



# **The Carenet Project:**

## A Roadmap to Continuous Improvement

Second Preliminary Report

Lisbon, July 31<sup>st</sup>, 2022

## Index

Executive Summary	Page 3
Introduction	Page 4
Methods	Page 5
Search strategy	Page 6
Eligibility criteria	Page 8
Screening and study selection	Page 8
Data extraction	Page 9
Results	Page 12
Description of the main key findings	Page 16
Aims, Types and Definitions of the Interventions	Page 18
Guidelines Suggestions for Future Psychosocial Interventions and Research	Page 21
Discussion	Page 24
Conclusion	Page 26
Appendix A	Page 28
Appendix B	Page 32
References	Page 46
Next on The Carenet Project	Page 49
Scheduling and planning of events and tasks	Page 50

#### **Executive Summary**

The Carenet Project intends to provide an overall picture of CCI members community, giving visibility to the actions of CCI members around the world. One of the main actions that we have been carrying out until the present moment encompasses a scoping review of literature reviews with the aim of mapping the research describing psychosocial interventions in childhood oncology contexts. As such, the following tasks regarding the 1<sup>st</sup> Part of the Literature Review, which are further described in this report, have been developed: i) Development and definition of a literature search strategy; ii) Development of the eligibility criteria of the articles; iii) Screening and study selection; iv) Data extraction from the articles; v) Writing of the article. A total of 5 literature reviews were included, which comprehend 116 primary articles regarding psychosocial interventions in the childhood oncologic disease context. We are now in the process of reviewing the article for journal submission. The 2<sup>nd</sup> Part of the Literature Review encompasses the gathering and analysis of CCI documents. About this action, the following tasks have been completed: i) Preparation of the document analysis grid; ii) Gathering of documentation online through the CCI partners' websites. The next steps are i) the gathering of documentation through specific requests via e-mail and ii) the subsequent document analysis. The next immediate planned action of the project concerns the focus groups preparation, which is included in the stage of the methodological development of The Carenet Project. Specifically, we will i) develop a script for the focus groups, ii) train the interviewer(s), (iii) define the structure of the groups (number of focus groups to be carried out, number of participants per group, languages in which the focus groups will be carried out) and iv) carry out the fieldwork (focus groups implementation).

The Iscte Research Team:

Cristina Camilo, PhD Sibila Marques, PhD Sónia Bernardes, PhD Jéssica Pimentel, MSc

#### 1. Introduction

Every year, more than 400 000 children and adolescents below 20 are diagnosed with cancer. Under these circumstances, the rate of survival varies between 80% in most high-income countries, and 20% in low-and middle-income countries (<u>https://www.childhoodcancerinternational.org</u>). At the present time, cancer is the leading non-communicable cause of childhood deaths in high- and middle-income countries.

The consequences of the oncologic disease are enormous for children and adolescents, who have to endure such a debilitating disease at an early age. However, this health condition is also a burden for the survivors: 62.3% suffer from at least one chronic health condition, 29% reported moderate to severe pain, 27.5% have a severe or life-threatening condition, and 95% will have a significant health-related issue by the time they are 45 years of age (Oeffinger et al., 2006; Hudson et al., 2013; Karlson et al., 2020). The families, and in particular the primary caregivers (which are often the parents), are also immensely affected by this disease, namely through its psychosocial consequences, which we will further elaborate on.

Childhood Cancer International (CCI), as an umbrella organization of childhood cancer grassroots and national parent organizations, is the largest patient support organization for childhood cancer, building and enhancing the capacity of parent organizations. As such, CCI felt the need to develop a global diagnostic study with the purpose of listening to the main stakeholders of the CCI - key actors in each of the countries. To this end, the CCI Carenet Project aims to provide an accurate picture of the actions of the member organizations at a global level, identifying good practices that can serve as standards for all associates and identify priority intervention areas that can guide the design of new projects. Such project is currently being undertaken by the lscte research team.

By conducting a scoping review of literature reviews, we summarize and critically analyze the current state-of-the art of psychosocial interventions in childhood cancer aimed at patients, survivors and their families and informal caregivers.

We chose to perform a scoping review of literature review of reviews partially due to the existence of a vast literature on psychosocial interventions concerning childhood cancer. As such, this was the most practical and encompassing way of collecting a great amount of information on the topic, having into consideration the quantity of articles included.

According to the WHO (2020), psychosocial interventions can be defined as "interpersonal or informational activities, techniques, or strategies that target biological, behavioral, cognitive, emotional, interpersonal, social, or environmental factors with the aim of improving health functioning and well-being" (England, Butler & Gonzalez, 2015). Psychosocial interventions use a psychological, behavioral or social approach, or a combination of these, to improve psychosocial well-being and reduce the risk of poor mental health outcomes (England, Butler & Gonzalez, 2015). Such interventions include programs targeting children/adolescents individually or in groups, or their caregivers and families. Interventions could be centered in the school, community (including in humanitarian contexts such as refugee camps), health center or home. They could also be online, digital or combinations of all the above. A range of individuals such as teachers, health and non-health professionals, community workers, lay workers and peers can deliver the interventions. This is the definition that we had in mind while writing this report and that we will consider throughout the development of the CCI Carenet Project. In our scoping review, we map the literature describing psychosocial interventions approaches in the childhood oncologic disease context, specifically aiming children with cancer, their families and childhood cancer survivors.

#### 2. Methods

This study is a scoping review of literature reviews. Scoping studies are a popular approach for the review of health research evidence, being particularly useful when one intends to clarify a complex concept and refine subsequent research inquiries (Davis, Drey & Gould, 2009). Additionally, scoping reviews are used to examine a broad topic, mapping in a systematic and comprehensive way the published literature. Even though scoping reviews don't require an assessment of study's quality, it is considered a rigorous and methodological approach, analyzing the research activity regarding a specific field.

For this scoping review of reviews, we considered the most recent guidelines of the Joanna Briggs Institute (JBI) approach for scoping reviews (Santos, Secoli & Püschel, 2018), which were built upon previous guidelines of Arksey and O'Malley's (Arksey and O'Malley, 2005) and Levac et al.'s (Levac et al., 2010), which we now briefly explain. The PCC (Population

5

(or participants)/Concept/Context) framework is recommended by the JBI to identify the main concepts in the primary review questions. This framework then informs the succeeding search strategy. Breaking down the research question in this way allows the researcher to check for any potentially missed inclusion and exclusion criteria for the review protocol (Santos, Secoli & Püschel, 2018).

Arksey & O'Malley (2005) methodological Framework for scoping reviews encompasses five distinct stages, namely: (1) Identifying the research question; (2) Identifying relevant studies; (3) Study selection; (4) Charting the data; and (5) Collating, summarizing, and reporting the results. This analysis allows the identification of gaps in the evidence base and therefore the synthesis and dissemination of the research findings. Having the results presented in a comprehensible and user-friendly format, policy makers, practitioners and consumers are better able to make efficient use of the findings (Arksey & Lisa O'Malley, 2005).

Levac et al (2010) include the following recommendations for clarifying and enhance the scoping review methodology: clarifying and linking the purpose and research question; balancing feasibility with breadth and comprehensiveness of the scoping process; using an iterative team approach to selecting studies and extracting data; incorporating a numerical summary and qualitative thematic analysis; identifying the implications of the study findings for policy, practice, or research; and adopting consultation as a required com- ponent of scoping study methodology.

#### 2.1. Search strategy

We developed a search strategy to frame the idea of interventions in the childhood oncologic disease context. The following electronic databases were used: PubMed, APA PsycInfo, Sage Journals, Scopus, WebofScience (Table 1). Our goal was to identify interventions targeting children with cancer, their families and childhood cancer survivors. The results of the search were retrieved and then the duplicates were identified and removed. Afterwards, a first screening of the articles took place, which was done through the assessment of title and abstract. The complete search strategy can be found in Appendix A.

## Table 1

Key search strategy concepts.

Concept	Search String	Database
Psychosocial interventions	(Psychosocial interventions	
	OR Health Promotion	PubMed, Apa PsycInfo, Sage
	Interventions OR	Journals, Scopus,
	Psychosocial Support OR	WebofScience
	Supportive Care OR Non-	
	pharmacological	
	Interventions OR	
	Psychological Interventions	
	OR Psychoeducation)	
Childhood Cancer	AND (Childhood Cancer OR	
	Pediatric Cancer OR	
	Childhood Oncologic Disease	
	OR Pediatric Oncologic	
	Disease)	
Family	AND (Primary Caregivers OR	
	Parents OR Siblings OR	
	Families OR Children)	
Survivors	AND (Childhood Cancer	
	Survivors OR Childhood	
	Cancer Survivorship OR	
	Oncology Cancer Survivors	
	OR Oncology Cancer	
	Survivorship OR Pediatric	
	Cancer Survivors OR	
	Pediatric Oncology	
	Survivors)	
Type of Review	Meta-analysis OR meta-	
	synthesis OR scoping review	
	OR scoping study OR rapid	
	review OR critical review	

#### 2.2. Eligibility criteria

The inclusion and exclusion criteria for the scoping review of reviews are listed in Table 2. We considered that a period of one decade would be broad enough to include the most recent advances in the area, but at the same time, not too narrow, preventing important literature from being excluded. As such, we decided to analyze the last ten years of childhood cancer psychosocial intervention literature to gain a broad enough understanding of recent advances.

#### Table 2

Eligibility for inclusion.

Inclusion criteria	Exclusion criteria					
Human subjects in any country.	Interventions that, although may be					
Published in English	included in the childhood oncologic disease					
Date range 2012 – 2022	context, are not aimed at children with					
Research targeting children with cancer,	cancer, their families and/or at childhood					
their families and childhood cancer	cancer survivors.					
survivors.	Articles that didn't report a rigorous					
Methods describe a systematic	methodology (e.g., book reviews, opinion					
review, meta-analysis, meta-synthesis,	articles, commentaries or editorial reviews).					
integrative analysis, rapid review, or a	Research focusing on theories or concepts					
systematic approach to data collection.	that support policy development, but do not					
The articles must reflect psychosocial	report psychosocial outcomes regarding					
interventions.	psychosocial interventions.					
	Research that is focused on study design					
	(e.g., methodology or protocol papers).					

#### 2.3. Screening and study selection

The studies included in the review were selected through a screening process with two stages. Firstly, the titles and abstracts were assessed by two independent reviewers in order to determine suitability for inclusion. Whenever uncertain, the articles were retained for additional analysis and the final decision was reached by consensus. Then, the second stage consisted in the full-text analysis of the remaining articles to determine their eligibility, which was also done independently by two reviewers. To resolve discrepancies, besides the existing discussion among the research team, the interjudge agreement was calculated, assuring the rigor of the process. The interjudge agreement, that was calculated having into consideration that two independent reviewers analyzed the articles, has a % of agreement of 96.88% (Cohen's k: 0.91), which means an almost perfect agreement. As such, it is considered that the mentioned methodology was followed with rigor and that the quality of the process of the screening and selection of articles was ensured.

#### 2.4. Data extraction

Data was extracted from the review papers included in the scoping review by two independent reviewers using a data extraction tool developed by our research team. The involvement of at least two reviewers in the process of data extraction reduces the chance of errors and bias, thus ensuring its rigor (Peters et al., 2020). In order to define the extraction method, the PRISMA guidelines were followed and then some specific dimensions were added so that we could properly meet the review question specifications. The extracted data includes specific details about the participants, concept, context, study methods and key findings relevant to the review question, particularly to map the literature describing psychosocial interventions approaches in the childhood oncologic disease context, aiming specifically children with cancer, their families and childhood cancer survivors. Being psychosocial interventions "interpersonal or informational activities, techniques, or strategies that target biological, behavioral, cognitive, emotional, interpersonal, social, or environmental factors with the aim of improving health functioning and well-being" (England, Butler & Gonzalez, 2015), the specific goals of the interventions were mentioned and detailed. Other important addition to the data extraction form entails the suggested guidelines of the review authors for future Interventions aimed at children with oncologic disease, their families and/or childhood cancer survivors. Additionally, the TIDieR checklist (Hoffmann et al., 2014) was also considered – some criteria were added (Why; When and how much; and Tailoring).

