Physical Activity in Young Adult Cancer Survivors: A Scoping Review

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PROBLEM IDENTIFICATION: Physical activity, a precision health strategy, positively affects biopsychosocial health in adult cancer survivors. However, understanding its effects among young adult (YA) cancer survivors is limited. The purpose of this scoping review was to explore existing research on physical activity in YA cancer survivors.

LITERATURE SEARCH: CINAHL®, PubMed®, PsycINFO®, SPORTDiscus, Web of Science, and Cochrane Library were searched, producing 63 articles and 28 grey materials.

DATA EVALUATION: Data extraction, guided by the revised symptom management model, included research aims, sample, design, primary outcome measures, and effects of physical activity.

SYNTHESIS: Findings of 35 review articles were reported under three main categories.

IMPLICATIONS FOR RESEARCH: Lack of clinical guidelines and limited research specific to YA cancer survivors hinders physical activity’s use as a symptom management strategy. Research is needed that addresses the development and clinical implementation of physical activity guidelines.

KEYWORDS symptom management; young adult cancer survivors; physical activity; exercise oncology

Annually, in the United States, there are about 89,000 new cancer cases in adolescents and young adults (AYAs) (ages 15–39 years) (National Cancer Institute, 2020). Significant improvements in AYA early diagnosis and treatments have led to increased cancer survival rates that exceed 80% (Barr, 2011; Keegan et al., 2016; Roberts et al., 2017; Robison et al., 2009). However, cancer morbidity has increased during the past two decades at a rate three times higher among those aged 15–29 years than among children (Bleyer, 2007; Bleyer et al., 2017). AYA cancer survivors have a significantly increased chronic disease risk compared to those without cancer, with more than two-thirds developing at least one chronic condition by age 40 years, limiting their full life potential (Bradford & Chan, 2017; Phillips et al., 2015).

Cancer and its treatments affect multiple biologic and psychosocial systems, resulting in late effects and long-lasting symptoms that can cause distress and disrupt social functioning (Dodd et al., 2001). In adults, symptom management techniques can mitigate these disruptive symptoms. The revised symptom management model (Dodd et al., 2001) encapsulates biologic, psychological, and social aspects of symptoms and symptom management. By addressing all aspects of health in young adults affected by cancer, this biopsychosocial approach offers improved function and quality of life.

There is a paucity of YA cancer research, with most of it being encapsulated within the AYA research. Therefore, this review will encompass references to both AYAs and YAs, with special attention paid to the YA population because of a critical need for research in this vulnerable cohort. Research in YAs (ages 18–39 years), a subpopulation of AYAs, is limited, with less than 2% of YA cancer survivors involved in clinical trials (Bleyer, 2007; Docherty et al., 2015; Fernandez et al., 2011; Keegan et al., 2016). Low participation in clinical trials is thought to be influenced by geographic distance, lack of insurance coverage, age,