

Research article

Caregiving Burden, Parental Burnout, and Mental Health in Families of Children with Neurodevelopmental Disorders

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Abstract: Caring for a child with a neurodevelopmental disorder often involves long-term emotional, physical, and organizational demands. Parents must manage their daily routines, medical appointments, and therapy programs, while coping with uncertainty and ongoing stress. Over time, this sustained pressure can increase the risk of parental burnout and depressive symptoms, particularly when family and systemic support are limited. The present study aimed to examine the relationships between caregiving burden, parental burnout, and depressive symptoms among parents of children with neurodevelopmental disorders. In addition, we explored the role of family quality of life, access to healthcare services, and family support, and tested whether family support moderates the association between parental burnout and depressive symptoms. A cross-sectional study was conducted among 130 parents of children with neurodevelopmental disorders who completed an online questionnaire. The survey included sociodemographic and clinical data, the Patient Health Questionnaire (PHQ-9), and the Parental Burnout Assessment (PBA). Data were analyzed using nonparametric tests (Mann–Whitney U and Kruskal–Wallis tests), Spearman correlations, and moderation analysis using the PROCESS macro. Parental burnout showed a strong and consistent association with depressive symptoms; higher caregiving demands —such as greater difficulty managing daily routines, greater severity of the child's condition, and more frequent therapy sessions —which were associated with increased burnout and depression, as well as lower family quality of life; satisfaction with access to healthcare services was negatively associated with both burnout and depressive symptoms. Family quality of life emerged as a protective factor, with lower emotional distress reported in families with better relational functioning. Moderation analysis indicated that family support weakened the relationship between parental burnout and depression, particularly among parents reporting low levels of support. Parental burnout emerged as a central factor associated with depressive symptoms among parents of children with neurodevelopmental disorders. Greater difficulty managing daily routines, higher therapy frequency, and poorer family quality of life were associated with increased emotional distress; family support played a moderating role, attenuating the relationship between parental burnout and depressive symptoms. These findings highlight the importance of family-centered interventions that address not only the child's therapeutic needs but also the emotional well-being and support systems of caregivers.

Keywords: parental burnout, caregiving burden, depression, family quality of life, social support, neurodevelopmental disorders, caregivers, mental health

1. Introduction

When a child is diagnosed with a neurological or neurodevelopmental condition, many families face a situation they did not anticipate and for which they were not prepared. In this context, parents often try to find meaning and stability while adjusting to a new reality. This search for balance usually becomes the background

of their entire experience, starting from the moment they take on the role of caregivers for children who need constant and varied support.

For many parents, caring for a child with a neurodevelopmental disorder involves continuous changes in daily life: routines and priorities are reshaped, relationships are affected, and parents gradually redefine their sense of self in response to their child's needs. Beyond medical challenges and recovery-related demands, families undergo an emotionally demanding process marked by uncertainty, high levels of strain, and ongoing adjustment. Research has shown that parents of children with special needs experience higher levels of stress than parents of typically developing children. This is often due to increased caregiving demands, limited access to services, and pressure to make important decisions for their children [1]. Over time, long-term stress can become overwhelming and may lead to more serious difficulties, such as parental burnout or depressive symptoms.

Parental stress is a common response to long-term caregiving responsibilities. However, when parents perceive their emotional and physical resources as exhausted, parental burnout can occur. Burnout is described as a state of deep fatigue, emotional distancing from the child, feelings of being overwhelmed, and the sense that the parent is no longer the person they used to be. Studies indicate that parents of children with neurodevelopmental disorders are at high risk for anxiety, stress, and burnout, particularly when social support is limited or inconsistent [2]. In addition, research on caregivers of children with disabilities shows that long-term caregiving burden is often linked to depression, which affects parents' emotional well-being and their ability to maintain healthy relationships and self-care habits [3]. Severe motor conditions, such as cerebral palsy, spasticity, or tetraparesis, add further challenges to daily care as children with these diagnoses often require assistance with basic activities, take part in intensive therapy programs, and require ongoing supervision. Consequently, parents must manage a high volume of daily tasks. Studies suggest that greater severity of the child's condition, higher levels of dependence, and more frequent therapy sessions are directly linked to higher caregiving burden and lower quality of life for parents [4, 5].

The experience of caring for a child with a neurodevelopmental disorder varies across families. Factors such as parental age, level of education, employment status, and type of diagnosis can influence how stress is experienced and managed. For example, younger parents and those with fewer financial resources tend to report higher stress levels, whereas families with more stable social and economic conditions often find it easier to access services and support [6]. In addition, the severity of a child's diagnosis plays a key role in the caregivers' emotional well-being. Higher levels of functional dependence are closely associated with parental burnout and increased risk of depression [4].

Family Quality of Life (FQoL) is a key concept for understanding how families adjust to disability. Families who report close relationships, clear communication, and fair sharing of responsibilities tend to experience lower levels of stress and cope better with daily challenges. In contrast, family conflict and poor communication increase vulnerability to burnout, making caregiving demands feel significantly more difficult to manage [7].

Social support represents another key dimension, and may come from extended family members, friends, other parents, the community, or healthcare professionals. Research shows that sufficient, reliable, and emotionally meaningful social support can significantly reduce caregiving burden and improve parents' quality of life, partly by helping them use more effective coping strategies [4, 8]. However, not all forms of support have the same protective effect. In some cases, moderate or inconsistent support can become ambivalent: it is present enough to influence family dynamics but insufficient to truly reduce parents' workload. This situation may lead to tension, frustration, or a sense of losing control. In contrast, steady and predictable support, combined with emotional involvement, can act as an important protective factor against parental burnout [7].

Parents of children with disabilities may be more vulnerable because, in addition to the usual responsibilities of raising a child, they must also manage more demanding medical, logistical, and emotional tasks. Parental burnout has been linked to poorer health, difficulties in the parent–child relationship, and higher levels of depressive symptoms. When burnout overlaps with depression, the risks increase further, affecting not only the parents but also the family as a whole [9].

Another important aspect concerns the impact of parental stress on parents' quality of life. Studies involving parents of children with autism have shown that high stress levels are strongly associated with poorer quality of life, regardless of the specific diagnosis. This finding suggests that similar vulnerability mechanisms may operate across most types of neurodevelopmental disorders [10]. At the same time, family quality of life may act as a mediator or moderator in these relationships, either strengthening or reducing the impact of stress on parents' emotional health [7].