As such, the extracted data comprised the succeeding elements:

- Review identifiers (authors, year of publication, place of publication, language of the article, and periodical – simplified by the use of the bibliographic reference);
- 2. Type of review review type and number of studies in the review;
- 3. Review aim or goal specifying what the review intends to achieve;
- 4. Inclusion/ exclusion criteria for the inclusion of the interventions in the reviews;
- Setting and population (physical or geographical location of the intervention, age groups or ethnicities of the population; specifying if the interventions are intended for children with cancer, their families and/or pediatric oncologic disease survivors);
- 6. Outcome variables what are the expected results of the interventions.
- 7. Determinant variables biological, behavioral, cognitive, emotional, interpersonal, social, or environmental (it is expected, since we are approaching psychosocial interventions, that few or any biological determinants will be identified). Also, determinant variables might comprise an inclusion criteria of the identified reviews, otherwise that information might not be available in the studies and, if so, we might not be able to retrieve it.
- 8. Mechanisms of change considering the different levels of analysis of the socioecological model.
- Description of the goal of the interventions (and the psychosocial concern(s) addressed by the interventions);
- 10. Why description of the rationale, theory or goal of the elements essential to the intervention(s) with children with cancer, families or childhood cancer survivors;
- 11. Structure and methods of the interventions (tools, scales, or surveys used to assess changes regarding psychosocial concerns about the target population);
- When and how much description of the number of times that the interventions were delivered and over what period of time (for example: number of sessions, schedule, duration, intensity and/or dose);
- Tailoring if the interventions intended to be personalized or adapted it should be specified how, what, why and when;
- 14. Results or key findings relevant to the review question. In this study we consider that results are the response to the review question, meaning that what we are referring

to as results are the answers to the main research questions or the effects of the interventions;

- 15. Limitations and biases of the reviews appointed by the authors;
- 16. Suggested guidelines by the authors of the reviews for future Interventions aimed at children with oncologic disease, their families and/or childhood cancer survivors.

The data extraction form is provided (and it can be consulted in Appendix B), along with the extracted information itself. It is worth observing that the scoping review methodology is a broad one and so is our research question. Therefore, the data extraction tool was modified and revised as necessary during the process of extracting data from each included evidence source. One significant modification in the scoping review concerns the fact that not all criteria from the TIDieR checklist (Hoffmann et al., 2014) were considered. In order to make that decision, we tried to apply all of the criteria to the two most recent articles included in our scoping review and we then realized that not all could be answered solely through the consultation of the reviews. As such, we decided to apply only the criteria that could be answered with the information comprised in the reviews and not in the primary sources. That decision was made considering the fact that scoping reviews of reviews don't intend to consult original articles, but should be limited to reviews. Any disagreements that arose between the researchers were resolved through discussion, or with an additional researcher(s). Indeed, data extraction in scoping reviews often is an iterative process, usually entailing several enhancements to be able to best meet the objectives and research question(s) of the scoping review (Peters et al., 2020).

#### 3. Results

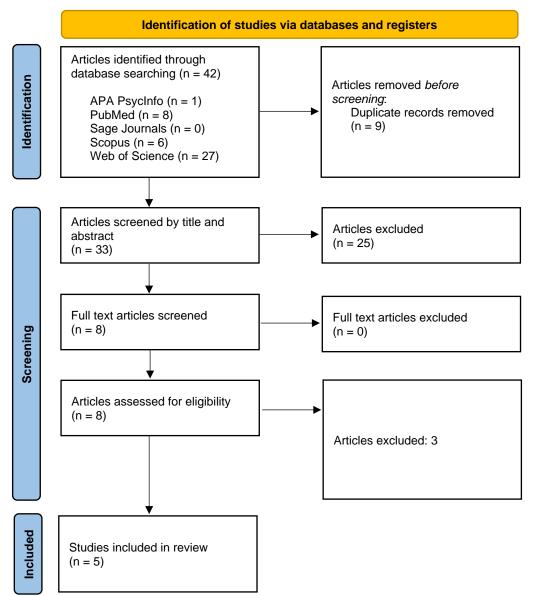


Fig. 1. PRISMA flow diagram describing the results of the literature search and study selection.

### Table 3

Overview of the included studies - Interventions for children with cancer, their families and childhood cancer survivors.

Title of the Articles	Review/ Interventions aims	Target Population	Results	Relevant Key Findings					
Complex behavioral interventions targeting physical activity and dietary behaviors in pediatric oncology: A scoping review (Demers et al., 2021).	To review complex behavioral interventions (CBI) targeting <u>physical</u> <u>activity and/or</u> <u>dietary behaviors</u> in pediatric oncology.	Children with cancer and childhood cancer survivors	14 studies included	The interventions typically focused on PA, had a short duration (<6 months) and were conducted during the survivorship phase. There is preliminary evidence that CBI are feasible and potentially beneficial for children with cancer and survivors to improve their health behaviors and outcomes. Addressing parenting practices and offering psychosocial support or training to families may be beneficial for both parents and children with cancer.					
School and educational support programmes for paediatric oncology patients and survivors: A systematic review of evidence and recommendations for future research and practice (Burns et al., 2021).	To identify peer- reviewed <u>education support</u> <u>programs</u> and compared them against the PSSC education standards.	Children with cancer and childhood cancer survivors	24 peer- reviewed articles included	Three school re-entry programs met all evaluation criteria, and their components were timed according to the child's position on the cancer trajectory (e.g., diagnosis and treatment, school re-entry, and follow up throughout schooling). These interventions appear to enhance students' education experiences and improve outcomes, which provides a promising structure for future education support programs.					
Non-pharmacological interventions for pediatric cancer patients: A comparative review and	To summarize the evidence-based <u>psychological</u> <u>interventions</u> in childhood cancer	Children with cancer	28 intervention studies on children with cancer were	The benefit of intervention has been mostly seen in anxiety and distress. Aspects of behavior (internalizing, social competence) and trauma have also been shown to improve significantly. Neurocognitive benefits have been reported for variables like attention, memory, intelligence,					

emerging needs in India (Satapathy et al., 2018).	and address the gap between intervention studies worldwide and India.		included (one from India)	vigilance and learning with cognitive remediation programs.					
Psychosocial interventions for rehabilitation and reintegration into daily life of pediatric cancer survivors and their families: A systematic review (Peikert et al., 2018).	To provide an overview of <u>psychosocial</u> <u>interventions</u> for childhood cancer survivors and their families in the first years after the end of cancer treatment.	Childhood Cancer Survivors and their families	33 articles included	Most of the studies reported a significant psychosocial benefit of the interventions. Overall, the investigated interventions helped families to improve their mental well-being and enhance social skills.					
Psychological symptoms, social outcomes, socioeconomic attainment, and health behaviors among survivors of childhood cancer: current state of the literature (Brinkman et al., 2018).	To review empirically supported interventions for psychological symptoms, for social functioning and for <u>risky</u> health behaviors in survivors of childhood cancer.	Childhood Cancer Survivors	17 articles included	This review states that many interventions suggest potential efficacy and should begin to be incorporated and disseminated as part of standard clinical care.					

#### **3.1.** Description of the main key findings

In this scoping review of literature reviews, we map the literature describing psychosocial interventions in childhood oncologic disease contexts, specifically aiming at children with cancer, their families and informal caregivers and childhood cancer survivors.

As described in the PRISMA flow diagram (Figure 1), a total number of 5 literature reviews were included. These 5 articles encompass a total of 116 primary articles regarding psychosocial interventions in the childhood oncologic disease context. We start by exploring each review article and their particularities individually, stating the aims and the types of interventions approached. For clarification, we also provide further definitions of the distinct interventions that were carried out. Afterwards, a general discussion is presented. Ultimately, we proceed with presenting suggested guidelines for future psychosocial interventions and research with the mentioned population and primary conclusions. In table 3 we provide an overview of the included studies. A more detailed analysis can be found in Appendix B.

Demers et al. (2021), in their scoping review regarding the use and effects of complex behavioral interventions (CBI) targeting physical activity and/or dietary behaviors in pediatric oncology, emphasize how CBI can potentially make a positive impact on children with cancer, childhood cancer survivors, their families, and the health care system, improving health behaviors and patient outcomes such as physical and psychological health. The authors also mention that there is a lack of studies in the area, particularly for younger children and patients still undergoing cancer treatment. They suggest that future research is vital in identifying and defining the most efficient methods to implement CBI. In this review were included fourteen quantitative studies which, overall, demonstrated that it is feasible to implement CBI. Nonetheless, due to a paucity of studies and the heterogeneity of the studies included in the review, it was not possible to identify conclusive evidence favoring specific interventions.

A systematic review of evidence and recommendations for future research and practice, by Burns et al. (2021), approaches school and educational support programs for pediatric oncology patients and survivors. The authors identified 20 education support programs in pediatric oncology, including peer programs (n = 3), teacher programs (n = 5), and school re-entry programs (SRPs n = 12). Of these, only 3 met with the evaluation criteria as specified by the PSSC (Psychosocial Standards of Care) education standards. Regarding the limitations, Burns et al. (2021) point that there is a lack of theoretical underpinnings and

negligible evidence of programs' effectiveness. As such, they also compiled a set of recommendations for clinical practice and research, namely: 1) Ensure education support services are available to all cancer patients; 2) Provide details about program content, timing, and materials to enhance implementation; 3) Ground programs in appropriate theory and modelled outcomes and utilize rigorous methods of evaluation; 4) Adapt programs to local contexts to support implementation.

Satapathy et al. (2018) undertook a Comparative Review concerning nonpharmacological interventions for pediatric cancer patients, approaching the emerging needs in India. As such, 28 intervention studies on children with cancer were included (one study from India): 18 were conducted on children under treatment, 7 on survivors, 2 on offtreatment patients and 1 on mixed sample. There were distinct types of interventions: psychosocial (7), physical (7), cognitive behavioural (4), cognitive (3), music-art therapy and play therapy (4), mindfulness mediation (1), digital storytelling (1) and mixed physical and psychosocial intervention (1). Regarding the therapeutic outcomes, the authors reported that there were benefits mostly in anxiety and distress. Furthermore, they also reported significant improvements in some aspects of behavior (internalizing, social competence) and trauma. The authors also mentioned that some of the challenges that the research in pediatric psychooncology in India faces are related with the affordability of care, provision of adequate health personnel and environmental and sociocultural barriers to cancer control.

Peikert et al. (2018), in their systematic review concerning psychosocial interventions for rehabilitation and reintegration into daily life of pediatric cancer survivors and their families, aimed to provide an overview of psychosocial interventions for childhood cancer survivors diagnosed before the age of 21 and their family members in the first years after the end of acute cancer treatment. The authors included 33 articles in the qualitative synthesis: 15 studies described interventions for the cancer survivor; 9 studies regarding interventions for the whole family; 2 studies interventions for siblings. The interventions mainly take place in an outpatient group setting (n = 15). They mentioned that most of the studies reported a significant psychosocial benefit of the interventions; nevertheless, the quality of the included studies was limited. There were diverse aims of the interventions in the studies: reduction of psychological burden (n = 9); reduction of physical and psychological burden (n = 9); improvement of social skills (n = 8); increase of social support (n = 6); psychoeducation (n = 2). Peikert et al. (2018) also stated that social support appears to be a protective factor in siblings of childhood cancer patients, meaning that psychosocial interventions focusing on social support could prevent long-term negative psychosocial consequences. As such, they recommend psychosocial support for the family as a whole.

Brinkman et al. (2018) reviewed the literature concerning psychosocial outcomes for survivors of childhood cancer, emphasizing the risk factors for adverse outcomes and highlighting potentially efficacious interventions to improve psychosocial outcomes for survivors. The authors reviewed empirically supported interventions for psychological symptoms in survivors of childhood cancer (N=4); empirically supported interventions for social functioning in survivors of childhood cancer (N=4); and empirically supported interventions for risky health behaviors among survivors of childhood cancer (N=9). It is worth noting that the authors refer that although most intervention efforts to date have been small, many suggest potential efficacy and should begin to be incorporated and disseminated as part of standard clinical care. They also mention that an important area of future research centers on the identification of potential genetic predispositions related to psychosocial outcomes among survivors of childhood cancer.

#### 3.2. Aims, Types and Definitions of the Interventions

Demers et al. (2021) reviewed complex behavioral interventions (CBI) targeting physical activity and/or dietary behaviors in pediatric oncology. Studies could also include other health behaviors such as smoking, alcohol consumption, sun protection, health accountability, and self-examination. The included studies in this review evaluated a combination of modalities including educational interventions, individualized or group PA interventions, counseling, psychosocial support or training, reward system (i.e., healthy goods and services), and adventure-based activities. Programs included between two and three different modalities. Five studies were conducted in a hospital or clinic, four were delivered using various technologies (i.e., emails, text messages, online platforms) or telephone, two were home-based, and three were community based.

Complex Behavioral Interventions (CBI) are defined as broad interventions that are built from several interacting components, using multiple modalities to change one or more health behaviors. As such, a complex behavioral intervention will comprise a minimum of two different modalities (education, face-to-face intervention, self-management tools, among others), propelling the modification of actions that individuals take regarding their health (Craig et al., 2008; Cutler, 2004; Demers et al., 2021).

