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## Adventure Therapy for Child, Adolescent, and Young Adult Cancer Patients: A Systematic Review

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**Purpose:** Child, adolescent and young adult (AYA) cancer patients commonly encounter unique physio-psychological challenges due to cancer diagnoses and treatments throughout their developmental stages. These negative effects are associated with lower quality of life. Adventure therapy (AT) is an emerging therapy which may help to ameliorate these adverse effects and promote the well-being of this population. However, there is no published systematic review focusing on intervention studies of AT for child and AYA cancer patients. The aim of this systematic review was to examine the evidence on AT intervention for child and AYA cancer patients in order to inform the design of future research and clinical practice.

**Methods:** This systematic review included studies that tested AT intervention among children and AYA cancer patients. Seven electronic databases (CINAHL, EMBase, Medline (via EbscoHost), PsycInfo, Web of Science, Scopus, and PubMed) were searched for English-language peer-reviewed published studies using a quasi-experimental design, one-group pretest-posttest experimental study design or randomized controlled trial (RCT) from inception to March 2019. The methodological quality of the included studies was evaluated using JBI Critical Appraisal Checklists for RCTs and for Quasi-Experimental Studies by two researchers independently. A narrative analysis of intervention characteristics and related health-related outcomes was performed.

**Results:** Eight papers from seven studies were included in the review, including four RCTs, two quasi-experimental study papers and two one-group pretest-posttest experimental study papers. The participants (n = 1168) were cancer patients and survivors (mean age = 20.83). Studies varied in the components and duration of AT. High methodological quality of included studies was noted in all study designs. Results showed the effectiveness of AT intervention in improving the physical activity, reducing fatigue, ameliorating psychological distress, and enhancing the quality of life and child and AYA cancer patients.

**Conclusion:** AT is a promising intervention that provides positive impacts on a number of health-related outcomes. There is a continued need for high-quality RCTs that confirm the effectiveness of AT in child and AYA cancer patients. Evidence-based AT

interventions should be developed and incorporated as a part of supportive care for child and AYA cancer patients.

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**Title:**

Adventure Therapy for Child, Adolescent, and Young Adult Cancer Patients: A Systematic Review

**Keywords:**

Adventure therapy, Child, adolescent and young adult cancer patients and Systematic review

**Abstract Summary:**

Limited evidence suggests that adventure therapy (AT) may be effective in improving physical and psychological health of child, adolescent and young adult (AYA) cancer patients. This systematic review examines the evidence on AT intervention for child and AYA cancer patients to inform the design of future research and clinical practice.

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**Author Summary:** I am a committed and caring individual with great passion in nursing. I am currently in my final year of study in BSc (Hons) in Nursing in The Hong Kong Polytechnic University. I have previous experience in supporting a variety of patients, ranging from children to the elderly, the homeless and the ethnic minorities, which greatly enhanced my communication skills and understanding regarding the importance of collaborative care.

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