

Psychological distress and family support mediate suicidal ideation in adolescents diagnosed with cancer: A literature review

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ABSTRACT

This study aims to review the literature regarding suicidal ideation in adolescents with cancer. Adolescents with a cancer diagnosis face significant physical and emotional challenges, which may increase the risk of suicidal ideation. This study examines various factors that contribute to this increased risk, including the psychological impact of a cancer diagnosis, and family support. The research methodology involved searching and critical analysis of journal articles, books, and reliable sources published in the last ten years and using relevant keywords including 'suicidal ideation in adolescents', 'psychology of adolescents with cancer,' and 'adolescent developmental tasks' and 'adolescents' developmental tasks'. family support in peer reviewed journals resulting in ten articles being obtained. The results of this study show that teenagers with cancer are at higher risk of experiencing suicidal ideation compared to healthy teenagers. Family support significantly reduces the risk. Practical implications of these findings include the development of more integrated psychological support programs in adolescent cancer care, as well as training for health professionals in recognizing and treating signs of suicidal ideation. This study suggests the need for further research to explore the effectiveness of different interventions in different contexts and identify the most effective prevention strategies.

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INTRODUCTION

People with cancer often face tremendous psychological distress due to the life-changing diagnosis and uncertainty of the future. The constant pain and side effects of treatment can worsen their mental state. Social stigma and perceived isolation can add to the emotional burden, making them feel alienated and not understood. In addition, financial worries and the inability to lead an everyday life can lead to feelings of hopelessness. All these factors can come together, increasing the risk of suicidal ideation as a way to end seemingly unbearable suffering. This is especially true

for adolescents who are at a critical juncture in their development, struggling to shape their self-identity under the weight of a cancer diagnosis.

Family support is essential in dealing with the psychological distress of adolescents with cancer as it can provide the security and love needed to fight the disease and assist them in completing their developmental tasks. The presence of a caring family helps reduce the loneliness and isolation often felt by adolescents; they can feel that they are essential to others, and this forms a sense of worth and ultimately, adolescents can develop adaptive coping. By providing emotional support, families can help boost morale and motivation to undergo treatment. Practical assistance, such as accompanying them to the hospital or helping with homework, easing the daily burden of the patient, listening to the adolescent's complaints, fostering their hopes for life, and helping them understand the meaning of life can support the formation of adolescent self-identity. In addition, open communication with families allows sufferers to express their feelings and concerns, which is essential for mental well-being.

The purpose of the literature review on family support and psychological distress of cancer survivors is to identify the extent to which family support plays a role in reducing psychological distress experienced by cancer survivors and to understand the mechanisms and forms of family support. In addition, this literature review aims to identify gaps in previous research and provide recommendations for further research. Thus, this study can contribute to the development of support strategies to improve the mental well-being of people with cancer.

RESEARCH METHOD

Secondary data derived from relevant previous studies were collected and analyzed through the literature review method. The aim is to look at the dynamics of family support in assisting adolescents with cancer to deal with psychological distress that is the cause or catalyst for suicidal ideation in adolescents diagnosed with cancer. This will then be used as a reference for what forms of support can improve adolescents' ability to deal with psychological distress due to cancer and their developmental tasks. Providing effective interventions so that suicidal ideation does not escalate to the stage of attempted suicide. After establishing clear research objectives, the next step was to determine inclusion criteria, including studies that focused on psychological distress and family support leading to suicidal ideation in adolescents with cancer, articles published in peer-reviewed journals, studies that used quantitative, qualitative, or mixed methods, publications in a language that the researcher understood. The literature search strategy involved identifying relevant sources of information. Relevant keywords for the search may include 'adolescent suicidal ideation,' 'psychology of adolescents with cancer,' 'adolescent developmental tasks,' and 'family support.' Once the search strategy is implemented, the search results are screened for relevant studies.

This process involved two stages. The first stage was a review of titles and abstracts to eliminate irrelevant studies, and the second stage was reviewing the completeness of texts that passed the first stage selection to ensure they met the inclusion criteria. The next step was to extract data from the selected studies systematically. The extracted information included basic study information (title, journal name, author's publication year, publication year, title), research design (quantitative, qualitative, or mixed), and key findings relating to coping strategies.

