# Parental Cancer and Its Impact on Children's Well-being: A Survey

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## **Abstract**

The survey paper examines the complex challenges faced by children when a parent is diagnosed with cancer, focusing on emotional well-being, educational impact, family dynamics, and coping strategies. It highlights the significant psychological and social disruptions experienced by children, emphasizing the need for effective communication and emotional support to mitigate these impacts. The paper underscores the limitations of the traditional biomedical model in addressing psychosocial needs, advocating for an integrative approach that includes psychiatric and psychosocial care. Key findings reveal that resilience and adaptive coping strategies are crucial for positive mental health outcomes, necessitating targeted interventions. The survey also explores the educational challenges children face, advocating for supportive measures within school environments to accommodate their unique needs. Family dynamics are significantly altered, with children often assuming increased responsibilities, highlighting the importance of structured support programs like Family-SCOUT. The paper calls for the refinement of adverse childhood experiences (ACEs) assessment methods and the development of culturally sensitive interventions. It also discusses advancements in Emotional Support Conversation systems, emphasizing the potential of frameworks like RESORT and SweetieChat in providing tailored emotional support. The survey concludes by advocating for a holistic approach that integrates evidence-based methods and innovative frameworks to address the multifaceted impact of parental cancer on children, suggesting areas for future research and intervention to enhance support systems and improve outcomes for affected families.

### 1 Introduction

# 1.1 Significance of the Issue

Parental cancer significantly challenges children's well-being, impacting their emotional, psychological, and social functioning. A parent's life-threatening illness can induce emotional distress, misunderstandings, and communication barriers within the family. Effective communication is vital to alleviate these challenges, as poor communication can worsen children's emotional distress [1]. The psychological effects on children are profound, with parental cancer leading to various psychological challenges and disruptions in social functioning [2]. Families with minor children face heightened emotional and organizational stress, burdening all family members [3]. Despite the urgent need for support, comprehensive services for families affected by parental cancer remain scarce [3]. Furthermore, providing effective emotional support in multi-turn interactions is essential to meet the needs of children facing such adversities [4]. Psychological factors, including resilience and coping strategies, significantly influence the mental health outcomes of these children, underscoring the importance of fostering these variables to enhance children's well-being [5].

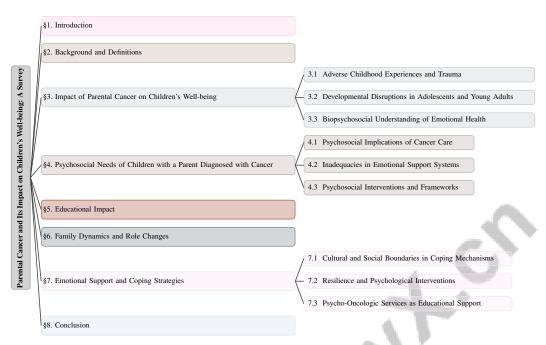


Figure 1: chapter structure

## **1.2** Structure of the Survey

The survey is structured around key themes to comprehensively examine the multifaceted impact of parental cancer on children's well-being. It begins with background information and definitions that establish the prevalence and demographic characteristics of parental cancer, alongside critical terms such as 'children's well-being', 'psychosocial needs', 'educational impact', 'family dynamics', 'emotional support', and 'coping strategies'. The survey then investigates the direct effects of parental cancer on children's emotional and psychological health, categorizing existing research into themes such as emotional problems, role changes, social functioning, and interventions [2]. The psychosocial needs of children are explored, emphasizing the necessity of addressing these needs for their mental health and well-being. Additionally, the survey analyzes the educational impact on children, discussing challenges within the school environment and potential intervention strategies. The focus subsequently shifts to family dynamics and role changes, examining the transformations in family roles and relationships. Finally, the survey addresses emotional support and coping strategies, identifying effective mechanisms and interventions to assist children. Each section builds upon the previous one, providing a comprehensive understanding of the issues at hand and guiding the reader through the complex interplay of factors affecting children with a parent diagnosed with cancer. The following sections are organized as shown in Figure 1.