Burns et al. (2021) identified peer-reviewed education support programs and compared them against the PSSC education standards. Their systematic review included 24 peer-reviewed articles, reporting on 20 education support programs, which consisted of 3 peer programs, 5 teacher programs, and 12 SRPs (school re-entry programs).

Education support programs were developed to address the needs to deliver education support for childhood cancer patients and survivors. Psychosocial Standards of Care (PSSC) for pediatric oncology details standards that relate specifically to education support. It postulates that all children should have continuous access to their education throughout treatment, and that all should have access to school re- entry support in the form of timely information provision to the child's school about the implications of diagnosis and treatment on education. The PSSC also recommends continued monitoring of neurocognitive late effects and yearly screening for adverse academic progress, for survivors of childhood cancer (Wiener et al., 2015; Burns et al., 2021)

Satapathy et al. (2018), in their review, intended to summarize the evidence-based psychological interventions in childhood cancer. There were various types of interventions: psychosocial, physical, cognitive behavioral, cognitive, music art therapy and play therapy. Generally, intervention settings were either hospital or home, and were designed to promote psychological well-being. The main outcome measure of interest was a change in the mental health profile of children with cancer (e.g. quality of life, behavior, sleep, fatigue, anxiety, depression, attention, academic achievement, resilience, distress etc.).

Psychological interventions cover a broad spectrum of behavioral and psychological problem areas, and can be classified as either coping-oriented or psychotherapeutic (i.e. mental health interventions) (Hendrieckx et al., 2021). As such, psycho-oncological interventions encompass a broad spectrum, and may include psychopharmacological treatments, relaxation and music-therapy and psychotherapy (de Vries & Stiefel, 2013). Satapathy et al. (2018) focused mainly on psychosocial, physical, cognitive behavioral, cognitive, music-art therapy and play therapy. Moreover, they also approached mindfulness mediation, digital storytelling and a mixed physical and psychosocial intervention (Satapathy et al., 2018). Cognitive Behavioral Interventions intend to reduce psychological distress and enhance adaptive coping by modifying maladaptive thoughts and behaviors, by raising

18

awareness of emotional states and their connection with thoughts and behaviors, and by providing new skills (Hollon and Beck, 2004). Bishop et al. (2004) propose a operational definition for mindfulness and state that it can be conceptualized as a clinical approach to foster an alternative method for responding to one's stress and emotional distress. By becoming more aware of thoughts and feelings, relating to them in a wider, decentered field of awareness, and purposefully opening fully to one's experience, clients can abandon dysfunctional change agendas and adopt more adaptive strategies.

Peikert et al. (2018) aimed to provide an overview of psychosocial interventions for childhood cancer survivors and their families in the first years after the end of cancer treatment. The studies cover a wide range of different intervention settings: 15 studies describe interventions in an outpatient group setting; Four different cancer camps were evaluated in the included studies; Five studies evaluated a family-oriented rehabilitation program; Three studies evaluated computer-based interventions; Four studies described outpatient individual interventions; One study assessed psychosocial outcomes in participants of a home-based intervention. The primary aims of the interventions also vary across the studies: Reduction of psychological burden (n = 9), reduction of physical and psychological burden (n = 9), improvement of social skills (n = 8), increase of social support (n = 6), and psychoeducation (n = 2).

Brinkman et al. (2018) reviewed empirically supported interventions for psychological symptoms in survivors of childhood cancer (N=4) (CBT, family therapy, coping skills training, internet-based individual CBT); empirically supported interventions for social functioning in survivors of childhood cancer (N=4) (peer-mediated group training, group social skills training); and empirically supported interventions for risky health behaviors among survivors of childhood cancer (N=9) (survivorship peer counseling, tailored and targeted written educational materials and free nicotine replacement therapy; Web-based intervention or print materials condition that included the provision of self-help materials; enhanced care/decision aid intervention psychoeducational modules, an educational CD-ROM, tailored substance use risk behavior counseling delivered by nurse practitioners and telephone boosters; multicomponent risk counseling intervention; 12-week Facebook-based intervention; integrated adventure-based training and health education program; health behavior change intervention designed to increase sun safety practices).

#### 3.3. Guidelines Suggestions for Future Psychosocial Interventions and Research

Demers et al. (2021) listed the following suggestions regarding complex behavioral interventions targeting physical activity and dietary behaviors in children with cancer and cancer survivors:

- Important elements that should be included or considered are self-efficacy, psychological variables and cognitive deficits.
- To enlist the support of parents or friends to provide additional social support to the CCS.
- To use targeted, individualized programs and age-appropriate approaches.
- The use of technology offers a feasible, relatively low-cost alternative to more in-person intensive interventions in this at-risk but sparse population because it can be distributed across time and geography. Nonetheless, personal contact also appeared to help compliance with protocol and followup. An online intervention is feasible and acceptable among young CCS.
- It may not be feasible to implement interventions during early treatment owing to the child's responses to the disease and treatment. For survivors, it was found that trying to recruit after treatment was difficult as families are often trying to forget their cancer and hospital experiences and, similarly, too long after (e.g., more than 3 years) was also difficult as families are likely to have created a new normal.

Demers et al. (2021) also mentioned that future research is vital in identifying and defining the most efficient methods to implement CBI. Specifically regarding the gaps that should be addressed in future studies, these authors mentioned that, in their review, no studies included families of children younger than 3 years of age or focused specifically on children with central nervous system or solid tumors. They also mentioned that intervening during early childhood is an opportunity to improve lifelong health outcomes since it is known that healthy behaviors such as a healthy diet established during childhood continue into adulthood. Finally, they also reported that data on race or ethnicity and socio-economic status were also not available for most studies, which could help identify and address health disparities.

Burns et al. (2021) compiled a set of recommendations for clinical practice and research regarding education support programmes for children with cancer, namely:

- Ensure education support services are available to all cancer patients.
- Provide details about programme content, timing, and materials to enhance implementation.
- Ground programmes in appropriate theory and modelled outcomes and utilize rigorous methods of evaluation.
- Adapt programmes to local contexts to support implementation.

For future non-pharmacological interventions for pediatric cancer patients, Satapathy et al. (2018) suggest the following:

- Researchers can focus on developing and testing culturally sensitive intervention modules for children with cancer that use feasible, cost-effective modes of delivery.
- Researchers may focus on developing problem-focused techniques for children with cancer in different phases of cancer trajectory.
- Studies should also report long-term follow up of the participants in intervention, due that childhood cancer is not only associated with apparent psychological symptoms during treatment but present themselves during post treatment in the form of neurocognitive deficits and trauma.
- Improvement of interventions for neurocognitive problems, combining them with treatments that target emotional and socio-behavioral components of functioning.

Regarding the implications for research and clinical practice concerning psychosocial interventions for childhood cancer survivors and their families in the first years after the end of cancer treatment., Peikert et al. (2018) leave the following suggestions:

- More high-quality studies investigating the efficacy of psychosocial interventions for childhood cancer survivors and their family members are necessary;
- More high quality randomized controlled trials should be conducted;
- Future studies should counteract the low reporting quality by following reporting guidelines

- Siblings and the family as a whole should be addressed in psychosocial interventions after the successful treatment of the patient
- Once the investigated interventions helped families to improve their mental well-being and enhance social skills, these results can be used to optimize health care services that help families with the re-entry into daily life
- Overall, more high quality studies are necessary to validate previous findings and to develop future comprehensive interventions.

Brinkman et al. (2018) compiled the following Psychosocial Standards of Care for Survivors of Childhood Cancer:

- Routine and systematic assessment of psychosocial needs
- Monitoring of neuropsychological deficits in survivors of brain tumor and other high-risk groups
- Annual psychosocial screening of long-term survivors for educational/vocational progress; social relationships; anxiety, depression, and distress symptoms; and risky health behaviors
- Access to psychosocial support and interventions
- Assessment of financial hardship with targeted referrals
- Education and anticipatory guidance related to late effects provided throughout the trajectory of cancer care
- Opportunities for social interaction
- School-reentry support that includes provision of information and recommendations to school personnel
- Open, respectful communication and collaboration among families and providers

#### 4. Discussion

Although only 5 articles were included in this literature review of reviews, it is worth noting that we could encompass a broad spectrum of research, with a total number of 116 primary articles regarding psychosocial interventions in the childhood oncologic disease context. As such, these 5 literature reviews, although distinct in methodology and goals, also have some converging points, which we will following discuss.

Demers et al. (2021), in their scoping review, approached the use and effects of complex behavioral interventions (CBI) targeting physical activity and/or dietary behaviors in pediatric oncology. Burns et al. (2021), in a systematic review, identified education support programs in pediatric oncology patients and survivors. Satapathy et al. (2018) undertook a Comparative Review regarding non-pharmacological interventions for pediatric cancer patients, approaching the emerging needs in India. Peikert et al. (2018) systematically reviewed psychosocial interventions for rehabilitation and reintegration into daily life of pediatric cancer survivors and their families. Brinkman et al. (2018) reviewed the literature concerning psychosocial outcomes for survivors of childhood cancer, highlighting potentially efficacious interventions to improve psychosocial outcomes for survivors.

As such, both Demers et al. (2021) and Burns et al. (2021) focused on children with cancer and cancer survivors. The involvement of families and their own outcomes was also often mentioned in multiple reviews. Regarding CBI targeting the adoption of a healthy diet and frequent PA, Demers et al. (2021) refer that parental involvement should be considered throughout the continuum of care and regardless of the survivors' age, since addressing parenting practices and offering psychosocial support or training to families may be beneficial for both parents and children with cancer. Similarly, Satapathy et al. (2018) recommend to review studies on impact of parental interventions on child's psychosocial and behavioral functioning or on pain management due to the adverse impact of parental stress on pediatric survivors' emotional and somatic distress. Likewise, Burns et al. (2021) stated that their review was limited to programmes that predominantly reported outcomes for the child with cancer and their parents; however, they considered that siblings, peers, teachers, and healthcare professionals have distinct information and support needs in the process of delivering and advocating education support, which should be considered in future education support programmes. Interestingly, Peikert et al. (2018) focused not only on pediatric cancer survivors but also on their families, expressing that childhood cancer seems to be a family

challenge that goes far beyond cancer treatment. They also emphasized that social support seems to be a protective factor in siblings of childhood cancer patients and thus psychosocial interventions focusing on social support could prevent long-term negative psychosocial consequences (Peikert et al., 2018).

Satapathy et al. (2018) focused only on interventions for children with cancer and Brinkman et al. (2018) focused only on interventions for survivors of childhood cancer. Concerning psychosocial outcomes, Satapathy et al. (2018) mentioned that the psychosocial needs identification and analysis of intra-personal processes and interpersonal dynamics in adaptation have been overlooked, especially in India; as so, they consider that there are opportunities to further refine interventions for neurocognitive problems and to combine them with treatments that target emotional and socio-behavioral components of functioning. Similarly, and despite many pediatric oncology programs lacking the multidisciplinary teams necessary to implement the full set of standards, Brinkman et al. (2018) consider that psychosocial programming must be prioritized in pediatric oncology and survivorship settings as a means of promoting prosocial development and physical and mental health outcomes across the cancer continuum. Additionally, the incorporation of mental health and behavioral measures in established and new cohort studies will support research across a broader range of survivors and new cancer therapies and longitudinal studies will serve to enhance understanding of the time course of these outcomes as well as specific temporal causes Brinkman et al. (2018).

It was also possible to identify some particular needs. Satapathy et al. (2018) advocate that there is a need to develop and test culturally relevant intervention modules that use feasible, cost-effective modes of delivery. Brinkman et al. (2018) suggest that assessing psychiatric diagnoses and impairment because of psychological symptoms in outcomes research will significantly improve the understanding of survivors' mental health needs and help inform the development of intervention programs to meet those unique needs. An important area of future research centers on the identification of potential genetic predispositions related to psychosocial outcomes among survivors of childhood cancer (Brinkman et al., 2018).

There is a converging concern that arose in all of the reviews included in our study: methodological limitations. Demers et al. (2021) didn't identify conclusive evidence favoring specific interventions, although reporting preliminary evidence that CBI are feasible and

24

potentially beneficial for children with cancer and survivors to improve their health behaviors and outcomes. Burns et al (2021), likewise, pointed the limitation of lack of theoretical underpinnings and negligible evidence of programmes' effectiveness, identifying 20 education support programmes for children with cancer, but only 3 meeting their evaluation criteria. Additionally, Demers et al. (2021) mentioned that rigorous experimental methods should be applied to behavioral studies, and suggested that researchers could use the ORBIT model, which was developed to identify the most productive ways to implement durable behavioral studies. Satapathy et al. (2018) refer that it was not possible to make a definite recommendation on the most effective psychological intervention in pediatric cancer due to a lack of homogeneity in study design and intervention, which has limited the review to a qualitative analysis only. Although the variations in research designs and intervention outcomes provide insight into the wide range of techniques available, the limited number of studies employing each type of technique prevented further comprehensive analysis (Satapathy et al., 2018). Peikert et al. (2018) concluded that even though clinical efficacy could not be confirmed in all of their reviewed studies, for all settings at least some studies revealed a statistically significant benefit and therefore offer starting points for further research. Overall and similarly to the other reviews, the methodological quality of the included studies was poor (Peikert et al., 2018), being evident the necessity of more high-quality studies to validate prior findings. Also, due to the methodological heterogeneity of the studies, Peikert et al. (2018) could not conduct a quantitative synthesis of the study results.