Study quality assessment is essential to ensure the validity and reliability of the findings. The quality assessment tool used was the Critical Appraisal Skills Program (CASP) for both qualitative and quantitative studies. This assessment involves evaluating the research design, methodology, data analysis, and potential bias. Once the data has been extracted and the quality of the study assessed, the researcher synthesizes the findings. In this literature review, the synthesis is done in a narrative manner that involves combining the findings of various studies to identify key themes, patterns, and relationships between factors that influence coping strategies. The

synthesized results are discussed to provide insights into the coping strategies of women victims of domestic violence.

RESULTS AND DISCUSSIONS

The results of the literature review show that adolescents experience a range of psychological distress in dealing with cancer and its treatment. These adolescents experience great stress caused by cancer and face a difficult transition period because it coincides with having to complete their developmental tasks (Nathanson, 2002). Suicidal ideation is a critical condition faced by adolescents with cancer, which is an accumulation of psychological pressure they receive; family support becomes the primary support system in helping adolescents maintain their quality of life and fulfill their developmental tasks. The following is a review of references related to psychological distress and family support that mediate suicidal ideation in adolescents diagnosed with cancer:

Table 1. Literature review table

No	Journal Identity and Author	Research Objective	Data Collection Method	Research Results	Conclusion
1.	<p>Suicide among cancer patients: adolescents and young adults versus patients of all ages</p> <p>Journal Name: <i>Annals of Translational Medicine</i> Vol: 7 Number: 22 Ha :1-10 Year: 2019 DOI: doi:10.21037/atm.2019.1051 Authors : Huaqiang Zhou et al</p>	<p>To Analyze the need to separate adolescent cancer patients as a particular group to identify high-risk patients.</p>	<p>Observational study design drawn from Surveillance, Epidemiology and SEER databases.</p> <p>Patients diagnosed with 20 malignancies were identified from the SEER database.</p> <p>Data were analyzed with multivariable logistic regression to determine risk factors for suicide.</p>	<p>Male gender had less impact on adolescents than patients of all ages.</p> <p>White race and married status have the same impact on adolescents and all age groups.</p> <p>The localized stage of cancer may have a more substantial impact on adolescents than on all ages.</p>	<p>Adolescent cancer patients are theoretically vulnerable to suicidal ideation, which is related to their developmental tasks. The high risk of suicidal ideation is not influenced by age group. Although psychologically, adolescents are at a critical phase in their development. Identifying high-risk groups is a preventive measure.</p>
2.	<p>Psychological distress and experiences of Adolescents and Young Adults with cancer during the COVID-19 pandemic: A cross-sectional survey</p> <p>Link: DOI:10.1002/pon.5849 Name: <i>Psychology of Women Quarterly</i> Vol: 2022 Number: 31 Page: 631-640 Year: 2021 Author : Camille Glidden et al</p>	<p>Investigate the prevalence of psychological distress, factors associated with distress, and experiences of Adolescents and Young Adults (AYAs) with cancer during the COVID-19 pandemic and compare distress in this group to previously surveyed</p>	<p>In January and February 2021, data were collected using a cross-sectional survey administered in English and French using a secure web-based data collection service, REDCap. The survey was part of the YACPRIME study, which targeted Adolescents and Young Adults aged 18-39 years diagnosed with cancer in Canada during 2017-2018.</p>	<p>High psychological distress occurred in more than two-thirds of the group (68.0%; 95% CI, 64.7%-71.2%). The impact of work during the pandemic (AOR (adjusted odds ratio), 2.16; 95% CI, 1.41-3.31) and hematological malignancy (AOR, 1.76; 95% CI 1.08-2.97) were associated with higher</p>	<p>The prevalence of psychological distress among adolescents with cancer during the pandemic will be higher than the prevalence of psychological distress before the pandemic. Psychological distress among adolescents with cancer during the pandemic will be more significant than among their peers without cancer.</p>

