

APPENDIX

Description of Reviewed Articles

Author	Article	Participants (Age = years; Gender = n; Type of cancer = n)	Study Design	Evaluation Tools Used
Aznar et al., 2006	Physical activity during treatment in children with leukemia: a pilot study	N = 14 Age = Experimental 5.7 (1.1) and Control 5.6 (1.3) Gender = M (8) and F (6) Type of cancer = ALL Point on cancer continuum = Last phase of maintenance therapy	Quasi- experimental	1. CHIP - CE 2. MTI Actigraph (uniaxial accelerometer)
Bogg et al., 2015	Feasibility of an inpatient exercise intervention for children undergoing	N = 14 Age = 10.8 (4.2) Gender = M (8) and F (6)	Pre- experimental	1. PedsQL MFS 2. PedsQL 3.0 Cancer Module

	hematopoietic stem cell transplant	Type of cancer = leukemia/lymphoma (11) and other (3) Point on cancer continuum = On treatment during hospitalization of undergoing stem cell transplant		
Braam et al., 2010	Design of the Quality of Life in Motion (QLIM) study: a randomized controlled trial to evaluate the effectiveness and cost-effectiveness of a combined physical exercise and psychosocial training program to	N = 100 Age = 8-18 at time of recruitment Gender = M and F Type of cancer = any malignancy Point on cancer continuum = < 12 months off treatment	RCT - Study Protocol	1. Actical 2.1 Accelerometer 2. Physical Activity Diary 3. PedsQL MFS 4. PedsQL 4.0 Generic Core 5. PedsQL 3.0 Cancer Module 5. CDI - Children's Depression Inventory 6. CBCL - Self-Perception Profile for Children

	improve physical fitness in children with cancer			7. CBSA - Self-Perception Profile for Adolescence 8. CBCL- Child Behavior Checklist 9. YSR - Youth Self-Report
Chamorro- Viña et al., 2012	EXERCISE in pediatric autologous stem cell transplant patients: a randomized controlled trial protocol	N = 24 Age = 5-18 at time of recruitment Gender = M and F Type of cancer = Allogenic stem cell treatment patients Point on cancer continuum = On treatment	RCT - Study Protocol	1. Log books for activity 2. Triaxial Accelerometers 3. PedsQL 4.0 Generic Core 4. BASC-2 - Behavior Assessment System for Children as a parent proxy 5. PedsQL MFS 6. TUG-3m 7. PedsQL 3.0 Cancer Module
Chung et al., 2015	Sustainability of an Integrated Adventure-	N = 71 Age = 12.6 +/- 2.1	RCT	1. CUHK-PARCY 2. PASCQ

	Based Training and Health Education Program to Enhance Quality of Life Among Chinese Childhood Cancer Survivors: A Randomized Controlled Trial	Gender = M (37) and F (34) Type of cancer = leukemia/lymphoma (53) and other (18) Point on cancer continuum = within 5 years of treatment completion (3 were longer than 5 years)		3. PASE 4. PedsQL
Cortés-Reyes et al., 2013	The effect of game-based exercise on infant acute lymphocytic leukemia patients	N = 7 Age = 9.0 (2.1) Gender = M (3) and F (4) Type of cancer = ALL Point on cancer continuum = Treatment within 2 months	Quasi-experimental	1. Motor Skills - gross motor function measurement (GMFM) to classify patients seated, bipedal, walking, running, jumping
Dijk-Lokkart et al., 2016	Effects of a combined physical and psychosocial	N = 68 Age = Experimental 10.0 (3.0)	RCT	1. PedsQL 4.0 Generic Core 2. PedsQL 3.0 Cancer Module

	intervention program for childhood cancer patients on quality of life and psychosocial functioning: results of the QLIM randomized clinical trial	and Control 12.6 (3.1) Gender = M (36) and F (32) Type of cancer = Leukemia/lymphoma (20), brain tumor/CNS tumor (2), solid tumor (8) Point on cancer continuum = during treatment or within one year after treatment		3. PedsQL MFS 4. Child Behavioral Checklist 5. Children's Depression Inventory 6. Dutch Self Perception Profile for children and adolescents
Diorio et al., 2015	A pilot study to evaluate the feasibility of individualized yoga for inpatient children receiving intensive chemotherapy	N = 11 Age = 14.0 (7.7-16.4) Gender = M (6) and F (5) Type of cancer = Leukemia/lymphoma (8) and other (3)	Pre-experimental	1. PedsQL 4.0 Generic 2. PedsQL MFS 3. PedsQL 3.0 Acute Cancer Module