#### 5. Conclusion

A scoping review of reviews was carried out, in which we mapped the literature describing psychosocial interventions approaches in the childhood oncologic disease context, specifically aiming children with cancer, their families and childhood cancer survivors.

In order to ensure the rigor of the used methods, we had into consideration the Joanna Briggs Institute approach for systematic reviews (Santos, Secoli & Püschel, 2018), Arksey and O'Malley's scoping review methodology (Arksey and O'Malley, 2005) and also Levac et al.'s methodology advancement (Levac et al., 2010). Furthermore, a search strategy was developed to frame the idea of interventions in the childhood oncologic disease context. Then, the inclusion and exclusion criteria for the scoping review of reviews were listed and the studies were screened and selected. The interjudge agreement was calculated, representing an almost perfect agreement. Then, we described the data extraction strategy that was developed and carried out.

Afterwards, we present the results of the scoping review of reviews, displaying the PRISMA diagram flow with the description of the results of the literature search and study selection, also presenting a table with an overview of the included studies regarding the interventions for children with cancer, their families and childhood cancer survivors. We then proceed to the description of the main key findings from the reviewed articles. After that, we state the aims and the types of interventions carried out in the reviews and further define the distinct interventions. Subsequently, we present guidelines suggestions for future psychosocial interventions and research.

Ultimately, there is preliminary evidence that CBI are feasible and potentially beneficial for children with cancer and survivors to improve their health behaviors and outcomes and that addressing parenting practices and offering psychosocial support or training to families may be beneficial for both parents and children with cancer. The school re-entry interventions appear to enhance students' education experiences and improve outcomes, providing a promising structure for future education support programs. The benefits of non-pharmacological interventions has been mostly seen in anxiety and distress. Regarding the rehabilitation and reintegration into daily life of childhood cancer survivors and their families, there was a significant psychosocial benefit of the interventions which, overall, helped families to improve their mental well-being and enhance social skills. Concerning interventions for psychological symptoms, social functioning and risky health behaviors, many interventions suggest potential efficacy and some authors suggest that they should be incorporated and disseminated as part of standard clinical care.

Overall, the existing literature on psychosocial interventions in the childhood cancer context reveals promising results on the improvement of psychosocial outcomes on children with cancer, survivors of childhood cancer, and their families. Despite this, more quality research is needed in order to confirm the interventions efficacy.

26

### Appendix A. Search strategy

Search String	Database / N	Other considerations
	Articles	
(((psychosocial interventions[Title/Abstract] OR	PubMed	Filters applied: Meta-
Health promotion interventions[Title/Abstract] OR	N = 8	Analysis, Review,
psychosocial support[Title/Abstract] OR supportive		Systematic Review, in the
care[Title/Abstract] OR non-pharmacological		last 10 years, Humans,
interventions[Title/Abstract] OR psychological		English.
interventions[Title/Abstract] OR		
psychoeducation[Title/Abstract]) AND (childhood		The Title/abstract was
cancer[Title/Abstract] OR pediatric		considered because the
cancer[Title/Abstract] OR childhood oncologic		database didn't allow to
disease[Title/Abstract] OR pediatric oncologic		consider only the abstract.
disease[Title/Abstract])) AND (primary		
caregivers[Title/Abstract] OR parents[Title/Abstract]		Não foi possível obter
OR sibling[Title/Abstract] OR families[Title/Abstract]		acesso aos seguintes
OR children[Title/Abstract])) AND (childhood cancer		artigos:
survivors[Title/Abstract] OR childhood cancer		Weyl-Ben-Arush, M. (2017).
survivorship[Title/Abstract] OR oncology cancer		The price of the successful
survivors[Title/Abstract] OR oncology cancer		treatment of pediatric
survivorship[Title/Abstract] OR pediatric cancer		malignancies. Current
survivors[Title/Abstract] OR pediatric oncology		Pediatric Reviews, 13(1), 4-
survivors[Title/Abstract])		7.
		Cahaney, C., Dhir, A., &
		Ghosh, T. (2022). Role of
		Precision Medicine in
		Pediatric
		Oncology. Pediatric

annals, 51(1), e8-e14.

AB (psychosocial interventions OR Health promotion Apa PsycInfo interventions OR psychosocial support OR supportive N = 1 care OR non-pharmacological interventions OR psychological interventions OR psychoeducation) AND AB ( childhood cancer OR pediatric cancer OR childhood oncologic disease OR pediatric oncologic disease ) AND AB ( primary caregivers OR parents OR sibling OR families OR children ) AND AB ( childhood cancer survivors OR childhood cancer survivorship OR oncology cancer survivors OR oncology cancer survivorship OR pediatric cancer survivors OR pediatric oncology survivors ) Ano de Publicação: 2012-2022; Idioma: English; Grupo Populacional: Human; Metodologia: LITERATURE REVIEW

Abstract (psychosocial interventions OR Health promotion interventions OR psychosocial support OR supportive care OR non-pharmacological interventions OR psychological interventions OR psychoeducation) AND Abstract (childhood cancer OR pediatric cancer OR childhood oncologic disease OR pediatric oncologic disease) AND Abstract (primary caregivers OR parents OR sibling OR families OR children) AND Abstract (childhood cancer survivors OR childhood cancer survivorship OR oncology cancer survivors OR Filter applied: Publication Years: 2012-2021 Idiom: English Populational group: Human Methodology: literature review

Sage Journalswithin review article, SinceN = 02012

oncology cancer survivorship OR pediatric cancer survivors OR pediatric oncology survivors)

ABS ("psychosocial interventions" OR "Health promotion interventions" OR "psychosocial support" OR "supportive care" OR "nonpharmacological interventions" OR "psychological interventions" OR "psychoeducation") AND ABS ("c hildhood cancer" OR "pediatric cancer" OR "childhood oncologic disease" OR "pediatric oncologic disease") AND ABS ("primary caregivers" OR "parents" OR "sibling" OR "families " OR "children") AND ABS ("childhood cancer survivors" OR "childhood cancer *survivorship*" OR "*oncology cancer* survivors" OR "oncology cancer *survivorship*" OR "*pediatric cancer* survivors" OR "pediatric oncology survivors") AND (LIMIT-TO (DOCTYPE, "re")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-

Language: English Doc Type: Review Não foi possível obter acesso ao(s) seguinte(s) artigo(s): Cahaney, C., Dhir, A., & Ghosh, T. (2022). Role of Precision Medicine in Pediatric Oncology. *Pediatric annals, 51*(1), e8e14.

Scopus

N = 6

TO ( PUBYEAR , 2012 ) ) AND ( LIMIT-TO ( LANGUAGE , "English" ) )

(((AB=(psychosocial interventions OR Health	Web	of	Query link:
promotion interventions OR psychosocial support OR	Science		https://www.webofscience.
supportive care OR non-pharmacological	N = 27		<pre>com/wos/woscc/summary/</pre>
interventions OR psychological interventions OR			<u>09531e9e-1885-49bd-83f0-</u>
psychoeducation)) AND AB=(childhood cancer OR			25ac4c50df33-
pediatric cancer OR childhood oncologic disease OR			343ba305/relevance/1
pediatric oncologic disease)) AND AB=(primary			
caregivers OR parents OR sibling OR families OR			Não foi possível obter
children)) AND AB=(childhood cancer survivors OR			acesso ao(s) seguinte(s)
childhood cancer survivorship OR oncology cancer			artigo(s):
survivors OR oncology cancer survivorship OR			Weyl-Ben-Arush, M. (2017).
pediatric cancer survivors OR pediatric oncology			The price of the successful
survivors)			treatment of pediatric
			malignancies. Current
			Pediatric Reviews, 13(1), 4-
			7.

## Appendix B

Interventions for children with cancer, their families and childhood cancer survivors.

Bibliogra phic Referenc e	Typ e of revi ew	Review aim or goal	Inclusion / exclusio n criteria of the review	Setting and popula tion	Outc ome varia bles	Deter minan t variab les	Mechanis ms of change	Descripti on of the goal of the intervent ions	Why	Structure and methods of the intervent ions	When and how much	Tailoring	Results / relevant key findings	Limitations and biases of the reviews	Suggested guidelines for future Interventions
Demers,	Scop	To report	Studies	Studies	Beha	cance	complex	The	For many	The	The	In Keats	14 studies were	This is a	Supporting
С.,	ing	on the	were	include	vioral	r and	behavioral	intervent	cancer-	studies	shortes	and	included in this	developing field	participants' self-
Brochu,	revi	state of the	included	d a	: PA	its	interventi	ions	related	evaluate	t	Culos-	scoping review.	of research, with	efficacy.
A.,	ew	evidence	for full-	total of	(Physi	treat	ons	included	complica	d a	interve	Reed,	The	the oldest article	Psychological
Higgins,		on the use	text	1000	cal	ment		in this	tions,	combinat	ntion	2008;Can	interventions	published in 1999	variables and
J., &		and effects	review if	partici	Activi			review	behavior	ion of	had a	ada,	typically	and with few	cognitive deficits
Gélinas, I.		of complex	they	pants,	ty)			were	al	modalitie	half-	"Individu	focused on PA	studies using CBI	were deemed
(2021).		behavioral	involved:	rangin	was			based on	modificat	S	day	alized	alone or in	to date. The high	important to
Complex		interventio	(i)	g from	targe			CBI	ions	including	duratio	program	combination	variability in	address.
behaviora		ns (CBI)	children	1022	ted in			(Complex	represent	educatio	n, with	ming was	with other	intervention type	
1		targeting	with	to 267	13			behavior	the	nal	the	essential	health	and outcome	Positive social
interventi		physical	cancer	partici	studi			al	primary	intervent	post-	for the	behaviors, the	measures across	interactions and
ons		activity	or CCS	pants.	es			Intervent	method	ions (n =	interve	overall	majority had a	studies made	encouragement
targeting		and/or	who	The	and			ions)	of risk	11),	ntion	success."	short duration	comparison of	with the mentor
physical		dietary	were	age of	dietar			addressin	modificat	individual	assess		(<6 months)	results difficult.	was associated
activity		behaviors	diagnose	the	У			g PA	ion	ized or	ment	Braam et	and were	many of the	with greater
and		in pediatric	d before	partici	beha			(Physical	available	group PA	conduc	al.,	conducted	included studies	adherence to
dietary		oncology.	the age	pants	viors			activity)	to	intervent	ted 3	2018;Net	during the	had small sample	healthy behaviors,
behaviors			of 21, (ii)	ranged	in			and/or	children	ions (n =	month	herlands,	survivorship	sizes and short	therefore
in			CBI, and	from 3	seven			dietary	with	6),	S	stated	phase.	follow-up	recommending to
pediatric			(iii)	to 34				behavior	cancer	counselin	followi	that	CBI targeting	duration. This	enlist the support
oncology:			intervent	years				in	and	g (n = 5),	ng the	"targeted	the adoption of	review underlines	of parents or
A scoping			ions	old.				pediatric	survivors.	psychoso	interve	programs	a healthy diet	the need for	friends to provide
review. P			targeting	Four				oncology.		cial	ntion,	might be	and frequent	further well-	additional social
ediatric			PA	studies					To the	support	wherea	better	PA have huge	designed trials	support to the
Blood &			and/or	targete					authors'	or	s the	than	potential to	using	CCS.
Cancer, 6			dietary	d					knowledg	training	longest	standard	make a positive	standardized	_
<i>8</i> (8),			behavior	adoles					e, no	(n = 6),	propos	programs	impact on	outcome	To use targeted,
e29090.			S.	cents					guideline	reward	ed a	to	children with	measures to be	individualized
				and/or					s provide	system	2.5-	increase	cancer or CCS,	implemented in	programs and
				young					guid-	(i.e.,	year	the	their families,	this population as	age-appropriate
				adults					ance on	healthy	progra	applicabil	and the	well as addressing	approaches.
				(11–34					the	goods	m	ity,	overburdened	the gaps in the	Researchers could
				years						and ser-	beginni	motivatio	health care	evidence base.	use the ORBIT

