans = ökad risk för fotledsskada



TEST ONORMAL BALANS

<u>Test för onormal balans</u>

Stå på ett ben med armarna i kors. Först med ögonen öppna i 15 sek, sedan med ögonen stängda i 15 sek.

Om man tvingas släppa händerna eller doppa den andra foten har man onormal balans.

(Unilateral stance US)



SVENSK BASKET

FÖREBYGG SKADA

- Bör sättas in i tidig ålder för bästa resultat
- Förbättra individens svaga punkter
- Lätt att utföra under ordinarie träning

HUR SKA VI FÖREBYGGA FOTLEDSSKADOR?

1. Använd tejp eller skydd efter den första stukningen och resten av karriären.
2. Träning av balans, proprioception och neuromuskulär träning.
3. Rörelseträning av fotleden

Träning skall alltid utföras utan tejp,

skydd och skor!

SVENSK BASKET

TRÄNINGSPROGRAM

Träning av proprioception

Barfota gång- halvplan, gå framåt backa tillbaka.

- Utsida
- Insida
- Tå
- Häl
- Dra dig fram med hjälp av tårna 2m.

TRÄNINGSPROGRAM

Träning av styrka

- Tåhävningar på två ben, börja varje tåhävning med att göra en halv knäböj. 30 sek

TRÄNINGSPROGRAM

Träning av balans

- Enbensstående 15 sek/ben med ögon öppna
- Enbensstående, 15 sek/ben med ögon stängda

TRÄNINGSPROGRAM

<u>Träning av rörlighet</u>

- Kompisknäböj 5 st. Sträva efter att ta ut så stor rörlighet som det går i fotleden.

TRÄNINGSPROGRAM

<u>Träning av proprioception, styrka, landningsteknik och balans.</u>

”Fyrkant”, hopp fram- sida- bak- sida, 5 varv per ben.

Observera!

Hitta balans innan nästa hopp.

AKUT STUKAD FOT

- Tryck, tryck, tryck med elastisk linda. Ev. U-pelott
- Högläge
- Vid smärta kan kyla användas
- Gå så mycket det går till smärtgränsen



SVENSK BASKET

REHABILITERING AV FOTLED

- Stegrat program med rörlighet, styrka, balans och neuromuskulär kontroll.
- Se www.basket.se/basketsmart
- Fotledsskydd eller tejp för att inte stuka igen!!!
- Är du osäker så kontakta sjukgymnast

Info kommer ligga på www.basket.se

till hösten

SVENSK BASKET

TEJP VS ORTOS

TEJP

- DYRT
- ALLTID MED?
- BÄTTRE KOMFORT
- KRÄVER KUNSKAP

ORTOS

- BÄTTRE MEKANIK
- KAN SKAVA I BÖRJAN
- SAMRE KOMFORT TILL EN BÖRJAN
- EJ ALLTID MED

SVENSK BASKET

TEJPNING

Se film på

www.basket.se/basketsmart



ORTOS

<u>Elastiska förband</u>

Ger tryck och ökad proprioception

- T ex. Vulkan

- Elastiskt stöd i NanoFlextramaterial

- Ger stöd och kompression i ankelområdet

Finns bl a på

www.mediband.se

ORTOS

- Mjuka eller semiregida ortose
- Ger tryck + ökad proprioception samt hindrar i viss mån rörelser som vid stukning
- T ex. Swede-O Ankle Lok
- Stabil ortos med insydda spiralfjädrar och urtagbara plastskenor.
- Elastiskt resår vid hälsenan och formsytt valv för optimal passform och minimerad risk för skavsår. Finns bl a på www.mediband.se



ORTOS

- Swede-Oatom. Stabil och smidig ortos som ger ett bra stöd.

