primary studies - published RCT

Active Video Game Playing in Children and Adolescents With Cystic Fibrosis: Exercise or Just Fun?

Code: PM25899477 **Year:** 2015 **Date:** 2015 **Author:** Salonini E

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

Randomized crossover trial

Participants

Thirty subjects with CF (11 males, mean +/- SD age of 12 +/- 2.5 y, mean +/- SD FEV1 of 73 +/- 16% of predicted)

Interventions

2 intervention groups: Xbox Kinect and a traditional stationary cycle.

Outcome measures

Heart rate, SpO2, dyspnea, and fatigue were measured. Subject satisfaction was tested.

Main results

Thirty subjects with CF (11 males, mean +/- SD age of 12 +/- 2.5 y, mean +/- SD FEV1 of 73 +/- 16% of predicted) were enrolled. Xbox Kinect provided a cardiovascular demand similar to a stationary cycle, although the modality was different (interval vs. continuous). Maximum heart rates were similar (P = .2). Heart rate target was achieved more frequently with a stationary cycle (P = .02). Xbox Kinect caused less dyspnea (P = .001) and fatigue (P

Authors' conclusions

Subjects preferred Xbox Kinect for its interactivity. Xbox Kinect has the potential to be employed as an exercise intervention in young subjects with CF, but investigation over longer periods is needed.

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See also

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Keywords

exercise; non pharmacological intervention - devices OR physiotherapy; training; videogames; Games- Experimental;