 		<del>т г</del>					1	16		
	old),				promotio	vices) (n	ng	n, self-	system.	model, which was
	seven				n of	= 2), and	after	worth,	However, there	developed to
	include				complex	adventur	diagno	and at	is a lack of	identify the most
	d				behavior	e-based	sis and	the end	studies in this	productive ways
	childre				al	activities	contin	the	area, especially	to implement
	n and				intervent	(n = 1).	uing	effects of	for younger	durable
	adoles				ions (CBI)	Programs	throug	the	children and	behavioral
	cents				(i.e. <i>,</i> the	included	h the	program"	patients still	studies.
	(4–20				use of	between	end of		undergoing	Monitoring
	years				multiple	two and	treatm		cancer	devices such as
	old),				modalitie	three	ent.	Moyer-	treatment. No	accelerometers,
	and				s to	different	Most	Mileur et	conclusive	pedometers, and
	three				change	modalitie	interve	al.,	evidence	heart rate
	were				one or	s.	ntions	2009;US	favoring specific	monitors can be
	design				more		had a	A, refer	interventions	used to
	ed for				health	Health	duratio	"Individu	were identified,	objectively
	the				behavior	behavior	n	alization	although there	measure PA and a
	caregiv				s) in the	assessme	ranging	of	is preliminary	measure of
	ers of				pediatric	nts	betwee	exercise	evidence that	weight, BMI, or
	younge				oncology	included,	n 6 and	program	CBI are feasible	body composition
	r				populatio	but were	12	recomme	and potentially	change to
	childre				n.	not	weeks.	nded"	beneficial for	evaluate the
	n (3–					limited			children with	impact of change
	13					to, PA		Cox et	cancer and	in behavior.
	years					levels,		al.,	survivors to	Long-term follow-
	old).					dietary		2018;US	improve their	up may be
	No					recalls,		А,	health	needed to
	studies					health		mention	behaviors and	determine
	include					behavior		that	outcomes.	whether the
	d					self-		"Differen	Addressing	downstream
	familie					efficacy,		t	parenting	effects on the
	s of					and		strategie	practices and	health outcome
	childre					consump		s for	offering	predicted by the
	n					tion of		categorie	psychosocial	change in
	younge					alcohol		s of	support or	behavior occurred
	r than					(Supplem		patients	training to	or whether the
	3 years					ental		may	families may be	short- term
	of age.					Table		need to	beneficial for	changes, such as
	0					S2). The		be	both parents	the change in
	In					most		consider	and children	behavior,
	eight					frequent		ed"	with cancer.	persisted.
	studies					patient			Rigorous	P
	, the					outcome		Berg et	experimental	Collecting data
	target					s were		al.,	methods should	over an extended
	of the					physical		2014;US	be applied to	period of time
	interve					fitness		A,		(e.g., more than
	interve			I		nuicoo		n,		(c.g., more than

		<u> </u>						haba ta si	12
	ntions				and		mention	behavioral	12 months after
	were				quality of		that	studies.	starting the
	the				life		"Tailoring		intervention)
	childre				(QOL).		the		would allow
	n with						messagin		clinicians or
	cancer						g		researchers to
	or						specificall		evaluate the long-
	survivo						y for the		term effects and
	rs						needs of		benefits of the
	thems					i	individual		interventions or
	elves,						young		program on
	five						adult		outcomes such as
	studies						cancer		QOL, which
	were					:	survivors		requires an
	family						would		extended period
	oriente						likely		to respond to the
	d, and						enhance		intervention
	one						message		compared with
	was					r	relevance		other outcomes,
	design						and		for example levels
	ed for						increase		of PA.
	parent						their		According to the
	s only.						engagem		MRC Framework,
	Partici						ent and		process
	pants						satisfacti		evaluation and
	in nine						on with		qualitative
	studies						the		research are
	were						content";		essential to
	survivo						also		understanding the
	rs,						"Using a		implementation
	where						commerc		of complex
	as the						ial		interventions and
	remain					ä	approach		guide future
	ing five						was a		efforts. Studies
	studies						win-win		included in this
	recruit						situation		review used
	ed						for		outcome
	childre						cancer		evaluation and
	n						survivors		quantitative data
	underg						and		exclusively;
	oing						business		underpinning the
	treatm						es".		need for
	ent.								qualitative and
	Nine						Huang et		mixed methods
	studies						al.,		study in the field.
	were						2014;US		stady in the field.
	were						2014,03		

· · · · · · · · · · · · · · · · · · ·		
conduc	A, stated	
ted in	that	
the	"Tailored	
United	approach	
States,		
States,	, as	
two in	opposed	
Hong	to	
Kong,	generic	
one in	weight	
Canada	manage	
, one in	ment	
the	intervent	
Nether	ion, may	
lands,	be	
and	helpful to	
one in	youth	
	youth	
Taiwan	who have	
	survived	
Five	leukemia	
studies	".	
were		
conduc		
ted in		
a		
hospita		
lor		
clinic,		
four		
were		
deliver		
ed		
using		
various		
techno		
logies		
(i.e.,		
emails,		
text		
messag		
es,		
online		
platfor		
ms) or		
teleph		
one,		
two		

				were											
				home-											
				based,											
				and											
				three											
				were											
				comm											
				unity											
				based.											
Burns, M.	Syst	The aims of	Inclusion	School-	Not	Not	Psychosoc	Educatio	The PSSC	The main	Regard	Regardin	This review	The analysis of	Recommendation
A.,	ema	this review	criteria	aged	availa	availa	ial	n	(Psychos	content is	ing the	g the 3	included 24	peer-reviewed	1: Ensure
Fardell, J.	tic	are to (1)	were:	cancer	ble	ble	Standards	support	ocial	psychoed	3	programs	peer-reviewed	papers reporting	education support
E.,	Revi	identify	peer-	patient			of Care	program	Standard	ucation.	progra	that met	articles,	on these	services are
Wakefield	ew	peer-	reviewe	s and			(PSSC) in	es in	s of	Also:	ms that	all the	reporting on 20	programmes	available to all
, C. E.,	("na	reviewed	d	survivo			paediatric	alignmen	Care)	Initial	met all	criteria:	education	revealed major	cancer patients
Cohn, R.	rrati	education	articles,	rs.			oncology	t with	details	consultat	the	Educatio	support	shortcomings.,	
J.,	ve	support	publishe	Also			2	the	standard	ion;	criteria	n	programmes in	namely the lack of	Recommendation
Marshall,	liter	programme	d in	parent				Psychos	s that	Liaison	, they	planning;	paediatric	theoretical	2: Provide details
G. M.,	atur	s and	English,	s and				ocial	relate	communi	had an	Ongoing	oncology,	underpinnings	about programme
Lum, A.,	e	compare	reportin	teache				Standard	specificall	cation;	ongoin	consultat	including peer	and the negligible	content, timing,
& Lah,	over	them	g on	rs.				s of Care	y to	Classroo	g	ion and	programmes (n	evidence of	and materials to
S. (2021).	view	against the	educatio	13.				(PSSC).	educatio	m visits;	в school	advocacy	= 3), teacher	programmes'	enhance
School	with	PSSC	n					(	n	Educatio	liaison	; Parent	programmes (n	effectiveness.	implementation
	-								support.			,		enectiveness.	Implementation
and	a	education	support						It is	n	or had	and	= 5), and school		
education	syst	standards,	or school							planning;	an	patient	re-entry		Recommendation
al support	ema	(2)	re- entry						unclear	Ongoing	ongoin	counselli	programmes		3: Ground
program	tic	summarize	program						whether	consultat	g multi-	ng.	(SRPs n = 12).		programmes in
mes for	sear	the	mes for						available	ion and	compo				appropriate
paediatric	ch	structural	school						educatio	advocacy	nent.				theory and
oncology	acco	features	aged						n support	;			Of the 20		modelled
patients	rdin	and	cancer						program	Tutoring.			education		outcomes and
and	g to	limitations	patients						mes are				support		utilise rigorous
survivors:	Gre	of the	or						meeting				programmes for		methods of
A	en	programme	survivors						the PSSC				children with		evaluation:
systemati	et	s that meet	,						standard				cancer that		"Researchers may
c review	al.",	all PSSC	parents,						s.				were identified,		consider utilising
of	with	education	teachers,						Providing				only 3 met the		existing
evidence	the	standards,	or peers.						support				evaluation		theoretical
and	inte	and (3)	Exclusio						consisten				criteria as		models, such as
recomme	nt of	provide	n criteria						t with the				specified by the		the Eco-Triadic
ndations	iden	practical	were:						PSSC				PSSC education		Model of
for future	tifyi	recommen	case						educatio				standards.		Education
research	ng	dations for	studies,						n						
and	peer	clinical	reviews,						standard						Consultation for
practice.	-	practice	books,						s may be						Children with
Psycho-	revi		conferen						challengi						Cancer (Eco-
,		1									1				

Oncology,	ewe	and future	ce						ng						Triadic Model),58
30(4),	d	research.	abstracts						without						or developing
431-443.	prog		,						explicit						novel theory
	ram		conferen						impleme						based on a social-
	mes		ce						ntation						ecological
	)		proceedi						guidance.						framework (SEF)
			ngs, and												to guide the
			doctoral												development of
			theses.												their program."
															"Both outcomes
															and instruments
															must align with
															the programmes aims and be
															grounded in
															relevant theory,
															with preliminary
															research high-
															lighting the
															importance of
															psychological and
															academic
															outcomes."
															"research must
															employ rigorous
															research
															methodology
															when evaluating
															programme
															effectiveness."
															Recommendation
															4: Adapt
															programmes to
															local contexts to
															support
															implementation
Satapathy	Com	This review	Inclusion	pediatr	Chan	Not	Various	Various	То	Overall,	The	Most of	28 intervention	The limitations of	Researchers in
, S.,	para	aims to	: Studies	ic	ge in	availa	types of	types of	address	most of	numbe	the	studies on	this review	future can focus
Kaushal,	tive	summarize	publishe	cancer	the	ble	key intonionti	key	the wide	the	r of	studies	children with	include lack of	on developing
T., Bakhahi	revi	the	d in	popula	ment		interventi	intervent	gap that	studies	session	utilized	cancer were	studies in	culturally sensitive
Bakhshi, S., &	ew	evidence-	peer-	tion	al		ons were	ions were	exists	reviewed	S	individual ized	included in	languages other	intervention module for
S., & Chadda,		based psychologic	reviewe d English	interve ntion	healt h		psychosoc ial,	psychoso cial (7),	between intervent	here targeted	ranged from a		current analysis (one study from	than English, and non-availability of	module for children with
R. K.		al	language	setting	profil		physical,	physical	ion	improvin	minim	program and	India)	more full text	cancer. They may
N. N.		ai	language	Jetting	prom		pilysical,	physical	1011	mprovin		unu	malaj		concer. They flidy

(2018).		interventio	journals	s were	e of	cognitive	(7),	studies	g social-	um of	individual		articles. Lack of	focus on
(2018). Non-		ns in	pertainin	either	childr	behavioral	(7), cognitive	worldwid	emotiona	two	sessions	The benefit of	homogeneity in	developing
pharmaco		childhood	g to	hospita	en	Dellavioral	behaviou	e and	I	session	as	intervention has	study design and	problem-focused
logical		cancer over	psycholo	l or	with	, cognitive,	ral (4),	India, and	functioni	s to	compare	been mostly	intervention has	techniques for
interventi		the two	gical	home	cance	music art	cognitive	to	ng.	twice	d to	seen in anxiety	limited the review	children with
ons for		decades	manage	nome	r (e.g.	therapy	(3) <i>,</i>	highlight	Some of	daily	group	and distress.	to a qualitative	cancer in different
pediatric		and	ment of		qualit	and play	music-art	the need	the	for 24	intervent	Aspects of	analysis only.	phases of cancer
cancer		addresses	children		y of	therapy.	therapy	for	studies	days	ion for its	behavior	While the	trajectory.
patients:		the wide	with		life,	therapy.	and play	research	have also	(48	participa	(internalizing,	variations in	Further, studies
A		gap that	cancer.		beha		therapy	and	utilized	session	nts.	social	research designs	should also report
comparati		existed	Primarily		vior,		(4) and	appropri	various	s).	1103.	competence)	and intervention	long- term follow
ve review		between	a		sleep,		other	ate	physical	Roughl		and trauma	outcomes provide	up of the
and		interventio	psycholo		fatigu		three	services.	techniqu	y, it		have also been	insight into the	participants in
emerging		n studies	gical/no		e,		types of	Services.	es like	took 8		shown to	wide range of	intervention.
needs in		worldwide	n-		e, anxie		intervent		aerobics,	session		improve	techniques	intervention.
India. <i>Indi</i>		and India	pharmac				ion.		adapted	s to		significantly.	available, the	
an			ological		ty, depre		1011.		physical	comple		Neurocognitive	limited number of	
Pediatrics			intervent		ssion,				activity,	te the		benefits have	studies employing	
, 55(3),			ion or		atten				yoga, and	recove		been reported	each type of	
225-232.			focused		tion,				enhance	ry		for variables like	technique	
225-252.			on the		acade				d physical	progra		attention,	prevented further	
			holistic		mic				exercise	m. The		memory,	comprehensive	
			care		achie				to	vast		intelligence,	analysis. Hence, a	
			along		veme				manage	range		vigilance and	definite	
			with the		nt,				psycholo	of		learning with	recommendation	
			treatme		resilie				gical	session		cognitive	on the most	
			nt of		nce,				compone	s		remediation	effective	
			childhoo		distre				nts like	depen		programs.	psychological	
			d cancer,		SS				anxiety,	ded		programs.	intervention in	
			children		etc.)				sleep,	upon			pediatric cancer	
			below 18		0101)				cognitive	the			cannot be made.	
			years'						fatigue	nature				
			age;						and	of				
			studies						quality of	interve				
			done						life.	ntion.				
			over the						Studies					
			past 20						demonstr					
			years						ating					
			only.						social					
			Exclusio						skills					
			n: not						intervent					
			with						ions have					
			adults or						targeted					
			parents						following					
			or						social					
			siblings						skills in					
L	I		51511165						5.005 111				1	1