  Tillåter full dorsal- och

  plantar flexion.Skall användas i sko med snörning.
- Finns bl a på

www.mediband.se



SAMMANFATTNING

- UPPREPADE FOTLEDSSKADOR KAN FÖRBYGGAS.
- PROGRAMMET MÅSTE UTFÖRAS KONTINUERLIGT
- TEJP ELLER ORTOS SKALL ALLTID ANVÄNDAS EFTER DEN FÖRSTA FOTLEDSSKADAN

SVENSK BASKET

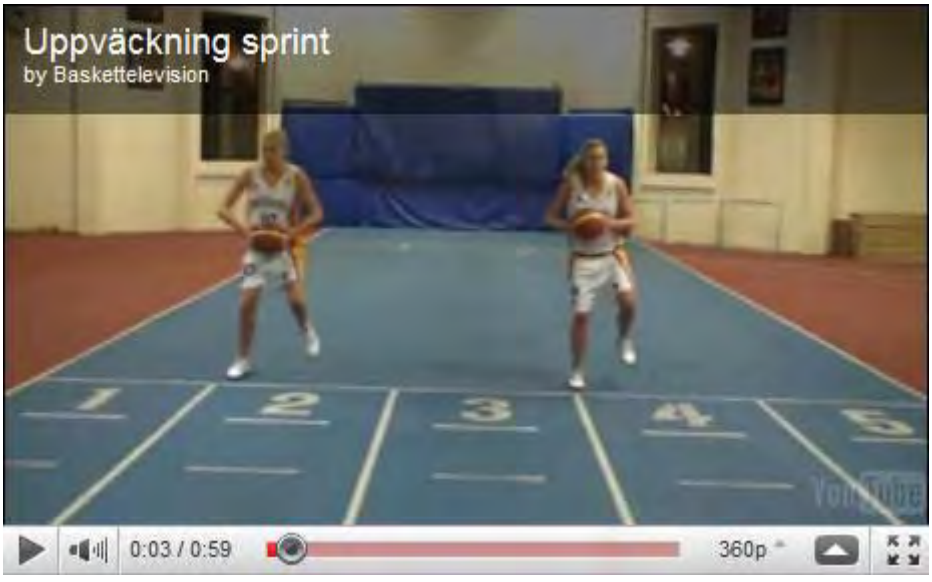

Knäböj
by Baskettelevision
YouTube
0:01 / 0:35
360p


Utfallssteg
by Baskettelevision
YouTube
0:03 / 0:26
360p


Generell temperaturstegring
by Baskettelevision
YouTube
0:09 / 3:10
360p


Enbensknäböj
by Baskettelevision
0:03 / 0:27
360p


Uppväckning sprint
by Baskettelevision
0:03 / 0:59
360p


Uppväckning sprint
by Baskettelevision
0:03 / 0:59
360p



Smart Basketball without damage

7 / 4, 2010. 00:12

Swedish Basketball League SBBF, has developed its own program for heating, Basketball Smart. Since the teams began with basketball Smart is the big damage is almost entirely absent.

Injuries in basketball will lead to big trouble for the player in terms of absence from training and games, sometimes up to one year, Swedish Basketball Federation has developed its own program for preventive measures, Basketball Smart. After they introduced the Swedish national team basketball smart, so have no internationals during the past two years had some serious knee injuries.
Today, more than 200 teams of Basketball Smart as part of regular training. At year end 2010, nearly twice as many teams to run basketball Smart. Basketball League has utbildinngar in Basketball Smart consisting of theory and practice. In the country there are about 20 trained Smart Basketball Coaches in the form of physical therapists, chiropractors and naprapaths.

Watch Basketball Smart in Swedish Basketball Television on the Web. http://www.svenskbaskettelevision.se/

DELA

Sök..

What do you read?

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Further reading



Short slow warming

Yesterday at. 23:47

Many coaches and athletes prefer to be active long before starting to bed sometimes hours ...



Originaltext: Google
23:39 Det är Dalälven och fruktpajen som gör skillnad

Yesterday at. 23:39 It is Dalälven and fruit pie with a difference
Yesterday at. 17:46 Full Effect Food & wellness day at Engeltofta
Yesterday at. 15:37 Cee-Lo Green - I Want You video
Yesterday at. 14:04 Security and safety at sports arena
Yesterday at. 12:14 Victoria and Daniel in Ockelbo
Yesterday at. 11:54 Did you know this about!
28 / 5 pm. 19:20 New ambassador for women's entrepreneurship in the county
28 / 5 pm. 18:55 Jonas Colting naked health
28 / 5 pm. 13:17 Stable and Unstable Strength Training
27 / 5 pm. 15:22 : Music in the valleys "at the Peace and Love
27 / 5 pm. 14:29 tracklisting Eminem and Royce 5'9 new EP finished!
26 / 5 pm. 17:41 Seen on the town: Final Hearing in Saab Automobile?
26 / 5 pm. 15:29 Successful exhibition for BNT
25 / 5 pm. 20:39 Plåtverksta'n invests in fresh wreckers
24 / 5 pm. 15:42 Berno celebrates 10th anniversary
24 / 5 pm. 13:12 New links release for Peace and Love!
24 / 5 pm. 12:50 Ends after 43 years in the bank.
24 / 5 pm. 09:52 Never a Bad Day
23 / 5 pm. 16:40 Cool accessories for Subaru Outback
23 / 5 pm. 16:37 Maximum development of Maximum Aluminum Window