Taken together, these findings suggest a clear pattern in which parents of children with neurodevelopmental disorders face a high risk of stress, burnout, and depression, especially when the child has a moderate or severe diagnosis and requires intensive and long-term therapy programs [2, 4, 5]. At the same time, family resources and social support can change this level of vulnerability by offering real protective mechanisms in some cases [3, 7]. Despite this, few studies have directly examined the interaction between parental burnout, depression, and family support among parents of children with neurodevelopmental disorders, particularly in severe conditions such as spastic tetraparesis.

Within this context, the present study aimed to explore the relationship between parental burnout and depressive symptoms among parents of children with neurodevelopmental disorders, while also exploring the role of contextual family factors. Specifically, the study investigated how family quality of life, perceived support from the healthcare system, and support from the extended family are associated with parental burnout and depression. In addition, the study examined whether family support moderates the relationship between parental burnout and depressive symptoms. The findings may support the development of psychological interventions and support services that focus not only on the child, but also on the emotional well-being of the parents who care for them.

2. Materials and Methods

2.1. Participants

The study was conducted between September and October 2025. The participants were parents of children with neurodevelopmental disorders who were enrolled in neuromotor rehabilitation programs. Participants were informed about the purpose of the study, their right to withdraw from the study whenever they wanted, without consequences, and about the confidentiality of their data. No incentives were given to the respondents. All the items were mandatory. Inclusion criteria consisted of questionnaires completed by parents of children with neurodevelopmental disorders before the survey deadline. Questionnaires that were incomplete, or submitted after the specified deadline were excluded from the analysis. Ultimately, 130 questionnaires were included in the research.

2.2. Data collection

The questionnaire was distributed online through parent support groups, rehabilitation centers, and professional networks working with children with neurodevelopmental disorders. Participation was voluntary and anonymous and both mothers and fathers were eligible to participate; however, the high proportion of female respondents likely reflects the greater involvement of mothers in caregiving activities.

The first part of the questionnaire collected socio-demographic data on parents and children with neurodevelopmental disabilities (e.g., parents' age and gender, marital status, environment, number of children, and children's age and gender), as

well as medical data related to their child's health (including diagnosis, age at diagnosis, severity of the condition, types of therapeutic services received and weekly therapy frequency).

The second part of the questionnaire included data on the degree of satisfaction with access to healthcare services and support provided by the medical system, as well as the perception of the child's condition regarding parents and family life.

The final part of the questionnaire included two psychological instruments that measured the severity of depression and parental burnout:

- The Patient Health Questionnaire is an instrument for screening, diagnosing and measuring the severity of depression. The scale consists of nine questions and the responses are scored on a scale of 0 to 3, with a maximum total score of 27. Based on the total scores, the scale classifies individuals into the following severity categories: 0 - 4 points = no or minimal depression, 5 - 9 points = mild depression, 10 - 14 points = moderate depression, 15 - 19 points = moderate-severe depression, 20 - 27 points = severe depression. In the present study, the Cronbach Alpha was 0.909, indicating very good internal consistency.
- The Parental Burnout Assessment is a 23-item questionnaire that measures four dimensions of parental burnout: emotional exhaustion, emotional distancing, feelings of being fed up, and contrast with the previous parental self. The responses were scored on a scale of 0 to 6, with a maximum total score of 138. The Cronbach's Alpha for the present study was 0.977, which proved the instrument's very good internal consistency.

2.3. Statistical analysis of data

The collected data were analyzed using IBM Statistical Package for Social Sciences (SPSS) version 23 (SPSS Inc., Chicago, IL, USA). For the descriptive analysis we calculated the means, standard deviations, and frequencies. Given that the data were not normally distributed, nonparametric tests were used. For comparative analysis the Mann-Whitney U test was used to detect and describe significant differences between the qualitative variables. The correlation analysis of data was performed using Spearman's correlation. A $p < 0.05$ was considered significant.

3. Results

3.1. Sociodemographic and Medical Data

Most participants were aged 39-48 years (41.5%, $n = 54$), and 29-38 years (39.2%, $n = 51$). The fewest participants were aged 49-58 years (13.8%, $n = 18$), 18-28 years (3.8%, $n = 5$), or over 59 years (1.5%, $n = 2$). Most of the respondents were female (90.8%, $N = 118$) and married (86.9%, $n = 113$). More than half of the participants were employed full-time (50.8%, $n = 66$) and lived in urban areas (56.2%, $n = 73$). The majority of the participants had one child (44.6%, $n = 58$), followed by two children (43.8%, $n = 57$).

More than half of the children diagnosed with neurodevelopmental disabilities were male (57.7%, $n = 75$). More than half of the children (50.8%, $n = 66$) were diagnosed with neurodevelopmental disabilities at approximately one year of age, with a mean age of $M = 1.47 \pm 2.62$.

The neurological diagnoses received by the children were diverse: more than one-third were diagnosed with spastic tetraparesis (34.6%, $n = 45$), followed by other diagnoses such as spastic paraparesis (16.9%, $n = 22$), diparesis (6.2%, $n = 8$), and cerebral palsy (6.2%, $n = 8$). Other diagnoses included spastic hemiparesis, autism spectrum disorder, ADHD (0.8%, $n = 1$), spastic diparesis, congenital hypotonia, global developmental delay (0.8%, $n = 1$), severe psychomotor retardation, spastic tetraparesis, epilepsy (0.8%, $n = 1$), psychomotor retardation, blindness, spastic tetraparesis, and global neurological disorder (0.8%, $n = 1$). Few children had a mild neurological diagnosis (7.7%, $n = 10$), approximately half received a severe diagnosis (49.2%, $n = 64$), and fewer than half had a moderate diagnosis (43.1%, $n = 56$).

The types of therapeutic services that children benefit from were diverse. More than one-third of the patients received physical therapy (33.07%, $n = 43$), while most benefited from combined therapies. The most common examples included physical therapy, occupational therapy, speech therapy (10%, $n = 13$), physical therapy, occupational therapy, speech therapy, behavioural therapy (e.g. ABA) (7.69%, $n = 10$), physical therapy, speech therapy, and psychotherapy/psychological counselling (7.69%, $n = 10$).

Less than half of these children attended therapy sessions daily (44.6%, $n = 58$), and more than one-third received therapy 2-3 times a week (33.8%, $n = 44$).

