

Depression in Parents of Children with Cerebral Palsy in Bosnia and Herzegovina

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Abstract- The aim of the research is to examine depression in parents of children with cerebral palsy, with hypothesis to have more depressive symptom among mothers of children with cerebral palsy. The sample of examinees (between 23 and 62 age) was used in this research. The first subsample of examinees (N=23) was made of mothers (average 33±5.83) of children with cerebral palsy. The second subsample of examinees (N=12) was made of fathers of children with cerebral palsy (average 38±9.8). The third subsample of examinees (N=16) represented the control group, and it was made of mothers of children without disorders (average 38±6.57). For the purpose of quantitative measurement of depression, the Zung self-evaluated method for depression was applied. All data research were processed by parametric and nonparametric statistics. The frequencies and percents were also calculated, and Kruskal-Valis single-factor analysis of variants was applied for checking the hypothesis. According to the results of this research, it was concluded that there was no statistically significant difference in the evaluation of depression between mothers and fathers of children with cerebral palsy, as well as there is no statistically significant difference in relation to mothers of children without disorders.

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Introduction

Referring to the World Health Organisation definition depression is very frequent mental disorder that includes depressive mood, loss of interests or pleasure, awakes the feeling of guiltiness, effects the appetite, dream and concentration

(http://www.who.int/mental_health/management/depression/definition/en/). Over 120 million people worldwide suffer from depression, thus as a cause-consequence relation takes the leading part among the person with disorders. Although people with disorders mostly suffer from depression, we cannot forget the fact that parents, especially, mothers take care about their children with or without disorder. Birth of child with disorder awakes the feeling of guilty, responsibility, care for education, including not just emotional engagement but also time and financial support. Cerebral paralysis is one of many examples that puts great requirements for

parents. It is a chronic disease which does not progress if a child is involved in the educational and rehabilitational treatment. Considering other researches, children with the chronic diseases, where the cerebral paralysis also belongs, may cause depression (1). Such chronic state of a child effects not only on mothers, but on all members of the family (including fathers) and also disturbs the family relations (2). The same author asserted that the number of empirical researches that involve information from different family members increased. Although researches in child psychology do not include fathers in a sufficient measure. Thus, the aim of this research was to examine depression in parents of children with cerebral palsy. Similarly to research, the hypothesis was asserted that level of the depression was significantly higher in parents (mothers and fathers) of children with cerebral palsy than in parents of children without disorders.

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Patients and Methods

The sample of examinees (23-62 age) was used in the research. The first subsample of examinees (N=23) was made of mothers (age 33±5.83) of children with cerebral palsy. The second subsample of examinees (N=12) was made of fathers (age 38±9.8) of children with cerebral palsy. The third subsample of examinees (N=16) represented control group and was formed of mothers and fathers of children without disorders, (age 38±6.57).

Research was done in the Center for children with manifold disturbance „Steps of Hope“, Tuzla (Bosna and Herzegovina), and in the Elementary school „Kiseljak“. This was individual research and examinees were given instruction how to fill in the questionnaire.

For the purpose of quantitative measurement of depression, Zung (3) self –evaluated scale was applied. The scale was based on the diagnostic criteria, and it was frequently used for the evaluation of depressive disorders. Prior to scale construction, main characteristics of depression were involved: affective (bad mood, regret, crying); physical (night or early waking up, tachycardia, tachyarrhythmia, loss of appetite); psychomotor (slow movement, agitation, spasms in certain body parts) and psychic disturbance (hesitation, confusion, discontent with life achievements, thinking about suicide). The scale consists of 20 particles. Each particle requires the answer on the scale of 4 degrees: never or rarely, sometimes, often, very frequent or always. In this manner possibility for examinees to choose the medium grade was excluded. Sum of all values for 20 assertions was shared with 80 and then multiplied by 100. Final result was formed as a linear combination of evaluation each of the assertion, which goes from 25 to 100.

According to numerous works where the Zung self-evaluated scale for depression was applied, it was

asserted that persons with mild or moderate depression had 50-59 points, those with moderate to strong depression had 60-69 points, and those with the very strong depression had more than 70 points (4).

All data research were processed by parametric and non parametric statistics. The frequencies and percents were also calculated and for the checking of asserted hypothesis Kruskal-Valis single-direction analysis of variants was applied.

Results

In the total sample of examinees (51) and according to Zung self-evaluated scale, 4 or 7.8% of examinees do not suffer from depression, 46 or 90.2% suffer from mild to moderate depression, while 1 or 2% of examinees suffer from hard depression (Table 1). Also, It was confirmed that 16.7% fathers of children without disorders and 12.5% mothers of children without did not suffer from depression. Mild to moderate level of depression had the 95.7% mothers and 83,3% fathers of children with cerebral palsy, while the percent of mothers of children without disorders was 87.5%. 4.3% of mothers of children with cerebral palsy suffer from hard depression (Table 1). Kruskal-Valis single-directed analysis of variants was applied for checking the hypothesis, considering the fact tha differences were recognised between subsamples of examinees. Results showed that there were no statistically significant difference in evaluation of depression between mothers and fathers of children with cerebral palsy and mothers of children without disorders ($h^2=4,66$; $P=0,09$).

Discussion

The results of the research showed that there were differences between applied subsample of examinees, but they were not statistically significant.

Table 1. Distribution of examinees in relation to the level of depression

Level of depression	Examinees							
	MDCP		ODCP		MDBI		Total	
	N	%	N	%	N	%	N	%
Without depression	-	-	2	16.7	2	12.5	4	7.8
Mild/moderate	22	95.7	10	83.3	14	87.5	46	90.2
Strong	1	4.3	-	-	-	-	1	2.0
Total	23	100	12	100	16	100	51	100

Legend: MDCP-mothers of children with cerebral palsy; ODCP – fathers of children with cerebral palsy; MDBI – mothers of children without the disorder.

The same results were achieved by Giauque (5), who, in her diploma paper with topic Relationships between Cohesion and Depression in parents of children with Developmental Disability, asserted that there were no statistically significant differences in evaluation of depression between mothers and fathers of children with difficulties in development in relation to parents of children without disorders. Similar results were achieved by Bristol *et al.* (6). Namely, they were evaluating the level of depression between 62 parents of children with autism and 50 parents of children without disorders. Results showed that parents of children with autism were much more depressive than parents of children without disorders, but these differences were not statistically significant. However, it was necessary to point the fact that these researches were done on the sample of examinees that was not homogeneous towards the type of disorder in relation to the topic of this research. Thus, for the purpose of further analysis, comparison of results was given.

Furthermore, results of this research showed that there were no statistically significant differences between mothers of children with cerebral palsy and mothers of children without disorders, which was the opposite to Fisman *et al.* (7), Harris and McHale (8), Dumas and colleagues (9), Blacher and Lopez (10), Hoar *et al.* (11) and Veisson (12). Their results showed that mothers of children with a developmental disability were more depressed than mothers of children without disorders.

The results of this research should be observed in the following context: (1) Social and economical conditions, which may be very significant factor in the research, were not taken into account, (2) The sample of examinees was relatively small, which made the possibility for generalisation of results lower; (3) Control group of examinees was taken from a rural area, which also may effects the results of the research. In conclusion, according to the results of this research it was concluded that there was no statistically significant difference in evaluation of depression among mothers and fathers with cerebral palsy as well that there was no significant difference in relation to mothers of children without disorders.

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