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# Challenges Encountered and Methods Used by Healthcare Providers in Psychosocial Support for Pediatric Cancer Patients

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<p>Psychosocial support is a concept utilized by healthcare providers to grant emotional and social assistance. Pediatric patients experience their condition differently, and healthcare providers must understand and recognize each patient from an individual point of view. Without proper psychosocial support, pediatric patients diagnosed with cancer may struggle to cope with their condition. Successful psychosocial support improves patients' quality of life.</p> <p>The purpose of this literature review was to describe the psychosocial methods used and challenges faced by healthcare providers when caring for a pediatric cancer patient. The aim was to produce a summary of psychosocial support methods provided to pediatric patients diagnosed with cancer as well as the challenges that healthcare providers faced while providing them. The data was analyzed with some methods of inductive content analysis.</p> <p>The results showed the need for psychosocial support methods. The benefits of play, animal-assisted therapy, and social activities in promoting children's psychological well-being and promoting positive nurse-patient relationships were recognized. The challenges faced were a lack of resources and personal motivation among healthcare providers.</p> <p>The results lead to conclusions which emphasize the importance of comprehensive psychosocial support for pediatric cancer patients and highlight the different methods and challenges faced by healthcare providers in providing such support.</p>	
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<p>Tämän kirjallisuuskatsauksen tarkoituksena oli selvittää millaisia erilaisia psykososiaalisia menetelmiä hoitotyön ammattilaiset käyttävät tukeakseen syöpää sairastavaa lasta, sekä mitä haasteita he kohtaavat psykososiaalisen hoitotyön aikana.</p> <p>Tavoitteena oli koota menetelmistä ja haasteista kattava tiivistelmä, josta syöpää sairastavan lapsen hoitava henkilökunta voisi hyötyä, sillä tällä hetkellä tieto psykososiaalisista menetelmistä on hajanaista, erityisesti lasten ja nuorten hoitotyön puolella.</p> <p>Katsausta varten, tutkimuksia haettiin kolmesta eri tietokannasta, joita olivat Cinahl, Medline, sekä PubMed. Kirjallisuuskatsaukseen valittiin 10 tutkimusta, joista kaikki olivat julkaistu englannin kielellä.</p> <p>Tutkimukset analysoitiin induktiivista sisällönanalyysia käyttäen. Katsauksen tuloksena löytyi useita erilaisia psykososiaalisia menetelmiä, joista osa oli yksilökeskeisiä ja osa ryhmäkeskeisiä menetelmiä, kuten ulkonäön parantamiseen liittyvät aktiviteetit ja eläinavusteinen terapia. Tutkimuksista löytyvät haasteet olivat muun muassa resurssien puute, motivaatio, sekä puuttuva koulutus.</p> <p>Jatkotutkimuksiksi suosittelemme kestävien ja tehokkaiden psykososiaalisten tukiohjelmien kehittämistä, jossa otetaan huomioon potilaan ja perheen yksilölliset tarpeet. Lisäksi tulevaisuudessa tulisi käsitellä millaisia psykososiaalisia resursseja on tarjolla kehittyvissä maissa.</p>	
Avainsanat	Lasten ja nuorten syöpä, Hoitotyön ammattilaiset, Psykososiaalinen tuki

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## 1 Introduction

Psychosocial support is one of the key concepts when it comes to caring for a pediatric patient diagnosed with cancer. Even though the concept is taught to healthcare providers, execution of psychosocial support is lacking. Due to their condition, patients can have heavy emotional distress and declining mental health. In addition to this, the patient's family is also in need of guidance, assistance and comfort. Therefore, the need for psychosocial support cannot be overlooked by healthcare providers. Ranging from psychological to spiritual and social needs, healthcare providers need to actively and comprehensively care for the patient and their immediate family. Yet, there is dissatisfaction when it comes to emotional support and information provided. (Sultana et al. 2021: 442.)

Every patient experiences their condition differently. Factors which affect this include the patient's age, their support system, and the patient's own thoughts. Depending on the age of when they were diagnosed, pediatric cancer patients determine different levels of importance for different aspects of their condition. Considering prepubescent individuals, identity, appearance, and disassociation from parents are factors heavily affecting their life. Combining these factors with a cancer diagnosis and potential palliative care may alter the trajectory of their life and causes many to lose the identity they were creating for themselves. For younger pediatric patients, the concept of cancer, treatments and premature mortality may be too difficult to understand. (Zebrack et al. 2007: 376.) Healthcare providers can find it challenging to evaluate the psychosocial aspects of a situation and determine the specific type of support required for each child's unique circumstances (Laronne et al. 2021: 1618).

The pediatric patient's age alters the way they view their own beliefs and attitudes. In addition, they may see topics like religion, family, and medical treatment in a variety of ways. The struggle with the need for independence can contribute to the way the patient behaves with the healthcare provider, and exactly how much support they are willing to accept. Furthermore, different racial or ethnic backgrounds and gender identities may make it difficult for a healthcare provider to relate to the patient, and therefore struggle to actively and comprehensively grant proper psychosocial aid. (Fernandez et

al. 2019: 3.) Successful non-medicinal support can help the patient cope with their condition and improve their quality of life (Zebrack et al. 2007: 381).

## 2 Background

### 2.1 Pediatric Cancer

Pediatric cancer is a major cause of mortality, particularly in developed countries. In 2019, a total of 291,319 new cases of childhood cancer were reported worldwide, resulting in 98,834 deaths, while the number of prevalent cases reached 1,806,630. Apart from the physical challenges posed by the disease, patients undergoing cancer treatments are often confronted with a multitude of difficulties, including escalating financial burden, limited work, and social opportunities due to physical impairments, as well as psychological disorders such as depression and anxiety. These factors inevitably result in a decrease in quality of life if they are not treated. (Wu et al. 2022: 234.)

A substantial portion of pediatric cancer patients experience several emotional and behavioral changes following their diagnosis. These changes range from fear and anxiety about the recurrence of cancer, to chemotherapy related appearance changes, to even death. Furthermore, patients experience disturbed relationships with their peers due to the time-consuming treatment or behavioral changes, such as difficulty controlling emotions or verbal and physical aggression. Finally, patients suffer from a decrease in social activity compared to their healthy peers. These findings demonstrate the far-reaching and complex effects of cancer on a patient's psychosocial wellbeing. Understanding these impacts and the different methods of psychosocial support is critical for the development of effective interventions to support patients and families affected by a cancer diagnosis. (Yousif et al. 2021: 81.)

