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Comparison of Behavioral Disorders in Students with Depressed and Non-depressed Mothers

Zahra Alibakhshi[1], Zahra Ebadi[2], Marzieh Mashal-pour Fard [3], Sara Mousavi[4]*, Masoumeh Besharati-pour[5]

Abstract

Aim: The aim of this study was comparing behavioral disorders in students with depressed and non-depressed mothers.

Methods: This case-control study was conducted among 35 (7-11 years old) children of depressed mothers as a case group and 35 children of healthy mothers as control group in Ahvaz, Iran, in 2015-16. The sample size was selected by multistage random cluster sampling. Research tools were Beck Depression Inventory, and Rutter behavioral disorders questionnaire. Data were analyzed using T-tests in the SPSS software (ver. 18).

Findings: Based on the findings of this study, more depressed mothers have children with more behavioral disorder. Aggression, hyperactivity, depression, anxiety, social dysfunction, and anti-social behaviors were seen more among students with depressed mothers comparing to students with non-depressed mothers.

Conclusion: Maternal depression is related to a wide range of child outcomes, and the effects continue from birth into adulthood. Children of depressed mothers are two to three times more likely to develop a mood disorder, and are at increased risk for impaired functioning across multiple domains, including cognitive, social and academic functioning, and poor physical health. At the same time, many children of depressed mothers develop normally. Therefore, the key research goal is to understand the pathways and processes through which maternal depression affects children. Child psychological counseling and psychiatric management along with mothers' treatment is advisable.

Keywords: Behavioral disorders, Student, Depressed and non-depressed mothers

1. Assistant Professor, Department of Psychology, Payame Noor University, Tehran, Iran
Email: z.alibakhshi@gmail.com
2. M.Sc., Department of Psychology, Payame Noor University (PNU), Tehran, Iran
Email: zahra.ebadi24@gmail.com
3. Lecturer, Faculty Member, Department of Psychology, Payame Noor University, Tehran, Iran
Email: mmashalpoor@yahoo.com
4. Instructor, Department of Psychology, Payame Noor University, Tehran, Iran
Email: saramhasti@yahoo.com
5. Lecturer, Faculty Member, Department of Psychology, Payame Noor University, Tehran, Iran
Email: mbesharatypoor@yahoo.com

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Introduction

Behavioral problems have rather same prevalence in different societies [1]. As most of the children with behavioral problems reach adulthood, their problems will fade away partly or totally; however, in some cases, the problem may sustain [2]. Children with psychiatric disorders-diagnosed parents have relatively more behavioral problems [3]. Literatures suggest that children with depressed mothers are much more prone to behavioral disorders [4]. Physical/mental illness of parents can cause behavioral disorders in children [5-7]. Mothers who are depressed may be less tolerant of a child's behavior, and be more likely to report negative attributes of their child to the physician at a well-child visit [8]. Children of depressed mothers are more likely to develop early and lifelong emotional, behavioral, and adaptive difficulties [9]. Despite a large body of empirical studies illustrating maternal depression as a risk factor for negative developmental outcomes in older children and adolescents, less consistent findings have been demonstrated in studies of the effects of maternal depression on infant and toddler outcomes. Indeed, several studies of early childhood have failed to find differences in markers of socioemotional competence and adaptation in young children upon exposure to maternal depression [10]. Research findings show that factors such as reduction of oxytocin in the mother can lead to depression and thus child response is negatively predicted by maternal depression, Child response was negatively predicted by maternal depression, and maternal negative affect [11]. The children of chronically depressed mothers displayed 61% Axis I disorders (mainly anxiety and oppositional defiant disorder), compared with 15% of the children of non-depressed mothers. The depressed mothers' families have negative effect of chronic maternal depression on child social outcomes [12]. The World Health Organization (WHO) reported that 10 to and 20% of European teenagers suffer from several behavioral disorders [13]. In Iran, the research of Anisi and his colleagues [14] to assess behavioral problems in adolescents among 10 provinces found that the average age of behavioral problems in this age group was higher compared with other age groups. These results increase our understanding of predictors of empathy development in young children with a wide range of social outcomes. Children of depressed mothers during their preschool years had the greatest level of behavioral and emotional problems, while kids whose mothers were depressed during pregnancy did not have any difficulties in these areas. Women with chronic depression, whether moderate or more severe, had kids with some emotional or behavioral issues. The results add to a growing body of research linking maternal depression to

