

Attention-Deficit/Hyperactivity Disorder and Marital Satisfaction: The Preliminary Roles of Employment and Income

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Abstract

To explore the components of marital satisfaction in a group of 35 Iranian mothers of six to twelve years old children with attention-deficit/hyperactivity disorder (ADHD) in comparison with 35 mothers of normal children in Tehran, Iran, during year 2013, all mothers completed the demographic checklist and Golombok Rust inventory of marital satisfaction. Data were analyzed by performing descriptive statistics and independent t-test using the SPSS software version 21. There was no statistically significant difference between scores of marital satisfaction ($P = 0.162$) yet further data analysis revealed that marital satisfaction of employed mothers (22.27 ± 10.71 vs. 28.73 ± 12.3 , $P = 0.42$) and those mothers who had a monthly income of more than 6,000,000 Rials (22.95 ± 12.31 vs. 22.21 ± 11.67 , $P = 0.04$) was significantly better compared with the comparison group. It may be concluded that employment and reasonable income may contribute to a lower level of stress and improved relationship among mothers with ADHD children.

Keywords: ADHD, Employment, Income, Marital Satisfaction, Psychiatric Disorder

1. Introduction

The incidence of attention-deficit/hyperactivity disorder (ADHD) has been reported to be between 3% - 6% among seven to twelve year-old children in Iran (1). Children with ADHD may have inappropriate levels of inattention, impulsivity and hyperactivity. They tend to show higher than average rates of non-compliance and are at risk of developing comorbid disruptive behavior problems and internalizing problem (2). Minuchin's theory (1985) suggests that ADHD in children may lead to a greater marital conflict. In addition, marital dissatisfaction has been associated with increased family conflict (3).

One factor that may contribute to the development of co-morbid problems among ADHD children is the lack of agreement among parenting values, beliefs, and practices, which could result in marital dissatisfaction. This issue is also known as parental inconsistency. However, the effects of marital satisfaction have not been completely examined among families with ADHD children especially in comparison with normal children. Marital satisfaction refers to the couples' satisfaction on adjustment and coordination about the way of organizing their married life including the way to spend leisure time, sharing housework, relationship with others, and showing affection and feelings,

respectively (4).

Milwaky and Biderman's study of the families of children with ADHD in the USA found that families of children with ADHD had less affective attachment and more family conflicts and struggles. Moreover, less mental stability, higher rate of divorce, more house moving and job changes were reported among such families (4). Studies have shown that ADHD especially when it has co-morbidity with conduct disorders is associated with more family tension, struggle, mental pressure in the family, and lower efficacy in bearing of children. These issues could be associated with marital satisfaction. A stressful family setting could also increase ADHD among children with this problem (5).

A recent study of 200 Iranian parents of children with ADHD and 200 parents of normal children showed that the level of marital satisfaction (strongly agree level) was 2.8% lower among parents of ADHD (6).

2. Objectives

Mothers of children with ADHD may experience more stress, parental inefficacy and life pressures compared with mothers who benefit from normal children. They may

also be surrounded by low income and low economic status, which negatively impacts ADHD in children. However, there is a paucity of study on this issue in Iran. To partly address this gap in the literature, the present report aimed to preliminarily investigate the components of marital satisfaction among mothers of children with ADHD.

3. Materials and Methods

Thirty-five mothers of children with a diagnosis of ADHD (group 1) and 35 mothers of normal children (group 2) who had been admitted an outpatient psychiatric division of a hospital for children in Tehran, Iran, during year 2013, were randomly selected by convenience sampling. Eligibility criteria included: 1) having children aged six to twelve years old, 2) diagnosis of ADHD based on the diagnostic and statistical manual of mental disorders (DSM)-IV-TR criteria (7) (The diagnosis of ADHD was approved by the psychiatrist of the center), 3) Signing consent form by mothers for study participation, 4) lack of divorce history, 5) lack of separation of parents, and 6) having at least elementary education for mothers. Exclusion criteria included: 1) history of serious physical illness, mental retardation and other psychiatric disorders.

Interviews were conducted individually and participants were assured of the confidentiality of interviews and completing the questionnaires. An identification code was included on each questionnaire. Participants were ensured that discontinuing participation in the study would not affect their treatment and service utilization. A demographic checklist was used to collect baseline data on age, gender, education, socio-economic status, and family's monthly income, number of children in the family, and details of history of psychiatric and physical disorders among children and their parents.