Pediatric oncology is a medicinal field diagnosing, supporting and caring for a child with cancer. This area includes all patients under the age of 18 who are suspected of having or are already diagnosed with a type of malignant tumor. Pediatric oncology is considered a harsh environment for healthcare providers due to the emotional strain of car-

ing for the child and supporting their family. Oftentimes, financial and emotional counselling and burden is placed upon the healthcare provider. Furthermore, pediatric oncology is the field in medicine where psychosocial care and support are most often seen and used. (Dyrmyshi et al. 2022: 907.)

## 2.2 Psychosocial Support

Different supporting mechanisms are used by healthcare providers to alleviate pain and increase the patient's comfort and health. These include any actions ranging from eating and hygiene assistance to emotional aid. Nurses and other healthcare providers perform supportive tasks daily. For a successful work performance, granting proper support towards the patient is a necessity. (IFRCPS 2014: 23.)

Psychosocial refers to the psychological, spiritual and social needs of a person, and how they relate to others around them. A combination of the words psychology and society, it is a key term for healthcare providers as they play a large part in making sure those needs are fulfilled for the patient. The concept of psychosocial support revolves around communication between the patient and the healthcare provider. Nurses, doctors, social workers and other healthcare providers alike must understand and recognize the patient from an individual point of view. The patient has their own wants and needs, their own support circle, their own ideas on the progress of their journey, and the ability to make their own decisions. (IFRCPS 2014: 52.)

Psychosocial support is an essential component of the care of pediatric oncology patients. Kazak et al. (2017: 707) noted that assessment should be standard in the care of pediatric cancer patients. This is because the diagnosis and treatment of cancer can have a significant impact on the emotional and social wellbeing of patients and their families. Additionally, addressing the individual psychological and social needs of pediatric cancer patients can lead to improved quality of life, reduced stress and anxiety, and better overall health outcomes. (Kazak et al. 2017: 710.)

Various methods and strategies are employed by healthcare providers to provide psychosocial support to pediatric oncology patients and their families. These include group therapy as well as individual based interventions such as art therapy and technology-based interventions. (Abdulah & Abdulla 2018; Suzuki & Kato 2003.)



However, challenges such as limited resources and personal motivation may impact the provision of effective psychosocial support. (Larone et al. 2021: 1612.) Despite the evidence that supports the methods mentioned above, we think that there is a need for more research. By considering the limitations and scattered information about the methods, it is necessary to determine worldwide standards for psychosocial care and to compare the effectiveness of the methods. Furthermore, it is important to determine which are the most beneficial for different patients based on age or individual need.

### **3 Purpose, Aim, and Research Questions**

The purpose of this literature review was to describe the psychosocial support methods used in pediatric oncology as well as the challenges encountered from a healthcare provider's perspective.

Our aim was to produce a summary of psychosocial support challenges and methods that healthcare providers, particularly those who work with pediatric cancer patients, can use and improve the quality of care they provide.

This literature review uses the term "healthcare providers" to refer to people or groups involved in providing psychosocial support. These include doctors, nurses, social workers, psychologists, and hospitals or clinics.

Our research aimed to answer the following questions:

1. What are the different methods used by healthcare providers to provide psychosocial support to pediatric patients diagnosed with cancer?
2. What challenges do healthcare providers encounter while using the methods of psychosocial support?

## 4 Methods

### 4.1 Design

A literature review is a way to summarize and analyze literature pertinent to a specific topic. Its purpose is to provide current information on a specific area of research and promote theory development by incorporating results and perspectives from various evidence-based data. It must include a clear and thorough search and literature selection strategy. Furthermore, a literature review should be void of personal opinions and biases. This research will be conducted as a descriptive literature review. (Cronin, Ryan & Coughlan 2008: 38.)

The first step in conducting a literature review is to formulate a research topic. The topic should be refined based on available data and personal interest. We decided on exploring factors related to psychosocial support of pediatric oncology patients. After the topic was selected, the retrieval of literature began. In this phase, relevant databases were selected and keywords for the data search formulated, to find the most relevant information to answer our research questions. Once the appropriate data was collected, we summarized and analyzed it using inductive content analysis. The results were then written based on the findings. (Cronin, Ryan & Coughlan 2008: 38.)

### 4.2 Data Search and Selection

To initiate the search for relevant data, we formulated search terms utilizing the PICO and facet analysis methods (Appendix 1). Primary sources were examined to retrieve the required data, and the databases CINAHL, Medline, and PubMed were employed (Table 1). We limited the search to peer-reviewed articles published within the timeframe of 2015-2023. Finally, we examined the reference lists to identify additional sources that were not initially identified. The search yielded a total of 750 relevant articles.

Table 1. Results of the Database Search

Database	Search terms	Number of hits	Selected based on title	Selected based on abstract	Selected based on full text

CINAHL	Healthcare providers AND Psychosocial support AND P*diatric oncology	N=161	N= 20	N= 10	N= 7
PUBMED	Healthcare providers AND Psychosocial support AND P*diatric oncology	N=87	N= 18	N= 7	N= 2
MEDLINE	Healthcare providers AND Psychosocial support AND P*diatric oncology	N= 502	N= 15	N=4	N=1

The selection of data can significantly impact the integrity of the findings. If the collection of data is primarily driven by cost and convenience rather than its potential to adequately address the research questions, the resulting data may be subject to integrity issues (Northern Illinois University). Therefore, it was essential to exclude any data that did not align with our study's purpose and aims. To ensure the elimination of irrelevant or inapplicable data during the search process, we established a set of inclusion and exclusion criteria (Table 2). To be deemed relevant, the article had to be published within the last eight years and the results had to be related to our research questions. The detailed selection process was outlined using a PRISMA diagram (Appendix 1.1). (Page et al. 2021).

Table 2. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Population including healthcare providers in pediatric oncology settings	Population including only guardians and pediatric patients
Peer reviewed studies	Studies focused only on guardian experiences
Studies published during or after the year 2015	Study subjects being cared for in homecare
Articles describing psychosocial support methods and challenges, provided by healthcare providers to children diagnosed with cancer	Studies in languages other than English
Primary studies	Dissertations and literature reviews

After reading the titles, abstracts, and full texts of the articles that were identified using the inclusion and exclusion criteria and research questions, we selected 10 final articles.

### 4.3 Data Analysis

The data analysis method used in this review was qualitative content analysis. Content analysis is a method of data analysis that provides a condensed presentation of data. It can be used in either an inductive or deductive way. (Elo & Kyngäs 2008: 115.)

The purpose of using an inductive approach is to condense a wide range of text data into a summarized form and to define direct links between the study objectives and the findings derived from the data (Thomas 2006: 237).

We chose the inductive content analysis (ICA) method as the purpose of the literature review was to describe summarized data. The first step was to familiarize ourselves with all the selected data (Appendix 2.1) and comprehend it to gain an understanding of what the literature is about before beginning coding. The second step involved highlighting sections of text in each study and using these sections to identify and merge similar pieces of text both within a study and between other studies. Each study was coded multiple times, resulting in refining the coding each time. Since this is an inductive coding, new aspects in the data were identified each time further studies were analyzed. (Vears & Gillam 2022: 127.)

