

Frequency of Depression Among Parents of Children with Cerebral Palsy

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ABSTRACT

Background: Depression is the serious mental disorder that causes great effect on family members, specially the families of disabled children. CP is the most common disability of children. Depression is very frequent in parents of CP children because they are more attached and worried about their child's health.

Objective: The purpose of study is to determine the frequency and level of depression in parents of cerebral palsy children.

Materials and methods: A cross-sectional study was conducted on a sample of 148 parents of CP children. The data was collected from different hospitals of Rawalpindi and Islamabad from 26th January 2018 to 26th July 2018. Population was selected using non-probability convenient sampling. Parents with at least one child with CP were included whereas; parents with any diagnosed mental disorder were excluded along with those parents, who had a child with any other disorder than CP. Standard questionnaire beck depression inventory was used to assess depression in the parents. Data was analyzed using IBM SPSS 20.

Results: Out of 148 participants 133 (89.90%) were mothers and 15 (10.10%) were fathers. Mean age of the participants were 29.85 years. In total, 83 (56.1%) parents were clinically depressed. Moderate level of depression was the most frequent level of depression i.e. (38) 25% followed by other categories. Mothers had greater severity of depression than fathers; total of 38 (25.5%) mothers had moderate level of depression. Fathers did not cross the borderline clinical depression category; only 3(20%) fathers were in borderline clinical depression category.

Conclusion: The study concluded that most of the parents of children having cerebral palsy undergo moderate level of depression.

Introduction

As defined by the World Health Organization "Depression is a common mental disorder, characterized by persistent sadness and loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities, for at least two weeks."

Depression is one of the most impending problem that the public health care systems are facing today and it effects almost all world's population children, adults and elders.^{1, 2} 350 million people are effected due to depression yearly and it increases the mortality rate up

to 70%.¹ This co morbid state of depression declines health much more than just depression alone or just a chronic disease without depression.²

Depression is also an early sign of many health conditions that influence physical disability.² The most common disability of children is cerebral palsy.² Cerebral palsy has a worldwide incidence of 2 to 2.5 cases per 1000 live births.² Cerebral palsy is caused by brain injury which can be either prenatal(e.g. brain malformations), perinatal(e.g. cord prolapse, obstruction in labor, ante

partum hemorrhage) and post-neonatal(e.g. infections and injuries).² When parents of children diagnosed with cerebral palsy come to know about different complications such as altered sleep, pain, limitations in rehabilitation programs, difficulty in performing activities of daily living (feeding, walking, using toilet, dressing up etc.^{2, 3} They become hopeless ,shattered and socially isolated.⁴ Inability to revert situations, feeling that all the dreams about a perfect and healthy child are broken and feelings of no freedom of life anymore also immensely impact the parents life.⁵ Mothers are majorly effected because they spent most of the time with child, and they are more prone to emotional distress.⁶ CP parents, most commonly mothers are not in a good mental health due to psychiatric problem of depression.⁷ As a result they are unable to provide adequate care that their child deserves in order to attain his optimal functional goals. The anxiety, depression, poor quality of life and altered marital satisfaction is found in parents having an abnormal, particularly a CP child, as compared to the parents who have normal child.⁸ The level of depression and other mental problems in parents are not constant and may increase with their child's developmental stages.^{9, 10}

The purpose of our study was to determine the frequency and level of depression in parents of cerebral palsy children. If depression is left unconsidered in our society and hospital setups, it can affect the parents as well as CP child's care giving and treatment

Methodology

A cross-sectional study was conducted on a sample of 148 parents of CP children. The data was collected from different hospitals of Rawalpindi and Islamabad after approval from their head of departments. The study was completed in duration of 6 months i.e. from 26th January 2018 to 26th July 2018. Population was selected using non-probability convenient sampling. Parents with at least one child with CP were included in the study whereas; parents with any diagnosed mental disorder were excluded along with those parents, who had a child with any other disorder than CP.