Table 1. Sociodemographic characteristics of the sample

Variable	Categories	N	%
Gender	Female	118	90.8
	Male	12	9.2
Parental age	18–28 years	5	3.8
	29–38 years	51	39.2
	39–48 years	54	41.5
	49–58 years	18	13.8
	≥ 59 years	2	1.5
Marital status	Married	113	86.9
	Other status	17	13.1
Occupational status	Full-time	66	50.8
	Part-time	12	9.2
	Unemployed / homemaker	22	16.9
	Retired	6	4.6
Place of residence	Other	24	18.5
	Urban	73	56.2
	Rural	57	43.8

Table 2. Clinical and therapeutic characteristics of children with neurodevelopmental disorders

Variable	Categories	n	%
Child's gender	Male	75	57.7
	Female	55	42.3
Age at diagnosis (years)	M ± SD	1.47 ± 2.62	—
Condition severity	Mild	10	7.7
	Moderate	56	43.1
	Severe	64	49.2
Therapy frequency	Daily	58	44.6
	2–3 times/week	44	33.8
	4–5 times/week	24	18.5
	Once per week	4	3.1

3.2. The degree of satisfaction regarding access to medical services and support provided by others

Less than half of the parents (41.5%, $n = 54$) considered that access to health services was satisfactory, with an average score of $M = 3.13 \pm 1.03$. However, most parents considered the support offered by the medical system in terms of childcare to be good (39.2%, $n = 51$) or very good (37.7%, $n = 49$). Additionally, approximately half of parents believed that the best support they could receive for childcare would be improved access to therapies (46.2%, $n = 60$), followed by financial support (24.6%, $n = 32$) or clearer information about conditions and treatments (19.2%, $n = 25$).

More than half of the parents declared that they received support from the extended family (siblings, grandparents, and other relatives) in caring for their children to a great (30.0%, $n = 39$) or moderate (29.2%, $n = 38$) extent. Socioeconomic status was

an important factor influencing the possibility of providing adequate care for a child diagnosed with neurodevelopmental disabilities, as more than half of parents (58.5%, $n = 76$) believed that socioeconomic status greatly influences access to appropriate therapies for each child with this diagnosis.

Table 3. Contextual variables and the impact of caregiving on family quality of life

Variable	Category	N	%
Access to healthcare services	Very unsatisfactory	10	7.7
	Unsatisfactory	27	20.8
	Neither unsatisfactory nor satisfactory	34	26.2
	Satisfactory	54	41.5
	Very satisfactory	5	3.8
Family quality of life (FQoL)	Very good	24	18.5
	Good	62	47.7
	Acceptable	33	25.4
	Poor	7	5.4
	Very poor	4	3.1
Impact of caregiving on daily life	Insignificant	23	17.7
	Moderate	54	44.6
	Major	49	37.7
Influence of socioeconomic status	Not at all	11	8.5
	Slightly	20	15.4
	Moderately	23	17.7
	Strongly	76	58.5
Support from the extended family	Not at all	27	20.8
	Slight	26	20.0
	Moderate	38	29.2
	Strong	39	30.0
Support from the healthcare system	Very good	9	6.9
	Good	21	16.2
	Acceptable	51	39.2
	Unsatisfactory	49	37.7
Greatest emotional challenge	Stress and anxiety	46	35.4
	Frustration and exhaustion	35	26.9
	Social isolation	17	13.1
	Sadness / depression	9	6.9
	Guilt	23	17.7
Impact on the couple relationship	Brought us closer as a couple	44	33.8
	Managed tensions	33	25.4
	No impact	22	16.9
	Conflicts / distancing	23	17.7
	Separation / divorce	8	6.2
Difficulty of daily routine	Not at all	12	9.2
	Slightly	22	16.9
	Moderate	52	40.0
	A lot	36	27.7
	Extremely	8	6.2

3.3. Impact that the child's condition had on quality of family life

About half of the parents (47.7%, $n = 62$) considered having a good quality of family life at present. Additionally, approximately half of the parents considered that caring for a child with neurodevelopmental disabilities had a moderate impact (44.6%, $n = 58$) on their daily lives. Regarding the impact of the child's diagnosis on the parent's relationship with their life partner, more than one-third considered that the child's diagnosis had united them more as a couple (33.8%, $n = 44$), while about a

quarter reported that the child's diagnosis had created some tensions between the partners, which had been successfully managed (25.4%, $n = 33$).

More than one-third of the parents reported that the biggest emotional challenge was constant stress and anxiety (35.4%, $n = 46$), while less than one-third considered frustration and exhaustion (26.9%, $n = 35$) to be their biggest emotional challenges.

At the end of this section, parents answered the question "How difficult is it to manage the daily routine of a child with this condition?". The responses were as follows: moderately (40.0%, $n = 52$), a lot (27.7%, $n = 36$), a little (16.9%, $n = 22$), not at all (9.2%, $n = 12$) or even extremely much (6.2%, $n = 8$).

3.4. The analysis of psychological tools

3.4.1. The Patient Health Questionnaire (PHQ)

The total score for the PHQ scale was $M = 9.46 \pm 6.62$, with scores ranging from 0 (3.8%, $n = 5$) to 25 (3.1%, $n = 4$). More than one-third of the participants had mild levels of depression. Detailed results are presented in Table 4.

Table 4. Results for the PHQ scale.

PHQ Scale	N (%)
No or mild depression	33 (25.4%)
Mild depression	42 (32.3%)
Moderate depression	23 (17.7%)
Moderate-severe depression	19 (14.6%)
Severe depression	13 (10.0%)

No significant differences in terms of participants' gender, child's gender, marital status or living environment were found.

Significant differences in PHQ scores were identified depending on parents' quality of life using the Kruskal-Wallis H test: $H(4) = 22.499$, $p < 0.001$. To explore these differences, we applied the Mann-Whitney U test, to compare responses to the self-assessment of quality of life in pairs. The results showed that there were significant differences between parents with a very good quality of life and those with a very poor quality of life ($U = 11.000$, $z = -2.441$, $p = 0.015$), meaning that those who had a very good quality of life had significantly lower depression scores ($Mdn = 4.500$) compared to those who with a very poor quality of life ($Mdn = 13.000$).

Similarly, on the same variable, significant differences were identified between parents with a very good quality of life ($U = 18.000$, $z = -3.129$, $p = 0.002$, $Mdn = 4.500$) and those with a poor quality of life ($Mdn = 14.000$), as well as between those who self-assessed a good quality of life ($U = 180.500$, $z = 480.500$, $p < 0.001$, $Mdn = 4.500$) and those who self-assessed an acceptable quality of life ($Mdn = 12.000$); between those who had a very good quality of life ($U = 488.000$, $z = -2.470$, $p = 0.013$, $Mdn = 4.500$) and those who had a good quality of life ($Mdn = 7.000$); and between those with a good quality of life ($U = 763.500$, $z = -2.032$, $p = 0.042$, $Mdn = 7.000$) and those who had a poor quality of life ($Mdn = 14.000$).

