

BARRIERS FACING MOTHERS HAVING CHILDREN WITH CEREBRAL PALSY

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Abstract

Background: Cerebral Palsy (CP) is a series of conditions that affect children's mobility, balance, and posture, and it is the most typical motor impairment in children, Children with CP have long-term care requirements that are different and exceed the usual needs of typical children. They are dependent on their mothers for their daily assistance so mothers who care for children with CP confront several barriers. **Aim:** the study was aimed to identify the barriers facing mothers having children with cerebral palsy. **Research design:** A descriptive research design was used. **Settings:** This study was conducted at the physiotherapy unit at El-Raml and El-Anfoshy Children's Hospital. **Subjects:** A convenient sample of 200 mothers having children with cerebral palsy. **Tools:** Two tools were used for data collection: Characteristics of Mothers and Children Structured Interview Schedule, and Barriers Facing Mothers Having Children with Cerebral Palsy Structured Interview Schedule. **Results:** Regarding the overall score of barriers the financial and social barriers are the highest percent scores followed by physical and psychological barriers. **Conclusion:** The findings of the present study concluded that mothers of children with cerebral palsy were confronted with multiple barriers that had an impact on their lives and children. Financial and social barriers are the highest percent score followed by physical and psychological barriers. **Recommendation:** provided educational program that support mothers of children with cerebral palsy.

Keywords: Children, Cerebral palsy, Mother, Barriers.

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Introduction

Cerebral palsy (CP) is a group of permanent disorders of the development of movement and posture that cause activity limitation which are attributed to non-progressive disturbances that occur in the developing fetal or infant brain (Jindal et al., 2019). Cerebral Palsy is caused by faulty brain development or brain damage that impairs the children's capacity to control their muscles. The abnormal brain growth or damage that causes CP can occur before birth (congenital), or during labor and delivery (acquired). The exact causes are unknown but there are several risk factors such as bacterial and viral infection, bleeding in the brain, head injury, lack of oxygen to the brain, and prenatal mother exposure to drugs or alcohol as reported by Centers for Disease Control and Prevention (Centers for Disease Control and Prevention [CDC], 2023).

The Centers for Disease Control and Prevention (Centers for Disease Control and Prevention [CDC], 2022) estimated that the prevalence of CP ranged from 1 to 4 per 1000 live births globally. In Egypt, the prevalence of CP in children was 2.04 per 1000 live births in the Al-Karga District of the New Valley Governorate (El-Tallawy et al., 2014).

Cerebral palsy children can be classified based on mobility limitation and the affected body part as spastic, ataxic, athetoid/diskintic, hypotonic, and mixed CP. The most typical form of CP is the spastic type which had high muscle tone and exaggerated jerky movement, while ataxic CP causes problems in coordination and voluntary movement. Moreover, Athetoid/diskintic CP causes muscle tone fluctuation and involuntary movement, and hypotonic CP causes loss of strength and firmness resulting in floppy muscles. In mixed

CP the child shows signs and symptoms of more than one form of CP (Shalini, 2018).

All types of CP affect a child's movement, balance, coordination, and posture. The symptoms vary according to the type and severity of the condition. The child may have delays in sitting, hypotonia, jerky movement, and muscle spasms. Other symptoms may appear as feeding difficulty, constipation, epilepsy, gastroesophageal reflux, and scoliosis (National Health Service [NHS], 2023).

Cerebral palsy children are more dependent on their mothers as the main caregiver in performing their daily living activities which include feeding, clothing, bathing, eating, toileting, transportation, dressing, and sleeping (Stillerova et al., 2016). Caring for these children needs more time and can be a source of stress for their mothers. It affects physical and social welfare, freedom and independence, comfort, and financial stability of the whole family (Nobakht et al., 2020).

Mothers who care for their children with CP experience many barriers. The barriers include psychological and physical barriers that emanate from continually aiding their children in daily living activities, mobility, and transportation challenges (Dehghan et al., 2022). Also feeling loss, uncertainty about the children's future, and fear of facing the outside world (Nazzal & Al-Rawajfah, 2018). In addition, the mothers experience financial barriers because many mothers lack employment opportunities. The majority of financial barriers are related to the financial burden associated with the cost of equipment, treatments, therapies, and access to community services, frequent hospitalization, high cost of transportation, and low income are among the financial barriers. Moreover social barriers because of lack of support from family members and social rejection and isolation from community activities (Eloreidi et al., 2021).

