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Discussion on the Factors Affecting Psychological Resilience in School-Aged Children with Tumors

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Abstract

Under the background of the development of medical science and technology, the survival and cure rate of children with cancer has increased to a certain extent. In addition to the medical intervention and treatment measures, all sectors of society have gradually paid more attention to the living environment and mental health problems of children with cancer. To study the psychological elasticity in school-age children using life treatment and status, the main content, and how according to psychological elasticity factors to maintain the mental health level of children with school-age cancer, summarizes the domestic and foreign literature about the mental health development of children with school-age cancer, related to the influence of the psychological elasticity factors are summarized, discusses the main influence factors and suggested measures, to the school-age children with tumor psychological elasticity related research to provide reference.

Keywords

Psychological Resilience; Children with Tumor; School Age.

1. Introduction

Solid tumors in children are tangible tumors that can be detected by the means of clinical examination, such as X-ray sheet, CT scan, ultrasound examination or palpation, which include both benign and malignant. On September 23, 2022, the Lancet published China's first study on the incidence of childhood and adolescent cancer and the access to medical services. A total of 121, 145 children and adolescents were diagnosed with cancer between 2018 and 2020, with an average cancer incidence of 126.48/million, the report said. Childhood tumors progress very quickly, and some tumors may progress from early to late stages in just three to four months. Malignant tumors pose a great threat to the life and health of children, which not only affects the growth and development of children, but also may endanger life, becoming one of the main causes of children's death, second only to accidental injury[1], It is urgent to pay attention to children's tumors.

In the mid-1970s, psychosocial oncology emerged, focusing on studying the role of psychosocial factors in the occurrence, development and progression of tumors[2]. Psychological factors have a positive effect on the progress of the treatment process and postoperative recovery of cancer patients, and the psychosocial problems are increasingly receiving more attention.

A number of existing studies have shown that psychological intervention and family therapy have significant improvements on the psychological status of children with cancer. Most of the existing treatment methods focus on the clinical aspect, and there is still a lack of research on the psychological resilience changes of children with tumors before and after receiving treatment. Regarding the psychological resilience of children with tumors, the research mainly focuses on the family environment and the interaction with medical staff. The study of the psychological resilience of children with tumors is not only helpful to understand the

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operational environmental factors affecting the growth process of children, but also conducive to the appropriate intervention for children with tumors to facilitate better treatment.

2. Definition of psychological resilience in school-aged oncology children

The concept of psychological resilience is usually divided into three definitions: outcome definition, quality definition and process definition. In the outcome definition, resilience usually refers to a state in which an individual is able to maintain mental health, function, and social competence in the face of stress, failure, or trauma. In other words, it refers to the adaptive behavior and effective functional performance that the youth in distress can show[3]. In the definition of quality, psychological resilience is regarded as an internal ability and trait of the individual, which is a series of characteristics inherent to the individual. In the definition of process, resilience is the process by which an individual adapts well in the face of stressful events[4].

In academic research, the elastic mechanism is usually operationally defined as the effect of a series of specific protective factors (protective factors)[5]. It includes the internal strength of individuals, as well as external social support, and these protective factors can help individuals to generate appropriate crisis response mechanisms.

Children with school-age tumors are limited by the external environment and the body and mind for a long period of time, and psychological resilience in their survival treatment is considered to be a factor that can change and promote adaptation to cancer[6]. Good psychological resilience is beneficial to improving their quality of life, so research is needed to evaluate the psychological resilience of school-age cancer children, and implement timely and effective intervention to help them maintain or restore relatively stable psychology and enhance physical function in the face of stressful life events and adversity[7].

The psychological elasticity of school-age tumor children tends to adopt the process definition, which can reflect the psychological dynamic changes of the children during and after the treatment. Starting with their protective factors, we study how individuals quickly recover and adapt to adversity during a series of dynamic interactions between abilities and traits[8].