Kruskal-Wallis H test identified very significant differences in PHQ scores based on how difficult parents found it to manage the daily routine of children with neuro-developmental disabilities: $H(4) = 30.300$, $p < 0.001$. Specifically, repeated Mann-Whitney U tests showed significant differences between those who found it not difficult at all and those who found it moderately difficult ($U = 149.00$, $z = -2.182$, $p = 0.005$), respectively between those who found it a little difficult and those who found it a lot difficult ($U = 170.000$, $z = -3.627$, $p < 0.001$). Specifically, those who did not feel the burden at all ($Mdn = 2.500$) or felt it a little ($Mdn = 4.500$) had lower depression scores compared to those who felt the burden moderately ($Mdn = 7.500$) or a lot ($Mdn = 13.000$). Similarly, significant differences were identified between those who had no difficulty at all ($U = 7.500$, $z = -3.134$, $p = 0.002$, $Mdn = 2.500$) and those who had extreme difficulty ($Mdn = 17.000$) in managing the daily routine of their children with

disabilities, respectively between those who had moderate difficulty ($U = 646.500$, $z = -2.462$, $p = 0.014$, $Mdn = 7.500$) and those who had extreme difficulty ($Mdn = 13.000$) in managing the daily routine of those children.

3.4.2. The Parental Burnout Assessment (PBA)

The total score on the PBA scale was $M = 32.06 \pm 21.50$, ranging from 0 (10.8%, $n = 14$) to 136 (0.8%, $n = 1$).

For PBA subscales we obtained the following results:

- Emotional Exhaustion - $M = 17.86 \pm 13.50$,
- Emotional Distancing - $M = 3.27 \pm 1.00$,
- Being Fed Up (Feelings) - $M = 4.57 \pm 0.50$,
- Contrast - $M = 5.49 \pm 1.50$.

The Mann-Whitney U test showed a significant difference in the PBA score based on the gender of the child diagnosed with a neurodevelopmental disability ($U = 1503.500$, $z = -2.637$, $p = 0.008$). Specifically, parents of sick male children had higher parental burnout scores ($Mdn = 24.00$) compared to those with sick female children ($Mdn = 14.000$).

Significant differences in PBA scores were identified based on the degree of satisfaction with access to healthcare services using the Kruskal-Wallis H test: $H(4) = 12.135$, $p = 0.016$. To explore these differences, we used the Mann-Whitney U test which showed that there were significant differences between those satisfied with access to medical services and those who were dissatisfied ($U = 451.00$, $z = -2.790$, $p = 0.005$), with those satisfied reporting lower parental burnout scores ($Mdn = 14.000$) compared to those dissatisfied ($Mdn = 32.000$).

The Kruskal-Wallis H test identified very significant differences in PBA scores based on quality of family life: $H(4) = 32.681$, $p < 0.001$. Specifically, repeated Mann-Whitney U tests showed significant differences between those who reported a very good quality of family life and those with acceptable quality of family life ($U = 178.500$, $z = -3.522$, $p < 0.001$), respectively between those with a very good quality of family life and those with a very poor quality of family life ($U = 2.000$, $z = -3.039$, $p = 0.002$). Parents with a very good quality of family life ($Mdn = 5.500$) had lower parental burnout scores compared to those with acceptable ($Mdn = 34.000$) or very poor quality of family life ($Mdn = 95.000$).

Similarly, significant differences were identified between those with a good quality of family life and those with a poor quality of family life ($U = 48.500$, $z = -3.352$, $p = 0.001$), respectively between those with an acceptable quality of family life and those with a poor quality of family life ($U = 47.000$, $z = -2.439$, $p = 0.015$). Parents with a poor quality of family life ($Mdn = 82.000$) had higher parental burnout scores compared to those with acceptable ($Mdn = 34.000$) or a good quality of family life ($Mdn = 18.000$).

Significant differences in PBA scores were identified depending on the support parents received from the extended families in caring for children with neurodevelopmental disabilities using the Kruskal-Wallis H test: $H(3) = 12.58$, $p = 0.006$. Specifically, the Mann-Whitney U test showed significant differences between those who received no support from the extended families at all and those who received moderate support ($U = 268.000$, $z = -3.264$, $p = 0.001$), respectively between those who received moderate support from the families and those who received a lot of support ($U = 506.500$, $z = -2.391$, $p = 0.017$). Parents who received moderate support ($Mdn = 32.000$) from the extended families in childcare had higher parental burnout scores compared to those who received a lot of support ($Mdn = 17.000$), but also compared to those who received no support at all ($Mdn = 10.000$).

The Kruskal-Wallis H test identified significant differences in PBA scores based on the support from the medical system in terms of childcare: $H(3) = 10.646$, $p = 0.014$. Specifically, the Mann-Whitney U test showed significant differences between those who considered that they had very good support from the medical system and those

who considered that they had good support ($U = 890.000$, $z = -2.481$, $p = 0.013$), respectively between those who considered that they had very good support from the medical system and those who considered the support received from medical institutions unsatisfactory ($U = 111.500$, $z = -2.343$, $p = 0.019$). Those who received very good support ($Mdn = 32.000$) from the medical system in caring for sick children had higher parental burnout scores compared to those who received good ($Mdn = 18.000$) or unsatisfactory support ($Mdn = 4.000$).

Significant differences in the PBA score were identified regarding how the child's diagnosis influenced the relationship between the parent surveyed and their life partner, highlighted using the Kruskal Wallis H test: $H(4) = 15.732$, $p = 0.003$. Specifically, the Mann-Whitney U test revealed significant differences between parents who believed that the diagnosis received by their child united them more in their relationship with their life partner and those who believed that their child's diagnosis created more conflicts in their relationship with their partner ($U = 247.500$, $z = -3.419$, $p = 0.001$). Additionally, significant differences were found between parents who believed that their child's diagnosis created more conflicts in their relationship with their partner and those who believed that the diagnosis received by their child had no influence on the relationship with their life partner ($U = 122.000$, $z = -2.977$, $p = 0.003$). Specifically, parents who believed that their child's diagnosis led to more conflicts in the relationship with their partner ($Mdn = 60.000$) had higher parental burnout scores compared to those who stated that their child's diagnosis united the parents ($Mdn = 14.500$), or those who believed that the child's diagnosis had no influence on the couple's relationship ($Mdn = 9.000$).