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			Respondents: Adolescents and Young Adults diagnosed with cancer	psychological distress, while older age was associated with lower distress. The adjusted odds of experiencing psychological distress among with cancer during the pandemic compared to the years before the pandemic was 1.85 (95% CI: 1.36-2.53).	
3.	Prevalence and Determinants of Psychological Distress in Adolescent and Young Adult Patients with Cancer: A Multicenter Survey Link: 10.4103/2347-5625.311005 Name : Asia-Pacific Journal of Oncology Nursing Vol: 8 Number : 3 Page : 314-321 Year : 2020 Author : Yinglong Duan, Lu Wang, Qian Sun, Xiangyu Liu, Siqing Ding, Qinqin Cheng, Jianfei Xie, Andy S. K. Cheng	Investigating the current prevalence and determinants of psychological distress and the relationship of distress with general information, character strength, medical treatment, and social support in Chinese adolescents and young adults (AYAs) aged 15-39 years with cancer.	Design: A multi-center survey The research team consisted of 1 head nurse, two associate head nurses, six graduate nursing students, and 1 investigating secretary nurse. After being explained the purpose of the study, participants signed a written consent form under the guidance of a team member. All questionnaires were completed anonymously by the participants themselves without any intervention. To improve the accuracy of the survey, participants were given 30-45 minutes to complete it.	The current prevalence of psychological distress in adolescents in China with cancer is 83.4%. Binary logistic regression analysis showed that gender, age, education level, marriage, monthly income, exercise intensity, cancer classification, treatment, self-control, confrontation, avoidance, and subjective support were all associated with distress. Adolescent cancer patients who were female, younger, or divorced or had lower monthly income, education level, or exercise intensity tended to have higher levels of distress.	
4.	Loneliness predicts suicidal ideation and anxiety symptoms in	(1) To determine the prevalence of loneliness in a	Methods: Recording secondary data,	Loneliness was reported by 17.70% of	Cancer in adolescents causes psychological

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	<p>long-term survivors of childhood cancer.</p> <p>Name: International Journal of Clinical and Health Psychology Vol: 21 Number : 2020 Page : 1-7 Year : February, 2023 DOI: https://doi.org/10.1016/j.jchp.2020.10.001 Author : Mareike Ernsta, Elmar Brähler, Philipp S. Wildb, Jörg Fabere, Hiltrud Merzenichf, Manfred E. Beutel</p>	<p>large sample of adolescent cancer survivors;</p> <p>(2) To investigate whether loneliness is an independent predictor of psychological symptoms of adolescent cancer survivors over time.</p>	<p>Survey using questionnaires and Interviews.</p> <p>Data Type : Information related to illness and treatment of adolescent cancer survivors taken from primary health records</p> <p>Sociodemographic information assessed through self-report as part of the personal interview</p> <p>Physical health and health behaviors were assessed by examination.</p> <p>Somatic symptoms were asked using the PHQ-15.</p>	<p>adolescent cancer survivors.</p> <p>Loneliness predicted more severe anxiety symptoms and suicidal ideation after two years.</p> <p>Loneliness did not predict somatic symptoms and depression at follow-up (which increased with age).</p>	<p>distress throughout life and is at risk of causing problems in psychosocial development.</p> <p>Cancer treatment leads to reduced contact with peers for extended periods (due to hospitalization), changes in physical appearance and associated stigmatizing experiences (e.g., hair loss), grade repetition at school, and other experiences that set them apart from their peers.</p>
5.	<p>Exploring the Impact of Cancer as a Traumatic Event on Italian Adolescents and Young Adults: Investigating Psychological Well-Being, Identity Construction, and Coping Strategies</p> <p>Link: https://doi.org/10.3390/pediatric15010021 Name : Pediatric Report Vol: 20 Number : - Page: 254-262 Year : 2023 Authors : Chiara Ioni, Francesca Bigoni, Maddalena Sacchi, Marco Zecca, Giulia Ciuffo, Anna Rovati, and Damiano Rizzi</p>	<p>to investigate the impact of oncological diseases on adolescents, with particular reference to the psychological and post-traumatic consequences for the adolescents themselves and the family system</p>	<p>This study used a survey method. The survey was administered to adolescents with oncological diseases by Soleterre staff at the Pediatric Oncology Unit of the IRCCS Foundation Policlinico San Matteo di Pavia. The survey started in November 2021 and ended in March 2022. Healthy adolescents were recruited in schools and answered the questionnaire online through the Qualtrics platform. All data collected was entered into a dedicated database, with participants</p>	<p>The participants were 31 adolescents (mean age 18.03 ± 2.799) hospitalized for cancer at IRCCS San Matteo Hospital in Pavia and 47 healthy adolescents (mean age 16.17 ± 2.099). Both samples completed a survey that included sociodemographic information and questionnaires assessing psychological well-being, traumatic effects of the illness, and adequacy of relationships with parents. 56.7% of adolescents with</p>	<p>Cancer in adolescence is considered a family disease that can have many negative psychological impacts on the teenager and the entire household. Cancer in adolescents shows the strong influence of traumatic events on their identity construction and way of seeing life. Cancer in adolescence may represent a significant traumatic event that can shape the identity and life of adolescents who are in an intrinsically vulnerable stage of life. Adolescent cancer patients have</p>

