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IMPLEMENTATION OF PHYSICAL ACTIVITY IN PEDIATRIC ONCOLOGY

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Introduction: Pediatric cancer patients are living longer at the expense of adverse health outcomes. Physical activity (PA) is a promising strategy to support physical and mental health, yet optimal approaches for implementing PA remain unclear. This abstract integrates findings from a RCT focusing on a 12-week behavioral PA intervention, and the results of a qualitative study examining how clinical conversations influence PA engagement in childhood cancer survivors (CCS).

Methods: In the RCT, 40 CCS (mean age 13.6 years) were allocated 1:1 to a behavioral PA intervention or control group. The intervention was based on pediatric oncology PA guidelines and the COM-B framework, with weekly support calls to refined PA prescriptions ((frequency, intensity, time and type). In the qualitative study, 20 CCS (mean age 14.1 years) participated in audio-recorded clinical conversations with their healthcare provider (HCP). HCPs received a 20-minute educational session on PA benefits. The conversations promoting PA were incorporated into routine clinical visits. Conversations were transcribed and independently reviewed using content analysis. CCS reported PA levels at baseline, 1 week and 3 months using the GSLTPAQ.

Results: The acceptability rate of the behavioral PA intervention was 90.9% and the feasibility exceeded 85%. CCS improved PA frequency (85%), intensity (80%), duration (100%), with 50% meeting PA guidelines. Six-minute walk distances were greater in the intervention group than controls ($465.8 \pm 74.5m$ vs. $398.7 \pm 92.9m$; $p=0.016$). No adverse events occurred, and PROs were within normal ranges. The qualitative study yielded six themes: #1 introducing PA, #2 explaining benefits, #3 providing recommendations, #4 goal setting, progression and assessment, #5 identifying opportunities, and #6 assessing receptiveness. CCS increased PA levels following these conversations.

Conclusion: Structured behavioral PA interventions and PA-focused clinical conversations are effective strategies to enact behavior changes in CCS. These findings are an important step to make exercise standard practice in pediatric oncology.

Keywords

Pediatrics; Behavior Changes; Exercise; Survivorship

Conflict of Interest & Ethical Approval

yes

Abstract submitters declaration

yes

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