Basketsmart utan skador

7/4, 2010 kl. 00:12

Svenska Basketförbundet SBBF, har utarbetat ett eget program för uppvärmning, Basketsmart. Sedan landslagen började med Basketsmart har dom stora skadorna nästan helt uteblivit.

Skador inom basketen leder till stora besvär för spelaren i form av frånvaro från träning och spel, ibland upp till ett år. Svenska Basketförbundet har utvecklat ett eget program i skadeförebyggande syfte, Basketsmart. Efter att dom Svenska landslagen införde Basketsmart, så har inga landslagsspelare under de senaste två åren fått några allvarliga knäskador.
Idag arbetar mer än 200 lag med Basketsmart som en del av den vanliga träningen. Vid årets slut 2010 beräknas nästan dubbelt så många lag köra Basketsmart. Basketförbundet har utbildinngar i Basketsmart som består av teori och praktik. I landet finns ett 20-tal utbildade Basketsmartcoacher i form av sjukgymnaster, naprapater och kiropraktorer.

Titta på Basketsmart på Svensk Baskettelevision på webben.
http://www.svenskbaskettelevision.se/

DELA

Sök..

Vad vill du läsa?

Kategori
Alla kategorier

Region
Alla regioner

Publicera

E-postadress

Lösenord

Logga in
Registrera dig
Glömt lösenord

Mer läsning



Kort långsam uppvärmning

Igår kl. 23:47

Många tränare och idrottare föredrar att vara verksamma långt innan start och lägger ibland timmar...



Senaste nytt

Igår kl. 23:47 Kort långsam uppvärmning
Igår kl. 23:39 Det är Dalälven och fruktpajen som gör skillnad
Igår kl. 17:46 Effectfull Mat & må bra-dag på Engeltofta
Igår kl. 15:37 Cee-Lo Green - I Want You video
Igår kl. 14:04 Trygghet och säkerhet på idrottsarenan
Igår kl. 12:14 Viktoria och Daniel i Ockelbo
Igår kl. 11:54 Detta visste du inte om!
28/5 kl. 19:20 Nya ambassadörer för kvinnors företagande i Gävleborgs län
28/5 kl. 18:55 Jonas Coltings nakna hälsa
28/5 kl. 13:17 Stabil och instabil styrketräning
27/5 kl. 15:22 "Musik i dalarna" på Peace and Love
27/5 kl. 14:29 Låtlistan Eminem och Royce 5´9 nya EP klar!
26/5 kl. 17:41 Sett på Sta´n: Slutförhandling i SAAB Automobil?
26/5 kl. 15:29 Framgångsrik mässa för BNT
25/5 kl. 20:39 Plåtverksta´n satsar på fräsch bärgare
24/5 kl. 15:42 Bernö firar 10-års jubileum
24/5 kl. 13:12 Nya bandsläpp till Peace and Love!
24/5 kl. 12:50 Slutar efter 43 år i banken.
24/5 kl. 09:52 Aldrig en Dålig Dag
23/5 kl. 16:40 Tuffa tillbehör till Subaru Outback
23/5 kl. 16:37 Maximal utveckling för Maximal Aluminiumfönster
23/5 kl. 08:41 Långbollarnas tid

ANNONS

SVENSK BASKET TELEVISION

SÃ ¶k video

Sök

› Advanced Search

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› Forgot your password?

Basketball Smart

Basket Smart

Basket Smart is a 15 minute warm-programs such as the Swedish Basketball Federation has worked out. More information about Smart Basketball is in the tab on Education www.basket.se



Join here!