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			identified only by a unique ID number. The database was stored on a secure server, and access to the information was limited to members of the research team.	oncology scored below average in terms of psychological well-being, and a minority of them were in the clinical worry range for anger (9.7%), PTS (12.9%), and dissociation (12.9%). Compared to peers, there were no significant differences... A significant positive correlation also emerged between adolescents' psychological well-being and their relationship with their parents (mothers: $r = 0.796$; $p < 0.01$; fathers: $r = 0.692$; $p < 0.01$).	different cancer patterns with unique biological and psychological characteristics. This is caused by the very complex and complicated period of puberty; illnesses that occur during this period can be a traumatic experience for the child and the entire family, with many short-term and long-term psychological consequences.
6.	Acceptability of Suicide Risk Screening Among Adolescents in Outpatient Care: Child and Parent Perspectives Link: https://doi.org/10.1080/07347332.2020.1856997 Name: Journal Psychosoc Oncol Volume : 39 Number : 6 Pages: 789-795 Year: 2021 Authors: Mary V. Tipton, Marina N. F. Arruda-Colli, Sima Zadeh Bedoya, Maryland Pao, Lori Wiener	to determine the acceptability of suicide risk screening among adolescents with cancer and other severe illnesses and their parents	This research used an observational study by collecting data using interview techniques and filling out screening questionnaires on adolescents suffering from cancer, as well as interviewing parents about their acceptance of suicide risk screening in children. Respondents: Teenagers with cancer and parents of teenagers Independent Variable: Suicide risk screening Dependent variable: parental acceptance	The sample included 32 patient/parent pairs. The overall positive screening rate was 9.4% ($n = 3/32$). Most patients (75%; $n = 24/32$) and parents (84.4%; $n = 27/32$) reported that healthcare settings should screen young patients for suicide risk.	Suicide risk screening is acceptable to most patients and parents in pediatric clinics. Implications for Psychosocial Providers: Medically ill patients are at risk for suicide. Universal suicide risk screening using validated measures can provide meaningful clinical information to patient families and health care providers and potentially save young lives.

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7.	<p>A protocol for applying a health justice-informed implementation science model and framework to adapt sleep interventions for youth at risk for suicidal thoughts and behavior</p> <p>Link : DOI 10.3389/fpubh.2022.971754</p> <p>Name: Frontiers in Psychiatry Vol: 10 Number : - Pages: 1-15 Year: 2022</p> <p>Author: Kabtamu Nigussie et al,</p>	<p>To describe the application of an implementation science model and framework informed by health equity to adapt and evaluate an evidence-based Transdiagnostic Sleep and Circadian.</p>	<p>Design: multi-stage research protocol using the Assessment, Decision, Adaptation, Production, Expert Topical-Integration, Training, Testing (ADAPT-ITT) model to adapt and evaluate the TSC evaluate the adapted TSC for feasibility, acceptability, and efficacy with a randomized trial pilot test.</p>	<p>Based on research on adolescent depression and sleep health disparities, it is anticipated that adaptations of the TSC will be necessary to improve intervention content for adolescents with depression, at risk for STB, and especially those from black and Hispanic/Latino backgrounds. Apart from that, researchers also anticipate adaptations that will be carried out.</p>	<p>Adolescent sleep health disparities Racial and ethnic sleep health disparities are well documented in adolescence.</p> <p>Risk factors for increased sleep-related STB, such as short sleep duration, poor sleep quality, and variable sleep timing, are more prevalent in black and/or Latino adolescents than in white adolescents (21 – 24).</p>
8.	<p>Covariates of risk health behavior in childhood cancer survivors during adolescence</p> <p>Link: https://www.tandfonline.com/loi/wjpo20</p> <p>Name: Journal of Psychosocial Oncology, Volume: 39 Number 1 Ha :74-88 Year: 2021 DOI:10.1080/07347332.2020.179577</p> <p>Penulis : Rachel S. Werk & Jennifer S. Ford</p>	<p>Exploring beliefs and behaviors related to alcohol and tobacco use among adolescent cancer survivors</p>	<p>Cross-sectional study using telephone assessment questionnaires. Univariate analysis and multiple logistic regression determined the association between psychological covariates and every use of alcohol and cigarettes.</p> <p>Respondents: Adolescent cancer survivors who had been examined at Memorial Sloan Kettering Cancer Center (n=128).</p>	<p>In multiple logistic regression, higher positive attitudes (OR $\frac{1}{4}$ 3.65; $p < 0.001$) towards alcohol use and lower knowledge about the risks of binge drinking (OR $\frac{1}{4}$ 0.38; $p < 0.05$) were significantly associated with alcohol use. Older age (OR $\frac{1}{4}$ 1.55; $p < 0.01$), lower knowledge about the risks of smoking (0.41; $p < 0.05$), and the subjective norm that smoking is something that others want (OR $\frac{1}{4}$ 1.90; $p < 0.05$) significantly associated with cigarette use</p>	<p>Delayed physical effects, or treatment-related chronic health problems, are a result of intensive care and increased life expectancy that increases the risk of these health problems in child cancer survivors. Tobacco and alcohol use affects an individual's risk of disease and may further increase the risk of adverse health problems among cancer survivors.</p>
9.	<p>Identity formation in adolescent and emerging adult</p>	<p>Knowing the identity formation of adolescents</p>	<p>Design: Intervention and control groups,</p>	<p>Comparison with control participants</p>	<p>Adolescents in the moratorium and diffusion periods</p>