# 2 Background and Definitions

## 2.1 Prevalence and Demographics of Parental Cancer

Parental cancer is a critical public health concern affecting diverse families across demographics, shaped by geographic, socioeconomic, and healthcare access factors. In the U.S., about 2.85 million children under 18 have a parent with cancer, highlighting the importance of understanding these families' demographics to develop effective support services [3, 2]. These families exhibit varied demographic profiles, including different ages, ethnicities, and socioeconomic backgrounds, which influence the challenges children face, such as disrupted routines and role changes within the family unit [2].

Recognizing these demographic characteristics is essential for creating targeted interventions that address the specific needs of different groups. This approach enables healthcare providers and policymakers to support families effectively, particularly those dealing with life-threatening conditions

like parental cancer. Such targeted strategies not only improve the well-being of children and parents but also enhance family dynamics and resilience, leading to better health outcomes [3, 6, 7, 1, 2].

## 2.2 Key Definitions

Understanding key terms is essential for grasping the complex impact of parental cancer on children. 'Children's well-being' refers to their emotional, psychological, and social health, significantly affected by the stress of a parent's illness [2]. 'Psychosocial needs' involve the emotional and social requirements to maintain mental health amidst adversity, including support for emotional distress, role changes, and social functioning challenges [7, 2].

The 'educational impact' of parental illness often disrupts children's academic performance and school experiences due to heightened stress and anxiety. 'Family dynamics' pertain to the changes in relationships and interactions within the family as children take on new roles [2]. 'Emotional support' involves assistance in managing feelings and coping with the psychological effects of a parent's diagnosis. 'Coping strategies' are methods children use to handle stress, such as fostering self-efficacy and employing psychological interventions to build resilience [8]. These definitions are crucial for developing effective interventions tailored to the unique needs of children affected by parental cancer.

#### 2.3 Limitations of the Traditional Biomedical Model

The traditional biomedical model's focus on physiological and pathological aspects often neglects the comprehensive needs of those affected by cancer, particularly the psychosocial factors vital for holistic care. This model frequently overlooks the emotional, psychological, and social elements crucial for the well-being of families facing parental cancer [9]. As a result, the psychosocial needs of children and families are often underrecognized and inadequately addressed in conventional healthcare [10].

Adopting an integrative approach that includes psychiatric and psychosocial care is essential for supporting families affected by parental cancer. This approach acknowledges health's multidimensional nature, emphasizing the importance of mental health and social support alongside medical treatment. Integrating psychosocial care into oncology enhances patients' and families' quality of life and fosters better health outcomes by addressing the diverse challenges posed by parental cancer [10].

By moving beyond the traditional biomedical model's limitations, healthcare providers can develop comprehensive intervention strategies that meet the specific psychosocial needs of children and families. This approach improves care quality and aligns medical practice with contemporary understandings of health and illness as outlined by the biopsychosocial model [1, 9]. Prioritizing the emotional and social dimensions of health ensures a balanced and supportive healthcare experience for all involved.

# 3 Impact of Parental Cancer on Children's Well-being

Parental cancer profoundly affects a child's development and emotional health, extending beyond immediate reactions to encompass broader adversities that shape their psychological landscape. Recognizing these experiences as Adverse Childhood Experiences (ACEs) is vital for crafting effective support mechanisms for affected children. As illustrated in Figure 2, the hierarchical structure of the impact of parental cancer on children's well-being includes various dimensions such as adverse childhood experiences, developmental disruptions in adolescents and young adults, and a biopsychosocial understanding of emotional health. Each section of the figure delves into specific aspects, including coping strategies, resilience, and interventions, which highlight the multifaceted challenges and support mechanisms relevant to affected children. This comprehensive framework not only underscores the complexity of the issue but also serves as a guide for developing targeted interventions that address the needs of these vulnerable populations.

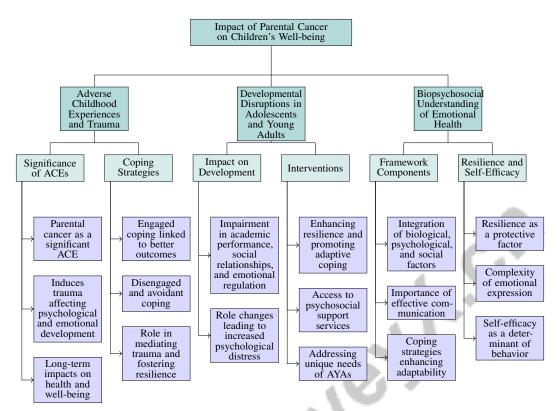


Figure 2: This figure illustrates the hierarchical structure of the impact of parental cancer on children's well-being, encompassing adverse childhood experiences, developmental disruptions in adolescents and young adults, and a biopsychosocial understanding of emotional health. Each section delves into specific aspects such as coping strategies, resilience, and interventions, highlighting the multifaceted challenges and support mechanisms relevant to affected children.