Press conference by Jonas Jerebko

News Frequently n Swedish BasketbollfÃ ¶rbundet

- Jonas Jerebko support team
- Timbus for men's national team
- Men National Team test new blood in the Nordic Championships
- Win against Portugal gave team victory for Sweden
- Correction: Portugal-Sweden played on Saturday
- Norway, a mouthful of Sweden
- Away defeat to Sweden in European Championship qualifiers
- Swedish Basketball Federation hires

ANNONS



"FINALS"

YouTube

Följ Svensk Baskettelevision på YouTube

Pressrum: Svenska Basketbollförbundet

ANNONS

SVENSK BASKET TELEVISION

SÃ¶k video

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› Bli medlem gratis Glömt lösenordet?

Hem | WebbTV-tablå 2010/11 | Arkivet | Kommentatorer | Basketsmart | EBC | Ladda upp ett klipp | Verktyg | Min Sida

Onsdag 11 maj 2011

Basketsmart

Basketsmart

Basketsmart är ett 15 minuter långt uppvärmningsprogram som Svenska Basketbollförbundet har arbetat fram.

Mer information om Basketsmart finns under fliken Utbildning på www.basket.se





Följ här!

Presskonferens med Jonas Jerebko

Nyheter frÃ¥n Svenska BasketbollfÃ¶rbundet

- Så spelas SM-finalerna mellan Sundsvall och Norrköping
- Publiksuccé när Stockholm Eagles vann Final Four
- Norrköping, Göteborg, Central och Järva blev mästare
- Telge Basket är svenska mästarinnor
- Damligans finalserie
- Enigt förbundsmöte omvalde Hans von Uthmann och nyvalde Erica Blomgren
- Billboo - Svensk basket nu i din mobil!
- Ladda ner slutspelens mediaguider
- Damlandslagets preliminära trupp uttagen
- Kjellbom blev veckans spelare i EuroChallenge

Nästa sändning

Landslag

- To be announced

Senast uppladdat

WHITE EAGLES — Ons 20 apr 12:50

ANNONS



"FINAL"

YouTube
Följ Svensk Baskettelevision på YouTube

Pressrum: Svenska Basketbollförbundet



SVENSKA
BASKETBOLLFÖRBUNDET

INJURY PREVENTION

PRESENT SITUATION REPORT

2011-05-14
STOCKHOLM

BACKGRUOND

Svenska Basketbollförbundet är med i ett EU- och FIBA Europaprojekt som handlar om skadeförebyggande åtgärder, projektets namn är Safety in Sports. Medverkande är Mats Jansson och Gökay Akyüz från Sverige. Där har frågan om vilka åtgärder vi i svensk basket utför för att minska skadorna och vilka åtgärder vi vill utföra lyfts. Vi har fått hjälp att se hur det ser ut i övriga världen och fått insyn i forskning inom området och projektet närmar sig sitt slut.
Swedish Basketball Federation is involved in a European and FIBA European Project dealing with injery prevention, the name of the project is Safety in Sports. Mats Jansson and Gökay Akyuz from Sweden are involved. There, the question of what measures we in the Swedish basketball are doing in order to reduce injerys and what measures we want to do. We have been helped to see how it looks in the rest of the world and the insight into the research in the area and the project is nearing its end.

Complicated knee injuries are relatively common in basketball. These injuries lead to big trouble for the player in terms of absence from training and games up to a year. In many cases, the damage will eventually also lead to problems for live and end of career.

2005 developed Knäkontroll (controle of the knee), a project where the Swedish Basketball Federation together with the Swedish Football Association, the Swedish Handball Association, the Swedish Floorball Federation and the Elite Sports Center - Bosön jointly worked out injury prevention exercises. After further research as developed SBBF an independent "warming up program" – BASKETSMART.

BasketSmart is a 15-minute warm up program the Swedish Basketball Federation has worked out. The program includes strength, balance and coordination, both with and without the ball. Basketsmart is on two levels, one basic warming up program and one program with higher difficulty.

Briefly, it consists of:
1 Rise of temperature, 2. Core training, 3. Strength hamstrings, 4. Squats, 5. Lounges 6. One leg balance, 7. Waking up the body

It is important that all basketball players must take part of this warming for the prevention of knee injuries, among others. The warm up is suitable for all, regardless of level of ambition and can be implemented at each training session. SBBF recommend that Basketmart in at least three practises a week.