3. Research on psychological resilience (influencing factors) in school-aged children

For the research of school-age cancer children, the past only focused on the clinical treatment, and paid little attention to the psychological impact of the disease on the children and the whole family. Over time, more and more social resources began to focus on pediatric tumors, including the psychological challenges faced by children with tumors in the course of treatment. As well as personal psychological factors, family psychological factors, peer psychological factors, school psychological factors and social psychological factors on children with cancer. Since there is no direct study of the psychological resilience of children with school-age cancer, this paper will explore the impact of psychological resilience on school-age cancer children from the above factors. Through reading a large number of data, it is found that most of the influence of the school on children comes from peers, so in the subsequent content, the psychological factors of the school and peer psychological factors are analyzed.

3.1. Personal psychological factors

After the disease, the children need to bear the physical and psychological level of the double torture. According to the research, children with malignant tumors will appear in the psychological behavior disorders, manifested as: suicide, depression and anxiety, insecurity and fear, the generation of bad behavior, dysthymia, lack of treatment and shame to see peers, social isolation, learning problems.

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In the process of treatment, the appearance of the children will change a lot, such as hair, skin, height and other aspects, which will make the children have a great sense of drop, and then affect the psychological state of the children.

Children leaving their familiar environment may lead to unpleasant emotions, and tumors can cause great harm to their bodies. During long-term chemotherapy, children will face many side effects, such as bone deformities, gonadal damage, and hair loss, which will undoubtedly have an impact on children's mental health[9]. The change of appearance will make children feel inferior, ashamed to communicate with others, nausea, vomiting, constipation and other discomfort, pain, memory and intelligence damage makes the development of learning is hindered.

As individuals in growth and development, children have certain plasticity under the influence of education. Because children's character is plastic in the process of growth, they can give strong emotional support to the children in the whole treatment, and often encourage the children to develop a positive character, so as to help the children relieve the bad emotions caused by the treatment of illness. After the treatment of the child, the hospital should actively understand whether the child needs to participate in the follow-up treatment and maintain contact with parents, schools, teachers and classmates, so as to timely understand the latest situation of the child and timely prepare for the possible emergency.

Therefore, the treatment of children with tumors should not only be effective and necessary, but also pay attention to their psychological problems and improve their psychological conditions, so as to maximize their physical and mental health. Through the use of psychological nursing intervention to improve the children's own psychological endurance, enhance the ability of children to actively deal with things. A large number of studies have shown that increasing psychological intervention can effectively improve the mental state of children with tumors, and provide important psychological support to improve the effect of clinical treatment and quality of life, which cannot be ignored[10].

3.2. Family support

The survey results show that parents' hostility, anxiety, compulsion and depression are closely related to the behavioral problems of children. The long-term negative emotions and behavioral problems of children will cause strong stress problems, which are not conducive to mental health, and will lead to low immunity and aggravate the deterioration of the condition[11].

At present, the family support of children with tumors mainly include family situation, parents, family relations and other aspects. Studies have shown that children's family management styles can be divided into four categories: optimistic practice, anxiety and adaptation, lack of ability, and difficult management. This classification is based on the family situation, management behavior, and the extent to which illness affects daily life. Among them, the management ability of the poor and difficult management families is relatively low[12]. Four types of children family residence and the main caregiver education level has significant differences, this is mainly reflected in the rural and urban living children, due to the time, geographical location, family economic situation and factors such as medical resources, may face more challenges, get less support about disease, the main caregivers of the child's physical condition, the disease management ability is lower, the disease burden of management. Furthermore, the lower educational level of the primary caregivers may lead to their poor understanding of the disease and its management, which in turn causes difficulties in effective family management.

After the illness, the family not only faces the economic burden, but also bears the psychological pressure, this double pressure has a serious impact on the physical and mental health of the parents of the children. Parents' mental state and behavioral problems may have a negative

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impact on the treatment process of the children, so parents need to correctly understand the difficulties caused by the disease and adjust their negative emotions in time to reduce the impact on the children.