## 3.1 Adverse Childhood Experiences and Trauma

Parental cancer is increasingly identified as a significant ACE, inducing trauma that affects children's psychological and emotional development. Assessing ACEs is crucial due to the long-term impacts of early trauma on health and well-being [7]. A cancer diagnosis destabilizes family dynamics, increasing stress and anxiety, particularly among adolescents and young adults (AYAs), who may face developmental setbacks and strained relationships [11].

Children's psychological responses to parental cancer vary, with coping strategies playing a crucial role in mediating trauma. Research highlights three coping profiles: engaged, disengaged, and avoidant, with engaged coping linked to better psychological outcomes [12]. Understanding these mechanisms is essential for developing targeted interventions that help children navigate the emotional challenges of parental cancer, fostering resilience and promoting improved mental health outcomes.

Figure 3 illustrates the hierarchical structure of key concepts related to adverse childhood experiences, particularly in the context of parental cancer. This figure categorizes the assessment of ACEs, the impact of parental cancer, and the coping strategies employed by affected children, highlighting crucial interventions and coping profiles. The visual representation serves to enhance our understanding of the complex interplay between these factors and underscores the importance of tailored support for children facing such adversities.

## 3.2 Developmental Disruptions in Adolescents and Young Adults

AYAs are at a critical developmental stage, and a parent's cancer diagnosis can cause substantial disruptions. The resulting stress and anxiety can impair academic performance, social relationships,

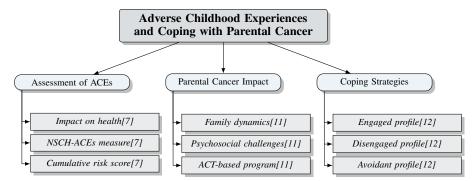


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and emotional regulation [11]. Role changes within the family, where AYAs may assume caregiving duties, exacerbate these disruptions, leading to increased psychological distress and role strain [2].

The psychosocial impact of parental cancer on AYAs is multifaceted, often resulting in heightened anxiety, depression, and social withdrawal [3]. These challenges can hinder engagement in age-appropriate activities, such as forming friendships and planning for future goals. The uncertainty surrounding a parent's health may foster feelings of helplessness and loss of control, adversely affecting self-identity and autonomy [9].

Interventions should focus on enhancing resilience and promoting adaptive coping strategies. Access to psychosocial support services, including counseling and peer support groups, can mitigate the negative effects of parental cancer on adolescent development. These services should address AYAs' unique needs, fostering an environment conducive to emotional expression and healthy coping mechanisms [10]. By addressing developmental disruptions due to parental cancer, we can support AYAs' well-being and facilitate a smoother transition into adulthood.

# 3.3 Biopsychosocial Understanding of Emotional Health

The biopsychosocial model offers a comprehensive framework for understanding the emotional health of children affected by parental cancer, integrating biological, psychological, and social factors. This model underscores the importance of considering the interplay of these elements to appreciate the emotional challenges faced by children [10]. Incorporating this model into cancer care highlights the necessity of addressing psychosocial health as a vital component of quality care [9].

Effective communication within families and between health professionals is crucial for positive emotional outcomes, facilitating better information exchange and understanding [1]. This is particularly relevant in the context of parental cancer, where misunderstandings can exacerbate emotional distress.

Coping strategies are fundamental to the biopsychosocial model, as they are essential for managing stress and improving mental health outcomes. A broader repertoire of coping strategies enhances adaptability and resilience [13], aligning with the biopsychosocial understanding of emotional health [12].

Resilience serves as a protective factor in children's emotional health, buffering against the negative impacts of parental cancer. The relationship between resilience, coping strategies, and health outcomes emphasizes the importance of fostering resilience to support children's well-being [5]. Additionally, the complexity of emotional expression and reappraisal processes is vital for long-term emotional benefits, necessitating nuanced and context-sensitive emotional appraisals.

