primary studies - published RCT

The Effects of Telerehabilitation Versus Home-based Exercise on Muscle Function, Physical Activity, and Sleep in Children with Cystic Fibrosis: A Randomized Controlled Trial.

Code: PM40028780 **Year:** 2025 **Date:** **Author:** Kilic K

Study design (if review, criteria of inclusion for studies)

Randomized Controlled Trial

Participants

30 children with CF (mean age = 10.2â€‰Â±â€‰1.9Â years)

Interventions

Telerehabilitation (TG) compared with an unsupervised home exercise training program (HG)

Outcome measures

Muscle function (one-minute sit-to-stand (1-min STS), sit-up, pushup, squat, and plank tests)), PA (Physical Activity Questionnaire for Older Children), and sleep (Epworth Sleepiness Scale (ESS) and Pediatric Sleep Questionnaire (PSQ)) were assessed before and after the 6-week study period.

Main results

The 1-min STS significantly improved in the TG compared with the HG (pâ€‰â‰¤â€‰.001, Î·(p)(2)â€‰=â€‰0.474). The sit-up (pâ€‰=â€‰.005, Î·(p)(2)â€‰=â€‰0.247), pushup (pâ€‰=â€‰.002, Î·(p)(2)â€‰=â€‰0.180), squat (pâ€‰=â€‰.002, Î·(p)(2)â€‰=â€‰0.284), and plank (pâ€‰

Authors' conclusions

Children who received TG improved muscle function more than children who received an HG. The effectiveness of longer term TG programs should be investigated in children with CF.

http://dx.doi.org/10.1080/01942638.2025.2469567

See also

Phys Occup Ther Pediatr. 2025 Mar 3:1-16. doi: 10.1080/01942638.2025.2469567.

Keywords

Exercise; non pharmacological intervention - devices OR physiotherapy; Counseling; Psychoeducation; non pharmacological intervention - psyco-soc-edu-org; telemedicine; training;