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# KTUM

kidsTUMove goes  
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**Congress Abstract**



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## 1. Introduction

The abstract with the title “Benefits of sports in children with chronic diseases. A systematic review within the project KidsTUMove goes Europe-cordially fit” was submitted for an oral presentation at the 57th Annual Meeting of the Association for European Paediatric and Congenital Cardiology (AEPC) in Porto, Portugal, between 8-11 May 2024 by the coordinator. The abstract contains the results of the systematic literature review, which were published as D2.1 in working package 2. This report contains the abstract that was submitted for the AEPC. It is also available on the journal website of Cardiology in the Young (CitY) as a [PDF](#). The abstract was accepted for a poster presentation.

## 2. Congress Abstract

The following abstract was submitted for AEPC 2024 on November 8, 2023 and accepted on February 15, 2024.

**Title:** Benefits of sports in children with chronic diseases. A systematic review within the project KidsTUMove goes Europe-cordially fit

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### BACKGROUND AND AIM:

The aim of this study was to identify sports-based interventions for children and adolescents with chronic diseases (CaAcd) and evaluate their influence on physical, psychological, and social well-being. The outcomes of this research will contribute to the comprehension of the potential advantages of sports interventions for CaAcd and offer insights for future initiatives to enhance their overall health and well-being.

### METHOD:

Within the EU-project KidsTUMove goes Europe-cordially fit, a total of 5 partner countries are involved, a systematic review across eight databases was conducted, adhering to PRISMA guidelines and employing an extensive search strategy to locate studies related to sport-based interventions for CaAcd. The review encompassed randomized controlled trials and observational studies that emphasized physical and psychosocial consequences.

## RESULTS:

A total of 10,123 titles and abstracts were screened, 622 full-text records were reviewed, and 53 primary studies were included. These studies encompassed 2,384 participants, with an average of  $45 \pm 37$  participants per study. Among the studies focused on CaAcd, aged 3 to 18 years, 19% (10 studies) concerned the attention for deficit hyperactivity disorder, 21% (11) to cerebral palsy, 30% (16) to autism spectrum disorders, and 17% (9) to obesity. Other conditions studied included cancer (5), asthma (1), and cystic fibrosis (1). The interventions involved diverse sports and physical activities tailored to each specific chronic disease. The duration and frequency of these interventions varied across studies. Most studies assessed physical outcomes, such as motor performance and physical fitness measures. Psychosocial outcomes were also evaluated, focusing on behavioral issues, social competencies, and health-related quality of life.

## CONCLUSIONS:

In summary, sport-based interventions demonstrated effective improvements in physical and psychosocial outcomes for CaAcd. These interventions were generally considered safe, and participants adhered to the prescribed protocols willingly. Nevertheless, there remains an insufficient amount of evidence concerning the implementation of these interventions. Future research should include interventions tailored to address the common challenges faced by CaAcd, offering a comprehensive understanding of the impact of sports interventions on those affected.

**Keywords:** children, chronic diseases, physical fitness, quality of life

### 3. Rights and Permissions

The abstract is published in the Journal "Cardiology in the Young (CiTY)". The authors gave the AEPC permission to publish the abstract in the abstract publication, supplement of CiTY: 57th Annual Meeting of the Association for European Paediatric and Congenital Cardiology (AEPC) Wednesday, May 8, 2024 – Saturday, May 11, 2024. Cardiology in the Young. 2024;34(S2):S1519–956. doi:10.1017/S1047951124034103.

The abstract is available on the Journal's website, titled "PP-417 Benefits of exercise in children with chronic diseases. A systematic review as part of the project kidstumove goes europe-cordially fit":

<https://www.cambridge.org/core/journals/cardiology-in-the-young/article/57th-annual-meeting-of-the-association-for-european-paediatric-and-congenital-cardiology-aepc-wednesday-may-8-2024-saturday-may-11-2024/CA4F69124DA52AF282ACE7E25AD8570E#article>



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