Becks Depression Inventory, being the most valid instrument, was used to assess depression in the parents.¹¹ It is also the best self-grading scale used for assessing depression.¹² Beck Depression Inventory

consists of total of twenty-one items. Every item carries 0-3 score on likert Scale. Score of 3 represents higher level of depression and 0 score indicate lower level of depression. Demographic information was added in the questionnaire.

Frequencies and percentages were calculated for qualitative variables and mean and standard deviation for quantitative variables. To find out the relation of depression with age of parents and socioeconomic status, Pearson correlation was applied. After a careful process of data collection, the data was analyzed using IBM SPSS 20.

Results

Total participants of the study were 148, out of which 133 (89.90%) were mothers and 15 (10.10%) were fathers. Mean age of the participants were 29.85 years. Majority of the parents belong to middle class 105 (70.9%) followed by lower class 33 (22.35%) and upper class 10 (6.8%).

In total, 83 (56.1%) parents were clinically depressed. Moderate level of depression was the most frequent level of depression i.e. (38) 25% followed by other categories. Detail of which is given in figure 1. Mothers had greater severity of depression than fathers; total of 38 (25.5%) mothers had moderate level of depression. Fathers did not cross the borderline clinical depression category; only 3(20%) fathers were in borderline clinical depression category.

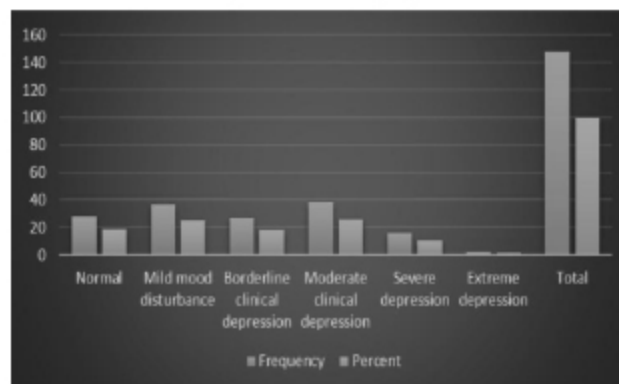


Figure 1. Categories of depression

There was a strong positive ($r= 0.083$) but statistically insignificant $p=0.32$ correlation between age of parents and depression. There was weak negative($r=-0.22$) correlation between socioeconomic status and

depression. The relationship was statistically insignificant $p=0.79$

Discussion

The result of our study reported that a high proportion of parents experience depression. This is mainly because of the increased mental and physical exertion on the parents of CP children.

According to the results of our study, the mean score of depression was 18.60; the result of our study is supported by comparative study by Sajedi et al in which mean depression score was 17.79. Both of these scores belong to borderline clinical depression. Further, in our study 1.4% mothers were severely depressed while in the study of Sajedi et al 3.4% mothers were severely depressed.¹³ The high level of depression in mothers as compared to fathers reason because mothers are the sole caregivers of children in most of the cases,

The results of the study conducted by Basaran et al concluded that 58.0% of parents/ caregivers of CP children had mild to moderate depression, while our study showed 25.7% parents falling in moderate depression.¹⁴ Hence moderate depression remains the most frequent level of depression in both the studies.¹⁵

Limitations:

- The main limitation of the study was that sample collection area was narrow. Therefore, it cannot be generalized to the whole population of Rawalpindi and Islamabad.
- Second major limitation was that the parents who participated in a consisted of mainly mothers not fathers
- Sample size was small.

Conclusion

The study concluded that most of the parents of children having CP undergo moderate level of depression. This shows us how much a CP child's health status affects his/her parent's mental health. Mothers being the sole caregivers in most of the cases have greater levels of depression as compared to fathers. Hence the parents must be referred for psychological counseling in order to prevent or treat their depression.

Recommendations:

- Every hospital and rehab institute should have their own psychologist.

- Psychological counseling must be thought out as an important adjunct of physical therapy sessions in all the institutes
- A thorough screening of parents of children with CP and all other disorders must be conducted.

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