The first round of coding was about organizing the data into a broad conceptual picture. This was implemented by highlighting all text related to the research questions to identify and label sections according to their broader meaning or category. When looking for broader categories, the text was read carefully to understand what the section was about. The goal of the analysis was to answer the research questions using the broad categories. (Vears & Gillam 2022: 126.)

The second coding step was to look closely at the text in each of the sections assigned to a particular category. This allowed the division of the data into smaller parts without losing any original words or ideas from the text. A category was chosen, and all the highlighted text (meaning units, Appendix 2.1) related to that category was looked at carefully from each study. Each of these sections needed to be coded in a meticulous

way by going through the text sentence by sentence. The purpose was to think about what the text said in detail and to mark it with a new code that compendiously describes it, thus, creating subcategories of the broader categories. (Vears & Gillam 2022: 127.) The review resulted in a total of 22 sub-categories.

After all the text had been coded into subcategories, the subcategories were processed further. Similar subcategories were combined into one, while different subcategories remained independent. Interpreting the data was the most important step in the analysis process. It was a process of synthesizing and connecting the categories to create a description that provides an overall answer to the research question. The goal of using ICA was to stay closer to the study purpose and to produce an analysis that provides an adequate answer to the research questions. (Vears & Gillam 2022: 111.) The coding process was completed by both authors to avoid any biased results.

## **5 Results**

### **5.1 Summary of the Data**

This review of literature incorporates a total of 10 research articles sourced from four countries, the United States, Brazil, Germany, and Israel. Six of the identified publications utilized qualitative research techniques, two employed mixed methods, one adopted a randomized controlled trial methodology, and one was part of a larger randomized controlled trial.

### **5.2 Methods Used by Healthcare Providers to Perform Psychosocial Support**

The findings revealed 10 generic categories and 22 subcategories (Table 3.) that covered the various techniques and challenges that healthcare providers confront while delivering psychosocial support to pediatric cancer patients. These sub-categories indicate the different strategies and obstacles that healthcare providers use to support pediatric cancer patients' psychological and social needs.

The analysis identified several psychosocial support methods, including play, psychoeducation, social activities, animal-assisted therapy and self-expression, as well as

a patient-centered approach. However, healthcare providers faced several challenges, including insufficient resources, limited healthcare education, and difficulties with adapting to the situation.

Table 3. Results of Inductive Content Analysis

<b>Sub-category</b>	<b>Generic category</b>	<b>Main category</b>
Playing distracts patients from hospitalization	Playing	Methods used by healthcare providers for psychosocial support
Social benefits of playing		
Benefits of screening	Screening	
Importance of screening		
Written psychoeducation	Psychoeducation	
Interactive psychoeducation		
Social activities in the hospital	Social activities	
Social activities outside the hospital		
Social activities related to self-expression		
Animal-assisted therapy improved patients' mental state	Animal-assisted therapy	
Animal-assisted therapy is a distraction from hospitalization		
Animal-assisted therapy improved communication		
Encouragement of self-expression	Use of self-expression	
Gender differences in self-expression		
Increased well-being of patient	Patient-centered approach	
Increased well-being of healthcare provider		
Challenges with different personalities	Personal motivation	Challenges faced by healthcare pro-
Challenges relating to patient's age		
Challenges with organizational resources		

Challenges with organizational coordination	Lack of resources	viders while providing psychosocial support
Challenges with adapting	Healthcare education	
Challenges with education		

### 5.2.1 Screening Tools

Screening tools are necessary to ensure that pediatric patients diagnosed with cancer receive appropriate and cohesive psychosocial support. After being diagnosed, patients often experience issues such as distress, social isolation and loss of individual character. Screening tools allow these challenges to be identified, and it is the first psychosocial support method used when beginning to treat a young patient. (Desjardins 2019: 1717.)

Screening tools can help healthcare providers identify emotional and psychological needs which younger patients can have difficulty expressing. The results highlight the need for all healthcare providers to use screening tools for more comprehensive and all-encompassing care for pediatric patients. Identifying these needs prevent negative outcomes such as increased anxiety and depression. Screening tools target specific emotional needs, focusing on each child's individuality. As treatment for a diagnosed patient can be a long process, tools such as PAT and PLLC can monitor changes over time and allow healthcare providers to adjust the psychosocial support methods accordingly. (Di Battista 2015: 394.)

The process of screening also enhances care adherence and attendance by promoting family functioning, ultimately leading to improved psychosocial outcomes and a higher quality of life for patients (Kazak et al. 2017: 704). Neglecting to screen for psychosocial issues may result in undiagnosed and untreated problems, which could lead to poor medical and psychosocial outcomes for the patient (Kazak et al. 2017: 707). Overall, screening represents a pivotal tool in the proactive psychosocial care of a pediatric cancer patient (Kazak et al. 2017: 704).

### 5.2.2 Psychoeducation

Psychoeducation is a method of educating patients and their families by providing information that enables them to better manage their disease and improve their psychosocial adaptation to the illness (Wiener et al. 2015: 12). For pediatric cancer patients' psychoeducation is critical, as it assists them in understanding their disease and its treatment, alleviates uncertainty, and empowers them to make informed decisions (Thompson & Young-Saleme 2015: 31).

The analysis results indicated that psychoeducation is delivered through a range of resources, including books, educational support groups, camps, and educational events. These findings suggest that healthcare providers are making concerted efforts to provide psychoeducation to pediatric cancer patients and their families using a range of resources.

### 5.2.3 Playing

The role of play in pediatric care has been increasingly recognized as a crucial component of children's cognitive and social development. As such, it has become an essential element of psychosocial care in hospital settings (Soares et al. 2016: 1051).

The benefits of playing in this context are multifaceted. Firstly, play can help children maintain a sense of normalcy despite being in a hospital environment, promoting their psychological well-being (Soares et al. 2016: 1050). Additionally, it can facilitate social interactions between patients and healthcare providers by increasing children's confidence and sense of autonomy (Soares et al. 2016: 1048), ultimately leading to better health outcomes. Furthermore, play can enhance children's social well-being and happiness by providing a necessary distraction from the stress of hospitalization (Soares et al. 2016: 105).

### 5.2.4 Animal-assisted Therapy

The implementation of play in pediatric care can also involve animal-assisted therapy (AAT), which is a therapeutic intervention that incorporates interactions between patients and trained animals (American Veterinary Medical Association).