The Kruskal-Wallis H test revealed highly significant differences in PBA scores based on the level of difficulty parents experience when managing the daily routine of children with neurodevelopmental disabilities: $H(4) = 40.796$, $p < 0.001$. Specifically, repeated Mann-Whitney U tests indicated significant differences between parents who found routine management not difficult at all and those who reported moderately difficult ($U = 157.00$, $z = -2.672$, $p = 0.008$), as well as between those who found it not difficult at all and those who found it extremely challenging ($U = 6.000$, $z = -3.266$, $p = 0.001$). Specifically, parents perceiving no burden at all ($Mdn = 3.000$) demonstrated lower burnout parental scores compared to those experiencing moderate ($Mdn = 24.000$) or substantial burden ($Mdn = 95.000$).

Similarly, significant differences were observed between parents reporting minor difficulty and experiencing extreme difficulty in managing the daily routines of their children with disabilities ($U = 86.500$, $z = -4.963$, $p = 0.001$), as well as between those with moderate difficulty and those with extreme difficulty in managing the daily routine of these children ($U = 646.500$, $z = -2.462$, $p = 0.014$). Specifically, parents who reported feeling this burden as minor ($Mdn = 8.000$) or moderate ($Mdn = 24.000$) exhibited lower parental burnout scores compared to those who perceived the burden substantial ($Mdn = 33.500$) or extreme ($Mdn = 95.000$). ($p = 0.014$).

3.5. Correlational analysis

Spearman's correlation was used to assess the relationship between parents' age and their degree of satisfaction with access to medical services. There was a statistically significant negative correlation between these variables ($r = -0.177$, $p = 0.044$), meaning that as parents got older, they appeared more satisfied with access to services provided by medical institutions. Age also correlates negatively with the Contrast subscale of the PBA scale ($r = -0.176$, $p = 0.045$), indicating that the older parents get, the less they feel that the current parent is not the person they used to be.

The results showed negative correlations between the age of children diagnosed with neurodevelopmental disabilities and the frequency of therapy sessions ($r = -0.188$, $p = 0.032$), meaning that as the child gets older, the weekly therapy sessions become less frequent. Negative correlations were also identified between the age of the sick child and the PHQ ($r = -0.329$, $p < 0.001$) and PBA scales, respectively ($r = -$

0.366, $p < 0.001$). Thus, the older the sick child, the lower the depression and parental burnout.

We identified positive correlations between the severity of the disease and the frequency of therapy sessions per week ($r = 0.222$, $p = 0.011$, meaning that the more severe the disease, the more frequent the weekly therapy sessions. Additionally, the severity of the disease correlates positively with the Feelings subscale of the PBA scale ($r = 0.196$, $p = 0.025$) and the Contrast subscale of the PBA scale respectively ($r = 0.185$, $p = 0.035$), indicating that the greater the severity of the disease, the stronger the parents' feelings of having reached saturation and being unable to take any more, as well as the feeling that they are no longer the person they used to be.

The frequency of therapy sessions per week correlates positively with the management of the daily routine of the child with neurodevelopmental disabilities ($r = 0.264$, $p = 0.002$). In other words, as the number of therapy sessions increases, managing these children's daily activities tends to be more difficult. Additionally, the frequency of therapy sessions correlates positively with the Emotional Distancing ($r = 0.195$, $p = 0.026$), Feelings ($r = 0.205$, $p = 0.019$), and Contrast subscales of the PBA scale ($r = 0.259$, $p = 0.003$). This means that as the frequency of weekly therapy sessions increased, parents' feelings of detachment from their children, their sense of saturation, and the feeling that they are no longer the person they used to be increased. A strong positive correlation was identified between the frequency of therapy sessions and the quality of family life ($r = 0.503$, $p < 0.001$), indicating that an increase in therapy session frequency is associated with a decline in quality of family life.

Spearman's correlation was used to assess the relationship between the degree of satisfaction with access to health services and quality of family life ($r = -0.385$, $p < 0.001$), meaning that the higher the level of satisfaction with access to services offered by the medical system, the higher the quality of family life. The degree of satisfaction with access to health services correlates negatively with the management of the daily routines of children with neurodevelopmental disabilities ($r = -0.179$, $p = 0.042$), indicating that increased satisfaction with medical system services is associated with reduced difficulty in handling the child's daily routine. Furthermore, the degree of satisfaction with access to medical services correlates negatively with the PHQ ($r = -0.239$, $p = 0.006$) and PBA ($r = -0.295$, $p = 0.001$) scales, respectively. Accordingly, greater satisfaction with health service access corresponds to lower levels of depression and parental burnout.

We identified a strong positive correlation between the quality of family life and the management of the daily routine of the child with neurodevelopmental disabilities ($r = 0.503$, $p < 0.001$), indicating that the poorer the quality of family life, the more difficult it is to manage the daily routine of the sick child. Additionally, the quality of family life correlates positively with the PHQ ($r = 0.409$, $p < 0.001$), respectively PBA scales ($r = 0.477$, $p < 0.001$), which means that the poorer the quality of family life, the greater the increase in depression and parental burnout.

The results confirmed positive correlations between the management of the daily routine of the child with neurodevelopmental disabilities and PHQ ($r = 0.482$, $p < 0.001$), as well as the PBA scales ($r = 0.559$, $p < 0.001$). These findings suggest that an increased difficulty in managing a child's daily routine is associated with higher levels of depression and parental burnout. Ultimately, Spearman's correlation was used to assess the relationship between PHQ and PBA scales. The results confirmed that the two variables correlate significantly ($r = 0.680$, $p < 0.001$), indicating that the higher the level of depression, the higher the parental burnout.

3.6. Moderation analysis

A moderation analysis using Model 1 of the PROCESS procedure investigated whether family support moderates the relationship between parental burnout and depressive symptoms [11]. The model was significant overall, explaining approximately 52.5% of the variance in depressive symptoms ($R^2 = 0.525$, $F(3,126) = 46.35$, $p < 0.001$).

The coefficient of parental burnout indicated a significant direct effect on depression ($B = 0.230$, $SE = 0.038$, $t = 6.06$, $p < 0.001$), whereas the direct effect of family support was not significant ($B = 0.520$, $SE = 0.481$, $t = 1.08$, $p = 0.282$). The interaction term between burnout and family support was significant ($B = -0.034$, $SE = 0.013$, $t = -2.59$, $p = 0.011$), indicating the presence of a moderating effect: the relationship between burnout and depression varies depending on the level of perceived family support.

The conditional effects analysis revealed that the effect of burnout on depression was more pronounced in parents with low levels of family support ($B = 0.197$, $SE = 0.026$, $t = 7.56$, $p < 0.001$), moderate at medium levels of support ($B = 0.130$, $SE = 0.012$, $t = 10.62$, $p < 0.001$), and reduced in parents with high levels of support ($B = 0.096$, $SE = 0.020$, $t = 4.88$, $p < 0.001$).