3.3. Friends and school psychological factors

Studies have shown that participating in activities and peer friends are effective coping strategies for disease symptoms, reduce negative emotions in children and improve their quality of life. In addition, when children are connected with their peers, they can also encourage each other. Common experience will make them feel empathy, can feel the energy brought by each other more deeply, and improve the confidence of both sides to fight the disease together.

Encouraging children to participate in group activities helps to divert their attention from the pain of illness and treatment, thereby alleviating emotional symptoms such as tension and sadness caused by hospitalization and traumatic treatment[13]. Studies show that to participate in collective activities, enhance peer strength, can well help children through psychological difficulties, in reluctant to meet with adults (such as parents and medical staff) share things, good peer relationship can solve this problem, and his companions will put forward their solutions, a lot of time can provide help.

The school provides a stage to meet the needs of children in social interaction, self-achievement and self-cognition, as well as becoming important members of society. Children can experience independence, self-control, and the opportunity to build self-esteem, which are not easy to achieve at home. The school environment can greatly promote the children's social communication skills, teamwork ability, and the ability to systematically learn knowledge. Through a series of efforts in the school, it can help the children to adapt to the study and life faster, and help the whole family to return to the right track as soon as possible.

3.4. Social support

Social support consists of two parts: the first part is actual social support, which includes material help and specific services, and the second part is perceived social support, which involves the emotional experience of social care, respect and understanding felt by individuals[14].

Actual social support, including the treatment services provided by hospitals for children, the relevant policy support issued by the government, and public welfare fundraising activities, can reduce the economic burden of children's families to a certain extent. The material also includes the ward environment of the hospital, the provided toys, picture books, etc., which can reduce the fear of children in the hospital and relieve the psychological pressure to a certain extent. At the same time, it can also help the major caregivers to take better care of the children's daily life. Understand that social support includes the psychological and spiritual support provided by medical staff, medical volunteers and social workers for children in the process of treatment, which can increase the contact between children and others, and is conducive to the physical and mental development of children.

Now there is no systematic and professional personnel to solve the psychological problems of children with cancer to help children and their families solve psychological problems. Research survey shows that psychological nursing is a widely recognized effective nursing intervention, it can be widely applied to a variety of situations, and can effectively solve the mental health problems of patients[15]. Literature data show that intensive psychological nursing intervention for cancer patients has important clinical value for relieving patients' negative emotions such as anxiety and depression, and can significantly reduce their psychological burden[16]. Because of its wide applicability, psychological nursing intervention can implement personalized psychological care for children with tumors. According to the age,

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cognitive development level and personality characteristics of the children, to develop the corresponding psychological care plan, and put these plans into practice, which can also effectively reduce the psychological burden of the children, and help them to maintain a positive mental state. At the same time, medical staff can provide psychological counseling, good layout of the ward environment, health education, example of advice and other measures to provide solutions to children or reduce the possibility of problems. Enrich the monotonous life of children in the hospital, reduce the degree of resistance to the unfamiliar environment, deepen the correct understanding of children and their relatives of cancer diseases, and help children and their relatives to establish positive and positive beliefs.

4. Domestic research status quo

Domestic scholars for tumor rehabilitation patients with a variety of research, but because the research object itself with particularity, and related research need hospital, society, therefore, domestic research on cancer rehabilitation patients' psychological social adaptation is still few, and research focus mainly on the medical field. There are even fewer studies on children with tumors, most of which are in adults.

As for the psychological problems of patients in the recovery period of cancer, Li Aizhi scholars conducted a survey on 100 cancer patients and pointed out that patients have a large number of psychological problems, but the focus of male patients is quite different between those and female patients[17]. In addition, according to the existing research results, the relevant factors affecting the rehabilitation of cancer patients mainly focus on personal, family, social support and other aspects, among which the individual level includes personal physical and psychological effects[18]. In the study of psychosocial adjustment of patients in cancer rehabilitation, corresponding rehabilitation interventions have been proposed in both medical and nursing fields. Jiang Wei's research points out that the physiological indicators of cancer patients have been improved to different degrees, through the implementation of psychological care, dietary care, pain care, home care and rehabilitation guidance[19]. In the field of psychology, the research on psychological adaptation of patients focuses on the psychological intervention of patients through various therapies, but the establishment of social psychological adaptation mechanism of patients in the recovery period of cancer is still less in China.

