The psychological effects of having a child with a speech disorder

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Abstract

Background: The experience of having a child with special needs can be like a death in the family experience. Several studies have been conducted on the burden and expressed emotion and the results have shown that having a child with special needs creates psychological pressure.

Objectives: The present study compares the caregiver burden and expressed emotion in mothers with or without children with a speech disorder.

Methods: To achieve the goal of research, 50 mothers of children (6 to 8 years old) with speech disorder in clinics of Isfahan University of Medical Sciences and 50 mothers without children (6 to 8 years old) with speech disorder in elementary schools in Isfahan were chosen by a targeted sampling method.

They responded to instrument of family burden Inventory and short form of self-expressiveness in the Family Questionnaire. Data was analyzed between these two groups by utilizing the independent t-test and Spearman’s correlation coefficient.

Result: The findings indicated there was a statistically significant difference between these two groups of mothers in psychological burden (p<0.05). Mothers with a child who had speech disorder had experienced more objective and subjective burden than mothers without children with speech disorders. Besides, the results revealed that there was a direct significant association between caregiver burden and expressed emotion (p<0.005). While the findings showed that there was no significant difference between mother with or without children with speech disorder in positive, negative expressed emotion (p > 0.05).

Conclusion: According to these findings, it seems that psychological factors of burden and expressed emotion in families of children with speech problems can be one of the factors effecting the whole of the family members especially mothers. Dealing with these issues impact on the family therapeutic and rehabilitation process and create the warmth and hope space to work with mother-child problems.

Key words: expressed emotion, burden, speech disorder, mothers
1. Background
Speech disorders involve articulation problems such as the production of speech sounds, disrupted speech patterns, and difficulties with pitch, volume, and quality in voice modulation (1). In other words, Childhood Speech Disorder refers to children who have difficulty in speaking clearly. It adversely affects the child’s social, psychological, academic and future occupational success (2). It can also generate a number of dysfunctional changes in the family organization and interactions. Families may accommodate to the symptoms of the illness (3). To date, family distress and burden research in psychiatry has focused mainly on schizophrenia and affective disorders, with other diagnostic categories being relatively unexplored (4). Also, caring for someone with a mental illness can elicit strong emotional reactions including guilt, shame, despair and anger (5). These emotional reactions can be associated with change in expressed emotion (EE), in particular, criticism and hostility and over-protection (7). High EE is typically characterized by critical attitudes, sometimes hostility, comparatively low warmth and/or needs for control on the part of one person towards another, typically a care towards a person with a chronic mental disorder (Leff and Vaughn, 1985). Conversely, low EE is inferred from ratings of minimal or no criticism, the absence of hostility and evidence of spontaneous positive regard and/or warmth towards the individual with a diagnosis. A previous study has shown that the mothers of children with behavioral disorders have been shown to express higher EE, few positive comments and less warmth towards their children than parents of children without such difficulties (8). The assumption underlying the EE construct is that the way parents talk about their children is indicative of the way they treat them (9). There is evidence that parents with high EE demonstrate more antagonistic, negative, harsh and intrusive behaviors when interacting with their child, compared with low-EE parents (8). On the other hand, the burden includes multiple responsibilities such as financial costs, physical care of the patient and compromises on the personal freedom and leisure activities and has been reported to affect the course of illness (10), in other words, literature on this topic distinguishes an objective and a subjective dimension. Objective burden refers to practical problems, such as disruption of family relationships, constraints in social, leisure and work activities, and financial difficulties. Subjective burden describes the psychological reactions which family members experience, e.g. feeling of loss, depression, anxiety, and embarrassment in social situations. The nature of the patient’s illness appears to influence the ways caregivers react to the patient’s behaviors (11). However, the families must cope with the stress of the patient’s disruptive symptoms, changes in household routines, strained social relations within the family, loss of social support, diminishing opportunities for leisure time and deteriorating finances (12). Studies assessing the burden on families with children with autism, physical and intellectual disability have found that heavier costs and other burdens develop in the course of raising such children than in raising children without special difficulties (13).

2. Objective
According to above contents, the aim of this review is to collate, compare and summarize the available evidence on the assessment of burden, EE in the caregiving experience of mother with or without children with a speech disorder.