Golombok Rust inventory of marital satisfaction (GRIM) is a valid international scale to assess marital satisfaction and measure couples' marital problems in the following areas: sensitivity, care, commitment, faithfulness, prosperity, cooperation, sympathy, affection, trust, security, sincerity, adjustment and empathy. The GRIMS is one of the most frequently used tools to measure marital satisfaction (8). In Besharat's study (2003), Cronbach's Alpha (reliability) was 92% for women and 94% for their spouses. Pretest-post test assessment within two weeks found that the reliability for the whole questionnaire was 94% (9). A two-week pre-test, post-test assessment of the questionnaire on 15 mothers showed a high reliability of 94% to meet the study aims. The validity of the questionnaire was also obtained from reviewing previous studies (9).

After signing the consent forms, and meeting all inclusion criteria to enter the study, demographic information was collected by a checklist. The GRIMS was then completed to assess marital satisfaction among mothers. Data was analyzed by performing descriptive statistics and independent t-test using the SPSS software (version. 21).

4. Results

Twenty-seven mothers had boys and eight mothers had girls in each group. The age range of the children was between six and twelve years old. The majority of mothers in the two groups were housewives and the family's monthly income ranged between three and six million Rials. The majority of mothers in group one (34.2%) had 12 years of education while the majority of mothers in group two (45.7%) had less than 12 years of education (Table 1).

Table 1. Demographic Information of the Participants (n = 70)^a

Variable	Group 1	Group 2	P Value
Gender			0.121
Male	27 (77.14)	27 (77.14)	
Female	8 (22.86)	8 (22.86)	
Age range, y	6-12	6-12	0.112
Mothers' job status			0.126
Housewife	26 (74.3)	26 (74.3)	
Employed	9 (25.7)	9 (25.7)	
Monthly income			0.133
< 3 million Rials	7 (20)	5 (14.3)	
3 - 6 million Rials	17 (48.6)	17 (48.6)	
> 6 million Rials	11 (31.4)	13 (37.1)	
Education, y			0.127
< 12	11 (31.4)	16 (45.7)	
12	12 (34.2)	10	
12 - 14	1 (2.8)	-	
> 14	11 (31.4)	9	

^aValues are expressed as No. (%).

The mean scores of the two groups were compared for the Golombok Rust Inventory of marital satisfaction (GRIMS). The mean score of group one was 29.11 ± 1.35 while the mean score of group two was 25.02 ± 12.79 , which indicates that there was no significant difference between the scores of the two groups in marital satisfaction ($P = 0.162$). The mean score of GRIMS among employed mothers was 22.27 ± 10.71 , and 28.73 ± 12.3 among mothers who were housewives. The mean score of GRIMS was higher among

housewives ($P = 0.42$) compared with employed mothers showing that employed mothers had more marital satisfaction compared with housewives. The mean scores of GRIMS were also compared with family's monthly income. There was a significant relationship between the mean scores of GRIMS and family's monthly income among employed mothers. The study results showed that families with an income of less than six million Rials had less marital satisfaction (22.95 ± 12.31) compared with families with more than six million Rials (22.21 ± 11.67) (Table 2).

The other variable that was measured in this study was the relationship between the mean scores of GRIMS and education status. The data analysis showed that there was no significant difference among mothers with education level of 12 years and less (27.53 ± 12.4) and mothers with university education (26.0 ± 11.4). The other variable that was measured was the relationship between the mean scores of GRIMS and age of mothers and their spouses. The study findings showed no significant difference between marital satisfaction and age differences of mothers and their spouses (Table 3).

5. Discussion

Mothers of children with a diagnosis of ADHD are not only psychologically affected but various aspects of their lives are also influenced. There is a complex interaction of environmental factors and psychological characteristics of parents with ADHD children. Some studies have shown that this group of mothers is not only depressed due to the burden of caring for their ADHD children, but ADHD behaviors also negatively impact other aspects of their lives, such as poor general health, low sense of competence and restrictiveness in parenting role (10). Stress experienced by parents of ADHD children also comes from other demands placed on parents (11). The difficulties faced by parents of ADHD children could adversely affect other aspects of individual, marital, and family functioning (12) therefore studying such issues is essential.

The present preliminary study showed the components of marital satisfaction among a group of children with a diagnosis of ADHD in comparison with normal children. The study results showed that there was no significant difference between the marital satisfaction of mothers of children with ADHD and mothers of normal children. This study emphasized the role of other factors and variables associated with marital satisfaction among mothers or may show that ADHD cannot be the only factor associated with marital satisfaction among the mothers in this study. This study is in contrast with the results of some other studies, which showed that marital dissatis-

faction among parents of children with ADHD were more common compared with parents of normal children (13).

