

A study of Casework in a Psychosocial Therapy Model to Reduce the Burden on Family Carers of Children with Cerebral Palsy

Tao Zheng¹, Fangfang Xin^{1*}

¹ Taizhou Polytechnic College, Taizhou, China

Email Address

498810664@qq.com (Fangfang Xin)

*Correspondence: 498810664@qq.com

Received: 29 July 2024; Accepted: 12 August 2024; Published: 23 August 2024

Abstract:

Cerebral palsy, as one of the major motor disorders in children, is the main disease that causes physical disability in children after poliomyelitis, and it cannot be cured by current medical treatment. Once a child is diagnosed with cerebral palsy, not only the child suffers from the disease, but also the caregivers of children with cerebral palsy have to face the pressure of mental and financial factors all year round. This paper studies the effect of psychosocial therapy on the reduction of the burden of family carers of children with cerebral palsy, aiming to provide reference for social rehabilitation institutions and the government, to enhance the attention of families of children with cerebral palsy, to create a good living environment and space for the children, so that they can fully feel the care of the state and society, to reduce the burden of carers, and to safeguard the mental health of the children with cerebral palsy and their family members.

Keywords:

Psychosocial Therapy, Children With Cerebral Palsy, Carer's Burden, Related Factors

1. Introduction

Caring for children with cerebral palsy often imposes a burden on family caregivers in many ways, such as continuous medical and rehabilitation costs that exert enormous pressure on the family's finances, and the fact that primary caregivers often need to invest a great deal of time and energy in caring for children with cerebral palsy, which can have a negative impact on their personal quality of life and career development. In this context, effective psychosocial intervention for children with cerebral palsy not only helps to improve the self-esteem and social adaptability of children with cerebral palsy, but also improves their emotional control, reduces the psychological burden of carers, promotes harmonious coexistence within the family, and improves the overall quality of life. Therefore, psychosocial therapy, as an

important component of comprehensive rehabilitation, is of vital importance to children with cerebral palsy and their carers.

2. Overview of Psychosocial Treatment and Factors Associated with the Burden on Carers of Children with Cerebral Palsy

2.1. Psychosocial therapy

In 1964, Hollis, a sociologist published by Columbia University in the United States, published “Casework: a psychosocial theory”, which defined psychosocial therapy, pointing out the core concept that psychosocial therapy is always centred around, that is, the association between psychological factors, social factors. Psychosocial treatment of patients is divided into direct and indirect treatment. Among them, direct treatment, that is, directly facing the patient to carry out treatment, counselling, including non-reflective direct treatment, reflective social. Indirect treatment is based on the improvement of the surrounding environment or the indirect services brought by third parties to influence the patient’s condition, aiming at expanding the focus of casework services.

2.2. Factors related to the burden on carers of children with cerebral palsy

Caregiver burden related factors include the burden indirectly created by the child’s own burden, in addition to the caregiver’s own burden.

From the caregiver’s perspective, the caregiver’s burden in caring for a child with cerebral palsy focuses on positive coping, negative coping, and family care index. Among them, positive coping strategies include seeking social support, receiving professional help, and self-education. Positive coping mindset helps carers to maintain their own mental health and enhance their ability to cope with stress. Negative coping, i.e. facing difficulties, denial of problems, avoidance of responsibility, and emotional outbursts (venting of anger, complaining, etc.) by carers during the challenge period can exacerbate family conflicts and personal psychological burdens. The Family Care Index, which aims to reflect the level of, and support among family members.

In terms of the individual child with cerebral palsy, the burden on the caregiver is centred on subjective quality of life, the Karnofsky (KPS) index, rehabilitation status, and the course of the disease. Subjective quality of life, which is the self-perceived satisfaction and well-being of children with cerebral palsy, is a comprehensive measure of physical and mental health and social support, and the Karnofsky (KPS) index, which is designed to assess the functional status and ability of patients to care for themselves. Higher KPS index proves that children with cerebral palsy have better self-care ability and less need for nursing care. Rehabilitation status, which covers the recovery of children with cerebral palsy in medical, physical and psychological dimensions. Effective rehabilitation programme and positive rehabilitation status can significantly improve children’s quality of life, self-care ability and subsequently reduce the burden of care [1]. Table 1 shows the relevant factors affecting the burden on carers of children with cerebral palsy.