	1		- 1												
			of							order to					
			children							decrease					
			with							isolation					
			cancer;							and					
			articles							improve					
			reportin							friendshi					
			g							ps.					
			importa							in this					
			nce of							review,					
			psycholo							cognitive					
			gical							intervent					
			manage							ions					
			ment or							[16,24,25					
			models							,29]					
			of							primarily					
			manage							focused					
			ment.							on					
										targeted					
										cognitive					
										dsyfuncti					
										oning/					
										impairme					
										nt.					
										Another					
										set of					
										intervent					
										ions					
										included					
										music					
										and art					
										therapy					
Peikert,	Syst	This study	The	childho	Social	psych	15 studies	The	The	Informati	Highly	Informati	Were included	Most of the	There is a
M. L.,	ema	aims to	inclusion	od	,	osocia	describe	intervent	burden	on not	variabl	on not	33 articles in the	studies were	necessity for high
Inhestern,	tic	provide an	criteria	cancer	emoti	1	interventi	ions had	and	available	e in the	available	qualitative	conducted in	quality studies.
L., &	revi	overview of	for study	survivo	onal,	interv	ons in an	as	needs of	in the	include	in the	synthesis. Most	North America	The results may
Bergelt,	ew	psychosoci	characte	rs	beha	ention	outpatient	primary	affected	review	d	review	of the studies	and Europe,	help to optimize
C. (2018).	(foll	al	ristics	diagno	vioral	s for	group	aim:	families		interve		described	meaning that the	health care
Psychoso	owi	interventio	were: (1)	sed		childh	setting.	Reductio	change		ntions		interventions	results cannot be	services that
cial	ng	ns for	Languag	under		ood	Four	n of	over time				for the cancer	generalized to	support families
interventi	the	childhood	e English	the age		cance	different	psycholo	and				survivor (n =	other parts and	with the re-entry
ons for	PRIS	cancer	or	of 21,		r	cancer	gical	dependin				15). Nine	cultures of the	into daily life.
rehabilita	MA	survivors	German,	their		surviv	camps	burden (n	g on their				studies	world. Only	Siblings and the
tion and	Che	and their	(2) full	family		ors	were	= 9),	current				investigated	studies in English	family as a whole
reintegrat	cklis	families in	text	memb		and/o	evaluated	reduction	age,				interventions	or German were	should also be
ion into	t;	the first	accessibl	ers or		r their	in the	of	patients				for the whole	included. (studies	addressed in
ion into	ι,	the mat	accessibl			i theil	in the	01	patients		1			included. (studies	uuuresseu III

مام : اب ا : 4 م			a (2) aa	4h e	£	أبع والبدوا وروا		f	г – т	family and true	in other languages	www.wheenetel
daily life	rese	years after	e, (3) no	the	family	included	physical	face		family, and two	in other languages	psychosocial
of	arch	the end of	conferen	family	memb	studies.	and	different		studies	might have been	interventions
pediatric	ques	cancer	ce	as a	ers	Five	psycholo	challenge		interventions	overlooked). Due	after the
cancer	tion	treatment.	proceedi	whole	during	studies	gical	s and		for siblings. The	to the	successful
survivors	s in	Research	ngs, (4)		the	evaluated	burden (n	may have		interventions	methodological	treatment of the
and their	conc	questions:	article		first	a family	= 9),	specific		mainly take	heterogeneity of	patient.
families:	orda	1. Which	publishe		five	oriented	improve	develop		place in an	the included	
А	nce	psychosoci	d in a		years	rehabilitat	ment of	mental		outpatient	studies, we could	
systemati	with	al	peer-		after	ion	social	needs		group setting (n	not conduct a	
с	the	interventio	reviewe		the	program.	skills (n =	(e.g.		= 15). Most of	quantitative	
review. PL	PIC	ns for	d		end of	Three	8),	keeping		the studies	synthesis of the	
oS	0	rehabilitati	journal,		cance	studies	increase	up in		reported a	study results.	
One, 13(4	crite	on and	(5)		r	evaluated	of social	school,		significant	Lastly, we	
),	ria)	reintegratio	primary		treat	computer-	support	develop		psychosocial	conducted the	
e0196151		n into daily	research		ment.	based	(n = 6),	ment of		benefit of the	systematic	
.		life of	(no			interventi	and	autonom		interventions.	database search in	
		pediatric	study			ons.	psychoed	y).		The quality of	four data- bases	
		cancer	protocol			Four	ucation			the included	that are relevant	
		patients	s or			studies	(n = 2).			studies was	for this field of	
		and their	intervent			described	, ,			limited.	research and	
		families	ion			outpatient				Overall, the	conducted	
		after the	descripti			individual				investigated	additional hand	
		end of	ons) and			interventi				interventions	searches. We had	
		acute	(6) not			ons.				helped families	to add only few	
		cancer	only			Only one				to improve their	studies to the	
		treatment	qualitati			study				mental well-	records identified	
		were	ve			assessed				being and	through our	
		evaluated	research			psychosoc				enhance social	database search.	
		and	. The			ial				skills.	Neverthe- less,	
		published?	participa			outcomes					relevant studies	
		2. What are	nts in the			in					published in peer-	
		the effects	studies			participan					reviewed journals	
		of these	had to			ts of a					that are not	
		interventio	meet the			home-					covered by these	
		ns on	followin			based					data- bases, might	
		psychosoci				interventi					have been missed.	
		al	g inclusion			on					nave been misseu.	
		outcomes	criteria:			011						
		in the	(1)									
		family	(1) Cancer									
		members?	patients									
		members?	and/or									
			their family									
			family									
			member									
	I		s, (2) the									