Some studies have shown that ADHD is related to marital disturbances (14). In a study on the role of marital conflict and family emotional security on children's physical and psycho-social health, researchers found that marital conflict and family emotional insecurity were related to the lack of children's physical and psychosocial health. As expected, marital conflict inversely influences child emotional security showing the role of marital dissatisfaction in child insecure attachment to parents (15).

On the other hand, this study is in agreement with a study from the USA, which showed that parents of children with ADHD did not have lower marital satisfaction compared with parents of normal children (7). Parents' marital satisfaction plays a crucial role in maintaining life balance and emotional setting. Marital satisfaction is an effective factor that helps a person deal with tensions, and allows better performance during one's lifetime (16).

Marital satisfaction among parents, especially mothers of children with ADHD, needs further research and should be compared with marital satisfaction of parents especially mothers of normal children in more representative samples and in longitudinal studies. Although no significant relationship was found between marital satisfaction and ADHD, yet the study findings showed that marital satisfaction was more common among employed mothers compared with housewives. This study is in contrast with an earlier study, which showed that housewives had more marital dissatisfaction compared with employed women (17). In contrast, in another study, researchers found that employed women had higher marital satisfaction compared with housewives (18).

This finding is likely to be the result of having a routine daily life with no special changes among housewives compared with employed women. Marital dissatisfaction among housewives may influence mothers' behaviors with their children and also accelerate the misbehaviors of children with ADHD. The findings of this study need further research and should be explored in more representative samples.

One other important finding in our study was the relationship between monthly income and marital satisfaction. The study results showed that higher income among mothers was associated with more marital satisfaction. This issue is likely to be the result of higher economic facilities and convenience for these mothers, which could be associated with more comfort and emotional wellbeing. This study is consistent with the study of Frast (2002), who showed that in Tehran financial facilities were associated with more marital satisfaction among women (19).

This subject still deserves further research and could

Table 2. Comparison of Golombok Rust Inventory of Marital Satisfaction Between the Two Groups (n = 70)

Groups	No.	Mean Score	SD	t	df	P Value
Group 1	35	29.11	11.35	2.58	68	0.162
Group 2	35	25.02	12.79	2.58	68	0.162
Employed	18	22.27	10.7	1.99	68	0.4
Housewife	52	28.73	12.3	1.99	68	0.4
> 6 million Rials	12.31	22.95	24	0.04	68	0.09
< 6 million Rials	11.67	22.21	46	0.04	68	0.09

Table 3. Mean Scores of Golombok Rust Inventory of Marital Satisfaction Based on Education and Age Status (n = 70)

Groups	No.	Mean score	SD	t	df	P Value
12 years and less	21	26.0	11.35	0.484	68	0.633
More than 12 years	49	27.53	12.44	0.484	68	0.633
Seven years and less	59	26.42	12.32	1.03	68	0.306
Eight years and more	11	30.54	11.23	1.03	68	0.306

be emphasized as a factor, which could influence mothers' behaviors towards children with diagnosis of ADHD. If providing some financial support could result in more marital satisfaction among mothers, therefore, the relationship between this issue and decreasing ADHD symptoms among ADHD children should be studied by further longitudinal studies. In the present report, no relationship was found between marital satisfaction, ADHD and other studied variables such as age.

Although the present study was one of the few Persian studies that emphasized the roles of employment and family income on marital satisfaction among mothers of ADHD children in comparison with mothers of normal children yet there were several limitations. Several characteristics of this study suggest that these results should be interpreted with caution and argue for replication. First, the cross-sectional design of this study limits causal conclusions. Second, the numbers of samples in each group was limited and this issue limits generalizability of the study findings. Moreover, more longitudinal studies are still required to explore marital satisfaction and its components, which influence ADHD among children with diagnosis of this psychiatric disorder in comparison with normal children.

5.1. Conclusions

Research on families with ADHD children has primarily focused on ADHD rather than relational variables; these results point to the need to study the family systems of ADHD children in order to create a more sophisticated un-

derstanding of factors that contribute to or prevent the development of co-morbid difficulties such as income and employment.

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Footnotes

Authors' Contribution: Hamid Kachooei conceived and designed the evaluation and drafted the manuscript. Mercedeh Samiei participated in designing the evaluation, collected the clinical data and interpreted them, performed the statistical analysis, helped draft the manuscript and revised it. Behrooz Dolatshahi participated in the clinical data collection, helped to draft the manuscript and its revision. Reza Daneshmand participated in designing the evaluation, interpretation of clinical data, and statistical analysis. All authors read and approved the final manuscript.

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