Marital barriers can arise from lack of spouse support which makes the mothers experience significant stress. Feeling unsupported can strain the marital relationship, as the mothers may feel overwhelmed and unsupported in their

caregiving responsibilities. Also, there are barriers related to the child's medical condition and treatment which are presented in limited access to medical services, difficulty in using public transportation. Moreover, poor communication with healthcare providers and inadequate information about the child's condition result in dissatisfaction with the improvement of the child (Zulfia, 2020). Consequently, these mothers encounter many changes in their routines and roles in terms of physical, psychological, and social dimensions which in turn exacerbate negative effects on mothers' health (Singogo et al., 2015; Currie & Szabo, 2020).

Pediatric nurse has proactive roles in caring for children with CP. Nursing management focuses on assisting in promoting mobility and maintaining optimal nutrition intake. She should assess mother's barriers and provide psychological, social, and emotional support for mothers, which helps to decrease their level of stress and help them to adjust and cope with their children's health conditions to improve their quality of life (Eloreidi et al., 2021). The nurse must include the child's family in the care process, emphasize the value of ongoing outpatient care and follow-up visits, and refer mothers to special support groups and organizations (Mostafa et al., 2015).

The significance of the study

Mothers of children with cerebral palsy face multiple barriers so the nurse as a holistic care of the child should have responsibility to assess those barriers.

The aim of the study is

The study was aimed to identify the barriers facing mothers having children with cerebral palsy.

Research question

What are the barriers that face mothers having children with cerebral palsy?

Subjects and Method

Study design:

A descriptive research design was used to accomplish this study.

Settings:

The study was conducted in the physiotherapy unit in two settings in Alexandria, which are El-Raml Children's Hospital at Wingate and El-Anfoshy Children's Hospital.

Subjects:

A convenient sample of 200 mothers had children with any type of cerebral palsy, diagnosed six months ago, and didn't have any congenital anomalies or diseases were reported for the study.

The sample size was calculated using power analysis (Epi-info7) program based on the following parameters: population size = 350/6months, expected frequency =50%, acceptance error =5%, confidence coefficient =95%, minimum recommended sample size is 183 mothers, and the current study sample size is 200 mothers.

Tools of data collection:

Two tools were used:

Tool one: "Characteristics of Mothers and Children Structured Interview Schedule". It consists of three parts:

Part (1): Mother's Characteristics: Socio-demographic data included Such as age, marital status, education level, occupation, working hours, residence, type of family, family size, income, number of children, number of ill children, and mother's medical problem.

Part (2): Child Characteristics: Such as age, gender, and birth order.

Part (3): Medical History of Children: Such as type of CP, current treatment, duration of illness, and recurrent hospitalization

Tool two: Barriers Facing Mothers Having Children with Cerebral Palsy Structured Interview Schedule: This tool was developed by the researcher after reviewing related literature (Singogo et al., 2015; Michael et al., 2019; Abdullahi & Isah, 2020). This tool was used to identify the barriers. It is categorized into six categories

1. Physical barriers include ten barriers.

2. Psychological barriers include ten barriers.
3. Social barriers include five barriers.
4. Financial barriers include five barriers.
5. Marital problems include three barriers.
6. Barriers related to medical condition and treatment include ten barriers.

Barriers were assessed based on the presence or absence of each barrier, if present using likert scale rating by rarely, sometimes, mostly, and always.

Method

1. Approval of the Ethics Research Committee of the faculty of nursing was obtained.
2. Official approval from the responsible authorities of the Physiotherapy Department in El-Raml Children's Hospital at Wingate and El-Anfoshy Children's Hospital to conduct this study was obtained after explaining the aim of the study.
3. The study tools were tested for content validity by 5 experts in the field of the study. The face validity was 95.47%. The necessary modifications were done accordingly.
4. A pilot study was carried out on 20 mothers (10% of the sample) to test the clarity and applicability of the research tools. Those mothers were excluded from the study subjects.
5. Reliability of the tools was tested using Cronbach's Alpha test. The reliability coefficient was 0.931 which is acceptable.
6. Each mother was interviewed individually in the waiting area of the selected setting to collect the necessary data; the time elapsed for each interview was approximately 15 to 30 minutes.
7. Data was collected by the researchers during the period starting from March to the end of June 2022.

