International Conference on Education and Educational Psychology (ICEEPSY 2012)

The effect of rational-emotional training on mothers' mental health condition of children with mental retardation

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Abstract

Mental retardation in children is a basic problem for families that produce stress. These stresses influence negatively on mental health condition of their parents especially mothers. The aim of the present study was to determine the effectiveness of rational-emotional training on mothers' mental health status of mental retarded children in exceptional center of Shahid Alavianin of Gonabad in the school year 2010- 2011. The research method is experimental accompanied by post-test and pre-test control group. The numbers of sampled individuals were 40, (20 individuals as case group and 20 as control group) were chosen and sampled by using random sampling method. Primarily, in both group pre-test was performed by general health questionnaire (GHQ- 28) was performed. Next, the case group underwent cognitive- behavioural training for 10 forty- five – minute sessions. At the end of training, post-test was performed in both groups. The data gathered were analyzed using SPSS-16 software program and the independent T-test- differences between means. The results suggested that there were significant differences between the variance of mean scores of general health and its components, namely, physical complaints, anxiety, social, adjustment disorder and depression in the two case and control group (p<0/05 ). According to the results, rational-emotional training has a significant positive effect on mothers' mental health condition of mental retarded children. Thus, as a decreasing stress strategy in these mothers recommend rational-emotional training programs by specialists for them.

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Keywords rational-emotional training, mental health, mental retarded children
Introduction

Although, Absence of psychological stress is equal to silence and inactivity in human and some levels of stress is required for activities but constant and severe psychological stresses has negative effect on one’s mental aspects. People who face psychological stress may have physical, mental and behavioural defects. Psychological stress may have various sources like having a mentally retarded child (Chen and Tang, 1997). In every culture there are people with low social abilities. These people have difficulties in adaptability with environment and need special cares (Ahadi and Bani Jamali, 1991). Mental retardation is one of the major problems in childhood and adolescence and its prevalence is about 3% (Naderi and Seif Naraghi, 2005). Mental retardation is usually considered as a familial problem which has irreversible effect on family mental health specially on mothers who have the traditional role of child care and also have higher level of responsibility (Olsson and Hwang, 2001; McConkey et al. 2007). Studies have shown that mothers with mentally retarded children have more stress and emotional crises and their mental and physical health is more fragile (Gupta, 2004). When a mentally retarded neonate is born, the specific needs and cares required which lead to many problems for their family. Mental difficulties happen especially for mothers who are imposed the most as they are the major supporter of the child. These special needs will render mother’s fatigue and financial, medical and educational problems. Parents may show various reactions such as feeling guilt or anger and interpersonal difficulties (Chen and Tang, 1997). These parents are more probable to face destructive social, financial and emotional problems (Khamis, 2007). Studies performed in Iran show that most of researches in this field have been involved in studies regarding care and rehabilitee of retarded child and there has been no specific study about maternal health. By considering the important roles of women in child health promotion and their important role as a mother and also their effect on family mental health, performing studies which focus on maternal mental health is quite necessary. Researchers have tried to propose methods which promote one’s mental health. One of these methods is cognitive behavioural therapy (CBT) like rational-emotional treatment of Albert Ellis. Ellis believes that people hurt themselves emotionally by making irrational beliefs intrinsic, so it is so difficult to achieve and keep mental health (Ellis, 2001). Ellis’s treatment methods are based on this fact that one’s emotions are derived from beliefs, assessments, interpretations and reactions to environment (Gerald Corey, 1937). Some researchers have also shown the effect of rational-emotional methods on improvement of mental health. Studies show that patients who are treated with rational-emotional methods have a significant improvement in social, familial and
cognitive interactions (Kadden, 1992). Rational-emotional treatments have been effective in anxiety reduction (Egbokhuku et al. 1997; Warren et al. 1976), anxiety disorders treatment (Cowan and Brunero, 1997) test anxiety (Ergene, 2008), depression (Xu, 2006; Flanagan et al. 2010; Navabifar et al, 2008) and somatoform disorders (Tazaki and Landlow, 2006). The advantages of this method on general mental health have also been proved (Gilbert et al, 2005). Studies also have shown the effect of rational-emotional methods on different aspects of mental health such as social skills, anger management, depression (Flanagan et al, 2010) and stress control (Abrams and Ellis, 1994).

Leaf et al (1992) showed rational-emotional methods’ effect on depression reduction in a group of students. Most studies have evaluated the therapeutic or group therapy effect of rational-emotional methods on mental disorders or mental health aspects. Rosenbaum in 1991 showed the effect of rational-emotional teaching on locus of control, rationality, and anxiety in primary school students.

