



PÉCSI TUDOMÁNYEGYETEM
ÁLTALÁNOS ORVOSTUDOMÁNYI KAR

Prevention of injuries in Paraspport

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1. Basic Definitions



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Definition of disability:

physical or mental condition, that limits a person's movements, senses, or activities, such as physical impairment, sensory impairment, cognitive impairment, intellectual impairment, mental illness, and various types of chronic diseases

PARA

SPORT

Definition of sport:

all forms of competitive, physical activities or games which, through casual or organized participation, aim to use, maintain or improve physical ability and skills while providing enjoyment to participants, and - in some cases- a form of entertainment for the spectators

1. Basic Definitions

Definition of Parasport:

A form of sports including disabled individuals. Parasports focus on maintaining a disabled individual's health while -strengthening their abilities. (video: this is ps.)

Sport injury prevention:

It is widely known in which all methods deemed beneficial are used to aptly research the nature regarding sport injuries, while unveiling risk factors attributed to sport-specific injuries, and developing strategies-to reduce the possibility of sport-specific injuries.

2. The health benefits of sports regarding paraathletes

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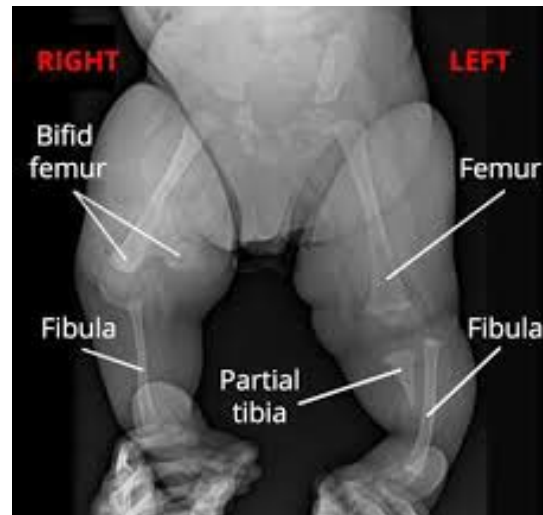
- positive physiological effect
- *cardio-vascular system*: stronger heart, improved lung function
- stronger *muscular system*: increased muscular performance, increased stamina, allowing for robust physical activity
- improved *metabolism*: reduces the effects regarding osteoporosis
- Physical activities heal the body and mind: enhances psychosocial function
- Improved motorskills, range of motion, and cognitive functionality
- Prevention of diseases
- Healthy lifestyle



3. The psychosocial benefits of sports regarding paraathletes

3. The psychosocial benefits of sports regarding paraathletes

- It ushers in many social experiences and assures a longing or desire regarding the experience
- It offers a stable background in the paraathlete's life
- This is tool regarding to achieve self-assessment and self respect
- They learn to be proud what they have a achieved
- the emphasis is on skills, not on disability(video woodhall)





5. Paralympics





5. Paralympics

5.1. Definition of Paralympic games:

Is a major international multi-sport event involving athletes with disabilities. There are winter and summer games. Since the 1988 Summer Games in Seoul, Paralympics are held almost immediately following the respective Olympic Games. All Paralympic Games are governed by International Paralympic Committee(IPC)





5. Paralympics

5.2. The story of paralympic games

1948 Sir Ludwig Guttmann:-He was the father of Parasport

(he was neurologist- neurosurgeon in England,he was born in Germany, as a Jew, during the WW 2. he and his family escaped to England)



He established the National Spinal Injuries Center in Buckinghamshire, called Stoke Mandeville Hospital:

(he organized a sport competitions for British war veterans with spinal cord injuries



this was the first time, when sport was applied in rehabilitation -Stoke Mandeville Games- International Wheelchair Games-

His motto was: to use sport for locomotor system rehabilitation of disabled people



5. Paralympics

5.2. The story of paralimpics: (video)

Stokes Mandeville Games: were held annually



(Parlaplegic Games = ParalympicGames)