Ethical considerations:

1. Written informed consent was obtained from mothers after explaining the aim of the study and the right to refuse to

participate in the study and/ or withdraw at any time.

2. Data confidentiality was ascertained during the implementation of the study.

Statistical Analysis

After the completion of data collection, the necessary statistical analysis was performed. Data were fed to the computer and analyzed using IBM SPSS software package version 20.0. Qualitative data were described using numbers and percentages. The Kolmogorov-Smirnov test was used to verify the normality of distribution. Quantitative data were described using range (minimum and maximum), mean and standard deviation. Significance of the obtained results was judged at the 5% level.

Results

Table (1) The table clarified that more than three quarters of mothers (80%) aged from 30 to less than 45 years, and the mothers whose age is more than 45 years constituted only 4% of them. The majority of mothers (97%) were married. Regarding the level of education, it was observed that about half of mothers (51.5%) had university or post-graduation education, while only 6% of them had preparatory education. Moreover, slightly more than three quarters of mothers (77%) lived in urban areas, and more than two thirds of them (71.5%) were nuclear families.

Table (2) The table clarified that nearly three quarters (71.5%) of children were males while 28.5% of them were females. Regarding the age of children, 43% of children aged from 6 to less than 12 years, and 7.5% of them aged from 12 to less than 18 years.

Table (3) It was clear from the table that, more than three quarters (86%) of children who had CP had spastic quadriplegia type while spastic diplegia and ataxia represented only 2% for each.

Table (4) The table shows the percent score of financial, social, physical, and psychological were $69.15\% \pm 24.93$, $64.62\% \pm 26.49$, $54.64\% \pm 20.94$, and $53.44\% \pm 22.02$ respectively.

Moreover, the percent score of overall barriers was $54.40\% \pm 17.93$.

Table (5) The table shows that the majority of physical barriers facing mothers were physical burden from chores, having many household tasks besides caring for the child, exhaustion from transportation, frequent sleep disturbance, and the physical burden of caring for the sick child, (92%, and 91.5, % 91%, 87.5%, and 87% respectively).

Table (6) The table shows that feeling sad about the nature of a child's illness and uncertainty about a child's future represent the majority of the psychological barriers (91% and 90% respectively).

Table (7) Lack of recreational and social activities constituted most of the social barriers facing mothers (98%) followed by lack of social relations (48.5%) and negative societal view of a child (81%).

Table (8) The table shows that the financial barriers of the majority of mothers were the high cost of medicine and medical examination, the high cost of transportation, and no financial support from social institutions (95%, 93.5%, and 91% respectively).

Table (9) The table shows that more than half of the marital barriers of mothers were lack of husband support, and constant husband blaming of giving inadequate care for the husband and the child (59.5% and 57.5%), while blaming for having a CP child constituted 50%.

Table (10) The table shows that (89.5%, 88%, 87.5%, and 86.5%) of mothers reported that lack of facilities and services, lack of a place of specialized care, no satisfaction with improvement in their child's condition, and difficulty in using public transportation respectively are the barriers related to child condition and treatment.

Discussion

Cerebral palsy has an impact not only on the children but also on the families as a whole because of increased requirements for change and consumption of family resources, which can lead to stress among mothers (Takezawa et al., 2018).

The current study shows that, more than two thirds of mothers were housewives despite slightly more than half of them being highly educated. This may be attributed to CP children's need for continuous care and as the nature of their disease is dependent on their mothers in most of their daily living activities so most of mothers are housewives to have enough time to care for their cerebral palsy children. This result is in line with Elslemy et al. (2023) he found that, more than three quarters of mothers were not working. Contrary to the result of the present study Mahmoud and Sabea (2020) reported that more than two third of participating mothers were employed.