Our study was performed by considering the important role of mothers in retarded child’s family members’ mental health. Our general goal was to determine rational-emotional training effects on maternal mental health in mothers with mentally retarded children.

Hypotheses

1. Rational- emotional training effects on mental health of mothers with retarded children.
2. Rational- emotional training effects on anxiety reduction in mothers with mentally retarded children.
3. Rational- emotional training effects on depression reduction in mothers with mentally retarded children.
4. Rational- emotional training effects in increasing social function in mothers with mentally retarded children.
5. Rational- emotional training effects on somatization reduction in mothers with mentally retarded children.

Methods

This research is an experimental study with a case and control double group in a pre- and post-test research design. The population consisted of mothers of all the students (110 persons) in Shahid Alavian exceptional school in Gonabad who were educating between 2010 till 2011. Forty mothers were selected randomly and then were divided into 2 groups randomly (each group containing 20).
Measures

Measurement tool in this study was General health questionnaire (GHQ-28) to assess the maternal mental health. This questionnaire is a well-known questionnaire for screening of mental disorders (Henderson, 1990). Goldberg (1979) has designed this questionnaire to distinguish people with mental disorders from general population who were referred to clinics. GHQ-28 contains 28 questions and it is derived from complete GHQ questionnaire which has 60 questions. GHQ-28 includes 4 scales and each one has 7 questions. These 4 parts are somatization, anxiety, social dysfunction and depression. All questions have 4 options to answer and 2 methods of scoring exist. One of them is GHQ scoring method in which values are given in 0, 0, 1 and 1 to each question so the total score is 0 to 28. The other method is Likert scoring method in which values are given as 0, 1, 2, 3 to each questions and total score is 0-84. In both scoring methods lower score means better mental health level.

Studies on GHQ-28 questionnaire have shown its high validity and reliability. Williams, Marri and Goldberg (1988) reported the reliability coefficient of 0.95 for this questionnaire which was filled by 853 patients (Taghavi, 2001). Yakoubi’s research has illustrated the sensitivity of 86.5% this questionnaire on general population at the best cut off point of 23, and it’s specificity and reliability to stand at .82 and .88, respectively; and that this cut-off point discriminates the mental condition of healthy individuals from unhealthy ones (as quoted by Tavakolizadeh, 2011). We used Cronbach’s alpha to determine the reliability coefficient which was 0.87 in pre-test and 0.84 in post-test for the whole questionnaire and for subgroups of somatization, anxiety, social dysfunction and depression they were 0.84, 0.88, 0.36 and 0.88, respectively in pre-test and 0.75, 0.44, 0.60 and 0.69, respectively in post-test.

The procedure of research was such that after random selection of case and control groups, pre-test was performed on both groups. Then rational-emotional trainings were performed in 10 sessions (each session’s duration was 45 minutes). These sessions included background, explanation of A, B and C theory, cognitive trainings (expressing irrational beliefs, giving home works for thought registration, home work evaluation of previous session, and teaching of positive thinking, positive learning and challenging irrational beliefs), emotional trainings (visualizing, home works and outcome assessment), behavioural trainings (relaxation, systematic desensitization, home works, self imaging in unpleasant and anxious situations recommendation on how to keep and promote rational-emotional theory outcome). At last post test was performed. We used SPSS version 11.5 software to...
analyze data. Both descriptive and analytic analyses were used. As our data had normal pattern we used independent t-test -differences between means.

**Results**

The outcomes related to the study hypotheses are shown in tables 1-5

<table>
<thead>
<tr>
<th>Table 1: independent t test outcome in mental health of case and control groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Case</td>
</tr>
<tr>
<td>Control</td>
</tr>
</tbody>
</table>

According to table 1, the mean of mental health score in case groups was significantly less than controls, Hence, the first hypothesis of study is confirmed with 95% confidence.

<table>
<thead>
<tr>
<th>Table 2: independent t test outcome in anxiety in case and control groups</th>
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<tbody>
<tr>
<td>Groups</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Case</td>
</tr>
<tr>
<td>Control</td>
</tr>
</tbody>
</table>

According to table 2, the mean of anxiety score of case group was significantly less than that of control group (p< 0.05), so the second hypothesis of the study is confirmed with 95% confidence.