Grounded in social cognitive theory, the biopsychosocial model posits that self-efficacy is a critical determinant of behavior, offering insights into the emotional health of children affected by parental cancer [8]. By integrating these diverse factors, healthcare providers can develop targeted interven-

tions to support the emotional and psychological well-being of children navigating the challenges of parental cancer.

# 4 Psychosocial Needs of Children with a Parent Diagnosed with Cancer

Category	Feature	Method	
Psychosocial Implications of Cancer Care	Family and Coping Support	CBCSM[13]	
Inadequacies in Emotional Support Systems	Conversational Engagement	SUPPORTER[14], PBMM[15], MES[4 COPING[16], Muffin[17]	
Psychosocial Interventions and Frameworks	Ongoing Support Strategies Adaptive Integration Techniques	F-SCOUT[3] D2RCU[18]	

Table 1: This table provides a comprehensive summary of various psychosocial interventions and frameworks addressing the needs of children with a parent diagnosed with cancer. It categorizes methods based on their focus areas, including psychosocial implications of cancer care, inadequacies in emotional support systems, and psychosocial interventions, highlighting key features and corresponding methods from recent studies.

Category	Feature	Method	
Psychosocial Implications of Cancer Care	Family and Coping Support	CBCSM[13] SUPPORTER[14], PBMM[15], MES[4], COPING[16], Muffin[17]	
Inadequacies in Emotional Support Systems	Conversational Engagement		
Psychosocial Interventions and Frameworks	Ongoing Support Strategies	F-SCOUT[3]	

Table 2: This table provides a comprehensive summary of various psychosocial interventions and frameworks addressing the needs of children with a parent diagnosed with cancer. It categorizes methods based on their focus areas, including psychosocial implications of cancer care, inadequacies in emotional support systems, and psychosocial interventions, highlighting key features and corresponding methods from recent studies.

Children with a parent diagnosed with cancer face significant psychosocial challenges, including emotional distress, routine disruptions, and altered family roles, all of which can adversely affect their social functioning and overall well-being. Addressing these issues requires comprehensive support services, as demonstrated by the Family-SCOUT project, which are essential in mitigating the emotional and organizational stress experienced by families during and after the cancer journey [10, 3, 7, 1, 2]. Table 2 presents an overview of psychosocial interventions and frameworks relevant to children facing the challenges of having a parent with cancer, detailing the features and methods employed to address their emotional and psychological needs. Additionally, Table 3 offers a comprehensive comparison of different methods used to address the psychosocial needs of children whose parents are diagnosed with cancer, focusing on support approaches, communication strategies, and emotional focus. The emotional and psychological impacts necessitate a detailed examination of children's specific psychosocial needs, highlighting the importance of effective communication and support systems to address these challenges.

# 4.1 Psychosocial Implications of Cancer Care

Parental cancer significantly impacts children's emotional and psychological health, inducing substantial stress within families. This stress often leads to increased psychological symptoms, revealing the limitations of current support services [3]. Open family communication is crucial for alleviating emotional distress, positively influencing children's well-being by strengthening family bonds [1]. Such an environment encourages emotional expression, reducing trauma and chronic stress risks.

The biopsychosocial model, integrating biological, psychological, and social factors, is vital for providing holistic, patient-centered care [9]. This framework enhances understanding of children's diverse psychosocial needs affected by parental cancer, emphasizing emotional support's role in influencing social interactions and mental health [19]. Innovative approaches, like the SweetieChat framework and social robots, offer promising emotional support by providing tailored assistance and contextualized knowledge [20, 21]. Coping strategies are crucial in managing psychosocial implications, enabling effective interventions by differentiating individuals' access to coping mechanisms [13].

Given the high prevalence of psychiatric disorders among cancer patients, integrating psychosocial care into cancer treatment is essential [10]. Support strategies should prioritize open communication and psycho-oncologic services to address children's emotional and psychological needs [2].

Figure 4 illustrates the psychosocial implications of cancer care, categorizing the main areas of emotional impact, the biopsychosocial model, and support strategies. This figure highlights the importance of family communication, holistic care, and innovative support methods. By understanding and addressing cancer care's psychosocial implications, we can enhance the well-being of children and families facing parental cancer challenges.