AAT is similar to play in that it has positive effects on patients, including improvements in their mental state and confidence. The findings of the analysis indicate that AAT can improve the mental state of pediatric patients and serve as a distraction from hospitalization. It can also encourage timid patients to engage with others and communicate with healthcare providers (Moreira et al. 2016: 1125), thereby promoting positive nurse-patient relationships. (Moreira et al. 2016: 1123.)

### 5.2.5 Social Activities

Although childhood can be a challenging phase for a growing child, the presence of a life-threatening illness such as cancer exacerbates these difficulties. This is primarily due to the prolonged and demanding treatment process associated with the disease, which often involves frequent hospitalizations and polyclinic visits. As a result, children with cancer may become increasingly isolated from their social environments, including school, which can negatively impact their friendships and overall social life. (Efe et al. 2022: 95.) Therefore, it is important to provide a multitude of personalized activities for patients to promote their psychosocial wellbeing.

The results of the analysis highlighted two main categories: self-expression through activities and social activities. Under the self-expression through activities category, it was found that self-expression methods were provided through group activities related to beauty for girls and through written or video diaries for boys. This subcategory highlights the use of a patient-specific support method. The social activities category revealed that various social activities were offered for the patients, including scheduled activities in playrooms, support groups, yearly hospital socials and retreats. Individual measures, such as beauty-related activities were taken for patients who were distressed by their changed appearance because of the cancer treatments (Williamson & Rumsey 2017: 51).

These results emphasize the importance of socialization for patients, especially those who may experience isolation due to frequent hospitalizations.

Overall, the results highlight the importance of social activities as a part of psychosocial care for pediatric oncology patients. These activities provide opportunities for self-expression and socialization, which are crucial for a child's development and wellbeing. The results also underline the need for patient-specific support methods to cater to individual needs and promote positive outcomes.

### 5.2.6 Patient-centered Approach

There are 11 attributes mentioned which growing children have that should be understood by healthcare professionals in order to grant proper psychosocial support. Included in these attributes are empathy, maturity, social engagement, supportive background and self-awareness. (Cho et al. 2021: 10.) For a healthcare provider to give comprehensive and meaningful social, psychological and emotional support for a diagnosed child, these attributes should be understood for each individual patient. Each child is in a different situation with their diagnosis and cancer stage. Furthermore, each child has individual opinions and values, placing a different amount of importance on topics such as a supportive background and their personal maturity. (Larone et al. 2021: 1613.) Therefore, it is crucial for healthcare providers to promote patient empowerment by working with them to define problems, prioritize goals, develop care plans, and consistently monitor results (Fernandez et al. 2019: 3).

When describing a patient, a nurse exclaimed: “They just always leave everybody smiling when people leave the room, even when they were not feeling good. When I see their personality, I think like, ‘how can I inspire other patients, have the outlook they have?’” Patient’s accomplishments allow healthcare providers to feel rewarded (Cho et al. 2021: 13). This lessens the emotional burden of caring for a pediatric patient diagnosed with cancer. When witnessing achievements such as the aforementioned, healthcare providers strive for further emphasis on emotional support and individuality. Through seeing the positive effects psychosocial support has on children diagnosed with cancer, healthcare providers are willing to pursue similar methods with more patients, instead of solely focusing on medicinal means. (Cho et al. 2021: 16.)

## 5.3 Challenges Faced in Psychosocial Support Performed by Healthcare Providers

### 5.3.1 Lack of Resources and Poor Understanding

Arguably one of the most important aspects of psychosocial care is understanding the patient. Children who have been diagnosed with cancer are in different stages of their childhood and have a range of emotional capacities, causing difficulties in providing fitting psychosocial support. Cho and others (2021: 10), further emphasizes the need to

understand a child's emotional development and methods in which healthcare providers may non-medicinally improve a diagnosed child's wellbeing. Moreover, a cancer diagnosis may affect the child's life even after symptoms have been eliminated and the patient is healthy (Fernandes et al. 2019: 7). Therefore, promoting proper psychosocial care is necessary to allow the child to continue with a satisfactory life.

The results (Table 3.) showed that healthcare providers lack proper resources (Laronne et al. 2021: 1617). Understaffing results in additional work, oftentimes overwhelming the healthcare provider. As a result, no additional time is allocated for workers to recognize children's different emotional needs. The main role, in this case of a nurse, is to alleviate the child's pain medicinally. This can cause a tendency to treat patients in a similar fashion, ignoring one's individuality and differences in needs. (Laronne et al. 2021: 1616.)

A study conducted found that children understood the importance of expressing their wishes, yet half of the participants chose not to do so. (Laronne et al. 2021: 1612.) This highlights how healthcare providers may not realize the specific wishes of patients and base their treatments on their own assumptions and beliefs.

### 5.3.2 Personal Motivation

Continuing with the same study, another care challenge rose due to healthcare providers individual personalities (Laronne et al. 2021: 1613). Reactions to grief and the ability to work through stressful and anxiety-inducing situations are handled differently. The study highlighted how participants felt scared of coping with a child's death, and henceforth withdrew from the patient, preventing them from receiving proper psychosocial and emotional care. With children being in such a vulnerable state, many participants feared saying the wrong thing, or having to explain difficult topics such as pre-mature death to the child. (Laronne et al. 2021: 1618.)

It is further argued how not every healthcare provider can deal with pediatric oncology patients. Empathetic, compassionate healthcare providers tended to gravitate towards a more emotional approach, whereas overly optimistic individuals focused on medicinal care. Additionally, the study found how healthcare providers own upbringing, views on mortality, and personal values affected palliative care. The importance they placed on

each respective area reflected on the care given to the pediatric patient. (Laronne et al. 2021: 1619.)

## **6 Discussion**

### **6.1 Main Results**

The purpose of this literature review was to identify the methods used by healthcare providers to perform psychosocial support for pediatric cancer patients and the challenges that healthcare providers face while providing them.

The results of the literature review showed that healthcare providers use various methods to provide psychosocial support to pediatric patients diagnosed with cancer. These methods include screening tools, psychoeducation, playing, animal-assisted therapy, and social activities. Challenges occurred with managing time, resources, and lack of understanding younger patients and their different situations in life.

Each method represents a proactive approach to pediatric cancer care that can improve the patient's quality of life and promote positive nurse-patient relationships. The use of screening tools, psychoeducation, playing, and animal-assisted therapy can have a positive impact on the psychosocial care of pediatric cancer patients and healthcare providers are making concerted efforts to provide these methods of care using a range of resources.

Overall, these findings have important implications for future research and practice in the field of pediatric psychosocial care.

### **6.2 Ethical Considerations and Reliability**

Ethical factors were considered to ensure the validity and reliability of this literature review. The review is written following the guidelines of the National Board of Research (TENK). Additionally, all references are used according to the Metropolia guidelines and all author's works are acknowledged and cited correctly. The data which is presented in the literature review have been selected based on the inclusion and exclusion

criteria, which narrowed down the validity by condensing the used methods of research and population, as well as by using peer reviewed articles.