Image: section of the secting of the secting of the secting of th		1				1										
Image: Second				patient												
Image: second symptomImage: second sympto				was												
Image: biological scalar biological (3) no primary focus on paliative cancerNot primary focus on paliative cancerSurvivo scalaPsych ndividual ologic available inNot scalard focus on patients.Not scalard focus on patients.Not scalard focus on patients.Not scalard focus on patients.Not scalard focus on patients.Not scalard focus on patients.Not scalard focus on patients.Not scalard focus on patients.Not scalard focus on patients.Not scalard focus on scalard focus on scalard focus on scalard focus on scalard focus on scalardNot scalard focus on scalard focus on scalard																
Image: biological scalar biological (3) no primary focus on paliative cancerNot primary focus on paliative cancerSurvivo o scalaNot o ndividualNot primary focus on paliative cancerNot o ologic availableNot ndividual CBT or scalard focus on paliative cancerNot scalard focus on paliative cancerNot scalard focus on paliative cancerNot scalard focus on paliative cancerNot scalard focus on paliative cancerNot scalard focus on paliative cancerNot scalard focus on scalard focus on scalardNot scalard focus on paliative cancerNot scalard focus on scalard focus on scalard focus on scalardNot scalard focus on paliative cancerNot scalard focus on scalard focus on scalard focus on scalardNot scalard focus on scalard focus on scalard focus on scalard focus on scalard focus on scalardSurvivo focus on scalard focus on focus on scalard focus on focus on focus on scalard focus on focus on focus on focus on focus on scalard focus on focus on <td></td> <td></td> <td></td> <td>d with</td> <td></td>				d with												
Image: base of 21 and (3) no primary primary apalients.before the go of 21 and (3) no primary primary apalients.before the go of 21 and (3) no primary primary apalients.before the go of 21 and (3) no primary primary apalients.before the go of 21 and (3) no primary primary apalients.before the go of 21 and (3) no primary primary apalients.Notindividual comparison of the primary comparison of the primary of childhood cancer for the primary (1) t																
Brinkman, r.M., Reklitis, 0, 																
Image: bit is a series of 21 and (3) no primary focus on palitistive cancer patients.of 21 and (3) no primary focus on palitistive cancerof 21 and (3) no primary availableof 21 and (3) no primaryof 21 and (3) no (2) noNot (3) no (2) noindividual (2) no (2) noPrimary (3) no (2) noNot (2) no (2) noNot (2) no (2) noNot (2) no (2) noNot (2) no (2) noNot (2) no (2) no (2) noNot (2) no (2) noNot (2) no (2) no (2) noNot (2) no (2) no (2) no (2) noNot (2) no (2) no																
Image: Second																
Image: second																
Image: bit of the palitative cancer patients.focus on palitative cancer patients.focus on palitative cancer patients.focus on palitative cancer patients.focus on palitative cancer patients.Notfocus on palitative cancer patients.Not individual availablePrimary on palitative cancer patients.Not availableReck is particular to palitative cancer patients.Not available availableNot availableReck is particular to palitative cancer patients.Not availableReck is particular to particula																
Image: second symppalliative cancer patients.palliative cancer patients.palliative cancer patients.primary availableNotindividualPrimary of cancerNotSurvivoPsych oscialPsychosocialStandards of CancerT. M., ew primaryof objectivesof objectivesChildh al bleologicavailableCBT orInterventavailableNotavailableNotavailableSupported </td <td></td> <td></td> <td></td> <td>primary</td> <td></td>				primary												
Image: cancer patientscancer patientscancer patientscancer patientscancer patientscancer patientscancer patientscancer patientsnotsurvivesurviveproblemssurviveproblemssurviveproblemsproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemsproblemssurviveproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemsproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurviveproblemssurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvivesurvi				focus on												
Image: Note of the second se				palliative												
Brinkman, T. M., Recklitis, Of G. J., Michel, J. L.Not availableSurvivo ologic rs of Childh al ood sympNot available bleNot available of standard of of childh bleNot available for childh bleNot available for childh bleNot available for childh bleNot available for charget for charget for charget socialNot available for charget for charget socialNot available for charget for charget social outco for charget social outco for charget social outco for charget social outco for charget social outco for charget social outco social outco social childhood cancerNot available for cancer childhood cance charget survivors childhood cancerNot available m of charget bleNot available m of chargetNot available m of chargetNot available m of chargetNot available m of chargetNot available m of chargetNot available m of chargetNot available m of chargetNot available m of chargetNot availableNot available m of chargetNot available m of chargetNot availableNot availableSurvivors for chargetNot availableNot availableNot availableNot availableSurvivors for chargetNot availableNot availableEmpirically vailableNot available availableSurvivors for charget <td></td> <td></td> <td></td> <td>cancer</td> <td></td>				cancer												
Brinkman, T. M., Recklitis, Of G. J., Grotenle, J. L.Not availableSurvivo rs of objectivesPsych ologic Childh al bleNot availableNot <br< td=""><td></td><td></td><td></td><td>patients.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></br<>				patients.												
T. M., Recklitis, Grew objectives of bitavailable rs of Objectives oddrs of Childh al bleclogic standard bleclosit standard blenutreent standard on of carce; rarget/savailable rs of childhoul carce; rarget/savailable rs of childhoul carce; rarget/savailable rs of childhoul carce; rarget/savailable rs of childhoul carce; rarget/savailable rs of childhoul carce; rarget/savailable rs of rarget/savailable rs of rarget/savailable rs of rarget/sSupported interventions forStandards of Ca for Survivors rechildhoul carce; rarget/savailable rs of rarget/savailable rs of rarget/savailable rs of rarget/sSupported interventions rd of rechargeStandards of Ca for rechildhoul Carce Routine an Survivors of carce; rechildhoud carce; reduction in reduction in red	Brinkman	revi	The		Survivo	Psych	Not	individual	Primary	Not	(same as	Not	Not	Empirically	Not available	Psychosocial
Recklitis, C.J., Michel, Ilterof of thisChildh od sympal of symp, Cancerble standard of cancer; for cancer; toms, social cancerstandard of cancer; for cancer; for cancerm of cancer; for cancer for childhod problem cancerInterventions for for change)Interventions for for change)Interventions for for proklogical Symptoms in Survivors of Cancer: Survivors of Cancer: symptoms italInterventions for Symptoms Survivors of Cancer: Survivors of Cancer: therapy; suportem of cancer for cancer forInterventions for for Survivors of Cancer: survivors of Cancer: survivors of cancer: significant reduction in attention problems, social cancer, outcomesetchildhood cancer: survivors of econ attain all econm of cancer for cancer therapy; suportem of cancer suporte therapy; suporte cancerInterventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for survivors for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Interventions for change)Intervention						-					•					
C. J.,theofthisoodsympofcare;Target(schange)forSecondChildhood CareMichel,literpaper areCancertoms,groupinsocialCBT;EmpiricalSymptoms inSymptoms insystematicGrootenhe,researchoutcofamilylysocialCBT;EmpiricalSurvivors ofsystematicuis, M. A.,notrelated tomes,therapy;SupporteChildhoodcancer:needs; MonitoriJ. L.iffedalecon-deliveredInterventinterventcancer:neeropsychologforoutcomesomiccopingions forreduction inneuropsychologattainskillsPsycholoattainneuropsychologicalsurvivors ofsurvivors ofattainskillsPsycholoproblems,socialtherapropsychologoutcomescancer,attainskillsPsycholointernet-symptominternet-symptomoutcomeswith analatchieCBT.ofsomaticproblems,socialoutcomeswith analachieCBT.ofsomaticsomaticpsychosocialsocioeonreduction finachieCBT.ofsomaticsomaticpsychosocialoutcomeswith analachieCBT.ofsomaticsomaticsomaticsocioe <td>-</td> <td></td> <td></td> <td>available</td> <td></td> <td>_</td> <td></td>	-			available		_										
Michel, G., aturliter to reviewpaper are to socialCancer toms, socialgroup cBT; familyinPsychological SurvivorsRoutine assessmentG., Grootenh uis, M. A., not related to b. Klosky, spec (2018).related to psychosocimes, socialtherapy; therapy; sociolSupporte dCancer: cBTSurvivors of Childhoodassessment systematic assessmentJ. L. (2018).ified alal econecon -deliveredIntervent training; gicalSignificant sociolof cancer: significantPsycholog ical symptom outcomesfor childhoodment attaintraining; sigical training; gicalgical sining; sigical sining; gicalment sigical sining; gicalment sigical sining; gicalment sigical sining; gicalment sigical sining; gical sining; gicalment sigical sining; gical sining; gicalment sigical sining; gical sining; gical sining; gicalment sining; sigical sining; gical sining; gicalment sining; sical sining; gical sining; sical sining; gical sining; sical sining; sical sining; sical sical sining; sical	,						DIE		-			le				
G.,aturto reviewsocialCBT;EmpiricalSymptoms inSymptoms insystematicGrootenhe,researchoutcofamilylylysurvivors ofassessmentassessmentuis, M. A.,notrelated tomes,therapy;SupporteChildhoodpsychosocialpsychosocial& Klosky,spcpsychosocisocioltelephonedCancer.needs; Monitori1. L.ifiedalecon-deliveredInterventSignificantof(2018).outcomesoutcomesomiccopingions forreduction inneuropsychologPsychologforattainskillsPsycholoattentional deficitsicalsurvivors ofmenttraining;gicalproblems,survivors of tumor and othsymptomcancer,alindividualSurvivorssurvivorsforAnnualoutcomeswith analahieCBT.ofsomaticsomaticproblems,scoiceonon riskachieCBT.ofcomplainedsomaticsomaticpsychosocialscoiceonon riskachieCBT.ofconcercomplainedcomplainedcomplainedscoiceonon riskachieCBT.ofcomplainedcomplainedcomplainedcomplainedscoiceonon riskachieCBT.ofcomplainedcomplainedcomplained<								,			change)			-		
Grootenhe,researchoutcofamilylysupporteSurvivors ofSurvivors ofassessmentuis, M. A.,notrelated tomes,therapy;SupporteChildhoodpsychosocialneeds; MonitoriJ. L.ifiedalecon-deliveredInterventSignificantofneeds; Monitori(2018).outcomesoutcomesomiccopingions forattentionattentionaldeficitsicalsurvivors ofmenttraining;gicalinternet-Symptomsurvivorsattentionaldeficitssymptomchildhood(educinternet-Symptomsurvivorsproblems,survivorsproblems,survivors of bras, socialcancer,ationbaseds <in< td="">inproblems,problems,problems,problems,y,emphasisachieCBT.ofcomplaints,complaints,survivors ofcomplaints,survivors ofsocioecoonriskgroupCancer):concer):behaviors;educational/voor</in<>					Cancer	-										
uis, M. A., & Klosky, J. L.not related to psychosoci almes, socio econtherapy; telephone dSupporte dChildhood Cancer: Significantpsychosocial needs; Monitori of reduction in atteninJ. L.ified aloutcomes for ticaloutcomes for attainomic attaincoping skillsins for gicalneeds; Monitori of skillsneuropsycholog al deficitsical symptom outcomes (clidhood s, social outcomes childhoodment (educ internet- basedtraining; gicalgical sinproblems, sin problems, social problems, s		atur				social			-							systematic
& Klosky, J. L.spec ified alpsychosoci alsocio econtelephone delivereddCancer: Significantneeds; Monitori of(2018). Psycholog icaloutcomes for survivors of childhoodomic attaincoping skillsions for skillsneuropsycholog attainattention problems, sintneuropsycholog attentionsymptom s, social outcomes social outcomeschildhood (educinternet- symptomSymptom attainchildhood basedsin problems, sintoutcomes social outcomeswith an emphasisal al al al al al al al al attainCBT. of of comp concer):complaints, weme groupcomplaints, concer):complaints, withdrawn	Grootenh	е,	research			outco		family	ly					Survivors of		assessment of
J. L.ified alalecon-deliveredIntervent(2018).outcomesforomiccopingions forattainskillsPsycholoPsychologforsurvivors ofattainskillsPsycholoattentionalal deficitsicalsurvivors ofmenttraining;gicalproblems,internalizingtumor and oths, socialcancer,ationbasedsinoutcomeswith analindividualSurvivorsproblems,Annual,emphasisachieCBT.ofsomaticcomplaints,screening of lonsocioecononriskvemepeer-Childhoocomplaints,screening of lonomicfactors fornt,mediatedddwithdrawnterm survivors of educational/voorattainmeadverseVocatgroupCancer):cancer):behaviors;educational/voor	uis, M. A.,	not	related to			mes,		therapy;	Supporte					Childhood		psychosocial
(2018).outcomesomiccopingions forins forreduction inneuropsychologPsychologforattainskillsPsycholoattentionattentionattentionattentionicalsurvivors ofmenttraining;gicalproblems,internalizingtumor and othsymptomchildhood(educinternet-Symptomsocialproblems, socialhigh-risk groupoutcomeswith analindividualSurvivorsproblems, socialproblems,Annual,emphasisachieCBT.ofsomaticpsychosocialsomaticpsychosocialsocioecononriskvemepeer-Childhoocomplaints,screening of lonomicfactors fornt,mediateddwithdrawnterm survivors fattainmeadverseVocatgroupCancer):behaviors;behaviors;	& Klosky,	spec	psychosoci			socio		telephone	d					Cancer:		needs; Monitoring
(2018).outcomesomiccopingions forreduction inneuropsychologPsychologforattainskillsPsycholoattainattentionattentionicalsurvivors ofmenttraining;gicalsymptomchildhood(educinternet-Symptomoutcomeswith analindividualSurvivors,emphasisachieCBT.ofsocioecononriskvemepeer-Childhooomicfactors fornt,mediateddattainmeadverseVocatgroupCancer):behaviors;	J. L.	ified	al			econ		-delivered	Intervent					Significant		of
Psycholog icalfor survivors of childhoodattain mentskillsPsycholo gicalattention problems, internet-attention problems, internalizingal deficits survivors of bra tumor and oth high-risk groups, social outcomescancer, with an emphasisation alal individualSurvivors socialproblems, problems, social problems, social problems, social problems, social problems, socialal deficitsoutcomes s, cialwith an emphasisal achieCBT. peer-of CBT. of peer-Childhoo complaints, weme groupconcer):complaints, withdrawn behaviors;screening of lon withdrawn term survivors f educational/voor	(2018).		outcomes			omic		coping	ions for					reduction in		neuropsychologic
icalsurvivors of symptomment (eductraining; internet-gical symptomsymptomchildhood(educinternet-Symptom basedsinternalizing problems, social problems, socialtumor and oth high-risk groupoutcomeswith an emphasisalindividualSurvivorsproblems, socialAnnual problems, social,emphasis socioeconachieCBT.of peer-Childhoo complaints, groupcomplaints, comerce):screening of lon withdrawnattainmeadverseVocatgroupCancer):behaviors;educational/voc	. ,		for						Psycholo					attention		
symptom s, social outcomeschildhood cancer, with an emphasis(educ ationinternet basedSymptom basedinternelizing problems, social problems,			-													
s, social outcomescancer, with an emphasisation albaseds individualsocial survivorsproblems, social problems, somatichigh-risk group Annual,emphasis socioeconon risk factors for attainmeon risk factors for adversent,baseds on risk groups on complaintedsocial problems, somatichigh-risk group Annual psychosocial sorvivors								<b>.</b>	-					-		
outcomeswith an emphasisalindividualSurvivorsproblems, sorialproblems, somaticAnnual psychosocialsocioecononriskcBT.ofpeer-Childhoocomplaints, weither autoutscreening of lon term survivors fomicfactors for attainmeadverseVocatgroupCancer):behaviors;educational/voc														-		
,emphasis on risk omic attainmeemphasis on risk factors for adverseachie per-CBT.of of peer-somatic childhoo dsomatic complaints, withdrawn behaviors;somatic psychosocial screening of lon term survivors f educational/voc			-						-					•		
socioecon on risk veme peer- Childhoo   omic factors for nt, mediated d   attainme adverse Vocat group Cancer):	outcomes															
omic attainmefactors for adversent,mediateddwithdrawnterm survivors fomic attainmeadverseVocatgroupCancer):behaviors;educational/voc	,					achie										
attainme adverse Vocat group Cancer): behaviors; educational/voc	socioecon					veme		•						-		
	omic		factors for			nt,		mediated	d					withdrawn		term survivors for
	attainme		adverse			Vocat		group	Cancer):					behaviors;		educational/vocat
nt, and outcomes, I ional training; Behavior I significant ional progree	nt, and		outcomes,			ional		training;	Behavior					significant		ional progress;
health and to Attai group problems improvement in social	health		and to			Attai		group	problems							social
behaviors highlight nmen social ; social skills; relationships;	behaviors					nmen			:					-		relationships;
among potentially t), skills Posttrau Significant anxiety,			0 0						Posttrau					,		• •
	-													•		
of interventio h self-help stress; arousal distress								-								-
	-								,							
									-							behaviors; Access
			al					• •						-		. ,
the outcomes Use, counseling finding, inferential support a	the		outcomes			Use,		counseling	finding,					inferential		support and
literature. Marij , tailored health interventions;	literature.					Marij		, tailored	health					statistics.		interventions;

Journal	for		uana	and	promotio			Authors suggest	Assessment of
of Clinical	survivors.		(Cann	targeted	n;			generally	financial hardship
Oncology,			abis)	written	depressio			positive effects,	with targeted
<i>36</i> (21),			and	education	n,			particularly in	referrals;
2190.			Illicit	al	fear of			benefit finding.;	Education and
			Drug	materials,	progressi			Significant	anticipatory
			Use,	and free	on/relaps			reductions in	guidance related
			Alcoh	nicotine	e.			symptoms of	to late effects
			ol	replaceme	Primary			posttraumatic	provided
			Use,	nt	Intervent			stress, anxiety,	throughout the
			Diet,	therapy;	ion			depression, and	trajectory of
			Nutrit	Web-	Target(s)			fear of	cancer care;
			ion,	based	in			progression/rel	Opportunities for
			and	interventi	Empirical			apse.	social interaction;
			Physi	on	ly			Empirically	School-reentry
			cal	or print	Supporte			Supported	support that
			Activi	materials	d			Interventions	includes provision
			ty,	condition	Intervent			for Social	of information
			Sun	that	ions for			Functioning in	and
			Expos	included	Social			Survivors of	recommendations
			ure,	the	Functioni			Childhood	to school
			Risky	provision	ng in			Cancer: No	personnel; Open,
			, Sexua	of self-	Survivors			significant	respectful
			1	help	of			differences	communication
			Beha	materials;	Childhoo			in social	and collaboration
			vior)	enhanced	d Cancer:			competence	among families
				care/decis	Peer			between	and providers
				ion aid	acceptan			survivors and	
				interventi	ce, social			peers.	
				on	reputatio			Intervention	
				psychoed	n; Social			classrooms	
				ucational	skills;			showed lower	
				modules,	Social			levels of	
				an	problem			social rejection	
				education	solving,			and	
				al CD-	social			victimization;	
				ROM,	behavior			Significant	
				tailored	s.			improvements	
				substance	Primary			in self-control,	
				use risk	Intervent			social skills, and	
				behavior	ion			quality of life;	
				counseling	Target(s)			Significant	
				delivered	in			improvement in	
				by nurse	Empirical			social skills in	
				practition	ly			the intervention	
				ers and	Supporte			group;	