NULÄGE

2009 använde mer än 200 lag med Basketsmart som en del av den vanliga träningen. Vi räknar med att ca 375 lag gör det idag.
2009 more than 200 teams used Basketsmart as a part of regular training. We anticipate that approximately 375 teams do it today.

SBBF arrange education in Basketsmart in all levels of coaches education,
consisting, both theoretical and practical elements. Everyone who participates in a education get a card where the warming up program is easily described. Basketsmart is a regular ingredient in team activities.

There are currently 18 educated Basketsmart Instructors, they are physical therapists, chiropractors and naprapaths. These educators also work with our nationalteams. Thanks to Idrottslyftet can clubs get their coaches trained in Basketsmart.

BASKETSMART HAS GOT A WORLD RECOGNITION

Basketsmart, which Jorgen Sandberg presented was rated as the best tool regarding injury prevention in the basketball sport. Experts in the field of sports has ruled on the effect of different methods, usability and acceptability. Experts from the United States, among others, Norway, Slovakia, Germany and Sweden have measured the effect of, and how easy it is to use the tool for both coaches and players.

MAPPING THE KNEEINJURYS

Lars Johansson and Jörgen Sandberg has initiated a study with the intent to identify injury problems regarding knee injuries and girls/women's basketball in Sweden. The mapping involves finding the causes of damage, if prevented training was conducted by the active and preventive measures in addition to Basketsmart. Lars Johansson uses Basketsmart in the senior national team on a daily basis.

Jorgen Sandberg will conduct interviews with all the players who have been knee injury (primary cruciate ligament injuries) during the last three years. Lasse Johansson will develop the battery of questions, together with Jorgen. If video recording is available when the damage occurred, it will be included. The study began in March 2011 and expected to end by December 2011. Results will be presented in report form with this report as a basis.

Yelverton Tegner som är förbundsläkare och medicinska kommittén kommer att ta del av studien och fortsatta satsningar på Basketsmart.
Forskning för att SBBF rekommenderar fotskydd för de som stukat foten en gång. Vi jobbar med denna fråga som ska nå ut till föreningar.
Yelverton Tegner, which is nationalteamdoctor and head of medical committee will take note of the study and continue investment in Basketsmart.

THE FUTURE IN A INJURI PREVENTION PERSPECTIVE

On the following levels have / should the Swedish Basketball Federation initiate a program to prevent injuries.

1. Board and office
Swedish basketball federation board should give one member responsible for the preventive work to reduce injuries in basketball. This work has the working title Basketsmart and could be operated by Aila Ibanez Mengüc the office level ..

2. Eduation
At all levels of education of coaches, there have been changes in the policy documents that determine the content of courses. The changes mean that injuryprevention is now a single point in the every education.
The education is offered throughout the country. This is paid for whith special fondationmoney from idrottslyftet, where the cost of the club is low or free. Coordinating done to the greatest extent, with as many clubs as possible from the same district. An offer has gone out in the spring where the Swedish Basketball League provides training to teams and coaches for their summer camp. During the ledarforum will allow time for Basketsmart in the form of extend kneetraining in form of jumping and a new program to prevention of ankle injuries. A work is continuous going on to have an overviw in the educational situation in the districts.
Administered by: Gökay Akyuz and Aila Ibanez Mengüc.

3. National teams
A short information is done to the national team physio, educatin will be held continuously for staff around the national team in the question of prevention of injury . Nationalteamfysio will in the near future be used as trainers in injury prevention training. The nationalteams use of this training is a given.
Responsible: Per Källman

4. Methods to get out information on how to prevent injuries
- Through direct contact with coaches across the country by lectures and practical to try the training and testing procedure. The method is tested and seems to have worked well under evaluation.
- The basketball television. There is already a material with lectures and how to practically implement prevention training.
- Through mailings and articles in the Swedish Basketball Federation materials and newspaper.
- I all coaching eduation
- The active emailinformation to our basketball coaches

5. Methods of development of injury prevention in the future

- Expert in the areas of physical therapy, insurance, research should be in constant contact on these issues. In group discussions should be carried out how we get most exchange to reduce the number of injuries in the Swedish basketball. A meeting will be held on 24 May in these matters. Participation in this group is currently Jorgen Sandberg, Aila Ibanez Mengüc, Gökay Akyuz and Lena Lindqvist (Folksam, Per Källman, Lars Johansson and Mats Janssson.

