Comparative study of the effectiveness of mixed method (Rational-Emotive-Behavioral Therapy and Reality Therapy) and Reality Therapy on the Hope of Breast cancer Patients

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ABSTRACT: Back ground: Today Cancer is among the most important global health problems. As Cancer has awful effects on Psychological aspects of patients surviving him on one hand and returning her to healthy life style on the other hand is paramount goal. The aim of this study is to assess the effectiveness of Rational-Emotive-Behavioral therapy on the Hope of Patients with Second Stage /Invasive ductal breast carcinoma in Tehran. Material and method:This survey was quasi-experimental thereby 60 Breast cancer patients referring to cancer research center of Shohadaye Tajrish hospital were selected based on their score (≤24 Snyder Adult Hope Scale as pre test). They were divided randomly in 2 experimental and a control group. (20 patients per each).Mixed method of Rational – Emotive- Behavior Therapy and Reality Therapy (mixed) and reality therapy were applied individually as counseling method. Each session lasted between 30 to 45 minutes for 8 sessions. After interventions, Snyder AHS as post test were applied for each group. Results:The meaningful differences of scores before and after intervention revealed us that these techniques have been efficient and effective in increasing hope among breast cancer patients.(P<0.001 ,Eta=0.38) however No meaningful differences were demonstrated between these two approaches. Conclusion: It is suggested to apply mixed method and also RT to increase Hope in breast cancer patients and also to preserve fertility before cancer treatment.

Keywords: Breast Cancer, Rational Emotive Behavior Therapy and Reality Therapy, Mixed Therapy, Hope

INTRODUCTION

Cancer is one of the most important health problems around the world and patient suffer from stress and mental problems after diagnosis and treatment process. Cancer patients have high levels of psychological problems which the scope of these disorders are different from depression, anxiety, lack of coping with the disease and self-esteem reduction, body image to emotional disorders, fear of recurrence and death and become hopeless [1]. Breast cancer is the most common cancer among women worldwide. Incidence rates increased rapidly predominantly in women 50 and older [2]. in the 1980s due to the increased detection of smaller, earlier-stage cancers with the widespread adoption of the screening of mammography among asymptomatic women [3]. Breast cancer affects Iranian women at least one decade younger than their counterparts in developed countries [4]. Advances in diagnostic and treatment could result in increased survival. Therefore, coping with breast as a chronic disease has become a common phenomenon [5]. Previous evidence has indicated that breast cancer patients may not show obvious evidence of disease, but they do suffer from a number of problems which persist long after initial
treatment[6-7] such as physical problems (pain and fatigue), psychological problems (fear of recurrence and inability to cope with the disease), and psychosocial problems (family worries and sexual problems)[8]. Therefore, there is a great need to provide education, information and support over time [9]. Most of women because of these problems become: hopeless, agency thinking is weak in them, and don’t have motivation for targeting and recognizing pathways to gain goals. During the treatment of breast cancer, patients suffer psychological morbidity, and hope is one important factor in maintaining psychological health [10]. Psychological interventions may improve the quality of life in cancer patients through affecting the bio-psycho-social dimensions [11]. Hope Therapy is essentially a time-based and future-oriented and donors to look at what is going on now and examine future goals. Glasser's Reality Therapy approach as a combination intervention on the part of this research can be applied to the treatment of the disease the patient is responsible exacerbation of anxiety, followed by the minimize maladaptive reactions [12]. Rational Emotive Behavior Therapy is a comprehensive and integrated approach that developed based on the judge’s thinking, deciding and acting stresses [13]. Treatment starts with problematic behaviors and emotions and thoughts that they create the challenges directly [14].