The literature review is conducted void of any personal bias or conflicts of interest. Author's personal opinions have been fully excluded, and only articles that grant full anonymity towards sample subjects have been selected. Furthermore, all selected articles have been assessed using JBI's Critical Appraisal Tools for qualitative studies (2015) and the Mixed Methods Appraisal Tool (MMAT) for the mixed methods studies (2018). We selected three questions from each appraisal list and applied them to the selected studies (Appendix 2.1).

Along with the limitations (Appendix 2.1) of these studies and their potential impact on the validity of the findings it is important to recognize some additional limitations related to the data used in this review. Firstly, the review's scope is quite narrow since it only includes a small amount of data into the methods and difficulties involved in providing psychosocial care. Secondly, the data primarily comes from developed nations that have well-established pediatric oncology programs. This means that psychosocial services may differ significantly in lower-income countries, where they may be in correlation to the development of better medical care for children with cancer in those regions.

#### JBI appraisal list

1. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?
2. Are participants, and their voices, adequately represented?
3. Is there congruity between the research methodology and the research question or objectives?

#### Mixed Methods Appraisal Tool

1. Is there an adequate rationale for using a mixed methods design to address the research question?
2. Are the different components of the study effectively integrated to answer the research question?
3. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?

The results (Appendix 2.1) were marked as either a pass or fail. To be eligible for a pass, each article had to pass at least two of the designated appraisal questions.

### 6.3 Recommendations

It is recommended that additional research is done by nurses, healthcare professionals, and others who are interested in providing care for children diagnosed with cancer. This research should cover various age groups of children and those from diverse backgrounds and religions. Furthermore, there is insufficient data on psychosocial methods, including screening tools and patient-centered approaches. The methods mentioned should be studied through qualitative methods such as interviews and focus groups, in addition to quantitative methods such as surveys and randomized control trials. Further research should be carried out globally, beyond the euro-centric care standards, for a more comprehensive and complete understanding of effective psychosocial care methods and the challenges involved in caring for a pediatric patient diagnosed with cancer.

## 7 Conclusions

The review emphasizes the need for comprehensive psychosocial support for pediatric cancer patients, including screening tools, psychoeducation, animal-assisted therapy, and social activities. Healthcare providers must develop sustainable and effective support programs that meet the unique need of each patient. Future research must address limitations and gaps to ensure patients receive optimal care.

## References

Abdulah, D.M., & Abdulla, B.M. 2018. Effectiveness of group art therapy on quality of life in paediatric patients with cancer: A randomized controlled trial. *Complementary-Therapies in Medicine* 41, 180–185.

Anatomy of an ethical approval statement 2021. Ripeta. <<https://ripeta.com/anatomy-ethicalapproval/>> Accessed 8 January 2023.

Animal-assisted interventions: Definitions. American Veterinary Medical Association. <<https://www.avma.org/resources-tools/avma-policies/animal-assisted-interventions-definitions>> Accessed 21 February 2023.

Cho, E., & Baker-Ward, L. & Smith, S. & Barfield, R. & Docherty, S. 2021. Human Flourishing in Adolescents with Cancer: Experiences of Pediatric Oncology Health Care Professionals. *Journal of Pediatric Nursing* 59, 10–18.

Community-based psychosocial support participant's book. 2014. Copenhagen: International Federation Reference Centre for Psychosocial Support, International Federation of Red Cross and Red Crescent Societies.

Cronin, P., & Ryan, F. & Coughlan, M., 2008. Undertaking a literature review: A step-by-step approach. *British Journal of Nursing*, 17 (1), 38–43.

Data Selection. Responsible Conduct of Data Management. Northern Illinois University. <[https://ori.hhs.gov/education/products/n\\_illinois\\_u/datamanagement/dstopic.html](https://ori.hhs.gov/education/products/n_illinois_u/datamanagement/dstopic.html).> Accessed 8 January 2023.

Desjardins, L., & Etkin-Spigelman, L. & Hancock, K. & Chung, J. & Shama, W. & Mills, D. & Alexander, S. & Barrera, M. 2019. Healthcare Provider Utility Ratings of a Psychosocial Screening Summary: From Diagnosis to 6 Months. *Supportive Care in Cancer* 28 (4), 1717–1723.

Di Battista, A., & Hancock, K. & Cataudella, D. & Johnston, D. & Cassidy, M. & Punnett, A. & Shama, W. & Barrera, M. 2015. Healthcare Providers' Perceptions of the Utility of Psychosocial Screening Tools in Childhood Cancer: A Pilot Study. *Oncology Nursing Forum* 42 (4), 391–397.

Dyrmyshi, S., & Moschovi, M. & Koutelekos, I. & Baka, M. & Polychronopoulou, S. & Petsios, K. & Dousis, E. 2022. Quality of Work Life of Greek Pediatric Oncology Nurses: A Comparative Study. *International Journal of Caring Sciences* 15 (2), 905–920.

Efe, Y.S., 2022. Social exclusion and behavior problems in adolescents with cancer and healthy counterparts. *Journal of Pediatric Nursing* 64, 95–101.

Elo, S., & Kyngäs, H. 2008. The qualitative content analysis process. *Journal of Advanced Nursing* 62 (1), 107–115.

Fernandes, L. T. B., & Nóbrega, V. M. d. & Sales, M. L. X. F. & Reichert, A. P. d. S. & Moura, F. M. D., & Collet, N. 2019. SUPPORTED SELF-CARE ACTIONS FOR CHILDREN AND TEENAGERS WITH CHRONIC DISEASES. *Texto & Contexto – Enfermagem* 28, 1-13.

Haddaway, N. R., & Page, M. J. & Pritchard, C. C. & McGuinness, L. A. 2022. PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis *Campbell Systematic Reviews*, 18, e1230

Higgins, JPT., Green, S. (editors). 2011. *Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0*

Jensen, K.A., 7 STEPS TO THE PERFECT PICO SEARCH. EBSCO Health.

Jones, B. & Currin-Mcculloh, J. & Pelletier, W. & Sardi-Brown, V. & Brown, P. & Wiener, L., 2018. Psychosocial standards of care for children with cancer and their families: A national survey of pediatric oncology social workers. *Social Work in Health Care* 57 (4), 221–249.

Kazak, A.E., & Barakat, L.P. & Askins, M.A. & McCafferty, M. & Lattomus, A. & Ruppe, N. & Deatrck, J. 2017. Provider Perspectives on the Implementation of Psychosocial Risk Screening in Pediatric Cancer. *Journal of Pediatric Psychology*, 42 (6), 700–710.

Kreuter, F. ed., 2008. *Encyclopedia of Survey Research Methods*. Thousand Oaks, CA: Sage Publications, Inc.