> - A complete training material already exist in the prevention of knee injuries. This includes lecture materials, films of lecture and movies about how training is conducted in practice. Development work in progress with the hope that targeting
> A new material on how to prevent ankle injuries in the form of lecture materials, lecture and film on how to carry out training is under production. The material is in short; barefoot strengthening exercises for the ankle, neuromuscular training, propriceptive training. It is also included that when an injury has happened the player should use an orthose for the rest of the career. We expect to reduce ankle injuries by at least 50%

- - Swedish Basketball Federation has participated in a project called Safety in Sports wjch has been very productive in terms of assistance to obtain materials, measurement methods for the impact of the reforms and in general great knowledge in the field. A continued international exchange is of great importance.

Att tänka på vid fysisk prestation

Träningslära för basketspelare

Varför ska du ha koll på idrottsträning?

För att om vi tränar rätt får vi ut mer ut av varje träningstimme, vi kan träna mer eftersom återhämtningstiden blir kortare och skaderisken minskar väsentligt. Vi kommer troligtvis att bli bättre basketspelare och få en högre fysik status, vi lär oss också att träna rätt för hela livet.



Att tänka på vid fysisk prestation

Uppvärmning

Varför ska vi värma upp?

- Ska förbereda kroppen för fysiskt arbete
- Är prestationshöjande
- Minskar risken för skador



Temperaturökningen som sker vid uppvärmning har flera positiva effekter:

- Reaktionstiden blir kortare, vi kan med andra ord reagera snabbare och ta snabbare beslut på planen
- Musklerna får lättare syre, vilket gör att vi kan maximera varje rörelse och får ut större effekt
- Koordinationen förbättras
- Bättre aktivering av svettkörtlarna, återgivningen av värme går snabbare och vi orkar hålla på längre.
- En uppvärmd muskel är mer motståndskraftig vilket gör att skaderisken minskar, den är alltså mer elastisk vilket gör att risken att sträcka sig är mindre, tänk en gummisnodd.

Att tänka på vid fysisk prestation



Uppvärmning har även ett flertal psykiska fördelar även om det är väldigt individuellt:

- Koncentrationen ökar på den kommande uppgiften
- Man kan bli mer motiverad för uppgiften
- En gynnsam spänningsnivå kan uppnås som en följd av den ”mentala” uppvärmningen
- Bara att tro att uppvärmning är bra för att uppnå resultat kan också ge bättre resultat under tävlingen
- Ritualer under uppvärmning är bra för att det ger trygghet

Att tänka på vid uppvärmning är t.ex.

- Få igång de stora muskelgrupperna (lår-, bröst- och armmuskler exempelvis) först så att tillräckligt med värme produceras.
- Starta lugnt och öka tempot gradvis, tänk på att värma upp alla muskler som kommer aktiveras under match/träning.
- Från allmänt till basket! Börja med t.ex. lätt jogging eller hoprep och få igång de stora muskelgrupperna, gå från helt utan boll till mer och mer anpassat för vad vi faktiskt ska göra dvs. spela basket!
- Undvik kraftiga riktningsförändringar tidigt i uppvärmning.
- Skilj på uppvärmning för tävling och träning, vid match ska uppvärmningen vara längre och det ska också vara mer förberedande på de situationer kroppen kan utsättas för under matchen. Vid matchuppvärmning bör intensiteten under slutet

på uppvärmningen vara i samma nivå som intensitet under första delen av matchen.

- Uppvärmningen bör vara tillräckligt lång för att ge optimal kroppstemperatur men inte längre. Det är viktigt att inte förbruka mer energi än nödvändigt. 4
- Knäprogram för att väcka senorna och ligament (för att undvika knäskador)



Töjning/ Aktiv stretching/Flex

Genom att lägga in tänjningsövningar i uppvärmningen så att musklerna kommer nära sina ytterläggen förbereds musklerna för alla situationer under en match eller tträning där de tvingas ut i sina ytterlägen. Ju varmare kroppen är när man töjer desto mer effektiva är tänjningsövningarna.