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	<p>cancer survivors: Different perspectives and relationships with psychosocial functioning</p> <p>Link : https://doi.org/10.1080/08870446.2021.1955116</p> <p>Name: Psychology & Health Volume : 38 Number 1 Pages: 76-93 Year: 2021 Author: Sofie Prikken, Koen Luyckx, Koen Raymaekers, Leni Raemen, Margaux Verschueren, Jurgen Lemiere, Trui Vercruyse & Anne Uyttebroeck</p>	with cancer	<p>The questionnaire was sent by post</p> <p>(1). Identity confusion: The identity subscale of the Erikson Psychosocial Stage Inventory</p> <p>(2). Identity Dimensions: Identity Development Scale (Luycjs et al, 2008)</p> <p>(3). Depressive Symptoms: Epidemiological Studies depression scale (12-item short version) (Roberts & Sobhan, 1992)</p> <p>(4). Satisfaction with life: Life satisfaction scale (Diener, 1985)</p> <p>(5). Physical Function: Sf-36 Health Survey (Aaronson et al 1998)</p> <p>(6). History of cancer: Childhood Impact Scale (Perrin, et al, 2005)</p>	<p>Identity confusion: No mean difference was found between the intervention group and the control group (p=0.481)</p> <p>Identity status: No difference found (p=0.532)</p> <p>Relationship between demographic and clinical characteristics in survivors</p> <p>Identity confusion: Men score higher than women</p> <p>There was no correlation between age and age of diagnosis</p> <p>There is no difference in the type of cancer</p> <p>Identity status: Younger individuals have more opportunities to achieve Relationship to experiences of well-being and illness</p> <p>Identity Status: Significantly related to depressive symptoms, life satisfaction</p>	<p>reported lower levels of well-being and more negative experiences of illness.</p>
10.	<p>Incidence of suicide among adolescent and young adult cancer patients: a population-based study</p> <p>Link : https://doi.org/10.1186/s12935-021-02225-y</p> <p>Name: Cancer Cell International Volume: 21 Number: 540 Page: 1-11</p>	<p>To characterize deaths by suicide among adolescent and young adult patients in the United States and identify risk factors associated with higher risk of suicide.</p>	<p>This study used a surveillance observational study and calculated suicide rates that were standardized by age, gender, and racial distribution and compared rates based on different anatomical locations. All statistical analyses were performed using statistical</p>	<p>We report that 981 of 572,500 AYA patients with cancer committed suicide, with an age-, sex-, and race-adjusted suicide rate of 17.68/100,000 person-years. The suicide rate was 14.33/100,000 person-years in the matched general</p>	<p>Higher suicide rates were associated with male gender, white race, unmarried country, distant tumor stage, and single primary tumor.</p> <p>The incidence of suicide in cancer patients is relatively high, so it is essential to identify cancer patients who are at high risk for suicide.</p> <p>Adolescents</p>