These results indicate that family support functions as a protective factor that attenuates the effect of parental burnout on depressive symptoms, especially among parents who perceive low levels of family support.

4. Discussion

The profile of participants in the study sample provides an important context for understanding the findings related to emotional health and parental burnout. Most parents were aged 29–48 years, which is typically associated with a higher likelihood of increased family and work responsibilities, and therefore an increased risk for parental stress. Most participants had one or two children, indicating that caring for a child with a neurodevelopmental disorder represented an important family responsibility.

In addition, more than half of the children included in the study were boys, which is consistent with the gender distributions reported in the neurodevelopmental literature. For most families, the diagnosis was established around the age of one, a period often associated with high levels of uncertainty and adjustment for parents. The high prevalence of severe diagnoses, such as spastic tetraparesis, highlights the complex nature of caregiving demands and helps explain the emotional burden reported by parents. Less than half of the children attended therapy sessions daily, while more than one-third participated in therapy two to three times per week. Both the severity of the child's condition and the high frequency of therapy sessions were associated with higher burnout scores reflecting emotional exhaustion, loss of connection with the previous parental self, and difficulties in managing daily routines. The volume and complexity of caregiving tasks—including assistance with mobility, feeding, hygiene, and frequent travel to therapy sessions—contribute significantly to the caregiving burden and reduced quality of life among parents of children with cerebral palsy [4, 5].

These findings suggest that rehabilitation programs may carry a significant emotional cost for parents, particularly when therapy schedules are intensive and not accompanied by structured support interventions for caregivers. More than half of the parents reported receiving moderate or high levels of support from their extended families. In families with children diagnosed with spastic tetraparesis or other forms of cerebral palsy, daily routines are characterized by sustained and intensive care requirements. Qualitative studies involving mothers of children with cerebral palsy describe a complex psychosocial burden that combines continuous caregiving, financial difficulties, gender role expectations, stigma, and limited institutional or family support [12, 13]. These factors not only increase the likelihood of parental burnout but also make family support and informal networks an essential resource for emotional balance. When extended family members are present, involved, and offer practical help without judgment or unsolicited advice, parents are better able to share their responsibilities, take breaks, and access emotional regulation strategies. Conversely, in the absence of such support, exhaustion tends to accumulate more rapidly, and the risk of depression increases [4, 14]. The models obtained in our analysis supported this pattern. Parents who reported low levels of family support were exposed to a combination of high demands and limited resources, placing them in a

zone of increased psychological vulnerability, characterized by higher burnout and depressive symptoms. In contrast, parents with high levels of family support, despite facing the same functional limitations and caregiving needs of their child, appeared to benefit from a life context that reduced the impact of burnout on depression. In those cases, similar levels of exhaustion were associated with less severe emotional consequences [4, 5]. Another important finding was that nearly half of the parents reported a good level of family quality of life. This suggests the presence of functional relational and structural resources in many participating families, which may help maintain lower stress levels and support more effective adaptation to the ongoing requirements associated with caring for a child with a neurodevelopmental disorder [3, 7]. For approximately half of the parents, caring for a child with a neurodevelopmental disorder has a moderate impact on everyday life. This suggests that daily caregiving tasks are demanding enough to change routines, energy levels, and the organization of daily activities, but are not overwhelming for most families. Similar findings in the literature show that caring for a child with chronic conditions or special needs is often linked to reduced parental quality of life and a significant family burden, with parents reporting emotional, relational, and organizational difficulties comparable to those observed in our sample [15, 16].

Our study showed that more than one-third of the participants exhibited mild levels of depression. This indicates that although some parents manage to maintain emotional balance while caring for a child with a neurodevelopmental disorder, emotional vulnerability remains high and represents an important risk factor for mental health over time [17, 18]. Both theoretical and empirical evidence indicate that parents with very good family quality of life report significantly lower depression scores compared to those with very poor family quality of life. In the present study, parents who reported a higher family quality of life also showed lower levels of burnout and psychological distress. Families with cohesive relationships and supportive interactions appear to function as emotional regulation units that buffer the impact of daily caregiving demands [7, 19]. This mechanism helps explain why higher Family Quality of Life (FQoL) is associated with lower PHQ scores: parents benefit from both internal resources (such as flexibility, meaning, and hope) and external resources (practical and emotional support), which reduce the risk of depressive symptoms. In contrast, very poor family quality of life reflects a lack of these resources, along with the presence of relational tension and ongoing difficulties, all of which are linked to higher levels of stress, burnout, and emotional distress [7, 19]. Therefore, the significant differences observed in PHQ scores across extreme levels of FQoL are not isolated findings but rather support a broader model in which family quality of life plays a key role in the mental health of parents caring for a child with a neurodevelopmental disorder.

Another important result shows that parents who perceive the management of daily routines as very difficult report significantly higher depression scores compared to those who experience little or no difficulty. This finding highlights daily routines as the core of objective caregiving burden and a consistent source of emotional distress, fatigue, and reduced quality of life [4, 5, 14]. Parents who view daily routines as difficult to manage report much higher levels of emotional exhaustion, reflecting a combination of high objective demands (such as greater child dependence, comorbid conditions, and intensive therapy schedules) and limited personal or family resources (including insufficient support and coping difficulties), a mechanism widely described in caregiver research [4]. In contrast, parents who do not perceive daily routines as difficult appear to live in a more supportive context in which caregiving demands are easier to integrate, resulting in lower levels of burnout and depression [5]. The gradual increase in PHQ scores from parents who report no burden to those who reported moderate or high burden is therefore consistent with the existing literature highlighting the direct impact of daily caregiving pressure on parental mental health.

With regard to the child's gender, parents of boys reported higher levels of parental burnout compared to parents of girls. This result may be related both to the higher prevalence of certain neurodevelopmental disorders among boys and to social expectations linked to male gender roles. For some parents, the gap between expectations and the child's actual functioning may be perceived as greater in the case of boys, which can increase feelings of frustration. Child behavioral difficulties and problems with emotional regulation have been linked to higher levels of parental exhaustion, reflecting ongoing pressure on parents' emotional resources [20]. In line with this, recent studies have shown that parents' perceptions of symptom severity and the need for constant supervision increase stress levels, particularly among parents of boys with more demanding behavioral profiles [21]. Moreover, mothers reported significantly higher levels of parental stress, influenced by both disruptive child behaviors and feelings of inadequacy related to parenting. These effects may be stronger in boys, where cultural expectations are often more rigid [22].