5. Research progress on psychological elasticity in children with tumors abroad

5.1. Intervention concept

As a malignant disease, tumor will make the sick people and their families experience a weak process. However, in the process of intervention abroad, researchers also believe that it can increase the meaning and satisfaction of the life of relevant people. This understanding lies in that both patients, family members and medical staff in the recovery period of cancer can experience positive emotional feedback and support in the improvement of the patients' overall quality of life, function and physical symptoms during the treatment process[20].

Patients with surrounding personnel to establish effective relationship can help them get better company and medical service provider support, and can express their needs of cancer patients emotional adaptability is stronger, so cancer even will give them great physical and psychological side effects, but at the same time also can prompt them inspire survival instinct in despair[21]. Under the active guidance of psychological intervention personnel, they can adjust their psychological condition, improve their understanding of their ability, reduce symptoms such as pain, fatigue, loss of appetite and insomnia, and thus improve self-efficacy.

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Therefore, the relevant personnel with the above intervention concept can reduce the psychological distress of the patients and their psychological members through positive measures, so that the tumor rehabilitation patients can better adapt to the society and improve the quality of life in the later recovery.

5.2. Interventions

In foreign studies, the psychological rehabilitation program will be supplemented in the treatment process of patients in the cancer rehabilitation period[22]. Specific measures include psychological rehabilitation program (CBT-OP) based on cognitive behavioral therapy, adjuvant psychological therapy (APT), post-traumatic growth (PTG) and psychological resilience, etc. Except for post-traumatic growth (PTG) and psychological resilience, the rest are developed on the basis of cognitive behavior.

Although patients have recovered physically and mentally, the severity of symptoms and psychological pressure will still affect their quality of life, and still threaten their independence and the ability to exist effectively in the family society[23]. The psychological pressure in this period mainly comes from their own cognitive deviation, and psychosocial adaptation[24].

These interventions, from the patient's physical health, mental health, stigma and post-traumatic stress disorder, and resilience, enhance to provide barriers to stressors, make the individual has the problem in life, and with the positive aspects of trauma, enhance coping strategies and improve mental health level to adapt to the challenges of cancer rehabilitation.

6. Research gap at home and abroad

Domestic scholars have carried out a variety of studies on patients with cancer rehabilitation, but because of the particularity of the research subjects and the relevant studies requiring the support of hospitals and society, there are relatively few studies on the psychosocial adaptation of patients in cancer rehabilitation in China, mainly focusing on the medical field. In the field of psychology, the research on psychological adaptation of patients focuses on the psychological intervention of patients through various therapies, but the establishment of social psychological adaptation mechanism for patients in cancer recovery is still less in China.

Similarly, although foreign research using the process of various interventions, the patient's psychosocial adaptation has certain attention, but mainly focus on the local range of the treatment environment, and the patient after recovery psychological tracking insufficient, now also has not established perfect cancer rehabilitation patients with social psychological adaptation mechanism.

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Reference

[1] Bao Pingping, Zheng Ying, Jin Fan. Progress in the environmental risk factors for childhood malignancy[J]. Environmental and Occupational Medicine, 2008, (02): 190-194.

[2] Sagar Stephen M.Integrative oncology: are we doing enough to integrate psycho-education ?[J]. Future oncology (London, England), 2016, 12(24): 2779-2783.

[3] Connor Kathryn M and Davidson Jonathan R T.Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). [J]. Depression and anxiety, 2003, 18(2): 76-82.

ISSN: 2688-8653

[4] Zeng kept the hammer, Li Qiwei. Review of studies on resilience development in children [J]. Psychological science, 2003, (06): 1091-1094.