He also found that more than half of mothers have skeletal pain this can be justified by more than three quarter of mothers having frequent sleep disturbance due to meeting the child needs which leads to bodily aches and muscular spasms. Also, continuous physical caring of children with CP is exhausting to the mothers' in addition to household duties and caring of other family members. The result of present study is congruent with Akter (2021) who mentioned that the mothers can't sleep well for look after their child, they could not take proper rest or give time for themselves, also they sometimes feel sick by doing over and over works which include household chores, caring children, taking treatments, and managing family.

Gender can potentially play a role in the occurrence and effects of brain damage (Zagni et al., 2016). It is found in the current study that, more than two third of children who have CP were males. The result of the present study is congruent with Abd Elmagid and Magdy (2021) who conducted a study about the " evaluation of risk factors for cerebral palsy " They found that, the male: female ratio was 1.8:1.They justify it as males have a higher incidence of CP which is likely connected to their increased biological sensitivity due to genetic polymorphism which has various effects on an individual's phenotype including their susceptibility to

certain diseases, also the shape of their brains, and influence of female hormones on the possible reduction of brain damage. This result disagrees with Russman and Ashwal (2004). Who reported that cerebral palsy occurs in both sexes equally.

The majority of mothers had physical barriers related to the physical burden from chores, many household tasks besides taking care of CP child, exhaustion from transportation, frequent sleep disturbance, and the physical burden of caring for the child. This may be attributed to cerebral palsy children need more care and effort as feeding, dressing, transportation, and physical therapy, etc. In addition to all of this, the mother also has to take care of the household duties and the other siblings and family members. That result is similar to Farajzadeh et al. (2020) They reported that mothers complain of consistent fatigue related to many tasks besides caring for CP child which affect their QOL negatively.

Regarding to psychological barriers, the current study showed that mothers had psychological barriers such as feeling uncertain about the child's future, feeling guilty about the child's illness, and lack of support from healthcare providers, family, and relatives. This can be justified by the nature of the child's illness can lead to constant worry about the child's health and feelings of sadness, hopelessness in addition to the nature of the child's illness can hinder the mother from involving the child in social visits which lead to a sense of loss for the life.

According to social barriers facing mothers of children with CP, the present study illustrated that most mothers had lack recreational and social activities for their CP children, and more than three quarters of them had a lack of social relation visits related to recurrent hospitalization, negative society view of the child and inadequate help in caring of the child. Moreover, about three quarters of them had lack of social support.

Although more than half of mothers reported high socio-economic status they suffer from lacking of financial resources

which prevents them from accessing services. The current study presented that, most mothers complain about the high cost of medications, follow-up sessions, and transportation. Furthermore, there is no financial support from social institutions. This result is in the same line with Talent (2018) who conducted a study about "challenges faced by mothers of children with cerebral palsy" and presented that, mothers of children with CP struggle financially to pay for their children's therapy, assistive devices, special educational needs, physiotherapy and transportation cost.

The present study illustrated that, about half of mothers had continuous husband blaming for having a CP child. It may be related to the stress of raising a child with CP is already significant, and marital issues can further intensify this stress. This result is in line with Vadivelan et al. (2020), who presented that, the absence of spouse support and their blaming all the time are the most significant challenges that mothers of CP children face.

The current study showed that mothers of children with CP had barriers related to their children condition and treatment which represented in lack of facilities and places for specialized care, difficulty in using public transportation, inadequate information about the child's condition and caring plan, and having difficulty in communication with a healthcare provider. This could be justified by wheelchair users are not well-served by public transportation. In both urban and rural countries, there is a lack of well-equipped taxis and buses which forces parents to arrange private transportation. Moreover, the limited availability of hospitals, clinics, or rehabilitation centers equipped to provide comprehensive care can make it difficult for mothers to find appropriate services for their children. This scarcity may force them to travel long distances or face difficulties in receiving timely and specialized care. Also, mothers may struggle to obtain comprehensive and accurate information about their child's condition and develop a suitable care plan due to insufficient communications from healthcare providers. This study is similar to Manyuma et al. (2023) who conducted a study about "caring for children with cerebral palsy: a challenge to

caregivers in rural areas of South Africa" they illustrated that all mothers expressed dissatisfaction with medical staff dealing, with the standard of care provided by public institutions, and difficulty in access to services.

Finally, the current study has been able to shed some light on the barriers facing mothers who have children with CP. In this respect, the pediatric nurse has a crucial role in helping those mothers to identify these barriers and how to cope and manage them to promote the child's health and well-being.