Table 1. Relevant factors affecting the burden on carers of children with cerebral palsy.

Projects	Total Score		Social Burden		Mental Burden		Physical Burden	
	<i>t</i>	<i>P</i>	<i>t</i>	<i>P</i>	<i>t</i>	<i>P</i>	<i>t</i>	<i>P</i>
carer								
Positive	-0.223	< 0.05	-0.221	< 0.05	-0.211	< 0.05	-0.167	> 0.05

Response								
Negative coping	0.356	< 0.01	0.256	< 0.01	0.046	< 0.01	-0.306	< 0.01
Family Care Index	-0.234	< 0.05	-0.220	> 0.05	-0.169	< 0.05	-0.247	< 0.05
child with cerebral palsy								
Subjective quality of life	-0.233	< 0.05	-0.206	< 0.05	-0.185	> 0.05	-0.248	< 0.05
Karnofsky Index	-0.496	< 0.01	-0.526	< 0.01	-0.376	< 0.01	-0.446	< 0.1
Rehabilitation status	-0.256	< 0.01	-0.286	< 0.01	-0.125	> 0.05	-0.276	< 0.1

3. Psychosocial Therapy Intervention Strategies for Cases of Children with Cerebral Palsy

3.1. General Materials

The case of this study was a family of three children, Xiao Song and his parents in Jiangsu Province. Xiao Song was 11 years old and was diagnosed with cerebral palsy at the age of 1 year after birth, with paralysis of the lower limbs but no deficits in language, cognition, or intelligence, and has been ill for 10 years. Song’s parents were both high school graduates, Song’s mother worked as a handyman from an actual business, and Song’s father worked as a repairman at an auto body shop. After confirming that their child had cerebral palsy, Song’s parents spent seven years seeking medical treatment in their hometown community hospital and three hospitals in first-tier cities. Despite the long-term rehabilitation treatment, Song's motor ability has improved, but as Song’s age gradually grows, he is still unable to stand and walk independently, Song’S parents are burdened with huge economic and mental pressure, gradually lost confidence in the treatment, and gave up the rehabilitation training treatment during the age of 8 to bring Song back to his hometown. At present, 11-year-old Xiao Song has already appeared the trend of degeneration of the body's motor function, has produced strong negative psychological emotions, such as irritability, low self-esteem, unwilling to communicate with others, insomnia, and Xiao Song’s parents have also appeared serious depression, insomnia, etc., the physical health of the deterioration of the Song, and the Song’s father often quarrels with the Xiao Song, and even out of the fight scolding. Eventually, Song’s parents were unable to take care of Song and the huge financial burden and other multi-dimensional pressure, to a rehabilitation institution, to seek the help of social workers, in the hope of improving the family’s state of life.

3.2. Psychosocial treatment programme

After the social worker received Song’s parents’ requests for help and complaints, and after several conversations to understand Song’s condition and the pressure of parental care, a 6-month psychosocial treatment programme was formulated for Song, including family support, individual psychotherapy, social skills training, school intervention and occupational therapy.

3.2.1. Family support strategy

In terms of family support, firstly, parental training was provided twice a month for 2 children each time, with a total of 12 sessions covering knowledge of cerebral palsy,

caregiving skills, coping strategies for various problems, and the use of government resources. Secondly, social workers set up online support groups based on the WeChat group function, through conducting one WeChat group exchange and Q&A with experts (30 minutes) for a total of 24 times. Thirdly, organise quarterly interactive activities for families with children with cerebral palsy, a total of 2 times, to increase parent-child interaction for half a day.

3.2.2. Individual Psychotherapy

Individual psychotherapy is provided once a week for 60 minutes, for a total of 24 sessions. In the initial stage (the first 2 months), a comprehensive psychological assessment was conducted to understand Xiao Song's psychological condition and emotional needs. In the middle stage (2-4 months), cognitive-behavioural therapy was used to help Song adjust his negative thinking patterns and behaviours, and game therapy and art therapy were used to improve his emotional expression and self-awareness. In the later stage (4-6 months), the focus was on consolidating the effects of the earlier stage and teaching Song emotional management and stress coping skills. During the treatment, Xiao Song's progress was recorded after each session, and communication was maintained with Xiao Song's parents and school in order to adjust the treatment plan. During the course of treatment, a comprehensive assessment was conducted every two months for a total of three times to ensure that the treatment goals were achieved.