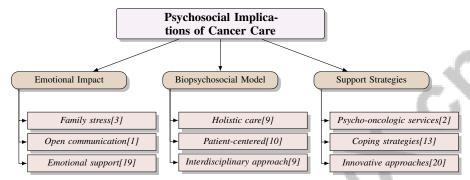


Figure 4: This figure illustrates the psychosocial implications of cancer care, categorizing the main areas of emotional impact, the biopsychosocial model, and support strategies. It highlights the importance of family communication, holistic care, and innovative support methods.

## 4.2 Inadequacies in Emotional Support Systems

Current emotional support systems for children affected by parental cancer often fall short, particularly in addressing complex emotional dynamics and providing effective multi-turn support. A significant challenge is the reliance on single-turn interactions in Emotional Support Conversation (ESC) systems, which inadequately meet users' evolving needs in extended dialogues [4]. This limitation is compounded by systems' inability to guide users through multi-turn conversations, hindering positive emotional transitions [14].

Additionally, ESC models often generate unhelpful responses, damaging trust and impeding effective support [17]. The failure to recognize emotional dynamics between speakers further complicates this issue, as systems frequently lack contextually appropriate responses in open-ended dialogues. This deficiency undermines the potential effectiveness of support systems.

Moreover, a preference for specific strategies can obstruct appropriate response selection, resulting in ineffective support [15]. Current methods struggle to comprehend emotions, particularly in articulating coping strategies, crucial for developing effective support systems [16]. The lack of comprehensive benchmarks for training models in emotional support skills further limits these systems' ability to provide meaningful assistance [19].

Addressing these inadequacies requires a nuanced approach incorporating cognitive reappraisal strategies and long-term emotional self-regulation [22]. By integrating coping strategies as protective factors against stress, we can enhance emotional support systems for children facing parental cancer challenges [8].

#### 4.3 Psychosocial Interventions and Frameworks

Psychosocial interventions and frameworks are crucial for addressing the emotional and psychological needs of children impacted by parental cancer. Implementing structured Emotional Support Conversation (ESC) frameworks, outlining specific stages and strategies for providing emotional support, enhances the quality of care for these children [19]. Such frameworks ensure systematic emotional support delivery, allowing children to receive consistent and meaningful assistance throughout their parent's cancer journey.

The Family-SCOUT intervention offers continuous psychosocial support from diagnosis through bereavement [3]. This comprehensive approach ensures ongoing guidance, addressing children's evolving emotional and psychological needs as they navigate parental cancer complexities. By providing tailored support, Family-SCOUT helps mitigate parental illness's adverse effects on children's well-being and development.

Research by Kavčič et al. emphasizes psychological interventions considering individual coping profiles [12]. Understanding specific coping strategies allows for customized interventions, enhancing resilience and adaptability in children facing parental cancer, equipping them with essential tools to manage stress and emotional challenges effectively.

Furthermore, integrating dynamic demonstration retrieval with cognitive understanding enhances emotional support systems' responsiveness [18]. This integration facilitates more adaptive and contextually appropriate support, addressing children's complex emotional landscapes. By fostering resilience and adaptive coping strategies, these psychosocial interventions significantly improve the mental health and quality of life of children navigating parental cancer challenges.

Feature	Psychosocial Implications of Cancer Care	Inadequacies in Emotional Support Systems	Psychosocial Interventions and Frameworks	
Support Approach	Holistic Care	Multi-turn Interaction	Structured Esc Frameworks Systematic Support Delivery Resilience Enhancement	
Communication Strategy	Open Family Communication	Contextual Responses		
Emotional Focus	Emotional Expression	Emotional Dynamics		

Table 3: This table provides a comparative analysis of psychosocial implications, inadequacies in emotional support systems, and psychosocial interventions and frameworks relevant to children with a parent diagnosed with cancer. It highlights the diverse approaches and strategies employed to address emotional and psychological needs, emphasizing holistic care, communication strategies, and resilience enhancement. The table underscores the importance of structured frameworks and systematic support delivery in mitigating the psychosocial challenges faced by these children.