This study is aimed to Comparative study of the effectiveness of mixed method (Rational-Emotive-Behavioral Therapy and Reality Therapy) and Reality Therapy on the Hope of Breast cancer Patients

MATERIAL AND METHOD

In the present study, quasi-experimental design of pre- post-test was used. The study population included 85 patients with breast cancer under certain conditions who referred to Shohada cancer researches center of Tajrish. The population with secondary breast cancer were based on Schneider Hope Scale score were lower than 24. Schneider Hope Scale was administered to all the population and eventually 60 of them stayed on as the sample into three groups:

- The combined group counseling or rational approach - emotional counseling with reality therapy approach
- Consultations with reality therapy approach
- The control group with the same volume of 20 randomly (draw) were replaced.

The used Instrument is hope 12-items scale questionnaire of Schneider which is planned for 15 years old and more and includes two subscales bus and motivation [15].

To answer any questions, Ranging from 1 (completely wrong) to 4 (completely true) is considered. In Golzari research (2007) was conducted on 660 female students in Tehran, Schneider Hope Scale reliability was evaluated with using internal consistency and Cronbach’s alpha coefficient was 0.89. Hope scale has high correlation with the scales which measure similar psychological processes. Schneider hope scale reliability of this study was obtained 0.79 with using Cronbach’s alpha. Concurrent validity in this structure has highly correlated with the given responses to some measure scale of the same psychological processes. Hope scale in research and clinical fields have been implemented on more than 20,000 people. These tools help people to determine their hope level in different situations. In the study was conducted by Kermani, Khodapanahi and Heidari (2000) to determine the psychometric properties of Schneider hope in the University of Shahid Beheshti on Bachelor students, constructer validity survey with using confirmatory factor analysis showed that scale includes two-factor structure of factor thinking and the paths. Concurrent validity survey of this scale correlation measuring with Suicidal Ideation Scale, perceived and meaning social support suggests a negative relationship between hope scale scores with suicidal ideation scale scores and positive relationship with perceived and meaning social support scales scores in the life. In the research which was to determine Schneider Hope Psychometric Properties by Kermani and Khodapanahi, reliability of this scale was obtained 0.86 with using Cronbach's alpha formula and was obtained 0.81 with retest and resulted into that Schneider hope scale for Iranian population has good reliability and validity and can be used in Iran psychological measurement and it can be used as a valid and appropriate tool in clinical and educational settings in order to assess patients and provide treatment and preventive programs[16]. The present study sessions run every 45 minutes in three groups of 20 patients randomized to the combination of Rational Emotive Behavioral Consultation and reality Therapy and reality therapy method.

Findings

To evaluate the effectiveness of reality therapy approach on the hopes of a second breast cancer patients was used these processes.
The data in Table 1 shows the experimental group scores that their treatment is based on reality therapy approach, in the test has remarkable increase. To measure the effects of reality therapy on the treatment of patients with breast cancer hope, the analysis of covariance was used the results of which are shown in the table 2.

Table 2

<table>
<thead>
<tr>
<th>Criteria variable</th>
<th>Eta coefficient</th>
<th>Significance level</th>
<th>F value</th>
<th>Squares' average</th>
<th>Degree of freedom of Total squares</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest group</td>
<td>0.49</td>
<td>0.001</td>
<td>27.26</td>
<td>103.63</td>
<td>1</td>
</tr>
<tr>
<td>group error</td>
<td>0.38</td>
<td>0.001</td>
<td>16.89</td>
<td>65.42</td>
<td>1</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td></td>
<td>3.94</td>
<td>106.49</td>
<td>27</td>
</tr>
<tr>
<td>General modified</td>
<td></td>
<td></td>
<td></td>
<td>0.14679</td>
<td>30</td>
</tr>
</tbody>
</table>

So it can be concluded that the approach reality therapy caused a significant change in the performance of the test groups in the hope of breast cancer patients. And this is the effect of practically 38%.

To test this hypothesis which rational - emotional - behavioral approach is effective on breast cancer patient hope, according to Table 3 surveys were carried out.