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	Year: 2021 Authors: Pengcheng Yang, Lei Zhang, and Xiaohua Hou		software SEER Stat 8.3.5, STATA 15.0, and R×64 3.5.2 with Standardized mortality ratio (SMR, patient suicide rate divided by the suicide rate of the comparison population) and 95% confidence interval (CI). Respondents: Cancer patients aged 15-39 years Suicide incident	population, giving a standardized mortality ratio (SMR) of 1.234 [95% confidence interval (CI) 1.159-1.313]. Higher suicide rates were associated with male gender, white race, unmarried status, distant tumor stage, and single primary tumor. AYA patients with otorhinolaryngo logic, gonadal, gastric, soft tissue, and nasopharyngeal cancers are at the most significant risk for suicide compared with patients with other types of cancer. In older patients (≥ 40 years), the highest risk is in those.	experience different physical, psychosocial, and psychological conditions from other age groups. They are also at an early stage of life when it comes to education, career, and family life.

Adolescents are in the transition phase from children to adults, physiologically experiencing many physical, emotional, and social changes that can be a source of stress (Indraswari et al., 2021; Novrianda et al., 2022). One of the conditions that teenagers have to face is puberty, which brings significant physical changes, such as body growth, changes in voice, and sexual development (Chen et al., 2021). These changes can cause confusion, discomfort with one's own body, or lack of self-confidence. Exposure to extreme stressors during puberty and adolescence increases the risk of developing mental illness. In this phase, teenagers begin to search for and form their own identity, which often involves searching for identity, values, and life goals; the pressure to discover "who they are" can be enormous (Milner et al., 2019). Three of the ten studies reviewed from this research found that the search for self-identity was the most significant stressor faced by teenagers in general. Self-identity must be formed in a person after entering late adolescence, so that the individual can lead a happy life and the quality of life can be maintained well. This search process in adolescence through various challenges and stress requires intervention and support. Another stressor is related to academic success, they are faced with demands from school, parents, and society (Opoku et al., 2020). Peers greatly influence teenagers' lives; pressure to be accepted in certain social groups, friendship problems, or bullying can be a significant source of stress. Unstable family dynamics, such as divorce, parental conflict, or economic problems, can affect teenagers' mental health.

What is no less important is the source of stress for teenagers today is increasingly increasing as a result of the high use of social media during the Covid-19 era; that there are many cases of social media addiction occurring in teenagers, they will be very anxious even if they have to be separated for a minute from their cellphones (Glidden et al., 2022; Mediarti et al., 2021). The research reviewed found that social media also had an impact on the emergence of problems of social comparison, cyberbullying, and feelings of loneliness, which were associated with various factors related to sociodemographics, health, and cancer (Kusumawaty et al., 2021). The pressure to appear perfect on social media can also be a source of anxiety. Teenagers often set very high standards for themselves, both in academics, appearance, and relationships. When they feel they cannot meet these expectations, they can experience stress and anxiety. Various typical stressors faced by teenagers put them in a crisis phase in life. Adolescence is a unique and formative period. Physical, emotional, and social changes, including exposure to poverty, abuse, or violence, can make teenagers vulnerable to mental health problems. Psychological stress experienced by teenagers can impact various aspects of their lives. Prolonged stress can cause mental health problems such as depression, anxiety, and eating disorders (Seitz et al., 2010; Ye, 2020). Demands and expectations that are too great can be a pressure that interferes with concentration and motivation, which in the end can reduce academic performance. Multiple and severe stressors predispose teenagers to withdraw from social interactions, cause conflict with peers, or even tempt them to engage in risky behavior such as using illegal substances (Kim et al., 2018). Stress significantly affects a person's physical health, resulting in complaints of headaches, sleep disorders, digestive disorders, etc.

Globally, one in seven children aged 10-19 years has a mental disorder, accounting for 13% of the global burden of disease in this age group (WHO, 2017). Depression, anxiety, and behavioral disorders are among the leading causes of illness and disability among adolescents. Suicide is the fourth cause of death in the 15-29 year age group (Graham et al., 2024). Suicide is a consequence of failure to address the mental health conditions of adolescents, which will extend into adulthood, disrupting physical and mental health and limiting opportunities to live a fulfilling life in adulthood. The vulnerable condition of adolescents will be increasingly at risk with the presence of other stressors such as cancer. Adolescents diagnosed with cancer face much greater psychological stress compared to healthy adolescents, as they have to face the usual challenges of adolescence but also the burden of serious illness (McEwen & Wills, 2014). The fear of death causes great anxiety and creates uncertainty about the future and the possibility of premature death, causing them to lose hope to survive and live the days that feel difficult. Research on teenagers fighting fear has been qualitatively obtained. Fighting fear is a personal struggle of teenagers, and they face this fear alone; sharing their fear with those closest to them helps them regulate their fear into a passion for life. Two of the studies reviewed in this study suggest that teenagers manage fear with the support of their parents, and another study suggests that there is a form of escape in the use of addictive substances to relieve fear.