[5] Haase J E et al.Research triangulation to derive meaning-based quality-of-life theory: adolescent resilience model and instrument development .[J]. International journal of cancer. Supplement=Journal international du cancer. Supplement, 1999, 12: 125-31.

[6] Manuela Eicher et al. Resilience in Adult Cancer Care: An Integrative Literature Review[J]. Oncology Nursing Forum, 2015, 42(1): E3-16.

[7] George A. Bonanno and Maren Westphal and Anthony D.Mancini.Resilience to Loss and Potential Trauma[J]. Annual Review of Clinical Psychology, 2011, 7(1): 511-535.

[8] Tusaie Kathleen and Dyer Janyce. Resilience: a historical review of the construct.[J]. Holistic nursing practice, 2004, 18(1): 3-8; quiz 9-10.

[9] Psychological and behavioral manifestations of children with malignant tumors [J]. Chinese Journal of Children's Health Care, 2002, (02): 123-125.

[10] Varni J W et al. Perceived social support and adjustment of children with newly diagnosed cancer.[J]. Journal of developmental and behavioral pediatrics: JDBP, 1994, 15(1): 20-26.

[11] Meng Fu. Psychological status of children with hematological tumors and their parents [J]. Chinese Journal of Mental Health, 2002, 16 (7): 457-459.

[12] He Hui, Jiang Xiaoping, Zhou Dan, Hu Xiaofeng. Study on family management types of children with malignant tumors based on cluster analysis [J]. Journal of Chongqing Medical University, 2022, 47 (10): 1254-1260.

[13] Frances F Prevatt and Robert W Heffer and Patricia A Lowe.A Review of School Reintegration Programs for Children with Cancer[J]. Journal of School Psychology, 2000, 38(5): 447-467.

[14] Wang Yanfei. Review on the study on the relationship between social support and physical and mental health [J]. Psychological Science, 2004, (05): 1175-1177.

[15] Zhang Manying. Effect of psychological care on negative emotions in children with hematological tumors [J]. Aerospace Magazine, 2020, 31 (08): 1002-1003.

[16] Liang Xiaoyun. Practice strategies for medical social work in the "bio-psychsychosocial" model of medicine [J]. Journal of Changsha Civil Affairs Vocational and Technical College, 2014, 21 (04): 2-7.

[17] Li Aizhi. Investigation of 100 psychological problems in cancer patients [J]. Clinical Rehabilitation in China, 2004 (06): 1025.

[18] Zhou Ting. A case counseling study on psychological adjustment in convalescent cancer patients [D]. Changchun University of Science and Technology, 2021.

[19] Jiang Wei. Nursing research in the cancer rehabilitation period [J]. Chinese and Foreign Medical Treatment, 2015,34 (18): 149-150 + 153.

[20] Aiste Pranckeviciene et al.Association between psychological distress, subjective cognitive complaints and objective neuropsychological functioning in brain tumor patients[J].Clinical Neurology and Neurosurgery, 2017, 163: 18-23.

[21] Fehrenbach Michael Karl et al.Psychological Distress in Intracranial Neoplasia : A Comparison of Patients With Benign and Malignant Brain Tumours [J]. Frontiers in Psychology, 2021, 12: 664235-664235.

[22] Masoome Barani et al.An Evaluation of Adjuvant Psychological Therapy (APT) Effectiveness on the Quality of Life of Patients with Hematologic Malignancies[J]. Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues, 2019, 38(5): 1728-1735

[23] Y.S.Uzar Ozcetin and D.Hicdurmaz .Relations of post-traumatic growth and resilience in cancer experience[J].European Psychiatry, 2017, 41: S672-S672.

[24] Pertz Milena and Schlegel Uwe and Thoma Patrizia .Sociocognitive Functioning and Psychosocial Burden in Patients with Brain Tumors[J].Cancers, 2022, 14(3): 767-767.