



Comparison in stress of caring mothers of children with developmental, external and internal disorders and normal children

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Abstract

However, having a baby brings positive emotions such as happiness, sense of maturity and proud, parenting's issue could cause high level of stress and child's characteristics was a detrimental factor which can effect on parent's stress, so the aim of this research was comparison of stress of caring in mothers of children with developmental, external, and internal disorders and normal children. The study population included all mothers of children with developmental, emotional, and disruptive behavior disorders, and mothers with normal children in Hamadan (a city in Iran). 240 mothers (4 groups include 60 mothers) were chosen based on simple random sampling. Family inventory of life events and changes Mc Cubbin, Patterson & Wilson was used for assessing participants. The results showed that maternal stress in mothers with children who have diagnosis of disruptive behavior disorders were significantly more than of mothers of children with developmental disorders, emotional and mothers of normal children. The present study showed that disruptive behavior disorders in children have a greater impact on their mothers. So, we suggest approved psychological interventions for helping mothers of children with psychological problems, particularly children with external disorders.

Keywords: Child, Development, Disorder, Stress

Introduction

Individuals experience different levels of emotional resiliency when experience high level of anxiety [1], one of the reasons which can cause high level of distress and stress was having a child with psychological problems that may cause long-term adverse effects on individuals and family's function [2]. New born baby as a change may lead to high level of stress for parents which can threat their psychological adjustment. This change could

have negative effects on parent's stress, self-confidence, and marital satisfaction [3]. However, having a baby brings positive emotions such as happiness, sense of maturity and proud, parenting's issue could cause high level of stress. Previous findings shows parents experience higher level of stress, anxiety and depression in comparison with spouses without child [4]. Moreover, child's characteristics was a detrimental factor

which can affect on parent's stress, for example parents of children with special needs, mental and physical retardation experience higher level of stress in comparison to parents with normal child [5]. Because mothers in Iran have more frequent interaction with their children, they showed more parenting stress too. Moreover, severity and kind of child's problem play a pivotal role in level of mother's parenting stress [5,6].

Moreover, mothers who have experienced lower level of anxiety are more successful for educating social skills to their children [7]. Furthermore, mothers with higher level of parenting stress were more vulnerable to critic and punish their children continuously, and this mothers were more irritable and these condition make them more vulnerable for showing more psychopathological symptoms such as Conduct Disorder (CO) [8], Oppositional Defiant Disorder (ODD) [9], antisocial behaviors [10], and Attention Deficit Hyperactivity Disorder (ADHD) [11]. Previous findings show most of the women experience stress from two main source mainsource including biological (reproduction) and social responsibilities such as giving care to children, and their old parents [12]. Caring from a child with special needs is more demanding and can increase and intensify this social responsibility. Hence, mothers of children with special needs face more stress in comparison with mothers of normal children [13]. And high level of parenting stress has negative effects on positive parenting and child's psychological health [14].

Taking care of a child with psychological problems could threat care giver's physical and psychological health [15-19]. However, co dependence relationship can enhance satisfaction, it was unequal relationship which leads to high level of dependency, and self-blame in needful person and burning out and pressure of responsibilities in caregiver [20]. If this relationship lasted long-term, psychological adverse effects would be more serious and resistant; the bigger problem was that caregivers understand that they did not have any other option [21,22]. Caregivers experience

variety of emotional and cognitional status such as: initial bewilderment and shock, lack of knowledge, different diagnosis of psychological disorders, continuous role of being caregiver, and lack of social support. Most of the caregivers were women with more than one caregiver role and they were more vulnerable to experience deficiency in their others roles. Findings of previous studies show 20% of individuals who care from patients with psychosis as a caregiver have similar experience in the past [23]. For individuals who experience this role for the first time, giving care can cause more problems since they should adjust to different kind of economical and emotional problems and they experience more stress. Kwan reported that experiences of giving care could have significant effect on quality of life of caregiver [24].

Therefore, caring from a child with psychological problem has significant negative effects on family function and parenting stress. And higher level of parenting stress in mothers with child with psychiatric diagnosis in comparison with mothers with normal children was well-documented [25-27]. Moreover, one factor that plays an important role in the level of parenting stress in mothers was kind of disorders; different disorders have different effect on family member's psychological health. Disorders with acute start have different effect in comparison with chronic ones [6].

One of the most important questions in the literature review of parenting stress was that whether the kind of psychological problems of children can affect mother's parenting stress or not? Previous findings shows some detrimental factors such as: developmental function level [28], frequency of behavioral problems [29], level of parent's perception of child's condition [30], and the severity of child's problem have direct association on parenting stress too [31]. Gupta compared stress in parents of children with ADHA, cerebral palsy, and developmental disorders and concluded that level of stress was

higher in parents who have children with more behavioral problems [32]. By considering previous studies mothers of children with psychological problems experience the highest stress when become aware of diagnosis and this psychological distress could decrease their psychological quality of life and ability for positive parenting [6]. Moreover, mothers of these children face more conflict with their husbands and have more conflicts in their interpersonal relationships too [13]. Therefore, the aimed of this study was s investigating and comparing of stress in mothers of children with different psychological problem.