Fördelarna är:

- Varje del av muskeln bär sin egen del av bördan och minskar risken för överbelastningsskador
- Förbereder musklerna för ytterläge
- Musklerna blir mer effektiva
- Större rörelseutslag

Att tänka på vid fysisk prestation

Statisk Stretching

Att sträcka ut musklerna och hålla kvar i ytterläge kallas för stretching. Stretching är väldigt omtvistat, det finns få belägg för att stretching minskar träningsvärk och att det skulle vara prestationshöjande precis innan träning/match däremot ökar stretching rörligheten i kroppen efter träning/match.

Studier som har gjorts kring stretching visar att:

- Minskar inte träningsvärk (Muskelömhet)
- Bibehåller eller/och förbättra rörligheten i musklerna
- Bidrar till en känsla av välbefinnande. I praktiken upplever man ofta en känsla av välbefinnande, avslappning och mindre obehag när man stretchat efter en idrottsaktivitet. Detta beror på att kroppen då frigör endorfiner (kroppens egna smärtlindrande medel).
- Om man tävlar och tränar regelbundet utan att stretcha blir resultatet efter hand en förkortning av musklerna. En förkortad muskel leder till mindre rörlighet och gör då att skaderisken ökar. Med stretching bibehåller musklerna sin längd och skaderisken minskar.
- Rörlighetsträning är väldigt individuellt och det är inte alla som behöver stretcha för att deras rörlighet redan är tillräckligt bra, hur yngre personerna är desto mindre behöver de stretcha, dock kan det vara bra att börja stretcha även med yngre barn för att få in en vana av att stretcha.

Nedjoggning/Nedvarvning

Är det som det slarvas mest med i Basketsverige, inte ens landslagen joggar ner efter match vilket är beklagligt. Alla träningar och matcher bör avslutas med fysiska övningar med mycket låg intensitet (ca.60%) med samma muskelgrupper som under själva träningspasset



Att tänka på vid fysisk prestation

Nedjogging/Nedvarvning har ett flertal positiva effekter:

- Mindre Träningsvärk (muskelömhet och muskelstelhet)
- Snabbare återhämtning, som beror på att blodgenomströmningen i musklerna ökar.
- Blodcirkulationen tillför syre och näringsämnen och underlättar borttransporten av nedbrytningsprodukter. Så kallade slaggprodukter som kan göra att kramper uppstår i kroppen.
- Mjölksyra försvinner.

Förslag på upplägg vid match

Innan match

- Allmän del, börja med t.ex. lätt jogging eller hoprep. Viktigt att påpeka att det också handlar om att röra på armar och ben i olika rörelser samtidigt som man joggar, dvs att inte bara jogga rakt upp och ner.
- Specifik del som gärna ska få igång nerver och motorik därför ska flera rörelser som används i basket kopplas in. T.ex. skott nära korgen/passning stillastående
- Basketövningar med lite högre tempo för att få upp kroppstemperaturen något t.ex. layup.
- Töjning/ Aktiv stretching/Flex
- Basketövningar med stegrande intensitet/ tempo
- Övningar med matchtempo

Efter match

- Nedvarning, t.ex. 5-10 min lätt jogging som trappas av mer och mer.
- Stretching



Att tänka på vid fysisk prestation

Sammanfattning

Vid varje träning- och matchtillfälle är det viktigt att lägga stor del på uppvärmning, töjning, stretching och nervarvning. Det viktigaste är att förståelsen för varför vi ska göra dessa övningar finns och målet är att spelarna själva tillslut ska ta ansvar för att själva göra dessa delar och inte använda träningstid för att värma upp, töja, jogga ner och stretcha. Genom att redan från ung ålder ha samma upplägg får man in en vana att göra ”rätt” redan från början.

Vill du veta mer?

Idrottens träningslära (Claes Annerstedt), Träningslära för idrotterna (Jostein Hallén), Aerob och Anaerob träning (SISU Idrottsböcker), Träna din kondition (HC Holmberg), Anatomi med Rörelselära och Styrketräning (Rolf Wirhed).

Rikard Aspegren
Bosön den 14 februari 2011