3. Patients and Methods

3.1. Participants and Plan
This study was conducted in 2012 in Isfahan; the present study is a causal-comparative study. The sample consisted of two groups: 50 mothers of children (6 to 8 years old) with a speech disorder and 50 mothers of children (6 to 8 years old) without a speech disorder. The sample of the first group was chosen by targeted sampling in speech disorder clinics of Isfahan University of medical sciences. The other group was chosen from elementary Schools in Isfahan. This group was matched for age, level of education and the state of marriage. The inclusion criteria were as follow:

1. Diploma as the minimum level of education of mothers.
2. Age ranged between 25 and 40.
3. Without any severe mental and physical illnesses.
4. Not be divorced or not be responsible for children.

3.2. Measurements
Socio-demographic data sheet
A socio-demographic data sheet was used to record personal information of the participants including age and education of the mothers and children.

Family Burden Questionnaire
The FBIS (14) is a 25-item semi-structured interview. This scale measures objective and subjective aspects of burden and it contains six general categories of burden, each having two to six individual items for further investigation. Subcategories include: financial burden, effects on family routine, effects on family leisure, effects on family interaction, effects on physical health of family members and effects on the mental health of other family members.
Each item is rated on a three-point scale, where 0 is no burden, 1 is moderate burden, and 2 is severe burden. Satisfactory internal consistency and significant correlation with patients’ psychopathology and social dysfunction were reported (14). The scale was translated into Persian with a high level of equivalence to the original English version; it demonstrated good internal consistency with Cronbach’s α = 0.72 for the scale and sub-scales (15).

**Short form of Self-Expressiveness in the Family Questionnaire (SEFQ; Halberstadt et al., 1995)**

Self-Expressiveness in the Family Questionnaire is a self-report measure, which is designed to examine the frequency of an individual’s emotional expressiveness within the family. It consists of 24 statements; 12 statements describe positive expressiveness (e.g. “Expressing deep affection or love for someone,” “Offering to do somebody a favor”) while the other 12 statements describe negative expressiveness (e.g. “Showing contempt for another’s actions,” “Expressing momentary anger over a trivial irritation”). The SEFQ has received support for its psychometric properties including high internal consistency of its subscales, test-retest reliability and validity and reported Cronbach’s α’s of 0.88 and 0.82 for the positive and negative subscales respectively (16). Respondents used 5-point Likert scales ranging from strongly disagree (1) to strongly agree (5).

### 3.3. Procedure

All participants (mother with children with speech disorder and without speech disorder) completed 3 questionnaires, including Socio-demographic data sheet, family burden Inventory and short form of self-expressiveness in the Family Questionnaire. Then collected data was analyzed by SPSS-13 software. Data was analyzed between these two groups by utilizing independent t-test and Spearman’s correlation coefficient.

### 4. Results

In Table 1, and 2 the results of socio-demographic characteristics of all of the participants are indicated. Regarding the results of Table 3, the t-test indicated that there was not a significant difference between the items of negative expressed emotion (t=0.67, p=0.05, df=98), positive expressed emotion (t=0.67, p=0.05, df=98), expressed emotion (t=1.14, p=0.05, df=98) and there is a statistically significant difference between mother burden in the two groups (t=3.50, p=0.05, df=98). Regarding the results of Table 4, the Spearman’s correlation coefficient between two variables caregiver burden and expressed emotion represents a significant positive relationship between them (r = 0.395, P < 0.005).

<table>
<thead>
<tr>
<th>Table 1: Socio-demographic: Level of mother’s education in research</th>
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</thead>
<tbody>
<tr>
<td><strong>Level of education</strong></td>
</tr>
<tr>
<td>Diploma</td>
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<tr>
<td>Higher diploma</td>
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<tr>
<td>Bachelor</td>
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<td><strong>Total</strong></td>
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<th>Table 2: Socio-demographic: Level of age mother and children</th>
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<tbody>
<tr>
<td><strong>Age of mother</strong></td>
</tr>
<tr>
<td>Group with problem</td>
</tr>
<tr>
<td>Group without problem</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<table>
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<tr>
<th>CHILDRN</th>
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<tr>
<td><strong>Group with problem</strong></td>
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<tr>
<td>Group with problem</td>
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<tr>
<td>Group without problem</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

