Physical activity in adolescent cancer survivors: A dyadic study exploring adolescents and their parents

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Introduction

• Adolescent cancer survivors experience several negative short- and long-term side effects and health outcomes as a result of their past therapy:
  • Comorbidities, chronic conditions, premature mortality, and physical limitations
  • Psychological, emotional, and social impairments
  • Reduced quality of life
• Recent systematic reviews and meta-analyses show that physical activity can help mitigate these negative side effects and health outcomes in children and adults with cancer.
  • Less information exists for adolescent cancer populations
• The Canadian Society for Exercise Physiology recommends 60 minutes of moderate to vigorous physical activity daily for youth.
  • Less than 30% of cancer survivors 9-18 years of age are meeting these guidelines.
• The determinants of physical activity in this population need to be better understood to highlight what factors to target in behavioural interventions

Parent as agent of influence

• Parents considerably impact their child's physical activity behaviour.
  • Can positively influence behaviour by providing different types of support, namely:
    • Instrumental (e.g., paying fees)
    • Conditional (e.g., engaging in activity)
    • Motivational (e.g., encouragement)
    • Informational (e.g., discussing benefits)
  • Can negatively influence and undermine behaviour by exerting control
• While developmental theories suggest parents influence diminishes from early childhood onwards, this may not be the case for adolescent cancer survivors
• Adolescents experience increased dependence on their parents during treatment and into survivorship.
• Isolation from peers during treatment puts emphasis on parents as a main source of support.

Knowledge Gaps

• The mechanisms by which parents exert influence over their adolescents' physical activity behaviour are unknown
• Investigation of parental support and control within single studies are lacking
• Research including parents and adolescents' perspectives is necessary to investigate the distinct perceptions of support/control they are experiencing, as well as determine if there are discrepancies

Purpose

• Explore how parents support and/or undermine their adolescents' physical activity behaviour after the latter have completed treatment for cancer

Methods

Recruitment

• 10-15 adolescent-parent dyads will be recruited using promotional material through:
  • Community programs
  • Youth oncology foundations and associations
  • Youth oncology camps
  • Adolescent oncology websites

Participants

• Adolescent inclusion criteria:
  • 15-19 years old
  • Completed treatment for cancer (< 5 years)
• Parent inclusion criteria:
  • Parent to an adolescent meeting the above inclusion criteria

Data Collection

• Parent-reported
  • Sociodemographic and cancer questionnaire
  • Parent- and adolescent-reported
  • Godin Leisure Time Exercise Questionnaire
• 2 interviews audio-recorded and transcribed verbatim
  • Interview # 1:
    • To gather information concerning perceptions of parental support/control for physical activity
    • 45-minutes in person or on the phone
    • Semi-structured interview
  • Interview # 2:
    • To verify the accuracy of participants' transcripts
    • 15-minutes on the phone

Data Analysis

• Thematic analysis following the flexible guidelines outlined by Braun and Clarke:
  1. Become familiar with the data
  2. Identify salient features
  3. Group similar codes together into subthemes and organize into main themes
  4. Perform member checks
    • Internal homogeneity
    • External heterogeneity
  5. Generate descriptions for each theme
  6. Select representative quotes

Anticipated Contributions

• This study will be the first to examine adolescent cancer survivors perceptions of parental support and control for physical activity using a dyadic approach
• Upon completion this study has the potential to:
  • Support or rebut prevailing socioecological physical activity theories
  • Gain insight into how parents influence their offspring's physical activity behaviour in the aftermath of cancer
  • Increase awareness of how parents come to support or hinder their adolescents' physical activity behaviour
• If it is determined that parents exert considerable influence over their adolescent's behaviours, then it may help understand, in part, why adolescent cancer survivors are not meeting physical activity guidelines
• These findings may directly impact intervention strategies focused on enhancing physical activity levels by determining if parental support/control should be targeted in behavioural interventions

Future Directions

• In an effort to expand research to improve participation rates, and ultimately improve quality of life, it is hoped this study will inform larger scale qualitative and quantitative studies exploring:
  • Associations between support and physical activity
  • Mechanisms by which parents may exert support and control
  • Mediators and moderators that may influence the association between support/control and physical activity behaviours
  • Parental support in relation to other sources of support
  • Unique influence of different types of support and controlling behaviours on adolescents physical activity behaviour

References