# **5 Educational Impact**

# 5.1 Adverse Childhood Experiences and Academic Outcomes

Adverse childhood experiences (ACEs), such as parental cancer, profoundly affect children's academic performance. The stress and emotional upheaval associated with a parent's illness disrupt cognitive and emotional development, leading to academic and engagement challenges. The NSCH-ACEs measure underscores the strong internal validity and predictive power of ACEs for adverse health outcomes, linking early trauma to negative academic consequences [7]. As illustrated in Figure 5, the impact of ACEs on academic outcomes emphasizes the critical role of effective communication and targeted interventions in mitigating these negative effects. Effective family communication is vital in this context; open dialogue correlates with improved emotional outcomes in children, which can enhance academic performance, while poor communication exacerbates anxiety and academic difficulties [1]. Adolescents and young adults (AYAs) often experience unmet psychosocial needs due to interventions lacking theoretical foundations, further impacting their academic outcomes [11]. Targeted interventions that incorporate effective communication and emotional support strategies are crucial for improving both emotional well-being and academic success among children affected by parental cancer.

## 5.2 Challenges in School Environment

Children with a parent diagnosed with cancer face numerous challenges within the school environment, adversely affecting their academic performance and social interactions. Parental cancer often leads to increased anxiety, depression, and emotional distress, hindering concentration and academic achievement. These emotional challenges are exacerbated by social stigma and misunderstandings among peers unaware of the child's home situation [2]. The school environment can add stress as children balance academic responsibilities with the emotional burden of their parent's illness. A lack of understanding and support from educators further compounds these challenges, leading to feelings of isolation and helplessness [3]. Shifting family dynamics and increased home responsibilities can result in absenteeism and reduced participation in school activities, as children may assume caregiving roles, limiting their time and energy for studies and extracurriculars [2]. Schools must implement supportive measures, such as access to counseling services, fostering open communication

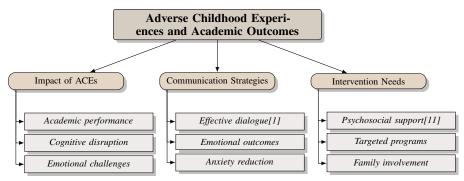


Figure 5: This figure illustrates the impact of adverse childhood experiences (ACEs) on academic outcomes, highlighting the importance of effective communication and targeted interventions to mitigate negative effects.

between staff and families, and creating an inclusive environment to enhance emotional well-being and academic performance [19, 16].

## 5.3 Intervention Strategies and Educational Policies

Effective intervention strategies and educational policies are crucial for supporting the approximately 2.85 million children under 18 living with a parent diagnosed with cancer, as these measures can alleviate emotional distress and academic disruptions. Parental cancer presents significant emotional and organizational challenges for families, negatively impacting children's academic performance and emotional well-being. Evidence-based interventions, such as psychosocial support programs and resilience training, are essential in mitigating these impacts and promoting healthier family dynamics during and after the cancer experience [3, 5, 7, 11, 2]. Schools play a pivotal role in providing a supportive environment that addresses these unique challenges, ensuring educational needs are met while offering emotional support. Integrating psychosocial support services within schools, offering access to counseling and mental health resources, can help children navigate the emotional complexities of a parent's illness, fostering resilience and coping skills [10]. Training teachers and staff to recognize and respond to signs of emotional distress enhances the support system available to affected children [3]. Educational policies should emphasize open communication between schools and families, allowing for personalized interventions that support academic success and foster inclusion [1]. Additionally, schools should implement flexible academic accommodations, such as adjustments to homework loads and deadlines, to support children whose academic performance may be impacted by their home situation [2]. By adopting a compassionate and flexible approach, educational institutions can create a more inclusive environment that supports the diverse needs of children affected by parental cancer.

# **6** Family Dynamics and Role Changes

## 6.1 Increased Responsibilities for Children

When a parent is diagnosed with cancer, children often assume greater responsibilities, impacting their emotional and psychological health. These duties, including caregiving and managing household tasks, can lead to significant stress and role strain [3]. The Family-SCOUT program seeks to alleviate these burdens by providing tailored support for families with minor children facing parental cancer, addressing their emotional, organizational, and communicative needs.

Children may experience accelerated maturation as they balance developmental needs with family demands, leading to heightened anxiety and emotional distress. Research underscores the importance of providing appropriate support and coping strategies to help children adapt to these pressures [1, 13]. Without adequate support, these challenges can exacerbate psychological issues.