Laronne, A., & Granek, L. & Wiener, L. & Feder-Bubis, P. & Golan, H. 2021. Organizational and Individual Barriers and Facilitators to the Integration of Pediatric Palliative Care for Children: A Grounded Theory Study. *Palliative Medicine*, 35 (8), 1612–1624.

Lockwood C., & Munn Z. & Porritt K. 2015. Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. *Int JBI Evidence Based Healthcare*, 13 (3), 179–187.

Matzen, I., 2014. What is Facet Analysis?, Tame Your Assets. <<http://tameyourassets.com/what-is-facet-analysis/#sthash.O9u9mLxy.WVtF1ly9.dpbs>> Accessed 14 January 2023.

Moreira R., & Gubert F. & Sabino L. M. & Benevides J. & Tomé M. & Martins M. & Brito M. 2016. Assisted therapy with dogs in pediatric oncology: relatives' and nurses' perceptions. *Rev Bras Enferm* 69 (6), 1122-8.

Page, M.J., 2021. The Prisma 2020 statement: An updated guideline for reporting systematic reviews. *Journal of Clinical Epidemiology*. 134, 178-189.

Shetty, S., 2022. Determining sample size for qualitative research: What is the magical number?, InterQ Research. <<https://interq-research.com/determining-sample-size-for-qualitative-research-what-is-the-magical-number/>> Accessed 8 January 2023.

Soares, V.A., & da Salvia, L.F. & de Santos, P.M. & Bastos Depianti, J.R. 2016. THE IMPORTANCE OF PLAYING FOR HOSPITALIZED CHILDREN WITH CANCER IN PALLIATIVE CARE. *Journal of Nursing UFPE On Line*, 10 (3), 1047–53.

Sultana, A., & Tasnim, S. & Sharma, R. & Pawar, P. & Bhattacharya, S. & Hossain, M. 2021. Psychosocial Challenges in Palliative Care: Bridging the Gaps Using Digital Health. *Indian Journal of Palliative Care*, 27 (3), 442-447.

Suzuki, L.K., & Kato, P.M. 2003. Psychosocial support for patients in pediatric oncology: The influences of parents, schools, Peers, and Technology. *Journal of Pediatric Oncology Nursing*. 20 (4), 159–174.

Thomas, D.R., 2006. A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, 27 (2), 237–246.

Thompson, A. L., & Young-Saleme, T. K. 2015. Anticipatory guidance and psychoeducation as a standard of care in pediatric oncology. *Pediatric Blood & Cancer*, 62 (5), 693-703.

Thurston, W.E. & Cove, L. & Meadows, L.M. 2014. Methodological congruence in complex and collaborative mixed method studies. *International Journal of Multiple Research Approaches*, 2–14.

Vears, D.F., & Gillam, L. 2022. Inductive content analysis: A guide for beginning qualitative researchers. *Focus on Health Professional Education: A Multi-Professional Journal*, 23 (1), 111–127.

Yousif, F.S., 2021. Psychosocial impact of childhood cancer on patients and their families. *AL-Kindy College Medical Journal*. 17 (2), 79–83.

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 (5), 419–S424.

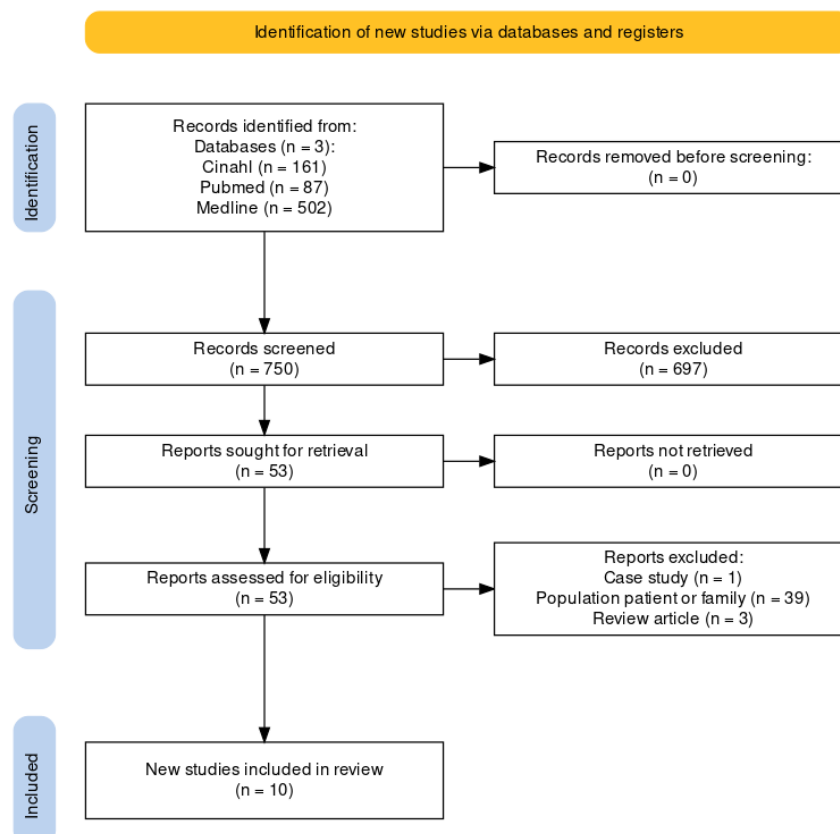
Williamson, H., & Rumsey, N. 2017. Perspectives of health professionals on the psychosocial impact of an altered appearance among adolescents treated for cancer and how to improve appearance-related care. *Journal of Psychosocial Oncology*. 35 (1), 47–60.

Wu, Y., & Deng, Y. & Wei, B. & Xiang, D. & Hu, J. & Zhao, P. & Lin, S. & Zheng, Y. & Yao, J. & Zhai, Z. & Wang, S. & Lou, W. & Yang, S. & Zhang, D. & Lyu, J. & Dai, Z. 2022. Global, Regional, and National Childhood Cancer Burden, 1990-2019. An analysis based on the global burden of disease study 2019. *Journal of Advanced Research*, 233-247.