Conclusion

Based on the findings of the present study, it can be concluded that mothers of children with cerebral palsy were confronted with multiple barriers that had an impact on their lives and children. Financial and social barriers are the highest percent score followed by physical and psychological barriers. Moreover, there are a statistically significant relation between the mother's level of education and overall barriers. Also, there are statistically significant relations between the age of children, duration of illness, and overall barriers.

Recommendations

- Implementation of educational programs that support and counsel mothers of children with CP, and provide an opportunity for them to discuss their experiences, difficulties, achievements, and solutions.
- Establish parent to parent support groups to help them develop their coping mechanisms and improve their self-efficiency and well-being .
- Future research may need to concentrate on studying the coping mechanisms used by mothers of CP children to protect themselves from the challenges of CP caregiving. Additionally, future study has to focus on the difficulties they face in a different geographical area because rural mothers of children with CP may have unique experiences.

Table (1): Percentage distribution of participating mothers according to their characteristics (n = 200)

Characteristics of mothers	No.	%
Age		
20 <30	32	16.0
30 – 45	160	80.0
>45	8	4.0
Min. – Max.	22.0 – 60.0	
Mean ± SD.	34.75 ± 6.17	
Median	35.0	
Marital status		
Married	194	97.0
Divorced	5	2.5
Widow	1	0.5
Level of Education		
Illiteracy/ Read and write	17	8.5
Primary education	18	9.0
Preparatory education	12	6.0
Secondary education/ institute	50	25.0
University education/ Postgraduate	103	51.5
Occupation		
Working	56	28.0
Housewife	144	72.0
Working hours	(n = 56)	
≤ 6 hours	44	78.6
> 6 hours	12	21.4
Residence		
Urban	154	77.0
Rural	46	23.0
Family type		
Nuclear	143	71.5
Extended	57	28.5
Family income		
Enough	77	38.5
Not enough	123	61.5
Socioeconomic score		
Low 50%	16	8.0
Medium 50 to <75%.	80	40.0
High ≥75%.	104	52.0
Number of children other than the a sick child		
None	36	18.0
One child	46	23.0
Two children	67	33.5
Three children	33	16.5
Four children and more	18	9.0
Min. – Max.	0.0 – 6.0	
Mean ± SD.	1.82 ± 1.34	
Median	2.0	
Presence of sick sibling		
Yes	17	8.5
No	183	91.5
Diagnosis of sick sibling	(n = 17)	
Cerebral palsy	5	29.4
Down syndrome	3	17.6
Heart disease	2	11.8
Hemophilia	2	11.8
Kidney disease	2	11.8
Systemic lupus	1	5.9
Mental retardation	1	5.9
Diabetes Mellitus	1	5.9
Presence of mother's health problems		
Yes	45	22.5
No	155	77.5
If the answer is yes what it is		
Skeletal Pain	26	57.8
Diabetes Mellitus	8	17.8
Hypertention	3	6.7
Heart disease	2	4.4
Others	6	13.3

Table (2): Percentage distribution of children according to their characteristics

Characteristics of children	No.	%
Gender		
Male	143	71.5
Female	57	28.5
Age of child		
<1 year	0	0.0
1-<3 years	37	18.5
3-<6 years	62	31.0
6-<12 years	86	43.0
12-18 years	15	7.5
Min. – Max.	1.50 – 15.0	
Mean ± SD.	6.14 ± 3.33	
Median	6.0	
Birth order of the child		
First	96	48.0
Second	44	22.0
Third	36	18.0
Fourth and more	24	12.0
Min. – Max.	1.0 – 6.0	
Mean ± SD.	2.01 ± 1.23	
Median	2.0	

Table (3): Percentage distribution of children according to their medical history

Medical history	No.	%
Cerebral palsy type		
Spastic quadriplegia	172	86.0
Spastic diplegia	4	2.0
Spastic hemiplegia	20	10.0
Ataxia	4	2.0
Duration of illness		
<1 year	55	27.5
1-<3 years	38	19.0
3-<6 years	57	28.5
6-<12 years	50	25.0
Min. – Max.	0.50 – 14.83	
Mean ± SD.	5.43 ± 3.40	
Median	4.96	
The current management		
Physiotherapy only	134	67.0
Physiotherapy and medical treatment	66	33.0
Previous hospitalization of the child		
Yes	128	64.0
No	72	36.0