Abbreviations: n<sub>i</sub>, absolute frequency; SD, Standard Deviation
Table 3: Mean, SD and t-value of total and subscales of expressed emotion and mother burden with children with speech disorder (Group 1, n=50) and without children with speech disorder (Group 2, n=50) groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>group</th>
<th>Mean±SD</th>
<th>Df</th>
<th>P value</th>
<th>t</th>
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</thead>
<tbody>
<tr>
<td>Positive emotion</td>
<td>1</td>
<td>31±1.4</td>
<td>98</td>
<td>0.05</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>30.6±1.6</td>
<td>98</td>
<td>0.05</td>
<td>0.67</td>
</tr>
<tr>
<td>Negative emotion</td>
<td>1</td>
<td>18.6±1.3</td>
<td>98</td>
<td>0.05</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>17.50±1.4</td>
<td>98</td>
<td>0.05</td>
<td>0.67</td>
</tr>
<tr>
<td>Expressed emotion</td>
<td>1</td>
<td>49.40±1.15</td>
<td>98</td>
<td>0.05</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>48.50±1.21</td>
<td>98</td>
<td>0.05</td>
<td>1.14</td>
</tr>
<tr>
<td>Mother Burden</td>
<td>1</td>
<td>1.2±1.2</td>
<td>98</td>
<td>0.05</td>
<td>3.50</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>6.8±3.4</td>
<td>98</td>
<td>0.05</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Abbreviations: SD, Standard Deviation; Df, Degree of freedom; t, Student’s t - test

Table 4- Spearman’s coefficient correlation between burden and expressed emotion

<table>
<thead>
<tr>
<th>burden</th>
<th>Expressed emotion</th>
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<tbody>
<tr>
<td>-</td>
<td>0.395*</td>
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</table>

*P ≤ 0.005

5. Discussion
This study was performed for the determination of the difference in caregiver burden and expressed emotion in mothers with or without children with speech disorder. Results showed that there are not significant differences between expressed emotion and subscales in the two groups. Previous studies have shown that EE seems to be linked to other psychiatric conditions such as: major depressive disorder (17), bipolar disorder (18), eating disorder (5), schizophrenic (12, 19) or medical conditions (20), although few studies have been carried out, and there is no general agreement in the literature (21, 22). However, there is now considerable evidence in the psychiatric literature that criticism occurs when relatives attribute patient problems to factors controllable by the patient (23). Also, previous findings indicated that over-involvement and criticism are not always strongly related, and it is often only criticism that predicts relapse (24). Also, Kolaee et al (2010) shows that EE level in mothers with schizophrenia patients seems to have a strong association with knowledge of illness, problem-solving skills, communication skills and coping strategies (12). Hence, speech disorder is less distressful and puts less pressure on the family than children with mental health problems and the family knowledge and the information on speech disorder is more available than that on mental health. So it can be argued that these results are in concordance with our results which is that there is not significant difference in negative emotion expressed in the two groups. This means that previous research has concluded conflicting findings regarding these associations. The results of a current study reveal that there is a significant difference in caregiver burden (mother) with or without children with speech disorder; this result is in line with previous research. Previous studies have shown that the presence of behavioral problems, psychotic and affective symptoms increases the risk of having greater family burden. As an example; Navidian and Bahari (2009) showed that family caregivers in mental health experienced a moderate to severe level of burden (25). Magliano et al (2005) observes that objective burden was higher in brain diseases, and subjective burden was higher in schizophrenia and brain disease patients than in the other groups (11). The current study finding shows that there is a positive significant association between caregiver burden and expressed emotion. According to Kolaee et al (2010) Psychoeducation consistently produced greater reduced burden on mothers and reduced positive symptoms in patients over the intervention and
follow-up periods, compared with the other two treatments. On the other hand, behavioral family management significantly reduced EE in mothers (12). Carra et al (2012) shows that the highly-expressed emotion relatives reported more subjective burden of care in disturbed behaviors and adverse effects areas (26). The two dimensions seem actually related and dependent on relatives' appraisal of the patients' condition rather than on his/her illness severity (27). If long-term caregivers believe that they are not in control of the patient's illness, they feel more stress and depression, have more negative views of the impact of care (28) and the lack of proactive strategies based on avoidant copings, may increase their levels of burden (29). Based on these results and previous research, it is suggested that family's awareness of the speech problem, expressed emotion and caregiver burden would be needed for early prevention and diagnosis; also there is a need for interventions aimed at improving the impact of the caring role in areas of caregivers' lives such as work and leisure time. The study was carried out at two clinics in Isfahan city that may limit its generalisability to other populations. Access was based on referral by two clinics (clinics of Isfahan University of medical sciences and Ahora speech disorder clinic) could have affected the generalisability of the findings.

References
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