Method

This study was a causal-comparative research which aimed to investigate the relationship between caring stress in mothers and kind of psychological problem in their child include: developmental, internalizing, and externalizing problem. The statistical society of current study was mothers of normal children and mothers of children who received diagnosis of a) developmental disorders (mental retardation, disorders related to speech and language, disorders related to educational skills and pervasive developmental disorders), b) emotional and internalizing disorders (anxiety disorders, phobias, mood disorders, adjustment disorders, and somatization), c) behavioral or externalizing disorders (CO, ODD, and ADHD). Through simple random sampling, we collected 180 mothers of children with different psychological problems from occupational therapy and physiotherapy centers, and hospitals and schools for children with special needs. And we collected mothers with normal children from kindergartens. We allocated each mother to a one of the four groups based on her child's status and diagnosis (normal, or with developmental, internalizing, or externalizing disorders). Hence, we had 4 groups that each group has 60 participants. We used from Family Inventory of Life Events and Changes questionnaire for collecting data. This questionnaire's validity and reliability is approved in 1991 and was

translated to Persian by Agha Yousefi [33]. This scale has 71 items in 9 sub-scales that assess life events in the general areas of family conflicts, marital relations, births/pregnancies, money, jobs, moves deaths, and other and Patterson & Wilson. This self-report instrument was designed to assess the normative and non-normative family life events, transitions, and strains a family unit may have experienced during the past year Higher scores indicate greater stress. The alpha coefficient for the total scale was reported as 0.81, and test-retest reliability was reported as 0.80. Validity and reliability of this questionnaire was 75% and 72% in AghaYousefi's study [34]. Reliability and Alpha coefficient of this questionnaire in Van Riper's study was 80% and 81% [35]. In this study we used from Mean and standard deviation, one way ANOVA. Moreover, we used from tukey's post hoc test for assessing the significant difference of Means for each pair group.

Results

The Mean age of children were 5.97 ± 2.32 , and the Mean age of mothers of a child with developmental, emotional, and externalizing disorders were (34.23 ± 4.82 ; 29.94 ± 4.26 ; 32.37 ± 5.61) respectively. Table 1 shows the Mean and standard deviation in 9 sub-scale that assess life events and changes of stress in 4 groups.

Based on Table 1 Mean scores shows that as a whole conclusion mother of children who suffer from psychological disorders shows more stress than mothers with normal children significantly. Moreover, mothers who have children with behavioral disorders suffer from significant more stress in comparison with mothers who have children with internalizing and developmental disorders. Mothers of children with behavioral problems have the highest level of stress in some subscales include: family conflicts, marital relations, deaths, nursing, and stresses that are associated to rules problems. Moreover, mothers of children

with developmental disorders experience high level of stress in some subscales include: family conflicts, marital relations, pregnancy, nursing and money. Furthermore, mothers of children

with emotional disorders have higher level of stress after mothers of children with developmental disorders in these subscales: family conflicts, money, nursing and death.

Table 1 Mean and standard deviation (SD) of total stress and its subscales

Groups	Developmental disorders	Emotional disorders	Destructive behavioral disorders	Normal	
Subscales	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	p
Total score	114.26 (23)	107.27 (24)	129.38 (25)	91 (10)	0.001
Family conflicts	24.79 (6)	26.56 (7)	29.39 (9)	17.38 (3)	0.001
Pregnancy	5.89 (2)	4.40 (1)	5.49 (2)	4.19 (1)	0.009
Money	33.13 (11)	29.62 (7)	27.84 (6)	16.72 (5)	0.089
Job	18.83 (6)	13.38 (3)	14.39 (5)	11.14 (1)	0.127
Illness and nursing	13.39 (6)	13.22 (6)	13.58 (6)	7.94 (2)	0.072
Death	6.38 (3)	6.21 (3)	6.28 (3)	2.55 (0)	0.472
Marital relations	5.05 (2)	4.11 (1)	5.38 (2)	5.17 (2)	0.001
Rules	5.01 (1)	5.37 (1)	7.61 (3)	4 (0)	0.059
Lost	6.48 (2)	8.38 (3)	8.92 (3)	5.58 (1)	0.064

However, results in Table 1 illustrates that difference between 3 groups of mothers of children with psychological problems in the whole level of stress, family conflicts, pregnancy and parenting stress, money, jobs and rules is significant ($\alpha= 0.05$), differences in nursing, death, and marital relations is not significant. By considering 4 groups, there is significant difference in just marital stress. We

used from Tukey's post hoc test for examining pairs of groups which have significant difference in the whole score and subscales score. Furthermore, we used from ANOVA for examining the difference of score between groups. Before applying this statistical method for analyzing the data we examined the pre assumption for this method. For example the normality of statistical society was approved.