		Point on cancer continuum = 2.2 months since diagnosis		
Esbenshade et al., 2014	Feasibility and initial effectiveness of home exercise during maintenance therapy for childhood acute lymphoblastic leukemia	N = 17 Age = 7. 4 (2.0) Gender = M (12) and F (5) Type of cancer = ALL Point on cancer continuum = At least 6 months of treatment remaining	Pre-experimental	1. BOT-2
Geyer et al., 2011	Feasibility study: the effect of therapeutic yoga on quality of life in children hospitalized with cancer	N = 6 Age = 11.6 (5.3) Gender = M (1) and F (5) Type of cancer = ALL (3), sarcoma (1), AML (1) and other (1) Point on cancer continuum =	Pre-experimental	1. PedsQL 4.0

		In-treatment but not in the induction phase		
Gilliam et al., 2011	A Pilot Study Evaluation of a Web-Based Token Economy to Increase Adherence with a Community-Based Exercise Intervention in Child and Adolescent Cancer Survivors	N = 12 Age = 12.8 (3.6) Gender = M (6) and F (6) Type of cancer = ALL (7) and other (5) Point on cancer continuum = Within 1 year post-treatment	Pre-experimental	1. Web-based exercise logs 2. Sit-To-Stand Test 3. Lateral Step-up test 4. PedsQL4.0 Generic Core
Götte et al., 2014	Comparison of self-reported physical activity in children and adolescents before and during cancer treatment	N = 130 Age = 12.2 (4.7) Gender = M (79) and F (51) Type of cancer = Leukemia (44), bone tumor (37), lymphoma (14), brain tumor (8) and other (27)	Cross-sectional	1. German Health Interview and Examination Survey for Children and Adolescents (KiGGS) in a modified cancer specific version

		Point on cancer continuum = 3 months post-diagnosis		
Hartman et al., 2009	A randomized trial investigating an exercise program to prevent reduction of bone mineral density and impairment of motor performance during treatment for childhood acute lymphoblastic leukemia	N = 51 Age = Experimental 5.3 (1.3- 15.6) and Control 6.2 (1.7-17.1) Gender = M (30) and F (21) Type of cancer = ALL Point on cancer continuum = At diagnosis	RCT	1. Dutch Bayley scale of Infant Development (BSID-II) 2. M-ABC
Hinds et al., 2007	Clinical field testing of an enhanced-activity intervention in hospitalized children with cancer	N = 29 Age = Experimental 13.8 (2.6) and Control 11.9 (3.2) Gender = M (12) and F (17) Type of cancer = solid tumor	RCT	1.FS-C - Fatigue Scale for 7-12 years old 2. FS-A - Fatigue Scale for 13- to 18 years old 3. FS-P - The Fatigue Scale:

		(25) and leukemia (4) Point on cancer continuum = On treatment		Parent Version 4. FS-S - The Fatigue Scale Staff Version
Kauhanen et al. 2014	Active video games to promote physical activity in children with cancer: a randomized clinical trial with follow-up	N = 40 Age = 3-16 at time of recruitment Gender = M and F Type of cancer = ALL or cancer outside CNS Point on cancer continuum = Within week after diagnosis	RCT - Study Protocol	1. M-ABC 2. Three-dimensional Accelerometer (FitBit) 3. PedsQL MFS 4. Leisure-time PA in MET
Keats & Culos-Reed, 2008	A community-based physical activity program for adolescents with cancer (project TREK): program feasibility and preliminary findings	N = 10 Age = 16.2 (1.6) Gender = M (2) and F (8) Type of cancer = Lymphoma (4), leukemia (4), CNS tumor (1) and other (1)	Pre-experimental	1. PedsQL 4.0 2. PedsQL-MFS 3. GLTEQ