The research showed that parents who are satisfied with access to healthcare services report lower levels of parental burnout compared to those who are dissatisfied. Satisfaction with medical services allows parents to rely on professional care and share a part of their caregiving responsibility with specialists. In contrast, dissatisfied parents tend to continuously search for alternative solutions, additional opinions, and new treatment options for their child, which consumes emotional and practical resources and leads to higher levels of exhaustion over time. As a result, satisfaction with healthcare access is linked to lower stress and depression levels and better quality of life among parents of children with neurodevelopmental disorders [14, 23]. The differences in burnout observed between satisfied and dissatisfied parents reflect the role of a healthcare system perceived as accessible, predictable, and responsive in reducing the feeling of "constantly fighting the system," thereby limiting the additional emotional burden associated with caregiving [4].

Parents who reported a very good family quality of life also showed lower levels of parental burnout compared to those who reported a very poor family quality of life. Previous studies have indicated that high family quality of life—defined by cohesion, open communication, positive relationships, and shared responsibilities—is linked to lower levels of psychological distress in families living with disability [19]. A high FQoL reflects the presence of both internal resources (such as flexibility, hope, and a sense of meaning) and external resources (such as support and social networks), which help buffer the emotional impact of caregiving. These findings support the idea that the family functions as a "stress regulation unit," where cohesive relationships and mutual support make daily demands easier to manage and reduce the risk of exhaustion [7]. Parents who reported no support from their extended families showed lower parental burnout scores than those who reported moderate support. This pattern may reflect what could be described as a "moderate support paradox": while social support is generally considered a protective factor in caregiving contexts, partial or inconsistent support may sometimes increase psychological strain rather than reduce it. One possible explanation is that, in the absence of extended family help, parents may develop their own coping strategies and organize caregiving responsibilities independently. In contrast, moderate involvement from extended families may sometimes reduce practical tasks but is often accompanied by opinions, advice, or expectations that can disrupt emotional balance and increase feelings of overload. This pattern is supported by literature describing the ambivalent nature of informal support, showing that help from relatives can be genuinely supportive but may also be critical, intrusive, or inconsistent, thereby becoming a source of stress in itself [24]. In families of children with intellectual disabilities, parents frequently report experiences of limited practical help combined with strong normative pressure, judgment, and unsolicited advice, which may increase distress rather than reduce it [7, 24]. In this context, moderate support describes a situation in which the extended family is present enough to influence decisions and generate expectations or tension but is not sufficiently involved in meaningfully reducing caregiving burden. Parents

without extended family support may gain a greater sense of control and consistency in their coping strategies, relying instead on alternative resources such as professionals or support groups. In contrast, parents who report high levels of family support tended to receive real, consistent help, which explains their lower burnout levels, in line with the protective effects of social support reported in previous studies [9, 14]. At the same time, parents who reported high levels of support from the extended families showed lower parental burnout scores compared to those who reported moderate support. High family support usually involves regular, predictable, and meaningful involvement in caregiving activities, including assistance with supervision, mobility, appointments, and daily routines. This type of support reduces daily pressure on parents and allows time for physical and emotional recovery. In contrast, moderate support is often irregular and uneven enough to influence family dynamics but not enough to significantly reduce caregiving demands. These differences suggest that not only the amount, but also the consistency and quality of extended family support are important in protecting parents from parental burnout.

Although the findings may initially appear to challenge the idea that a supportive healthcare system should reduce parental burnout, the results show that parents who rated healthcare support as “very good” reported higher levels of parental exhaustion than those who rated it as “good” or even “unsatisfactory.” Previous research suggests that high satisfaction with medical services is often reported by parents of children with the highest levels of dependence and care complexity—situations in which contact with healthcare services is intensive and frequent [4, 5, 23]. In studies involving mothers, satisfaction with medical care was linked to lower stress and depression only when the child’s level of dependence was lower; when dependence was high, the protective effect of satisfaction with care disappeared [23]. Similarly, among caregivers of children with cerebral palsy, functional severity and long-term caregiving demands are associated with a very high burden, even when rehabilitation services are viewed positively [4, 5]. Thus, parents of the most severely affected children are often those who receive care from specialized teams, follow complex treatment protocols, and have frequent contact with healthcare services that they evaluate as “very good.” However, the severity and constant demands of caregiving help explain the higher burnout scores. In contrast, parents who rate healthcare support as “good” or “unsatisfactory” may represent less complex clinical cases or less frequent interaction with the healthcare system, resulting in a lower overall caregiving burden, even if their subjective experience of services is less positive.

The findings related to couple relationship dynamics highlight the role of the marital context in shaping the levels of parental burnout. Parents who perceived that their child’s diagnosis led to conflict within the couple reported significantly higher levels of exhaustion, suggesting that interpersonal tension acts as an amplifier of the emotional demands associated with caregiving. In families where the child’s diagnosis becomes a source of conflict—such as through blame, major differences in coping styles, or an unequal distribution of caregiving tasks—parental stress increases and is more likely to develop into burnout [25]. In contrast, when parents perceive that the diagnosis did not harm the relationship or even strengthen the bond between partners, as also observed in our results, levels of burnout were noticeably lower. When the diagnosis was integrated within the couple as a shared challenge (“it brought us closer”) or as an experience that did not disrupt the relationship, emotional resources were distributed across the family system, and exhaustion is less pronounced. These findings support the idea that the couple relationship functions as a filter between caregiving demands and parental burnout.

Parents reported that managing their child’s daily routine was not difficult at all. These parents showed lower levels of parental burnout compared to those who perceived daily routines as extremely difficult to manage. Daily routines—including assistance with feeding, mobility, hygiene, medical appointments, and multiple therapy sessions—represent the core of objective caregiving pressure and are consistently linked to emotional distress, fatigue, and reduced quality of life [5, 14]. Higher levels

of caregiving pressure are associated with poorer quality of life and an increased risk of emotional difficulties, while social support and adaptive coping strategies partially mediate this relationship [4]. Perceiving the daily routine as “extremely difficult to manage” reflects a combination of high objective demands (such as increased child dependence and comorbid conditions) and limited resources (including insufficient support and ineffective coping), which helps explain the much higher burnout levels observed in this group.

The correlational analysis revealed a strong and consistent association between parental burnout and depressive symptoms, suggesting that these two constructs reflect closely linked emotional processes that can reinforce each other in the context of caring for a child with a neurodevelopmental disorder. Parental burnout—marked by emotional exhaustion, emotional distancing, and a sense of losing continuity with one’s former parental self—appears to create fertile ground for the development of depressive symptoms. This relationship is supported by recent research showing that parental burnout is a key predictor of depression among parents of children with disabilities, particularly under conditions of chronic stress and limited personal or social resources [3, 9]. Lower family quality of life was linked to higher levels of psychological distress, burnout, and depressive symptoms. In contrast, families characterized by cohesion, open communication, and balanced sharing of responsibilities tend to provide a protective environment. Existing literature supports the idea that FQoL acts as a buffering factor, reducing the negative impact of caregiving demands on parents’ mental health [7, 19].