SD: Standard deviation

Table (4): The overall score of barriers facing mothers of children with cerebral palsy (n = 200)

Barriers facing mothers of children with cerebral palsy	Total Score	% Score
Physical barriers (0 – 40)		
Min. – Max.	0.0 – 37.0	0.0 – 92.50
Mean ± SD.	21.86 ± 8.38	54.64 ± 20.94
Psychological barriers (0 – 40)		
Min. – Max.	0.0 – 40.0	0.0 – 100.0
Mean ± SD.	21.38 ± 8.81	53.44 ± 22.02
Social barriers (0 – 20)		
Min. – Max.	2.0 – 20.0	10.0 – 100.0
Mean ± SD.	12.93 ± 5.30	64.62 ± 26.49
Financial Barriers (0 – 20)		
Min. – Max.	0.0 – 20.0	0.0 – 100.0
Mean ± SD.	13.83 ± 4.99	69.15 ± 24.93
Barriers related to marital problems (0 – 12)		
Min. – Max.	0.0 – 12.0	0.0 – 100.0
Mean ± SD.	3.61 ± 3.53	30.08 ± 29.45
Barriers related to the child's condition and its treatment (0 – 40)		
Min. – Max.	0.0 – 40.0	0.0 – 100.0
Mean ± SD.	20.14 ± 8.66	50.35 ± 21.64
Overall Barriers (0 – 168)		
Min. – Max.	22.0 – 156.0	13.10 – 92.86
Mean ± SD.	91.39 ± 30.12	54.40 ± 17.93

SD: Standard deviation

Table (5): Physical barriers facing mothers of children with cerebral palsy (n = 200)

Physical Barriers	Not a barrier at all		Barrier		Always		Often		Sometimes		Seldom	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
The physical burden of caring for a child	26	13.0	174	87.0	50	25.0	43	21.5	67	33.5	14	7.0
Inaccessible health facilities	40	20.0	160	80.0	76	38.0	25	12.5	46	23.0	13	6.5
Health condition impaired meeting child needs	61	30.5	139	69.5	10	5.0	30	15.0	66	33.0	33	16.5
Physical burden from mother's occupation	146	73.0	54	27.0	12	6.0	14	7.0	17	8.5	11	5.5
Exhausted from transportation	18	9.0	182	91.0	70	35.0	43	21.5	54	27.0	15	7.5
Frequent sleep disturbance due to meeting the child's needs	25	12.5	175	87.5	52	26.0	58	29.0	52	26.0	13	6.5
Physical burden from chores	16	8.0	184	92.0	22	11.0	55	27.5	49	24.5	58	29.0
Tired of taking care of the child's sibling	66	33.0	134	67.0	34	17.0	34	17.0	53	26.5	13	6.5
Difficult to move with the presence of Sidewalks and stairs	32	16.0	168	84.0	91	45.5	36	18.0	37	18.5	4	2.0
Many household tasks besides taking care of the sick child	17	8.5	183	91.5	67	33.5	48	24.0	51	25.5	17	8.5

Table (6): Psychological barriers facing mothers of children with cerebral palsy (n = 200)

Psychological Barriers	Not a barrier at all		Barrier		Always		Often		Sometimes		Seldom	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Taking care of a child all the time	55	27.5	145	72.5	53	26.5	25	12.5	48	24.0	19	9.5
Uncertainty about the child's future	20	10.0	180	90.0	96	48.0	31	15.5	41	20.5	12	6.0
feeling sad about the nature of the child's illness	18	9.0	182	91.0	91	45.5	28	14.0	55	27.5	8	4.0
feeling guilty about a child's illness	36	18.0	164	82.0	72	36.0	18	9.0	53	26.5	21	10.5
Having no time for housework, husband, and siblings	38	19.0	162	81.0	36	18.0	39	19.5	65	32.5	22	11.0
Overwhelming by multiple roles	42	21.0	158	79.0	43	21.5	24	12.0	57	28.5	34	17.0
Lack of support from family and relatives	55	27.5	145	72.5	65	32.5	20	10.0	32	16.0	28	14.0
Lack of support from doctors and nurses	45	22.5	155	77.5	67	33.5	38	19.0	34	17.0	16	8.0
inability to meet the needs of the sick child	42	21.0	158	79.0	34	17.0	45	22.5	59	29.5	20	10.0
Sibling jealousy from extra care provided to the child	122	61.0	78	39.0	10	5.0	19	9.5	29	14.5	20	10.0