<table>
<thead>
<tr>
<th>Table 3: independent t test outcome in depression in case and control groups</th>
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</thead>
<tbody>
<tr>
<td>Groups</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Case</td>
</tr>
<tr>
<td>Control</td>
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</tbody>
</table>
According to table 3, the mean of depression score of case group was significantly less than that of control group (p< 0.05), so the third hypothesis of study is confirmed with 95% confidence.

Table 4: independent t test outcome in social dysfunction in case and control groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>T</th>
<th>Freedom degree</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>20</td>
<td>-1.70</td>
<td>2.51</td>
<td>0.61</td>
<td>-2.35</td>
<td>38</td>
<td>0.01</td>
</tr>
<tr>
<td>Control</td>
<td>20</td>
<td>0.42</td>
<td>2.85</td>
<td>0.65</td>
<td></td>
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</tbody>
</table>

According to table 4, the mean of social dysfunction score was significantly lower in case group (P<0.05) in comparison to the control group so fourth hypothesis of the study is confirmed with 95% confidence.

Table 5: independent t test outcome in somatization in case and control groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>T</th>
<th>Freedom degree</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>20</td>
<td>-3</td>
<td>4.04</td>
<td>0.92</td>
<td>-3.61</td>
<td>38</td>
<td>0.0005</td>
</tr>
<tr>
<td>Control</td>
<td>20</td>
<td>-0.77</td>
<td>1.86</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

According to table 5, the mean of somatization score was significantly lower in case group in comparison with control group (p<0.05) so the fifth hypothesis of the study is confirmed with 95% confidence.

**Conclusion**

Our results show that rational-emotional trainings lead to significant improvement in maternal mental health. These results are compatible with Warren et al. (1976), Flanagan et al. (2010), Cowan and Brunero (1997), Xu (2006), Tazaki and Landlaw (2006), Egbochuku et al. (2008), Navabifar et al. (2008), Gilbert et al (2005), Zare and Shafiabadi (2007) studies. These results show that rational-emotional trainings is effective in improvement of mental health and its various components (reduction of somatization, increase of social function, reduction of anxiety and depression) in mothers of children with mental retardation and can be used as a therapeutic method. It seems that these trainings lead to changes in one’s beliefs and provide knowledge to face difficulties of having a mentally
retarded child so the psychological stress will be reduced. Group therapy also can reduce psychological stress by providing sympathy and difficulties sharing.

Our results also showed that rational-emotional trainings decrease maternal anxiety significantly so the second hypothesis of the study was confirmed with 95% confidence. This result is compatible with Egbochuku et al. (2008), Warren et al. (1976), Cowan and Brunero (1997), Ergene (2008) results in which the effect of rational-emotional therapy was assessed on anxiety reduction.

Mothers with mentally retarded children experience many psychological stresses such as divorce, depression and anxiety. The effect of having a mentally retarded child on mothers depends on their cognition of issue and their facilities to face this problem. These mothers usually have irrational beliefs about themselves. Strategies to increase their resistance are necessary. These strategies can increase self-confidence and reduce anxiety and stress. Our results show that these trainings plans have been effective in maternal anxiety reduction.

This study also showed that rational-emotional trainings leads to a significant reduction in depression in mothers with mentally retarded children so the third hypothesis of study was confirmed with 95% confidence. This study is compatible with Navabifar et al. (2008), Xu (2006) and Flanagan et al. (2010) which have shown the effectiveness of cognitive group therapy on depression reduction. There are many methods to increase resistance due to cope problems. We can mention the rational- emotional methods as one of the best methods in this field. Our results also showed that rational-emotional trainings increase social function significantly so the fourth hypothesis of the study was confirmed with 95% confidence. This result is compatible with Flanagan et al. (2010), Ghasemi Harandi (1997); Arabi (2001) studies.

Our study also showed that rational-emotional trainings decrease somatization significantly so the fifth hypothesis of the study was confirmed with 95% confidence. This result is compatible with Tazaki and Landlaw about the effect of cognitive-behavioral interventions on reduction of somatoform disorder.

We understand from this study’s results that rational-emotional trainings are an effective method in improvement of maternal general mental health. So it is recommended to use these trainings to promote the mental health of mothers with mentally retarded children.

By considering the importance of this issue it is recommended to evaluate the effect of rational-emotional trainings on fathers’ mental health as well.
Acknowledgement

We would like to thank the deans of Shahid Alavian exceptional school. We also wish to thank all mothers who participated in this study because of their efforts. The authors wish to express their sincere gratitude to Farzan Institute for Research and Technology for technical assistance.

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