Programs like Family-SCOUT aid in managing role redistribution, ensuring children are not overburdened. This approach enhances children's emotional well-being and fosters family cohesion through prioritized communication and understanding. Targeted interventions promote resilience and adaptive

coping, helping children navigate family complexities while safeguarding their mental health. Early intervention and resilience-building are crucial for mitigating adverse childhood experiences, thereby enhancing coping abilities [8, 5, 7, 13].

## 6.2 Standardized Assessment of Family Dynamics

Benchmark	Size	Domain	Task Format	Metric
NSCH-ACEs[7]	95,677	Child Health	Survey-based Assessment	Cumulative Risk Score, Predictive Validity
ESC[19]	31,410	Emotional Support	Conversation	F1-score, Accuracy

Table 4: This table presents a comparative analysis of representative benchmarks used in the standardized assessment of family dynamics. It includes details on the benchmark name, dataset size, domain of application, task format, and evaluation metrics, offering insights into their relevance and utility in assessing the impact of parental cancer on family dynamics.

Understanding the impact of a parent's cancer diagnosis on family dynamics is essential for effective support. Standardized assessments identify specific challenges and needs, offering a structured evaluation of family roles and interactions to facilitate tailored interventions [2]. As illustrated in Figure 6, the key components of these assessments encompass emotional impact, organizational stress, and communication strategies, all of which are critical in the context of parental cancer. Additionally, Table 4 provides a detailed overview of representative benchmarks utilized in the standardized assessment of family dynamics, highlighting their application in understanding the impact of parental cancer.

A standardized framework allows healthcare providers to systematically assess the effects of parental cancer on family dynamics across emotional, organizational, and communicative dimensions, enabling the development of strategies that alleviate stress and role strain [3]. The inclusion of these components in assessments ensures a comprehensive understanding of the multifaceted challenges families face.

Incorporating standardized assessments into clinical practice ensures consistent recognition and addressing of families' psychosocial needs. These assessments guide interventions such as counseling and support groups, enhancing family resilience and cohesion through open communication and understanding [9].

Furthermore, standardized assessments provide valuable data for research and policy development, deepening the understanding of parental cancer's impact on family dynamics. This knowledge is critical for creating support programs that effectively address the emotional and psychosocial needs of families, especially those with minor children facing significant stress and inadequate services [3, 1]. Prioritizing standardized assessments ensures comprehensive support for families navigating the challenges of parental cancer.

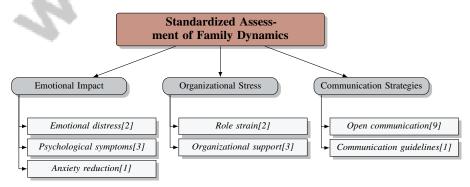


Figure 6: This figure illustrates the key components of standardized assessments in family dynamics, focusing on emotional impact, organizational stress, and communication strategies, as related to parental cancer.

## **6.3** Communication Strategies within Families

Effective communication is crucial for family cohesion and engagement, particularly amidst the complexities of parental cancer. Open communication fosters mutual understanding and support, helping families navigate emotional and psychological challenges [1]. Research shows that families engaging in open dialogue about the illness experience improved emotional outcomes, reducing anxiety and strengthening bonds [1].

Creating a supportive environment where family members feel comfortable expressing emotions and concerns is vital. Safe spaces for dialogue allow children and adults to share thoughts without fear of judgment, promoting solidarity [2].

Tailoring communication to children's developmental needs is essential. Younger children may need simpler explanations and reassurance, while adolescents benefit from detailed discussions acknowledging their autonomy [2]. Adapting communication strategies ensures all family members are supported and informed.

Involving children in age-appropriate discussions about treatment plans and caregiving responsibilities empowers them and enhances their sense of agency, reducing feelings of helplessness and isolation [2].

Regular family meetings or check-ins facilitate ongoing dialogue, providing opportunities to address concerns or changes in dynamics. Emphasizing effective communication enhances family resilience and cohesion, promoting emotional well-being. This approach is crucial, as parental cancer impacts not only the affected individual but also the emotional and social functioning of their children. Comprehensive support interventions provide necessary resources and strategies for families, aiding them in navigating this life-altering experience [3, 1, 2].