## Appendix 1. Facet analysis

<b>P= Population:</b> <b>Healthcare providers</b>		<b>I= Interest:</b> <b>Psychoso- cial support</b>		<b>Co= Context:</b> <b>Pediatric oncology</b>
Healthcare providers	<b>AND</b>	Psychosocial support	<b>AND</b>	P*diatric oncology
<b>OR</b>		<b>OR</b>		<b>OR</b>
Healthcare professionals		Psychosocial care		P*diatric cancer
<b>OR</b>		<b>OR</b>		<b>OR</b>
Clinicians/nurses/doctors		Emotional support		Children with cancer

## Appendix 1.1 PRISMA diagram (Haddaway et al. 2022)



Appendix 2

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Appendix 2.1 Description of The Selected Articles

Article	Aim	Sample	Methods/Analysis	Major Findings	Limitations
<p>1 <b>Soares VA et al.</b> <b>2016</b> <b>Brazil</b></p>	<p>To identify the importance of playing for pediatric oncology patients in palliative care in the perception of the nursing team.</p>	<p>Four nurses and seven nursing technicians from the nursing team in a public pediatric hospital in Rio de Janeiro. This sample was chosen due to the fact that they are working in close contact with the hospitalized children.</p>	<p>Qualitative research, interviews.  / thematic analysis method.</p>	<p>According to the participants, playing as a care method helped the children distract themselves from their hospitalization. “Playing is important for children to have a life more or less normal to forget for a moment that they are living a complicated life, away from their family, friends, their toys, and school” (Soares et al. 2016: 3). “Playing helps children interact with each other” (Soares et al. 2016: 4). The participants highlighted that playing improved psychosocial aspects like happiness, well-being, and interactions between the child and the nurse.</p>	<p>A lack of control group could limit the interpretation of the findings. <b>JBI appraisal:</b> pass</p>

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<p>2 <b>Jones et al.</b> <b>2018</b> <b>USA</b></p>	<p>To report the experiences of social workers in delivering psychosocial care to the patients and their families, as well as the adherence to The Standards of Psychosocial Care for Children with Cancer and Their Families (2015).</p>	<p>107 social workers from 81 cancer institutions.</p>	<p>Mixed methods study, online survey / statistical analysis + review of open-ended questions.</p>	<p>58 participants said that they used some kind of assessment tool to screen for any psychosocial issues in their patients and their families. The Psychosocial Assessment Tool (PAT) was the most commonly used. Psychoeducation concerning cancer was provided regularly at 55 institutions. Psychoeducation included supplying of resources, such as books, educational support groups, camps and educational events. 29 of the institutions reported offering social activities always. For example, scheduled activities in playrooms, support groups or yearly hospital socials. They also offered social outlets such as retreats, and activities for adolescents. 44 of the institutions offered support with re-entry to school life.</p>	<p>Self-reported data could be a subject to social desirability or memory recall bias. <b>MMAT appraisal:</b> pass</p>
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<p>3 <b>Kazak et al.</b> <b>2017</b> <b>USA</b></p>	<p>To identify the importance of psychosocial risk screening of patients from a healthcare providers perspective.</p>	<p>15 healthcare providers, ranging from physicians, nurses, social workers, psychologists to physician assistants. Participants were selected from nine sites, with 3 of them using PAT (psychosocial assessment tool) for research and six of them for clinical care.  The participants were from different clinical sites where PAT is used. (no other details were given on the setting).</p>	<p>Qualitative research, digitally recorded interviews / constant comparative analysis method.</p>	<p>Screening is an important factor in psychosocial support as it facilitates clinical care. Screening was identified as critical to proactive care. Screening is an effective tool to match intervention to need. Screening supported care adherence and attendance thus improving the child's quality of life. It also makes communication between the team smoother as they are more aware of the patients and family's need. According to the participants, no families should be excluded from screening, as it allows underlying issues to be discovered. Screening also promotes psychosocial outcomes.</p>	<p>Small sample size where only 15 healthcare providers are interviewed.  The sample size can limit the generalizability of the results.  <b>JBI appraisal:</b> pass</p>
<p>4 <b>Moreira RL et al.</b> <b>2016</b> <b>Brazil</b></p>	<p>To observe the effects of animal-assisted therapy with dogs on pediatric patients.</p>	<p>Six healthcare providers from the nursing staff, including nurses and nurse technicians, as well as 10 legal guardians. The study was set</p>	<p>Qualitative study, sample observation and in-depth interviews.</p>	<p>The participants recognized significant changes in the mental state of the patients after playing with the dog.  "They get distracted, they play, they have fun-. The presence of</p>	<p>A lack of control group could limit the interpretation of the findings.</p>

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	ric patients from the perspective of the nursing staff and parents.	in a hospital located in Brazil that diagnoses and treats children and adolescents with cancer.	theoretical-methodological method / Content analysis.	the dog improves interaction and makes them more relaxed and calm” (Moreira et al. 2016: 1125). The presence of the dog seemed to also have a positive effect on the relationships between the nurses and patients. “Yes, there was an improvement in communication, mainly with those who are naturally shy or those who seem scared when they get here” (Moreira et al. 2016: 1125). “Usually they don’t want to talk, but when the dog comes...we can’t help getting excited as well, then were able to speak with them about it. When there’s something in common to talk about it is easier to medicate them” (Moreira et al. 2016: 1125).	<b>JBI appraisal:</b> pass
5 <b>Williamson &amp; Rumsey</b>	To investigate the interventions and perspectives	Phase one: 14 healthcare providers	Sequential explanatory mixed methods study.	Participants expressed that although it is surprising that patients with terminal illnesses could be	Limited sample size in phase one, although phase

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<p><b>2017 UK</b></p>	<p>tives of healthcare providers regarding the psychosocial impact of appearance change in adolescents (12-18 years) during cancer treatments.</p>	<p>(five nurses, two psychologists, five doctors, two social workers) from a regional pediatric hospital. Phase two: 48 healthcare providers working within UK multidisciplinary oncology teams (MDT's) (43,8% social workers, 27% nurses, 14,6% doctors, 10,42% psychologists, and 10,4% youth workers).</p>	<p>Phase one: interviews Phase two: online survey / Phase one: thematic analysis Phase two: qualitative data → deductive content analysis, quantitative data → statistical analysis (SPSS).</p>	<p>concerned about physical appearance, it is very common. The root of the insecurities lies in the change in treatment that they receive from their peers, feeling like they don't fit the beauty standards of society, and the fear of being judged or bullied because of their physical appearance. The interventions mainly focused on prevention, so explaining the physical effects of cancer to the patients. Group activities related to beauty (wig installments, make-up, clothes etc.) were provided for girls. A few participants also used patient-specific support methods, such as, building a trust relationship, using a person-centered approach to encourage conversations about specific concerns. Patients who struggled with self-expression (mostly boys) were encouraged to use written or video</p>	<p>two incorporates a larger sample size, they are only a representation of the healthcare providers in the UK. Potential for bias due to self-reported data. <b>MMAT appraisal:</b> pass</p>
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				<p>diaries. Simple interventions included validating feelings, introducing positive role-models, and giving reassurance to the patient. In difficult situations, social skills and cognitive behavioral techniques were taught to help manage social situations and identify and challenge negative appearance cognitions.</p> <p>“We work together, they know what will work, we just gently suggest, and facilitate what they need” (social worker) (Williamson &amp; Rumsey 2017: 53).</p> <p>“Bring it up early on, we need to invest in that discussion to put support networks there, or at least discuss feelings, before changes happen, otherwise problems arise like reluctance for treatment and not taking medicines” (nurse) (Williamson &amp; Rumsey 2017:53).</p>	
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<p>6 <b>Cho et al.</b> <b>2021</b> <b>USA</b></p>	<p>To help healthcare providers grant age-appropriate support for cancer-suffering adolescents through emotional, individual and social approaches.</p>	<p>17 pediatric oncology healthcare providers.</p>	<p>Qualitative study/ Demographic data → descriptive statistical analysis Transcripts → qualitative content analysis.</p>	<p>The study found critical aspects in care which are necessary to provide proper support for an adolescent child in different stages of their cancer journey. These attributes include: “(1) initiative and enterprise, (2) positivity and evocativeness, (3) tranquility and maturity, (4) perseverance and tenacity, (5) compassion and empathy, (6) social engagement and connection, (7) wisdom and translation into life, (8) supportive background, (9) self-awareness and selfagency, (10) transcendence and full potential, and (11) meaning-making” (Cho et al. 2021: 10). “[Despite] everything that they went through, they were still able to carry forward. Another nurse also mentioned, they just had end</p>	<p>Small sample size and some healthcare provider roles such as a social worker missing. <b>JBI appraisal tool:</b> pass</p>