Table 2 Results of Tukey's post hoc test to comparing stress in 4 groups of mothers based on level of stress, family conflicts, pregnancy and parenting stress, money, jobs and rules*

Developmental normal	Emotional normal	Emotional developmental	Destructive normal	Destructive emotional	Developmental destructive	Sub-scales
Total score	7.26(0.01)	4.35(0.021)	23.33(0.001)	13.49(0.008)	25.14(0.001)	11.03(0.08)
Marital relations	0.85(0.013)	0.44(0.05)	0.38(0.83)	0.58(0.58)	0.52(0.93)	0.27(0.015)
Births/ pregnancies	-0.389(5.34)	2.62(0.79)	4.5(1.76)	0.56(6.46)	9.73(4.85)	0.60(2.76)
Money	0.55(0.001)	0.46(0.05)	0.33(0.60)	0.017(0.67)	1.76(0.74)	0.12(0.76)
Jobs	-9.83(0.789)	3.79(2.68)	5.90(1.67)	7.65(9.87)	16.58(7.75)	4.037(6.67)
Stress related to rules	0.003 (3.03)	0.095(0.001)	1.68(0.001)	0.036(0.66)	0.001(1.000)	0.98(2.74)

*Mean differences (p-value)

Based on Table 2, the whole score of stress in mothers of children with behavioral disorders was significantly higher than mothers with children who suffer from developmental and emotional disorders and mothers who have normal children. This table shows, however, mothers of children

with behavioral and developmental disorders have higher level of stress in comparison with other groups in the whole score of stress, stress related to family conflicts, pregnancy, money, jobs, and rules; these mothers have not any significant difference with each other.

Discussion

The aim of this study was comparing caring stress in mothers of children with developmental, internalizing, and externalizing disorders. Previous findings show caring from a child with psychological problem has significant effect on family. Moreover, parents of children with psychological problem suffer from more parenting stress in compare with parents of normal children [25-27]. However, the kind of problem and other family factors can moderate this effectiveness. Acute disorders which have sudden start in compare with chronic disorders have different effects on families. Furthermore, one disorder in different times can have different effect on family life [6].

The structure of family and economical status are detrimental factors in family stress. Parents who have protective relationship in compare with a single parents who are less able to be protective, can be responsible for child's need more effectively. Based on the findings, external disorders in families who suffer from economic problems are more and the stress of economical and emotional problems is common in these families too. Stress in these families can intensify psychological problems, it is clear that there is a relationship between family problems and psychological problems in children [20].

"Caring stress" refers to a broad range of somatic, psychological, emotional, social, and economical problem which can be experienced by family members of patient or client [35]. Child's disorder has significant effects on family member's relationships, and in the most case this effect is negative [13]. Results of currents study showed that there is significant difference between mothers of children with externalizing and behavioral problems and mothers of children with developmental, emotional, and normal. Therefore, stress in mothers of children with psychological problems are more than from mothers of normal children and by considering subscales firstly, mothers of children with behavioral problems and secondly mothers of children with developmental problems got the highest score. The results of this study are analogous with others which showed that families

of children whit behavioral problems such as: ADHD, CD, and ODD suffer from significant stress [26,27,36,37]. These stresses result in problems in parents and children interactions, siblings, and marital conflicts [26]. Furthermore, results of previous findings show mothers of children with psychological disorders have less level of parenting competent and marital satisfaction and higher score in family stress and adjustment problem in compare with mothers of normal children [27,36]. Moreover, the levels of parenting stress and marital conflicts have direct association with adversity of child's psychological problems [37] and external disorders brings more stress for families rather than internal disorders [27,36]. Mothers of children with behavioral disorders, particularly mothers of children with ADHD are worry about negative beliefs of others about their children and parenting style and abilities [38]. The main reason of stress in mothers of children with ADHD, CD, and ODD was found the more probability of psychological problem in siblings of these children and grief reaction in mothers when understand that their children suffer from psychological disorder [39]. Moreover, sometimes parents suffer from feelings such as guilt or shame which can increase their level of stress. There are some reasons based on previous findings which can justify the high level of stress in mothers of children with destructive behavioral problems such as CD, ODD, and ADHD. For example these children have more interactions with other individuals in society than others disorders, go to normal schools, and their mothers have direct affect on the reducing their problems, therefore, these mothers need more to stress management programs which can help them significantly.

The novelty of this study is that stress in mothers was evaluated based on their child's psychological problem, therefore, the results of this study was unpredictable. We cannot generalize findings of this study just to mothers of children with developmental, internalizing and externalizing problems. Moreover, we

propose future studies consider intensify of child's problem.

Conclusion

The aim of this study was comparing caring stress in mothers of children with developmental, internalizing, and externalizing disorders. Previous findings show caring from a child with psychological problem has significant effect on family. and, The present study showed that disruptive behavior disorders in children have a greater impact on their mothers. So, we suggest approved psychological interventions for helping mothers of children with psychological problems, particularly children with external disorders. So, we suggest approved psychological interventions for helping mothers of children with psychological problems, particularly children with external disorders. There were some limitation for this study, for example, we did not divide groups based on the difference in intensify of symptoms and we did not have groups of children with more than one diagnosis.

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Study design: NZ, NH

Data collection and analysis: NZ, SA

Manuscript preparation: NZ, SZ

Conflict of Interest

"The author declares that they have no competing interests."

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