

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.

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

Randomized Controlled Trial

Participants

30 children with CF (mean age = 10.2 ± 1.9 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 ($p = 0.001$, $I^2 = 0.474$). The sit-up ($p = 0.005$, $I^2 = 0.247$), pushup ($p = 0.002$, $I^2 = 0.180$), squat ($p = 0.002$, $I^2 = 0.284$), and plank ($p =$

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.

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See also

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Keywords

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