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				<p>goals [even in palliative treatment]. They wanted to go to college still. They were still in school; they didn't take any time off. When they were here for their treatment, they had classes online. They were still being very active. This person was amazing and very driven; they just kept going" (Cho et al. 2021: 13).</p> <p>When providing care for pediatric cancer patients, healthcare providers should emphasize a child's individuality, emotional support and social interactions, instead of solely focusing on symptom alleviation.</p>	
<p>7 <b>Fernandes et al.</b> <b>2019</b> <b>Brazil</b></p>	<p>To aid healthcare providers to identify the need for different psychosocial methods based on a child's age.</p>	<p>11 healthcare providers, including three Community Health agents, two dentists, three nurses and three doctors. From these, there were two males and nine females</p>	<p>Qualitative study conducted through semi-structured interviews / Thematic analysis.</p>	<p>The study describes how the 5 A's method can be used to help healthcare workers in providing adequate psychosocial support for children who are suffering from cancer. The 5 A's method includes</p>	<p>The small sample size of only 11 healthcare professionals can limit findings.</p>

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		<p>with an average age of 48.</p>		<p>the following: “Assessment - understanding the subjects’ beliefs, knowledge and behaviours; Guidance - exchange information on disease management and coping strategies and skills training; Agreement - elaboration of the joint self-care plan, considering the specificities of the individual; Assistance - actions by professionals that improve people’s motivation and improve their self-help skills; Follow-up - joint development and implementation of a monitoring system” (Fernandes et al. 2019: 4). The study reflects upon the need for the healthcare providers personal extrinsic and intrinsic motivation to assure full understanding of the necessary psychosocial support methods.</p>	<p><b>JBI appraisal tool:</b> pass</p>
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<p>8 <b>Di Battista et al.</b> <b>2015</b> <b>USA</b></p>	<p>To inspect the way healthcare providers regard psychosocial screening tools such as PAT and PCCL in reference to young children suffering with cancer.</p>	<p>14 nurses, 8 social workers and 15 oncologists are included in the population.</p>	<p>Repeated measures comparative study/ Mann-Whitney U test analysis.</p>	<p>Healthcare providers use a PCCL screening tool to assess the necessary psychosocial support. "Examples of items include "child withdrawn," "moody," "child acting out," and "child social problems." The PCCL also documents any actions taken to address observed concerns" (Di Battista et al. 2015: 392). "The use of psychosocial screening tools may improve communication among HCPs treating children with cancer, which, in turn, may improve healthcare services" (Di Battista et al. 2015: 395). The study found that nurses were more inclined to use the psychosocial screening tools, whereas other healthcare providers such as social workers had much lower utility ratings. The study emphasizes the necessity of screening tools to bring healthy communication between the child</p>	<p>Lack of familiarity with PCCL/PAT can grant inflated and amicable results.  <b>JBI appraisal tool:</b> pass</p>
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				and the healthcare provider, in addition to communication between healthcare peers.	
9 <b>Laronne et al.</b> <b>2021</b> <b>Israel</b>	The study identifies barriers which healthcare providers face in regard to palliative pediatric oncology care.	46 healthcare providers, including nurses, oncologists, psychosocial team members and other healthcare staff.	Qualitative study/ NVivo software analysis.	<p>“The important role of the primary healthcare provider has also been identified in studies on barriers to pediatric palliative care implementation including the provider role, conflicting philosophies about palliative care, and emotional relationships with patient/families” (Laronne 2021: 1613).</p> <p>“Additional barriers included provider beliefs that palliative care cannot be delivered concurrently with curative cancer treatments, discomfort talking about death, and perception that there is little or no benefit in incorporating palliative care at end of life” (Laronne 2021: 1613).</p> <p>“Healthcare providers acknowledged their discomfort with providing palliative care as a barrier,</p>	<p>Study conducted in a country different from Eurocentric healthcare systems.</p> <p><b>JBI appraisal tool:</b> pass</p>

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				<p>mentioning both difficulty with end-of-life care and conflicting goals of care” (Laronne 2021:1613).</p> <p>The study identifies factors which result in barriers of care for healthcare providers. Barriers include issues such as a lack of resources and individual barriers including personal motivation and emotional capability. Lack of job commitment and dedication result in lessened support for pediatric oncology patients.</p>	
<p>10 <b>Desjardins et al.</b> <b>2019</b>  <b>Germany</b></p>	<p>To highlight the necessity of psychosocial screening tools such as PAT, which have not been an integral part of psychosocial support so far.</p>	<p>54 healthcare providers, including nurses, oncologists and social workers.</p>	<p>Randomized controlled trial/ VAS rating scale analysis.</p>	<p>PAT follows the classification system ‘Pediatric Psychosocial Preventative Health Model.’ The diagnosed child is assessed through levels 1-3. A higher level means that more psychosocial resources need to be used when supporting the patient. The study indicates the necessity of screening tools as an important aspect of psychosocial care. The study found that</p>	<p>Healthcare providers focused on reporting on more than one patient, potentially lowering utility perception. <b>JBI appraisal tool: pass</b></p>

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				<p>nurses and oncologists found the screening tools useful, whereas other healthcare providers had low utility ratings.</p> <p>Differences in perceptions between healthcare providers creates a barrier of communication.</p> <p>Proper implementation of psychosocial support can therefore be hindered.</p>	
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