Addressing insufficient physical activity in children with obesity in a 4-month physical activity on prescription intervention: a single-group pre-post study

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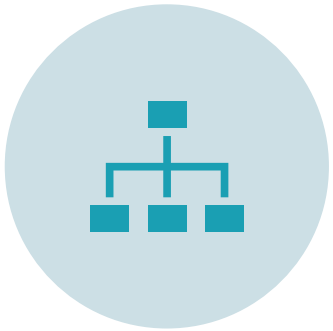
Background

- Childhood obesity is growing worldwide
- Family-centered treatment including lifestyle habits
- Physical activity on precsription - PAP - evidence-based treatment method for adults but sparesly studied in children

Physical activity on prescription (PAP)

A PATIENT-CENTRED
INDIVIDUAL COUNSELLING

INDIVIDUALLY TAILORED
PHYSICAL ACTIVITY
RECOMMENDATION INCLUDING
A WRITTEN PRESCRIPTION



AN INDIVIDUALISED,
STRUCTURED FOLLOW-UP

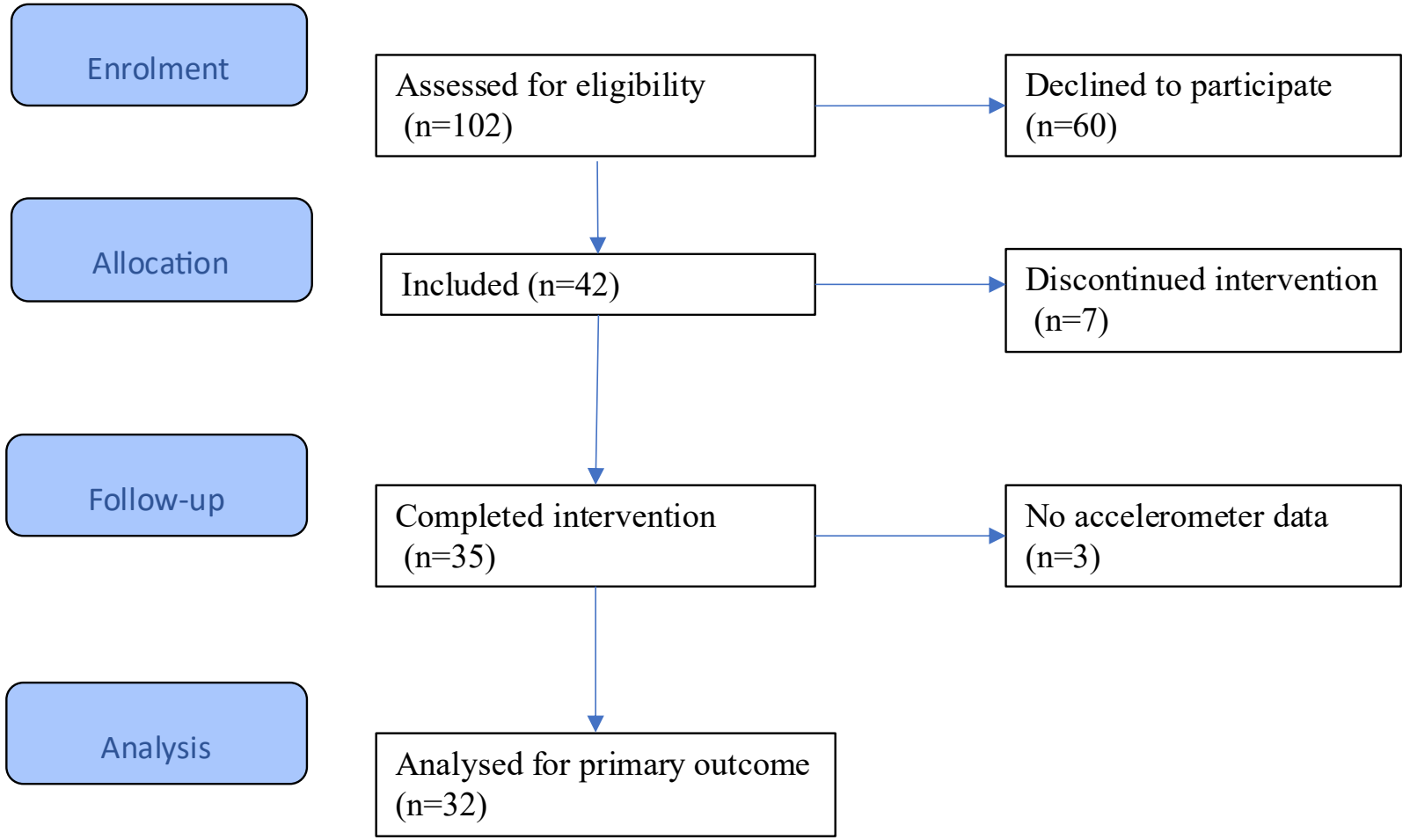
Aim

To explore changes in physical activity patterns in 6–12-year-old children with obesity after a 4-month PAP intervention and to explore age- and sex-related differences

Method

- Single-group pre-post design
- Children with obesity, 6-12-years-old
- Accelerometer measured physical activity patterns at baseline and after PAP intervention at four months
- Wilcoxon’s signed rank test – PA patterns and SED
- Mann-Whitney U test – subgroup analyses
- Descriptive statistics – Client Satisfaction Questionnaire (CSQ-8)

Flowchart


Enrolment
Assessed for eligibility (n=102)
Declined to participate (n=60)
Allocation
Included (n=42)
Discontinued intervention (n=7)
Follow-up
Completed intervention (n=35)
No accelerometer data (n=3)
Analysis
Analysed for primary outcome (n=32)

Results

- Physical activity patterns did not change significantly
- No significant subgroup differences between younger and older children, or between boys and girls
- In addition to accelerometer data, most children reported biking and/or swimming

Beyond measured activity levels:

- High satisfaction with PAP treatment among both children and participation parents

Discussion

- Complexity of childhood obesity
- Influence of multiple adult contexts
- Accelerometer-based assessment of physical activity
- Time constraints in clinical practice
- Intervention dose: number of registered visits

Strengths

- Use of accelerometers’ for objective measurements
- Conducted in clinical setting
- Diverse participant sample

Limitations

- Small sample size
- No control group
- Accelerometers’ limited ability to measure all types of activities

Conclusion

- PAP is acceptable and well received by both children and parents
- No short-term changes in physical activity patterns detected
- PAP may be feasible in paediatric clinical practice, but requires further evaluation over time

Implications for practice and research

- Evaluate the PAP treatment process and fidelity to core components
- Further tailor PAP to the child’s social context to support sustained behaviour change
- Optimise the individualised physical activity plan (dose, enjoyment, long-term follow-up)
- Strengthen adult support within family, school and leisure settings

Thank you!

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