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developmental problems in their children [15]. As mentioned earlier, depressed mothers are unable to set up and manage emotions, and develop secure attachment of their children, and cannot express their feelings. They further have trouble to love their children. Accordingly, the aim of this study was to compare students with behavioral disorders of depressed and non-depressed mothers.

Materials and Methods

The population of this cross-sectional study consists of all elementary school students in Ahvaz/Iran in 2015-16. The sampling method used in this research was cluster sampling. The psychological health of mothers in the control group was confirmed with Beck Depression Inventory. The behavioral problems in the two groups of children were compared using the Rutter behavioral disorders questionnaire. After clarifying the mothers about the study goals and reassuring them about the anonymity of questionnaires as well as the confidentiality of their information, written informed consents were obtained. The inclusion criteria were students aged 7-11 years and the students who attended public schools in Ahvaz City.

The exclusion criteria were mothers whose children were mentally retarded, and non-housewife mothers (working). The sample size was 140 school children selected by multistage random cluster sampling. Then 70 students from each school were selected randomly using Beck questionnaire; among them, 35 students had depressed mothers and 35 had not depressed mothers. After completing the questionnaires and data collection, the collected data were analyzed using SPSS software (version 18) making use of descriptive and analytical statistics (Pearson's correlation, and independent t-test).

Beck Depression Inventory

The Beck Depression Inventory [16], a 21-itemself-report instrument that assesses depressive symptomatology, is perhaps the most widely used outcome measure in studies of depression treatment. The participants indicate which of four statements most accurately reflects how they felt during the preceding week (e.g., "I do not feel sad" vs. "I feel sad" vs. "I am sad all the time and I can't snap out of it" vs. "I am so sad or unhappy that I can't stand it"). The BDI is highly correlated with the clinical ratings of depression (r= 0/72), and has been shown to have high internal consistency in both clinical and nonclinical samples, with mean coefficient alphas of 0/86 and 0/81, respectively [17]. In the current sample, the coefficient alpha was 0/81.

Rutter behavioral disorder questionnaire

This questionnaire was made by Michael Rutter [18]. Mahryar and co-workers used it to

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assess behavioral problems in children in the Iranian city of Shiraz. The questionnaire included 28 questions (24 of these questions are directly extracted from the questionnaire and Mahryar and colleagues added 4 questions to it based on Iranian culture. Yousefi [19] used Rutter behavioral disorder questionnaire and announced its reliability coefficient as equal to 0/89

Results

In this study, 70 school children (7-11 years old) participated. Regarding gender distribution, 47% of the children with healthy mothers were girls and 53% boys. In the group with depressed mothers, the distribution percentage between boys and girls was 55% and 45%, respectively. Thus, there was not a meaningful difference between the two groups with respect to gender distribution. In the case group, average age was 9.70±2.70 and in the control group, it was 9.80±2.80, and the difference was not meaningful (Table 1). Table 2 shows that 35 (50%) mothers had depression and 35 (50%) mothers did not show any depression. The children of depressed mothers had more behavioral disorders score comparing to the control group (Table 3). The independent t-test, which compared the mean score of behavioral disorders among the children, showed a significant difference between the two groups in terms of aggression, hyperactivity, anxiety, social maladjustment, anti-social behavior, and attention deficit ($P < 0.005$) (Table3).