MAGYAR ÉRMESEK A PARALIMPIÁN



Konkoly Zsófia



Ekler Luca



Konkoly Zsófia



Pap Bianka



Kiss Péter Pál



Illés Fanni



**Veres Amarilla, Krajnyák Zsuzsanna,
Mező Boglárka és Hajmási Éva**



Luterán Petra



Konkoly Zsófia



Pap Bianka



Ekler Luca



Major Endre



Pálos Péter



Pap Bianka



Szvitacs Alexa

4. Disadvantages of sport- injuries involving paraathletes

4. Disadvantages of sport-injuries involving paraathletes

on an individual level:

- a. Injury of tissues or organs
- b. Psychological trauma



on a team level:

- a. injured paraathletes can affect the whole team's potential for success,
- b. Financial burden (therapy and rehabilitation costs)

5. The levels of sport-injury prevention in parasport



5. The levels of sport-injury prevention in parasport

5.1. The exploration of the type, severity, and the frequency of a sports-specific injuries

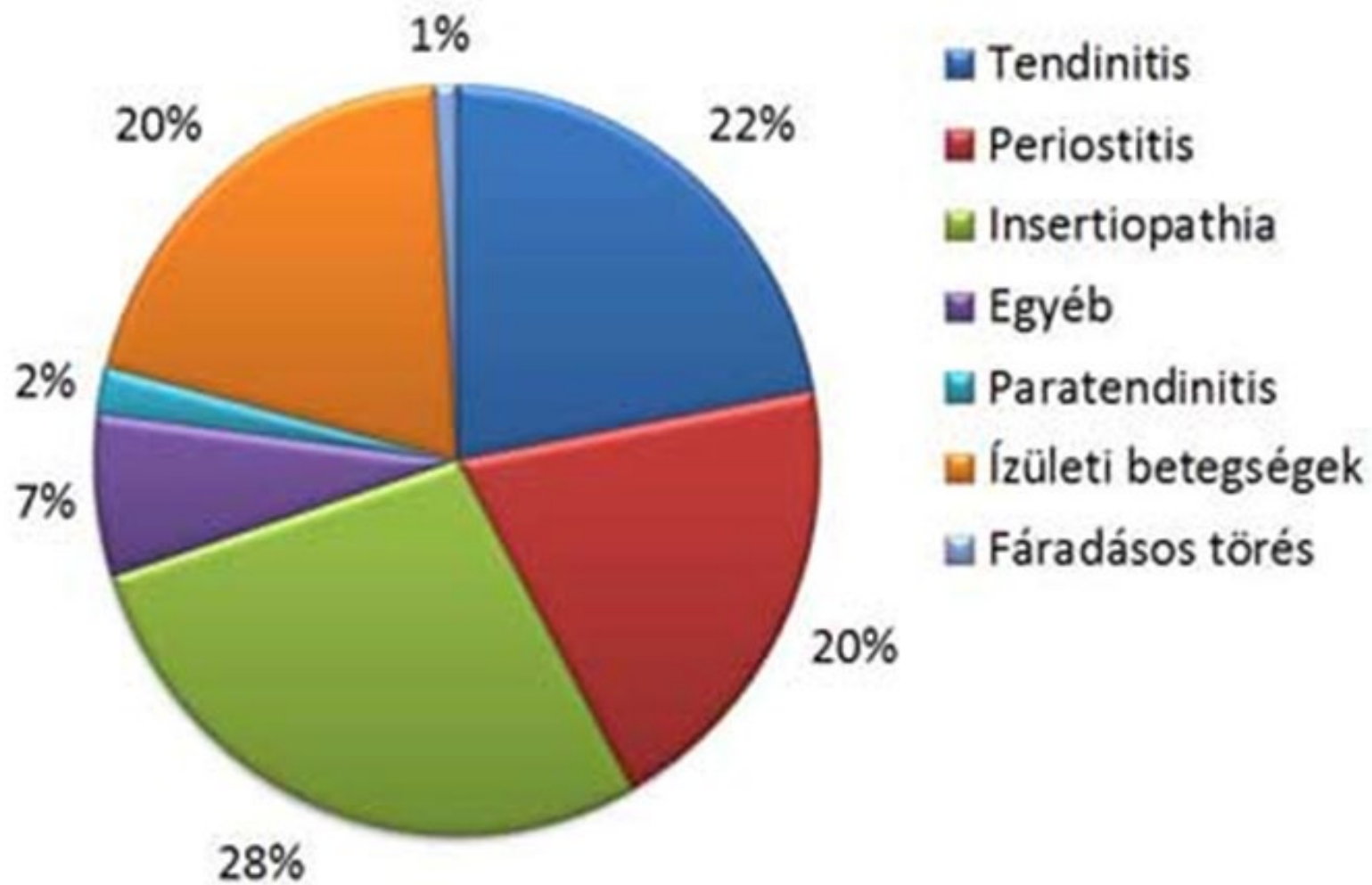
5.2. The exploration of etiology and pathomechanism of the sport-specific injury