		Point on cancer continuum = 62.5 months post-diagnosis		
Kesting et al., 2015	Motor Performance After Treatment for Pediatric Bone Tumors	N = 21 Age = 15.2 (2.1) Gender = M (13) and F (8) Type of cancer = Bone cancer Point on cancer continuum = Within 24 months of follow-up after treatment completion	Cross- sectional	1. MOON (test for motor performance in oncology) Test
Li et al., 2013	Effectiveness of an integrated adventure- based training and health education program in promoting regular physical activity among childhood cancer survivor	N = 71 Age = Experimental 12.5 (2.2) and Control 12.8 (2.1) Gender = M (37) and F (34) Type of cancer = Leukemia (35), lymphoma (18), brain tumor (4), bone tumor (8) and	RCT	1. Physical activity Rating for Children and Youth (CUHK- PARCY) (Chinese University of Hong Kong) 2. PA Stages of Change Questionnaire (PASCQ) (used with Chinese children)

		neuroblastoma (6) Point on cancer continuum = Completed treatment at least 6 months prior		3. PA Self-Efficacy (PASE) (used with Chinese children) 4. PedsQL 4.0
Marchese et al., 2004	Effects of physical therapy intervention for children with acute lymphoblastic leukemia	N= 28 Age= Experimental 8.6 and Control 7.6 Gender= M (20) and F (8) Type of cancer= ALL Point on cancer continuum= In maintenance therapy	RCT	1. PedsQL 3.0 2. TUDS
Norris et al., 2010	Families of young pediatric cancer survivors: a cross-sectional survey examining physical	N = 27 Age = Survivors 15.5 (2.2) and Siblings 13.8 (2.3) Gender = M (15) and F (12) Type of cancer = Leukemia (7),	Cross-sectional	1. GLTEQ 2. Total physical activity metabolic equivalent (METs) hours per week 3. PedsQL 4.0

	activity behavior and health-related quality of life.	CNS tumors (3), lymphoma (2), other (5) Point on cancer continuum = Aged 10-17 with a previous cancer diagnosis		
Paxton et al., 2010	Associations between leisure-time physical activity and health-related quality of life among adolescent and adult survivors of childhood cancers	N = 94 (adolescents) Age = 14.3 (1.8) Gender = M (48) and F (46) Type of cancer = CNS tumors (40), lymphoma (40) and leukemia (14) Point on cancer continuum = Previous diagnosis with no evidence of recurrent or progressive disease	Case-control	<ol style="list-style-type: none"> 1. Pediatric Quality of Life 4.0 Generic Core (PedsQL) 2. PedsQL 3.0 Cancer Module 3. PedsQL Multidimensional Fatigue Scale Questionnaires (PedsQL MFS) 4. Godin Leisure-Time Exercise Questionnaire (GLTEQ)

Perondi et al., 2012	Effects of a combined aerobic and strength training program in youth patients with acute lymphoblastic leukemia	N = 6 Age = 10.33 (4.13) Gender = M (2) and F (4) Type of cancer = ALL Point on cancer continuum = > 6 months post treatment	Quasi- experimental	1. PedsQL
Piscione et al., 2012	Physical functioning in pediatric survivors of childhood posterior fossa brain tumors	N = 30 Age = 11.4 (4.1) Gender = M (15) and F (15) Type of cancer = Brain tumor Point on cancer continuum = At least 1 year after surgery with no maximum time since diagnosis	Cross- sectional	1. Bruininks-Oseretsky Test of Motor Proficiency, Second Edition (BOT-2)

Reinders-Messelink et al., 1999	Motor performance of children during treatment for acute lymphoblastic leukemia	N = 27 Age = Experimental 5.8 and Control 5.5 Gender = M (18) and F (9) Type of cancer = ALL Point on cancer continuum = On treatment	Cross-sectional	1. Movement Assessment Battery (M-ABC)
Rosenhagen et al., 2011	Implementation of structured physical activity in the pediatric stem cell transplantation	N = 23 Age = 15.3 (3.7) Gender = NR Type of cancer = leukemia (17) and other (6) Point on cancer continuum = On treatment	Case-control	1. KINDL (self-assessment test for health-related QOL) 2. PedsQL MFS
San Juan et al., 2007	Effects of an intrahospital exercise program	N = 7 Age = 5.1 (1.2)	Pre-experimental	1. Child Health and Illness Profile -- Child Edition (CHIP -

	intervention for children with leukemia	Gender = M (4) and F (3) Type of cancer = ALL Point on cancer continuum = Within 18-24 month after start of treatment. ALL in maintenance phase		CE/CRF) 2. Timed-Up-and-Go (TUG) 3. Timed-Up-and-Down Stairs (TUDS)
San Juan et al., 2010	Benefits of Intrahospital Exercise Training after Pediatric Bone Marrow Transplantation	N = 16 Age = Experimental 10.9 (2.8) and Control 10.9 (2.6) Gender = M (8) and F (8) Type of cancer = leukemia Point on cancer continuum = ≤ 12 months post-treatment	Quasi-experimental	1. TUG-3m 2. TUG-10m 4.CHIP-CE,PE,AE
Soares-Miranda et al., 2013	Physical Activity in Pediatric Cancer patients with solid tumors	N = 40 Age = 4-18 Gender = M and F	Pre-experimental	1. TUDS 2. TUG-3m 3. TUG-10 meters (10m)