Table 3

<table>
<thead>
<tr>
<th>Criteria variable</th>
<th>group average</th>
<th>Standard deviation</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest experimental</td>
<td>20.80</td>
<td>2.62</td>
<td>16.0</td>
<td>0.24</td>
</tr>
<tr>
<td>Witness</td>
<td>20.33</td>
<td>2.74</td>
<td>16.0</td>
<td>0.24</td>
</tr>
<tr>
<td>posttest experimental</td>
<td>22.08</td>
<td>2.75</td>
<td>16.0</td>
<td>26.0</td>
</tr>
<tr>
<td>Witness</td>
<td>19.46</td>
<td>3.15</td>
<td>14.0</td>
<td>0.24</td>
</tr>
</tbody>
</table>

The data in Table 1 shows the experimental group scores that their treatment is based on rational - emotional - behavioural approach, in the test has remarkable increase. To measure the effects of rational - emotional - behavioural approach on the treatment of patients with breast cancer hope, the analysis of covariance was used the results of which are shown in the table 4.

Table 4

<table>
<thead>
<tr>
<th>Criteria variable</th>
<th>Eta coefficient</th>
<th>Significance level</th>
<th>F value</th>
<th>Squares' average</th>
<th>Degree of freedom of Total squares</th>
</tr>
</thead>
<tbody>
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<td>pretest group</td>
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<td>0.001</td>
<td>37.66</td>
<td>143.37</td>
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<tr>
<td>error</td>
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<td>0.001</td>
<td>16.89</td>
<td>64.30</td>
<td>1</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td></td>
<td>3.80</td>
<td>102.76</td>
<td>27</td>
</tr>
<tr>
<td>General modified</td>
<td></td>
<td></td>
<td></td>
<td>0.13728</td>
<td>30</td>
</tr>
</tbody>
</table>

So it can be concluded that the approach rational - emotional - behavioural caused a significant change in the performance of the test groups in the hope of breast cancer patients. And this is the effect of practically 38%.

About the effectiveness of reality therapy, and combined the two approaches and Rational Emotive Behavioral Therapy reality check expectancy following breast cancer patients was conducted

Table 5, One-way analysis of variance to compare the effectiveness of two therapeutic approach (approach reality therapy, and combination of these two approaches) are the hope for breast cancer patients (n=20).
Can concluded that the mean efficacy of treatment (approach reality therapy, and combination of Rational Emotive Behavioral Therapy approach) there is no significant difference on the level of hope in patients with breast cancer.

**DISCUSSION AND CONCLUSION**

Based on the above findings, rational-emotive behavioral therapy and combination approach and the approach of reality therapy) were effected on patients with breast cancer. The findings of this study is consistent with previous research on the effectiveness of the therapy on cancer patients [17-21].

Also the results of other researchers, indicated the effectiveness of psychosocial interventions such as reality therapy and Rational-Emotive-Behavioral in depression, on anxiety and hope and quality of life patients with cancer [22]. The quality of life of cancer patients in all three dimensions (physical, psychological and social) has limitations and the use of psychological interventions with medical therapy can be effective in improving quality of life [23].

In order to explain the results it seems that cancer patients, encountered more challenges in the combined treatment approach rational emotive behavior and attitude fact. Because they challenged the reasonableness of opinion and responsibility According to Glasser’s disease in some patients.

While the fear of death, believed to continue treatment with high costs and inability to pay for treatment costs. Leave a spouse or close relatives such as spouse and children in the hardest lack of understanding psychiatric conditions following the incurable disease detection and disease burden of challenging ideas and responsibilities, including Among other issues, are the psychological pressure are sobered the patient’s logic.

The limitations of this study are as following:

Due to changes in the condition of patients increasing of chemotherapy and skin inflammation caused by the side effects of radiation therapy, the treatment seemed to take on the post-test questionnaire response affects patients. Different economic levels, causing some confusion in the cost of treatment in patients who were treated together. Due to the sampling of the sample was available for this research.

Since the method is based on the patient's life expectancy is suggested that this method may also be used to other types of cancer and other chronic diseases.

On the other hand, need more researches the method of sedation and relaxation, for art therapy and its impact on patients.

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