

**3<sup>rd</sup> BRICSCESS 2024-New Delhi  
Invited Speaker**



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**Prof. Dr. Serap Inal** is currently teaching in the Department of Physiotherapy and Rehabilitation in Istanbul Galata University. She worked as Assistant Professor in King Saud University, The College of Applied Medical Sciences and as Consultant in Orthotics Section, Physiotherapy Department in King Khalid University Hospital, Riyadh, Saudi Arabia between 1984-1990. While she was the academic chair in Marmara University, The School of Physical Education and Sports, initiated The Adapted Physical Activity (APA) Certificate Program with her colleagues in 2002, which can be considered as the pioneer in this area in Turkey. She headed the Istanbul University, School of Physical Education and Sports between 2006-2009, and same The APA Certificate Program was also structured during her time in this university. She has books (Turkish) in the areas of exercise and sports biomechanics, upper extremity prosthesis, orthotics in neuromuscular disorders, and chapters (English) in geriatric rehabilitation, adapted physical activity, supported employment for people with ID. She is also working on the dissemination of dance among people having severe disabilities. She was a part of the European University Diploma in Adapted Physical Activity-EUDAPA between 2010-2016; and is a member of ICHPER-SD (life member), IFAPA, Turkish Neuromuscular Disorders Society and Turkish Physical Therapy Association and the Scientific Adviser of The Foundation for Global Community Health-GCH. She is an ACRE certified supported Employment specialist from Virginia Commonwealth University since 2018.

**Prevention of Knee Joint Injuries among Prepubertal and Pubertal Children:11+ and FIFA 11+**

The increasing desire to participate physical activity,sports andcompetitive sports increase the risk of sports injuries among children thatare often anterior cruciate ligament (ACL) injuries, concussions and diaphyseal separations.Studies indicate that the risk of ACL injury among children increases as they get older. Precautions should be taken to prevent ACL injuries, especially in pre-pubertal children with incomplete skeletal system development.

An imbalance of strength or an increased valgus angle in the knee joint, flat foot can lead to strain on the knee joint during training. For lower extremity alignment the insoles and wedge supportmaybe effective to prevent injuries. Therefore, the trainer, physiotherapist, child athlete

and family should work together for the necessary precautions. Intensive, resistant exercises are avoided in prepubertal ( $\leq 12$  years) children, since the skeletal system has not yet developed, and the growth plates have not closed. At the age after puberty (13-17 years), intense and resistant exercises are started, and benefit is provided. During training planning, 11+ and FIFA 11+, which is currently adapted for football, are recommended to guide the selection of age-appropriate exercises. It has been prepared for the characteristics of the posture, strength, balance, coordination, flexibility, speed, quickness, and agility of children. Additionally, its illustrated guideline gives clues to the trainers about the incorrect postures and movements comparatively. Thus, it is not only an effective training tool but also trains coaches, athletes, and families.