						 <del>т г – г – г – г – г – г – г – г – г – г </del>		
				telephone	d		significant	
				boosters;	Intervent		increase in	
				multicom	ions for		social problems	
				ponent	Risky		in untreated	
				risk	Health		comparison	
				counseling	Behavior		group;	
				interventi	s Among		Significant	
				on; 12-	Survivors		improvements	
				week	of		in maintaining	
				Facebook-	Childhoo		eye contact,	
				based	d Cancer:		social	
					Tobacco			
				interventi			conversations	
				on	use, self-		with peers, and	
				(FITNET)	reported		cooperative	
				or a 12-	smoking		play; no	
				week	cessation		observed	
				Facebook-	; llicit		change in social	
				based self-	drug use,		problem-	
				help	risk		solving.	
				condition;	motivatio		Empirically	
				4-day	n; Diet		Supported	
				integrated	nutrition,		Interventions	
				adventure	knowledg		for Risky Health	
				-based	e of		Behaviors	
				training	disease		Among	
				and health	and		Survivors of	
				education	treatmen		Childhood	
				program	t, risk		Cancer: The quit	
				or	perceptio		rate was	
				attention-	ns,		significantly	
				only	protectiv		higher in the	
				group;	e/risky		peer counseling	
				multiple	health		condition v the	
					behavior		self-help	
				health				
				behavior	S;		condition at 8	
				change	Physical		(16.8% v 8.5%)	
				interventi	activity,		and 12 (15% v	
				on	body		9%) months;	
				designed	mass		Quit rates at	
				to	index,		long-term	
				increase	body		follow-up	
				sun safety	weight,		were	
				practices;	Function		significantly	
				UVP or	al		higher in the	
				education	Assessme		peer counseling	
1				-only	nt of		condition v the	
L	•	 	· ·	1	•	 · · · · ·		

 	I	1	 	Company	 	 I	aalf hala	
			compariso	Cancer			self-help	
			n.	Therapy-			condition	
				General			(20.6% v	
				Survey,			17.6%);	
				physical			Equivalent rates	
				well-			of cessation	
				being,			were reported	
				social			for both groups	
				well-			(16%) at the 15-	
				being,			month follow-	
				emotiona			up.; At 6 months	
				l well-			post	
				being,			intervention,	
				functiona			there was a	
				l well			significant	
				being;			change	
				exercise			in risk	
				behavior,			motivation for	
				levels of			low risk takers.;	
				physical			In the	
				activity,			intervention	
				self-			group,	
				efficacy,			self-reported	
				quality of			junk food	
				life; Sun			consumption	
				exposure			significantly	
				, sun			decreased.;	
				safety			Over 12 weeks,	
				practices;			increases in	
				Sun			light physical	
				protectio			activity were	
				n.			135 min/wk	
				11.				
							greater in the	
							FITNET group	
							relative to the	
							self-help	
							condition, and	
							the FITNET	
							group reported	
							significant	
							weight loss	
							over time (22.1	
							kg).; Those in	
							the	
							experimental	
							group	
							Broup	

	r	 					
						reported	
						significant	
						differences in	
						physical activity	
						stages of	
						change,	
						higher levels of	
						physical activity,	
						and self-efficacy	
						as compared	
						as compared	
						with those in	
						the control	
						group.	
						There were also	
						statistically	
						significant mean	
						differences in	
						physical activity	
						levels, self-	
						efficacy, and	
						quality of life of	
						participants in	
						the	
						experimental	
						group	
						from baseline to	
						9 months after	
						starting the	
						intervention.;	
						Survivors in the	
						intervention	
						arm reported	
						significantly	
						more sun safety	
						practices at 1	
						month post	
						intervention	
						than control	
						participants.;	
						UVP was found	
						to be	
						acceptable and	
						not distressing	
						to survivors.	
						UVP resulted in	
						significantly	

						improved sun protective behaviors (ie,	
						reduced sun	
						exposure, increased	
						sunscreen use,	
						and increased	
						hat wearing).	

#### References

- Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, 8(1), 19-32.
- Bhakta, N., Force, L. M., Allemani, C., Atun, R., Bray, F., Coleman, M. P., ... & Fitzmaurice, C. (2019). Childhood cancer burden: a review of global estimates. *The lancet oncology*, 20(1), e42-e53.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical psychology: Science and practice*, 11(3), 230.
- Brinkman, T. M., Recklitis, C. J., Michel, G., Grootenhuis, M. A., & Klosky, J. L. (2018). Psychological symptoms, social outcomes, socioeconomic attainment, and health behaviors among survivors of childhood cancer: current state of the literature. *Journal* of Clinical Oncology, 36(21), 2190.
- Burns, M. A., Fardell, J. E., Wakefield, C. E., Cohn, R. J., Marshall, G. M., Lum, A., ... & Lah, S. (2021). School and educational support programmes for paediatric oncology patients and survivors: A systematic review of evidence and recommendations for future research and practice. *Psycho-Oncology*, 30(4), 431-443.
- Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. *Bmj*, *337*.
- Cutler, D. M. (2004). Behavioral health interventions: what works and why. *Critical perspectives on racial and ethnic differences in health in late life*, 643, 674.
- Davis, K., Drey, N., & Gould, D. (2009). What are scoping studies? A review of the nursing literature. *International journal of nursing studies*, *46*(10), 1386-1400.
- Demers, C., Brochu, A., Higgins, J., & Gélinas, I. (2021). Complex behavioral interventions targeting physical activity and dietary behaviors in pediatric oncology: A scoping review. *Pediatric Blood & Cancer*, *68*(8), e29090.
- England, M. J., Butler, A. S., & Gonzalez, M. L. (Eds.). (2015). *Psychosocial interventions for mental and substance use disorders: a framework for establishing evidence-based standards* (pp. 57-69). Washington, DC: National Academy Press.

- Gilliam, M. B., & Schwebel, D. C. (2013). Physical activity in child and adolescent cancer survivors: a review. *Health psychology review*, 7(1), 92-110.
- Hendrieckx, C., de Wit, M., Gray, S. M., van Duinkerken, E., & Snoek, F. J. (2021). Diabetes Mellitus: A Biopsychosocial Perspective.
- Hoffmann, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., ... & Michie, S. (2014). Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. *Bmj*, 348.
- Hollon, S. D., & Beck, A. T. (2013). Cognitive and cognitive-behavioral therapies. *Bergin and Garfield's handbook of psychotherapy and behavior change*, *6*, 393-442.
- Hudson MM, Ness KK, Gurney JG, et al. Clinical ascertainment of health outcomes among adults treated for childhood cancer. JAMA. 2013;309(22):2371-2381.
- Jong, M. C., Lown, A., Schats, W., Otto, H. R., & Jong, M. (2019). Mapping the concept, content and outcome of wilderness therapy for childhood cancer survivors: protocol for a scoping review. *BMJ open*, *9*(8), e030544.
- Karlson, C. W., Alberts, N. M., Liu, W., Brinkman, T. M., Annett, R. D., Mulrooney, D. A., ... & Krull, K. R. (2020). Longitudinal pain and pain interference in long-term survivors of childhood cancer: A report from the Childhood Cancer Survivor Study. *Cancer*, 126(12), 2915-2923.
- Kaye, E. C., Brinkman, T. M., & Baker, J. N. (2017). Development of depression in survivors of childhood and adolescent cancer: a multi-level life course conceptual framework. *Supportive Care in Cancer*, 25(6), 2009-2017.
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: advancing the methodology. *Implementation science*, *5*(1), 1-9.
- Merz, E. L., & Tomfohr-Madsen, L. (2018). Sleep disruption in pediatric cancer survivors: Conceptual framework and opportunities for clinical assessment and behavioral treatment. *American Journal of Lifestyle Medicine*, *12*(4), 311-323.
- Oeffinger KC, Mertens AC, Sklar CA, et al. Chronic health conditions in adult survivors of childhood cancer. N Engl J Med. 2006;355(15):1572- 1582.
- Peikert, M. L., Inhestern, L., & Bergelt, C. (2018). Psychosocial interventions for rehabilitation and reintegration into daily life of pediatric cancer survivors and their families: A systematic review. *PLoS One*, *13*(4), e0196151.

- Peters, M. D., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., ... & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI evidence synthesis*, *18*(10), 2119-2126.
- Santos, W. M. D., Secoli, S. R., & Püschel, V. A. D. A. (2018). The Joanna Briggs Institute approach for systematic reviews. *Revista latino-americana de enfermagem*, 26.
- Satapathy, S., Kaushal, T., Bakhshi, S., & Chadda, R. K. (2018). Non-pharmacological interventions for pediatric cancer patients: A comparative review and emerging needs in India. *Indian Pediatrics*, *55*(3), 225-232.
- World Health Organization. (2020). *Guidelines on mental health promotive and preventive interventions for adolescents: helping adolescents thrive*. World Health Organization.
- Wiener, L., Devine, K. A., & Thompson, A. L. (2020). Advances in Pediatric Psycho-Oncology. *Current opinion in pediatrics*, *32*(1), 41.
- Wiener, L., Kazak, A. E., Noll, R. B., Patenaude, A. F., & Kupst, M. J. (2015). Standards for the psychosocial care of children with cancer and their families: an introduction to the special issue. *Pediatric blood & cancer*, *62*(S5), S419-S424.

# Next on The Carenet Project

Some of the next planned actions for the global mapping project are as follows:

### Literature Review

 The 116 interventions included in the literature reviews will be organized, categorized, and further analyzed.

# Writing of the Preliminary Report

• The 3<sup>rd</sup> preliminary report, due on September 15<sup>th</sup>, will be written.

# Instruments Development

 Two methodologic instruments will be developed: a quantitative survey and guidelines for the focus groups.

### Interviewer training

• Afterwards, the training of the interviewer, for the focus group, will take place.

### Field Work

 The focus group interviews will be carried out, followed by an analysis of the collected data and the development of the quantitative survey. Scheduling and planning of events and tasks.

# Graphic Representation of the Tasks to be Developed considering the Project Stages

		C	hildhood	Cancer Ir	nternationa	l: The Care	enet Project					
Tasks / Months	March	April	May	June	July	August	September	October	November	December	January	February
					General Tasks	5						
1. Elaboration of the communication strategy by the Waves team												
2. Writing and delivery of reports		Preliminary report deadline - April 30th			Preliminary report deadline - July 31st		Preliminary conference report deadline – September 15 <sup>th</sup>	Conference – September 28 <sup>th</sup> to October 1 <sup>st</sup>				Final report deadline - February 28 <sup>th</sup>
				Stag	e 1: Model Elab	oration						
3. Literature Review Part 1												
3.1. Development and definition of the search strategy	$\checkmark$											
<b>3.2.</b> Development of the eligibility criteria of the articles	$\checkmark$											
3.3. Screening and study selection		$\checkmark$										
3.4. Data extraction												
3.4.1. Development of the data extraction instrument			$\checkmark$									
3.4.2. Application of the instrument previously developed												
3.5. Development of the PRISMA diagram				$\checkmark$								
3.6. Writing of the article					1 <sup>st</sup> draft of the article deadline – July 31st			2 <sup>nd</sup> version of the article				
4. Literature Review Part 2 – Gathering and analysis of documents												
4.1. Preparation of the document analysis grid						$\checkmark$						
4.2. Gathering of documentation												

			1								
			$\checkmark$								
		Stage 2:	Methodolog	ical Developme	nt and Implem	entation		1	L	I	
· · · · ·	· · · ·		Sta	ge 3: Final Diag	nosis	'				'	
			Image: Stage 2:     Image: Stage 2:	Image: Second	Image: second	Image: selection of the selection	Image: second	Image: second	Image: series of the series	Image: state in the state in	Image: space of the systemImage: space of the syst

Labels:

✓ Completed Tasks

**Planned Activities** 

Deadlines