3.2.3. Social Skills Training

For social skills, a social skills training programme designed for 6 months was provided once a week for 90 minutes for a total of 24 sessions. In the initial stage (first 2 months), the training focuses on basic social etiquette and communication skills, using role-playing and scenario simulation for practice. In the middle stage (2-4 months), education on relationship building and maintenance was strengthened, and social workers worked with Song's parents and Song on teamwork and conflict resolution exercises, and enhanced understanding through storytelling and video demonstrations. In the later stage (4-6 months), tasks are carried out in actual social environments, including participation in group activities of the rehabilitation centre, cooperative projects, and mastery of a series of applications of learned social skills. At the end of each session, the therapist gives detailed feedback and provides guidance to Song and his parents on counselling at home. Effectiveness evaluations were conducted every two months for a total of three times, and the training content was adjusted according to the evaluation results.

3.2.4. School Intervention

The Rehabilitation Centre and the school formed a joint treatment team and initiated a 6-month school intervention programme to develop an Individualised Education Plan (IEP). Firstly, a comprehensive functional assessment is conducted at the beginning of each semester to set specific academic and developmental goals. Secondly, special education teachers are arranged to collaborate with classroom teachers to conduct one-to-one support and small group activities three times a week for 45 minutes each time. Inclusive activities are organised once a month, arranging collaborative interactions between children with cerebral palsy and ordinary students. Thirdly, home-school communication parent-teacher meetings were held once every

two months, inviting parents to participate, giving feedback on educational progress and adjusting plans.

3.2.5. Occupational Therapy

Occupational therapy was held once a week for 60 minutes each time to train Song's basic living skills, such as dressing, eating, personal hygiene, etc., and to improve Song's ability to live independently. At the same time, combined with the fun activities occupational therapy, through the game to improve Xiao Song's fine motor ability, cognitive level, strengthen Xiao Song's hands-on ability, self-confidence [2].

4. Effect of Reducing the Burden of Family Carers of Children with Cerebral Palsy after Psychosocial Therapy Intervention

After the psychosocial intervention in the family of Xiao Song, a child with cerebral palsy, a test was conducted to measure the level of psychological burden on the family carers of the child with cerebral palsy.

4.1. Patient side

Subjective quality of life, Karnofsky Activity Index, and rehabilitation status of Song, a child with cerebral palsy, were tested.

For subjective quality of life, a standardised quality of life questionnaire (PedsQL) was used for the subjective quality of life treatment of Song, a child with cerebral palsy. The dimensions of the test questionnaire included physical functioning, emotional status, social functioning, and school functioning, each of which contained a number of questions. Subjects responded on a Likert scale (1-5) ranging from 'very bad' to 'very good'. As a result, Xiao Song, a child with cerebral palsy, scored 32 (out of 40) for physical functioning, 24 (out of 30) for emotional state, 16 (out of 20) for social functioning, 8 (out of 10) for school functioning, and a final composite score of 80 (out of 100 for PedsQL), compared to a composite score of 56 before treatment. Right class, after the psychosocial treatment intervention, Xiao Song's quality of life scores were high, especially in physical and emotional functioning, and there is still room for further improvement in school and social functioning.

For Xiao Song Karnofsky index, Karnofsky rating scale was used, which classifies the activity ability into different levels (100-0 points), with every 10 points being a level. Through conversations with Xiao Song's parents and Xiao Song, the daily activity ability was observed and Xiao Song's activity ability was assessed level by level against the rating scale, and the assessment was carried out every 2 months for a total of 3 times. As for the scoring results, the first assessment scored 55 (Xiao Song was able to take care of himself, unable to carry out normal activities and work), and the second assessment scored 65 (Xiao Song was able to take care of himself, able to carry out light daily activities). The third assessment scored 75 (Song was able to carry out normal basic activities but had mild symptoms or fatigue). In a comprehensive analysis, Xiao Song's ability to perform activities gradually improved during the rehabilitation process of psychosocial therapy intervention, from a score of 55 to a score of 75, showing significant progress [3].