5.3. Developing and adaptating injury-prevention methods

5.4. The evaluation regarding these methods



5.1. The occurrence, type, frequency of various sport-specific injuries





5.2. Etiology and pathomechanism of sport-specific injuries:

5.2.1.: Internal factors:

- Sex and age
- Bodyform, muscle performance and muscle binding
- Skills, range of motion and motor coordination
- Joint and ligament instability
- Self-knowledge and spiritual factors
- Previous injuries



5. The levels of sport-injury prevention in parasport

5.2. Etiology and pathomechanism of sport-specific injuries :

5.2.2. External factors:

- Sport-specific rules
- Training load
- Sports environment, various equipment and uniforms/clothing
- Sports specialists' backgrounds (Fitness Trainer, Rehabilitation Trainer, physiotherapist, Sports Masseuse, Sports Dietetician, Team Doctor and a Sport Psychologist)
- Medical and sports medicine background
- Social conditions: diet , alcohol consumption, nicotine use , anabolic steroids and potentially other drug use





5. The levels of sport-injury prevention in parasport



Sports environment



5. The levels of sport-injury prevention in parasport



Sports equipment, uniforms and sports fashion



Sports equipment, uniforms and sports fashion



5. The levels of sport-injury prevention in parasport

Sports equipment, uniforms and sports fashion



5.3. The development of the Sport-specific injury preventive(prevention) methods:

5.3.1. Performance of physiology and performance of diagnostics in parasport:

- Regular training causes(creates) change in the operation of several organs system, while the physiological functions regarding the human body undergoes development and adapts to the performance
- Adapting(adaptation) appears in:
 - the neuromuscular system,
 - the human motoric system,
 - the cardiorespiratory functions,
 - and, muscle metabolism

5. The levels of sport-injury prevention in parasport

-Ergometric measurements:

measure(s) currently or in real time, and accurately, the amount regarding the physical performance.

Types: treadmill ergometer

bicycle ergometer

crankcycle ergometer



-*Spiroergometric measurements:* we can acquire information regarding muscle metabolism in the form of spiroergometric measurements. Today, using spirometry, we can also measure correct muscle and respiratory performance among athletes.

6. The advantages of sport-specific injury prevention methods



Can measure

- Current muscle performance
- Training performance
- Current training status
- Current health conditions!
- Which (one) is the most important in among paraathletes?

Possibilities

- Strategic planning regarding training performance
- Improved competition results
- Evaluation of intensity of load capacity





The aims of parasport: maintain and, or improve their quality of life and their state of health .

Maintain state of health, improved health and longer life expectancy

Injury= Life Quality Failure



Injury Prevention



Importance of scientific background = changing approach in PARASPORTS

Thank you for your attention!



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