# 7 Emotional Support and Coping Strategies

## 7.1 Cultural and Social Boundaries in Coping Mechanisms

Cultural and social contexts significantly influence coping mechanisms in response to parental cancer, necessitating adaptable support systems that respect these boundaries [6]. The ESC Framework, grounded in Helping Skills Theory, emphasizes the importance of recognizing cultural nuances in emotional support [19]. Empathy and elicitation balance, as highlighted by Zhou et al., are crucial for effective communication across cultural lines [14].

Advanced models like CauESC and D2RCU offer strategies to navigate these boundaries, enhancing emotional understanding and generating responses that align with cultural contexts [23, 18]. The efficacy of large language models (LLMs) in selecting context-appropriate strategies further strengthens coping mechanisms [15]. Saccardi et al. emphasize personalized support that considers a child's emotional history and cultural background, ensuring effective navigation of parental cancer challenges [21].

#### 7.2 Resilience and Psychological Interventions

Building resilience through psychological interventions is vital for children coping with parental cancer, with adaptive strategies linked to improved mental health outcomes [5]. The ESC Framework and ESConv dataset advance dialog systems' ability to provide effective emotional support, fostering resilience through strategic emotional engagement [19, 14].

Innovative approaches like SweetieChat enhance coping mechanisms by tailoring responses to individual needs [20]. Engaged coping profiles, characterized by active strategies and acceptance, effectively manage stress related to parental cancer [12]. Psychologically grounded methods like RESORT contribute to resilience by generating cognitive reappraisal responses [22]. The role of coping strategies in emotional expression is crucial for developing resilience-focused interventions [16]. Comprehensive psychosocial care is essential for improving the quality of life for affected families [10].

## 7.3 Psycho-Oncologic Services as Educational Support

Psycho-oncologic services provide essential educational support for children impacted by parental cancer, integrating psychological principles with educational frameworks to enhance coping and resilience. Frameworks like MultiESC improve service efficacy by adjusting strategies based on user feedback [4]. Digital platforms offer promising personalized interventions, and future research should explore their influence on coping behaviors [6]. The COPING corpus method informs the development of services addressing educational needs [16].

The RESORT framework, utilizing LLMs, demonstrates the potential of psycho-oncologic services to generate empathetic, cognitively aligned responses, enhancing educational support [22]. The SESF framework, employing Knowledge Graphs, exemplifies innovative approaches, enabling tailored educational strategies for children [21]. These methodologies ensure comprehensive educational support that addresses academic challenges while promoting emotional and psychological well-being.

## 8 Conclusion

The survey underscores the profound and multifaceted impact of parental cancer on children's well-being, highlighting the critical role of timely and effective communication in mitigating anxiety and fostering emotional resilience. Integrating the biopsychosocial model into clinical practice emerges as a pivotal strategy to enhance children's psychosocial health and patient outcomes, thereby establishing its significance in comprehensive cancer care. Resilience and adaptive coping strategies are identified as pivotal in improving mental health outcomes, emphasizing the need for targeted interventions to cultivate these traits.

Improving assessment methods for adverse childhood experiences (ACEs) is paramount to better understanding protective factors in child development. Future research should prioritize developing tailored intervention programs that cater to the unique needs of various age groups, with a particular focus on adolescents and young adults. Exploring the adaptability of frameworks across diverse cultural contexts and their long-term effects on emotional well-being remains crucial.

Advancements in Emotional Support Conversation systems, as evidenced by models like D2RCU, show promise in enhancing the delivery of effective emotional support. Addressing challenges in generating helpful responses in emotional support interactions is essential, with models such as Muffin demonstrating potential improvements in fluency and relevance. Additionally, frameworks like SweetieChat offer valuable insights for future research aimed at enhancing human-agent interactions in emotional support contexts, particularly for children impacted by parental cancer.

The Family-SCOUT program's demonstrated effectiveness in reducing anxiety and depression among parents suggests the need for further exploration of its scalability and adaptability across different healthcare systems and cultural contexts. This survey advocates for a comprehensive approach that combines evidence-based methods with innovative frameworks to address the complex impact of parental cancer on children, identifying key areas for future research and intervention to strengthen support systems and improve outcomes for affected families.

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