The rehabilitation status of Xiao Song was tested using the GMFM Comprehensive Rehabilitation Assessment Scale, which was conducted every 2 months for a total of 3 times, and assessed multiple dimensions including gross motor function (standing, walking, running and jumping), fine motor skills, and self-care in daily life, with a

total of 264 activities, and the maximum score was 264 points. The first assessment was 150 (about 57%), the second 175 (about 66%), and the third 190 (about 72%), which shows that Xiao Song's various motor and self-care abilities have been significantly improved throughout the rehabilitation process, from 150 to 190, indicating that his motor and self-care abilities have substantially improved after the psychosocial therapy intervention. Eventually, based on the collation of the results of the three dimensional tests, the changes in caregiver burden factors from Xiao Song, a child with cerebral palsy, were obtained, as shown in Table 2:

Table 2. *Changes in carer burden factors from children with cerebral palsy.*

Test item	Test result		
Subjective quality of life	80 points		
Karnofsky Index	Primary assessment	Secondary assessment	Tertiary assessment
	55	65	75
recovery status	Primary assessment	Secondary assessment	Tertiary assessment
	150	175	190

4.2. Caregivers

After the psychosocial therapy intervention for Xiao Song, a child with cerebral palsy, positive coping, negative coping, and family caringness index were measured for Xiao Song's father. The CBI Burden Questionnaire was used for positive and negative coping, and the FCI Family Caring Scale was used for family caring. As a result, Song's father was able to positively cope with the care of his child and various problems in his daily life, with the positive coping score increasing from 45 to 70 before the intervention, and the negative coping index decreasing significantly from 60 to 30 before the intervention. Under the Family Care System Index (FCI) test results, the FCI score was 55 (out of 100) before the intervention, and the FCI score increased to 85 after the intervention, and the overall caring of Xiaosong's family increased significantly, indicating that family members cared for, supported, and interacted with each other in a more positive way [4].

5. Conclusions

In conclusion, the psychosocial intervention in the rehabilitation centre for the family of Xiao Song, a child with cerebral palsy, resulted in a significant decrease in the caregiver's burden, both from the perspective of the child with cerebral palsy and from the perspective of the caregiver, a significant improvement in the subjective quality of life of the child with cerebral palsy, in the Karnofsky index, and in his rehabilitation status, an increase in the father's positive coping scores and a decrease in his negative coping scores, and a significant increase in the family caringness index. The positive coping score of Song's father increased, the negative coping score decreased, and the family care index increased significantly. This suggests that psychosocial therapy interventions for children with cerebral palsy can be effective in reducing the level of caregiver burden. However, although psychosocial intervention can improve the burden of carers of children with cerebral palsy, the fundamental problem has not been solved, and carers of children with cerebral palsy still need to suffer from psychological pressure and physical strain in various dimensions for a long period of time. Therefore, this paper suggests that the government and the public should continue to pay more attention and care to children with cerebral palsy, strengthen policy support and social love, and establish a good living environment and

space for children with cerebral palsy and their caregivers, so as to reduce the pressure of the patients and their families.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Funding

This work was supported by the Jiangsu Provincial Department of Education, “Effectiveness of Case Intervention on Personality Development in Children with Cerebral Palsy Based on Psychosocial Therapy Model” (grant number: 2023SJYB2336); 2023 Jiangsu Provincial University Philosophy and Social Science Research Project “Effectiveness of Case Intervention on Personality Development in Children with Cerebral Palsy Based on Psychosocial Therapy Model” (grant number: 2023SJYB2336).

References

- [1] Yang, N.B.; Chen, L.S.; Wu, S.Q. et al. Establishment of an index system for measuring the rehabilitation resilience of carers of children with cerebral palsy. *Evidence-Based Nursing*, 2023, 9(18), 3390-3394.
- [2] Zheng, B.L.; Yang, N.B.; Chen, L.S. Correlation between caregiver burden and perceived benefit of illness in children with cerebral palsy. *Evidence-Based Nursing*, 2023, 9(14), 2583-2588.
- [3] Zhou, Y.Y. Analysing the application of social work intervention in the rehabilitation of children with cerebral palsy in child welfare institutions. *China Health Standard Management*, 2021, 12(06), 6-8.
- [4] Li, Q. A study of casework in psychosocial therapy model to reduce the burden of family carers of children with cerebral palsy. Huazhong University of Science and Technology, 2020.



© 2024 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)