Table 1: Demographic features of students

Variable	Control group (Mean±SD)	Case group (Mean±SD)
Age (years)	9.80±2.80	9.70±2.70
Level of education		**Frequency (Percent)**
Elementary		10(17/9)
Secondary		16(20/7)
Third grade		17(22/1)
Fourth grade		13(19/3)
Fifth grade		14(20)

Table 2: Frequency distribution of mothers regarding depression (n=70)

Mothers' depression	NO.	Percent
Yes	35	0/050
No	35	0/050
Total	70	100

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Table 3: Mean/SD of behavioral disorders of children with or without depressed mothers

Variable	Group	Mean	Standard deviation	t	Degrees of freedom (df)	Significant
Aggressive behavior and hyperactivity disorders	**Students with depressed mothers**	2/85	0/133	4/25	139	0/000
	Students with no depressed mothers	2/01	0/035			
Depression	**Students with depressed mothers**	1/56	0/021	5/42	139	0/000
	Students with no depressed mothers	1/49	0/102			
Anxiety and social dysfunction	**Students with depressed mothers**	2/36	0/354	6/04	139	0/001
	Students with no depressed mothers	1/56	0/154			
Anti-social behavior	**Students with depressed mothers**	2/32	0/215	3/15	139	0/002

Discussion

The aim of this study was to compare behavioral disorders in children with depressed mothers. Mother is the center of family, and depression disorder can affect children's mental health and cause mental disorders. This finding can be explained by the claim that there is a risk of psychiatric disorders in children of a family with mother depression disorder as they model their mother. They are also influenced by the environment in which they grow. As you can see, all the assumptions of this study were confirmed, and therefore, we can say that there is a significant relationship between maternal depression and behavioral disorders in children. There is a difference between the students' aggressive behavior and hyperactivity disorder with depressed and non-depressed mothers. Previous findings [20-26] are in line with our findings. Mousavi and Ahmadi [27-29] found that somatic complaints, anxiety and depression, social problems, externalization and internalization scores were meaningfully higher in the case group. No significant differences in isolation, attention problems, thought problems, and anti-social behaviors were seen in either group. Weaver and colleagues [30] and Olive and colleagues [31] assessed the mothers' psychiatric problems and their effect on children's behavior. Their results are concordant with current study. In addition, mothers with depressive symptoms report lower self-efficacy in their ability to care for

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their children with asthma. A number of studies suggest increased rates of depression among children of both mothers and fathers, as well as grandparents with major depressive disorders [32]. A recent meta-analysis of data from 28 studies revealed that paternal depression is associated with a significant decrease in positive paternal parenting practices, which may serve as a mechanism by which depression is transmitted between generations [33]. McLearn et al. [34] also reported that children showed relatively poorer cognitive and social-emotional outcomes and relatively more behavioral problems when their mothers had anxiety and/or mood disorders. As noted elsewhere, the literature is much more extensive regarding the effects of maternal depression than of paternal depression, and suggests that emotional disorders can be transmitted via the father or the mother to the offspring, but similar to the findings reported in the present study, the risk is much greater when mothers experience depression [35]. Since the focus of this study was on an important part of the lives of parents and children, all the articles studied were consistent with the findings of the research [36-40]. Limitations in our study were quick and inaccurate response to the questionnaire, and incomplete questionnaires. Given that mental health can also be a determinant of peaceful life and healthy children, those interested in this subject must examine it to develop appropriate assumptions, including the relationship between behavioral disorders and affective family functioning, social support, and parenting style.

Conclusions

Policy-makers and clinicians should work together to provide readily available services such as screenings for pregnant women and mothers [41]. Programs aimed at reducing disruptions to family functioning are one avenue for decreasing children's risk for psychopathology. Parents, clinicians and policymakers should be sensitive to the fact that comprehensive programs are needed to not only treat mothers' depression but also offer family-level services. For example, depressed mothers could be provided with parent education classes to teach them effective skills and best practices for child rearing and discipline. Families with a depressed parent can partake in educational classes that teach constructive ways to handle conflict, in ways that promote problem-solving and conflict resolution. As more research on moderating factors is conducted, prevention and treatment efforts can be better targeted to those most at risk. Such comprehensive efforts that work together with mothers, children and families will certainly have a long-lasting and important impact on children's development [42].

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