Table (7): Social barriers facing mothers of children with cerebral palsy (n = 200)

Social Barriers	Not a barrier at all		Barrier		Always		Often		Sometimes		Seldom	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Lack of social relation visits related to recurrent hospitalization	31	15.5	169	84.5	69	34.5	35	17.5	38	19.0	27	13.5
Negative society's view of child	38	19.0	162	81.0	71	35.5	29	14.5	47	23.5	15	7.5
The lack of social support	52	26.0	148	74.0	64	32.0	34	17.0	23	11.5	27	13.5
Inadequate help in caring for the child	48	24.0	152	76.0	79	39.5	29	14.5	33	16.5	11	5.5
Lack of recreational and social activities for CP children	4	2.0	196	98.0	149	74.5	26	13.0	15	7.5	6	3.0

Table (8): Financial barriers facing mothers of children with cerebral palsy (n = 200)

Financial Barriers	Not a barrier at all		Barrier		Always		Often		Sometimes		Seldom	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Lack of financial support from family and relatives	47	23.5	153	76.5	27	13.5	17	8.5	28	14.0	81	40.5
No financial support from social institutions	18	9.0	182	91.0	123	61.5	29	14.5	13	6.5	17	8.5
High cost of medicines / medical examinations / follow-up sessions	10	5.0	190	95.0	141	70.5	28	14.0	18	9.0	3	1.5
Frequency hospitalization	55	27.5	145	72.5	40	20.0	25	12.5	39	19.5	41	20.5
The high costs of transportation	13	6.5	187	93.5	115	57.5	40	20.0	22	11.0	10	5.0

Table (9): Barriers related to marital problems facing mothers of children with cerebral palsy (n = 200)

Barriers related to marital problems	Not a barrier at all		Barrier		Always		Often		Sometimes		Seldom	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Lack of husband support	81	40.5	119	59.5	28	14.0	22	11.0	39	19.5	30	15.0
Constantly husband blaming for having a child with CP	100	50.0	100	50.0	24	12.0	13	6.5	19	9.5	44	22.0
Constant husband blaming for giving him and his CP child inadequate care	85	42.5	115	57.5	15	7.5	13	6.5	33	16.5	54	27.0

Table (10): Barriers related to child condition and treatment facing mothers of children with cerebral palsy (n = 200)

Barriers related to the child's condition and its treatment	Not a barrier at all		Barrier		Always		Often		Sometimes		Seldom	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Satisfaction about the improvement in the child's condition	25	12.5	175	87.5	66	33.0	44	22.0	48	24.0	17	8.5
The suffering of mother and child from repeated hospitalizations	70	35.0	130	65.0	18	9.0	23	11.5	42	21.0	47	23.5
Difficulty in communication with the healthcare provider and inadequate information about the child's condition and the required examinations	58	29.0	142	71.0	50	25.0	33	16.5	34	17.0	25	12.5
Lack of places for specialized care for a child's condition	24	12.0	176	88.0	102	51.0	23	11.5	27	13.5	24	12.0
Lack of facilities and services besides home to serve the child	21	10.5	179	89.5	127	63.5	17	8.5	16	8.0	19	9.5
Difficulty in using public transportation due to the child's condition	27	13.5	173	86.5	115	57.5	15	7.5	21	10.5	22	11.0
Suffering to give medications to the child	85	42.5	115	57.5	33	16.5	24	12.0	31	15.5	27	13.5
Vomiting the child of medication	83	41.5	117	58.5	22	11.0	20	10.0	34	17.0	41	20.5
Irrigularity of giving medications to the child	87	43.5	113	56.5	8	4.0	6	3.0	49	24.5	50	25.0
Inadequate information about caring for the child	44	22.0	156	78.0	39	19.5	33	16.5	34	17.0	50	25.0

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