	(PAPEC): Trial rationale and design	Type of cancer = Solid tumors Point on cancer continuum = On treatment	- Study Protocol	4. Uni-axial accelerometer (Actigraph MTI) 5. Child Health and Illness Profile-Child Edition, Parent Edition and Adolescent Edition (CHIP-CE,PE,AE)
Speyer et al., 2010	Effect of adapted physical activity sessions in the hospital on health-related quality of life for children with cancer: A cross-over randomized trial.	N = 30 Age = 13.6 (2.9) Gender = M (18) and F (12) Type of cancer = Hematologic malignancy (15), solid tumor (12), other (3) Point on cancer continuum = In-hospital for treatment	RCT	1. Child Health Questionnaire (CHQ)
Takken et al., 2009	Development, feasibility and efficacy of a	N = 9 Age = 9.3 (3.2)	Pre-experimental	1. TUG-3 meters (3m) 2. TUDS

	community-based exercise training program in pediatric cancer survivors	Gender = M (3) and F (6) Type of cancer = ALL Point on cancer continuum = \geq 6 months post-treatment		
Tanir & Kuguoglu, 2013	Impact of exercise on lower activity levels in children with acute lymphoblastic leukemia: a randomized controlled trial from Turkey	N = 40 Age = Experimental 10.2 (1.5) and Control 10.7 (1.5) Gender = M (24) and F (16) Type of cancer = ALL Point on cancer continuum = Within 1 year after diagnosis	RCT	1. PedsQL - 4.0 2. PedsQL 3.0 Cancer module 3. TUGS-3m 4. TUDS
van Brussel et al., 2006	Physical function and fitness in long-term survivors of childhood leukaemia	N = 13 Age = 15.5 (5.8) Gender = M (6) and F (7) Type of cancer = ALL	Cross- sectional	1. M-ABC

		Point on cancer continuum = On treatment		
Woods et al., 2013	An Evaluation of Psychosocial Outcomes for Children and Adolescents Attending a Summer Camp for Youth with Chronic Illness	N = 102 Age = 13.1 (2.4) Gender = M (56) and F (46) Type of cancer = NR (38 diagnosed with cancer) Point on cancer continuum = NR	Pre- experimental	1. PedsQL 2. Children's Hope Scale
Wurz et al., 2014	The feasibility and benefits of a 12-week yoga intervention for pediatric cancer out- patients	N = 8 Age = 11.9 (4.3) Gender = M (4) and F (4) Type of cancer = leukemia/lymphoma (4), CNS (2) and other (2)	Pre- experimental	1. PedsQL 4.0 2. TUG-3m 3. GLTEQ

		Point on cancer continuum = Out-patient on treatment		
Yildiz, Duger & Uckan, 2016	Investigation of the Effects of an Exercise Program on Physical Functions and Activities of Daily Life in Pediatric Hematopoietic Stem Cell Transplantation	N = 22 Age= Experimental 9.3 (3.4) and Control 6.7 (3.0) Gender = NR Type of cancer = leukemia/lymphoma (8) and other (14) Point on cancer continuum = On treatment undergoing stem cell transplant	Quasi-experimental	1. Time needed to stand up from bed rest exam 2. TUG-3m 3. TUDS 4. WeeFIM - functional independent measure for children
Yeh et al., 2011	A pilot study to examine the feasibility and effects	N = 22 Age = Experimental 11.0 (3.6)	Quasi-experimental	1. PedsQL MFS 2. Physical Activity Log

	of a home-based aerobic program on reducing fatigue in children with acute lymphoblastic leukemia	and Control 12.5 (3.9) Gender = M (12) and F (10) Type of cancer = ALL Point on cancer continuum = On treatment		
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NR = Not reported; NA = Not applicable