Daily routines—including assisted feeding, mobility support, hygiene care, medical appointments, and multiple therapy sessions—represent the core of objective caregiving burden. When these routines are perceived as difficult or extremely difficult, the levels of emotional exhaustion and psychological distress increase markedly. These findings are in line with previous studies indicating that daily caregiving pressure is one of the strongest predictors of burnout and depressive symptoms among caregivers [4].

The study showed that greater severity implies higher levels of functional dependence, need for constant supervision, and ongoing emotional responsibility, all of which substantially increase parents’ psychological burden. The literature consistently supports the view that the severity of a child’s condition is a major determinant of emotional burden and parental exhaustion. Parents of children with moderate or severe disabilities report higher levels of burnout, emotional exhaustion, and a reduced sense of parental competence compared to parents of children with milder forms of impairment [25, 26].

In addition, a higher therapy frequency was associated with greater parental burnout and lower family quality of life. Although therapeutic interventions are essential for the child’s development, their intense and sustained nature can increase daily pressure on the family and reduce parents’ opportunities for emotional recovery. Studies suggest that intensive therapy programs, when not accompanied by adequate support for caregivers, may incur significant emotional costs for parents [27, 28].

Furthermore, satisfaction with access to healthcare services negatively correlated with parental burnout and depressive symptoms. This may be explained by the fact that a healthcare system perceived as accessible, predictable, and supportive allows parents to share part of their caregiving responsibility with professionals and reduces the feeling of constantly struggling with institutions. Research shows that higher satisfaction with medical services is linked to lower emotional distress and better adjustment to the caregiving role among parents [3, 23, 29].

Finally, the child’s age showed a negative correlation with parental burnout and depression, suggesting a gradual process of adaptation over time. As the child grows, parents tend to strengthen their coping strategies, restructure their daily routines, and develop a greater sense of parental competence, which contributes to lower emo-

tional distress. This pattern is consistent with studies describing the progressive adaptation of families to disabilities, particularly after the initial period following diagnosis [30].

The moderation analysis showed that family support plays a key role in how parental burnout is reflected in parents' emotional well-being. The relationship between parental exhaustion and depressive symptoms is not linear or the same for all parents but clearly depends on the level of family support they perceive. Parental burnout has emerged as a strong predictor of depression, confirming that emotional exhaustion accumulated while caring for a child with a neurodevelopmental disorder can have serious consequences for parents' mental health. At the same time, family support, when considered an independent variable, was not sufficient on its own to reduce depressive symptoms and this finding suggests that it is not simply the presence of support that matters, but rather how this support interacts with the level of parental exhaustion.

The significant interaction between burnout and family support indicates that support functions as a protective factor that can weaken the impact of burnout on depression. Parents who experience high levels of exhaustion and perceive low family support appear to be the most emotionally vulnerable [31]. In such situations, burnout is more likely to translate into depressive symptoms. In contrast, when family support is perceived as consistent and actively involved, the relationship between burnout and depression becomes weaker, even when exhaustion levels remain high.

These findings suggest that family support plays an important role in emotion regulation. The possibility of sharing responsibilities, receiving emotional validation, or having real moments of rest can reduce accumulated psychological pressure and help prevent exhaustion from developing into a persistent depression. In the absence of such support, parents remain directly exposed to the ongoing demands of caregiving, without external resources to buffer their emotional impact.

Overall, the results highlighted the importance of family support as a contextual factor that significantly shapes the effects of parental burnout on emotional health. These data support the need for interventions that do not focus exclusively on the parent or the child, but instead address the family as a whole, with particular attention paid to strengthening support networks for parents in situations of increased vulnerability.

5. Limitations

Several limitations should be considered. First, the cross-sectional design does not allow causal relationships to be established between parental burnout, depressive symptoms, and the contextual family variables examined and the findings therefore reflect associations rather than direct causal effects. Another aspect that should be acknowledged is the composition of the sample, which consisted predominantly of mothers. Although this reflects the reality that mothers are often the primary caregivers, it may limit the extent to which the results can be generalized to fathers or other family members involved in caregiving. Future research could address these limitations by using longitudinal designs that allow a better understanding of causal pathways.

6. Conclusions

The results of this study outline a complex picture of parental experience in the context of neurodevelopmental disorders, in which children's demographic and clinical characteristics interact with family resources and relationship dynamics to influence parental stress, burnout, and emotional vulnerability. The complexity of caregiving, intensified by the need for frequent therapy sessions and daily care tasks, represents a major source of pressure for parents. Although these interventions are essential for the child's development, they add a considerable physical and emotional load to parents' lives, leading to levels of exhaustion that can become difficult to manage in the absence of adequate support.

Family support emerges as a key factor, but its effects are not uniform. Consistent and meaningful involvement helps reduce parental burden and creates real opportunities for recovery, whereas intermittent or ambivalent support may lead to tension and a sense of losing control. Interestingly, some parents who received no help at all developed more stable internal organization and coping strategies than those who received only partial support. At the same time, families with a cohesive family life—characterized by effective communication and shared responsibilities—tend to manage daily pressures more effectively, and parents in these families report greater emotional stability.

Their relationship with the healthcare system does not function as a simple protective factor. Parents who rate medical support as “very good” are often those whose children have severe conditions and therefore require frequent and intensive contact with healthcare services. In these cases, higher burnout scores appeared to reflect the intensity of caregiving rather than the quality of services. Similarly, tension within the couple significantly increases parental exhaustion, while stable relationships or partnerships that become stronger following the diagnosis seem to provide additional emotional protection.

These findings also have practical implications: psychological support programs for parents of children with neurodevelopmental disorders—such as psychoeducation, stress-management interventions, or caregiver support groups—may help reduce parental burnout and depressive symptoms. Such interventions could be delivered by clinical psychologists or multidisciplinary rehabilitation teams working with these families.

Overall, the findings suggest that parental burnout and depressive symptoms arise from the interaction between high caregiving demands, available resources, and the ways in which families organize their lives around the child’s diagnosis. Strengthening resources—through family support, balance within the couple, structured access to services, and targeted psychological interventions—remains one of the most promising directions for reducing the emotional burden experienced by parents caring for children with neurodevelopmental disorders.

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