Cancer not only causes suffering due to accompanying symptoms such as pain, weakness, and fatigue, but also, the treatment process causes uncomfortable conditions and often causes physical changes such as hair loss, weight loss, or surgical scars (Zakarija-Grkovic & Stewart, 2020). These changes can damage body image and reduce self-confidence, resulting in feelings of being different from peers (Filinkova & Kovalev, 2021). Delayed physical effects, or treatment-related chronic health problems, are the result of intensive treatment and increased life expectancy, which increases the risk of these health problems in children who are cancer survivors. The intensive treatment process can result in teenagers having to leave school for long periods, and frequently, this prevents them from doing activities with their peers. The article in this research found that close relationships with peers are also an essential source of support for chronically ill adolescents when they are facing developmental tasks and illness-related challenges. The absence of peers creates feelings of loneliness and social isolation.

Cancer treatment often interferes with daily activities, including school, hobbies, and social interactions, which can leave teens feeling frustrated and losing control of their lives (Ojasalu et al., 2020). In the article, cancer in adolescence can represent a significant traumatic event that can shape the identity and life of adolescents who are intrinsically in a vulnerable stage of life, which causes sufferers to lose enthusiasm in carrying out all daily activities. This is in line with other research, which states that reward dysfunction affects mental conditions, causing individuals to lose the energy to carry out all activities (Krill et al., 2023), to the point that what was a hobby before the illness, when they are sick, they lose interest.

Stressors that appear as accompaniments to cancer in adolescents can trigger changes in family roles (Ernst et al., 2021). The condition of cancer in one of the family members creates family dynamics due to the need for greater attention to be paid to the sick teenager. This is perceived by teenagers as something that destroys family stability, causing feelings of guilt or additional pressure on teenagers. The psychological pressure on feelings of guilt identified in the article is related to their condition, which requires financing and thinking that involves all family members (Santana, 2018). As well as the process of changing family roles due to the need for extra assistance for teenagers.

Adolescents with cancer face stigma from society and different treatment from their peers or society because of their disease (Fusar-Poli et al., 2021). The societal stigma felt by adolescents with cancer influences psychological distress through cancer disclosure, internalized shame, and the availability of social support. Higher levels of perceived societal stigma predict higher levels of shame and self-blame, as well as lower availability of social support, which then increases psychological distress. A survey of cancer adolescents found that more than half of the sample, or 60.2% of patients, had a negative health assessment. The heavy psychological pressure experienced by teenagers due to cancer and the demands of the developmental tasks they complete can trigger various problems, such as suicidal ideation in teenagers (Lee et al., 2023). Adolescence is a critical period in human development marked by significant physical, emotional, and social changes. The fact is that on an international scale, 981 out of 572,500 teenage cancer patients committed suicide in the United States (Lee et al., 2023). Meanwhile, in Indonesia, there are no official records of suicide among teenagers with cancer, but previous research on teenagers with cancer found that 16.7% had suicidal thoughts. Moreover, 5.4% had attempted suicide but failed.

When this psychological pressure is not managed well, it can result in mental health problems such as depression, anxiety, and post-traumatic stress (Séguin & Chawky, 2017). This condition will reduce the overall quality of life, and teenagers will be overwhelmed by grief and feel unhappy and unable to achieve satisfaction with their lives. The three articles reviewed in this research synthesize that the presence of suicide in adolescents with cancer is an accumulation of unpleasant conditions experienced, resulting in feelings of deep despair, which, in the end, can lead to suicidal thoughts. Suicidal ideation in adolescents with cancer passes through a series of complex and often interrelated stages (Molla et al., 2022). Starting with a state of shock and disbelief when first diagnosed, denial will be the first strategy that emerges; they do not believe or are confused about the situation they are facing (Perloff et al., 2019). Loss of hope and the future and death are psychological conditions that are at risk of suicide, characterized by intense self-harm and suicidal thoughts in the near future. In the next phase, the overall quality of life decreases due to the course of the disease, which causes pain and various symptoms of discomfort. Changes in appearance, such as hair loss and weight loss, can disrupt body image and place teenagers in a condition of worthlessness. Cancer is a minority group, most of whom have a history of depression at various levels. This depression will increase with the presence of increasingly complex stressors. This is a precipitating factor in the emergence of suicidal thoughts in teenagers.

Social and emotional isolation is a stage that arises as a result of feelings of worthlessness that arise in adolescents (Glidden et al.). Absence from daily life as a result of treatment that requires a long time in hospital causes teenagers to be isolated from friends and the social activities they have been involved in. Social isolation is associated with poorer psychological well-being

being an important determinant of health for adolescents with cancer. Depression and despair begin to appear in teenagers due to constant pressure and uncertainty about the future, as well as feelings of worthlessness because they are a burden on family and friends. When the physical and emotional pain becomes unbearable, teenagers begin to think about escaping the situation by contemplating suicide so that their suffering can end (Séguin & Chawky, 2017). Suicidal thoughts continue to develop into plans on how to carry out the intention to commit suicide, and efforts to carry out these plans begin to be made. Adolescents are already in a critical phase of suicide. When they have attempted suicide, strict supervision and preventive interventions must be carried out immediately in a comprehensive manner (Grobman et al., 2023).

The physical and emotional presence of family provides a sense of comfort. People feel calmer and supported when they are near the people they love (Wayant et al., 2021). Physical presence to assist practical needs such as medication supervision, daily care, and transportation meets both physical and psychological health service providers. The presence of a family member can provide positive distraction and direct emotional support when a teenager is going through chemotherapy sessions, radiation, or other medical procedures; this can help reduce anxiety and feelings of loneliness (Hung et al., 2024). Extra attention is needed by teenagers who are in this condition because they experience changes in health due to side effects of disease and treatment, which sometimes require immediate medical intervention. The emotional presence of the family in the form of attention, love, affection, and understanding can foster feelings of being appreciated (Bergersen et al.). The feeling that they are valuable triggers the enthusiasm and hope of adolescents to undergo treatment and ultimately can have an impact on the results of treatment.

The family's capacity to cope and deal with the disease and treatment of cancer in adolescents is vital to maintaining their quality of life (Séguin & Chawky, 2017). Families help teenagers manage emotions, such as anger, sadness, or fear, so they do not feel alone (Pedraza et al., 2023). The emotional presence of the family to listen to expressions of feelings of fear creates feelings of physical and psychological security for adolescents. Families can develop effective communication. Listening without judgment and providing consistent emotional support can help teens feel more accepted and understood. When the diagnosis is revealed in children, most of them are described with negative perceptions and feelings, using words such as goodbye, sadness, discomfort in conversation, fragility, sadness, and fear of death are things that must be done with caution. Otherwise, people's Parents reported their teenagers had positive feelings when using the words trust, calm, feelings of well-being, and hope to their children.

Creating a conducive home atmosphere, such as watching movies together, playing games, or just chatting together, can cure feelings of sadness due to having to miss school or social activities that have been carried out with peers (Krill et al., 2023). The family can be a substitute for teenagers' peers at home. Understanding the treatment schedule, providing knowledge about the adolescent's medical condition, and being actively involved in treatment are supports that families can provide consistently. Opening sufferers' access to a larger group, such as arranging visits from close friends or other family members to interact directly, can help teenagers build a more comprehensive support network and provide additional encouragement for teenagers.

CONCLUSION

The heavy psychological pressure experienced by teenagers due to cancer and the demands of the developmental tasks they complete can trigger various problems, such as suicidal ideation in teenagers. The physical and emotional presence of family for adolescents with cancer is significant and can have a significant positive impact on their well-being. This support helps reduce feelings of loneliness, boosts morale, and provides a much-needed sense of security in facing this enormous challenge. Families who are actively involved and provide full support can help teenagers feel stronger, motivated, and able to cope better with treatment and recovery. Intervention strategies given to adolescents with suicidal ideation must involve the support of all parties involved,

especially family members. Family therapy is one of the intervention strategies that must be provided. Open communication, giving teenagers the opportunity to express what they feel, can increase their sense of comfort and feeling appreciated. An open dialogue with all family members and listening to the teenager's feelings, complaints, and hopes can reduce the burden of guilt he feels.

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