To study effect of group therapy based on approach of integration (IT) on quality of life among women suffering from cancer

Alireza Attariani, Hamed Ghafarian Moslemi and Mahdi Salehzadeh

INTRODUCTION

Attention to concepts of mind and body has begun from old times and considered by thinkers such as Bocrates, Socrates, Aristotle and Plato. At the beginning of 20 century, a holistic approach of health and disease has commenced and attention to relation between mind and body has become deeper. There are various cases that show how depression, despair and stressful events of life are related to change of immunity system of body [48].

Cancer, a term that includes more than 200 kind of neoplastic diseases goes back a long way. There were malign diseases before human genesis and their effect has been known not only on animals but on life of plants. Outbreak of cancer has been considered about 2500 BC. And tumor and its treatment have been mentioned in epical Hinduism book of "Ramayana".

Nowadays, cancer is one of the most important health problems throughout the world and its outbreak is more in industrial and developing countries and if its outbreak continues in this way, among 5 persons, 1 person will catch one of cancer forms. Statistics of cancer sufferers in Iran follows this rule. Cancer, after cardiovascular diseases, is the second reason of death in America and the third one in Iran [16].

According to scientific and epidemiological valid studies, breast cancer is the most common cancer among women throughout the world and includes one third of cancers among women. This disease is the main reason of death among 35-45 years old women. Also, lung cancer is the most common cancer among men [14].
Cancer has different changes, stresses, and effects on life of the patient and his/her family. Respond to cancer depends on cases such as patient, his/her psychological structure, family and social environment, disability and deformity and can effect on all activities of the patient [21].

It seems that cancer has the most effect than other chronic diseases on hope. Most researches of hope is about patients with cancer because this disease is a threatening factor of hope and finally, causes downfall of quality of life of the patients [30].

Hopeful thinking and cancer are related to each other in two ways, first, hopeful individuals concentrate on problem more and act actively in solving them. They have more confidence in showing screening behavior of cancer. In addition, the individuals, who think hopefully and facing with cancer diagnosis and treatment, show less distress and more conformity.

Clinical psychology has traditionally emphasized on psychological deficiency and disabilities and rarely considered to flexibility and tactfulness and ability of clients for evaluation. But, during last decades, positive and health psychology and increase of happiness and health and scientific study about role of personal power and positive social sites emphasize on increasing optimized health. Main subjects of positive psychology include happiness, hope, creativity, trust to self and wisdom.

Studying quality of life in health studies is important in the case that it helps to us in determining situation of life and risk of disease on quality of life and can clarify many ambiguous points. From 1970s, attention to concept of quality of life has been more and more. Reasons of attention increase to concept of quality of life at modern age, is more emphasis on quality of life against quantity of life and increase of staggering costs of health cares. Quality of life of women with cancer relates with many factors including type of treatment and according to programs of cancer control of WHO, study of extent of cancer problems is one of primary steps [18].

During late decades, quality of life as consequence of treating patients with cancer has been considered by clinical specialists and researchers of health sciences. In fact, measurement of quality of life evaluates using treatment in terms of increase of lifetime considering to social and psychological aspects along with physical aspects. The case whether quality of life has an effect on vitality in cancer diseases or not is most considered lately. As number of saved patients is increasing, then, our knowledge about high quality of life should continue with more sensitivity and its result should be used as a promoted model for increase of quality of life among this population. As distress is common among these patients, necessity of some preparation for access of the patients to some supporting services to increase quality of life is obvious [46].

Quality of life of the patients is considered as sign of quality of health cares and as some control programs of the disease. By studying quality of life of patients and recognizing effect of the disease on different dimensions of their life, suitable treatment methods can be used and results of treatment evaluated in a short time and situation of patients with cancer is improved by sufficient knowledge. Also, results of measuring quality of life of patients can be used for studying disability of different groups recovered from cancer, quality of provided cares, comparing advantages and disadvantages of treatments, screening individuals subject to social, psychological and mental problems and following individuals improved from cancer. Recognition of quality of life and its related factors help to physicians to organize their activity for increasing health level and improving quality of life of patients with cancer [45].

Patients with cancer have many social, mental and physical problems that cause disorder in natural flow and quality of life, therefore, quality of life is a strong power in direction of guiding, keeping and developing health in different cultures. As in our society, concept of quality of life and its related factor among patients with cancer have less considered and as health, treatment employees such as nurses have a close relation with the patients, therefore, recognition of quality of life and its related factors help to health, treatment employees to do more effective efforts for increasing health level of help seekers [29].

Cancer disease threatens two important aspects of quality and quantity of life. People, following physicians and specialists, attend more to increase of lifetime than increase of quality of life and better life of the patient while in most cases, correction of quality of life of a patient suffering from cancer cause directly increase of his/her quality of life and lifetime. Reason of this mistake among people is lack of education and public knowledge. This is why we mostly look for using the most expensive treatments while common treatments plus additional helps can have the same consequences in terms of lifetime. On the other hand, if we expend expense of an expensive medicine for caring fields such as correctness of nutrition pattern, correctness of anemia and improvement of mental conditions, not only quality of life of the patient will improve but the patient with cancer can better tolerate common treatments and effect of main treatments will be more. Many researches have proved that the patients with cancer, who have better social and mental situation and support, have better quality of life and more length of life [12].

The researches show that patients with cancer are endangered to hard sentimental stresses and this issue can create some disorders in their quality of life. Many researches have showed that 20 to 30 percent of patients with cancer suffer psychological problems due to psychological unconformity with their disease and feel hard fragmentary at their family life. Protection of patients with cancer is a very important factor in their social and
psychological conformity. Nowadays, number of patients with cancer is increasing, while treatment and progress of the disease is changing. The fundamental problem of these patients is the loss of physical health and this issue effects on their quality of life. Many patients need to help due to pain, physical image, sexual problems and social problems. Researches have showed that the first step of planning and caring patients with cancer is to understand effect of disease on their quality of life [35].

As individual psychotherapy have some limits such as high expense, lack of trained and competent therapist and also required time, a special treatment approach in a group form is used because group psychotherapy have some advantages such as group relation, knowledge and learning due interaction, generality in means of having a common pain and simplification of emotional discharge [33].

Corsini [8], in a comprehensive definition, defines group therapy as collective treatment of psychological problems in which several patients interact with each other at presence of one or several therapist as simplifier and accelerator. Also, Lego says: group therapy is a kind of treatment which is based on study and analysis and recognition of individual and psychological structures and group processes. Integration group therapy (IT) is natural structure of Islamic view about human nature and theory and method of human psychology. Purpose of this treatment is to reinforce position of wisdom, to give new life to love and attraction to origin of unity and to reach to unity and integration. Main elements of treatment are to encourage knowledge and commitment to eminent behaviors of main elements of treatment [17] various researches have proved effectiveness of group therapy. Sharifinia [39] showed, in a research under title of monotheistic integration therapy for treatment of psychological disorders, that this treatment method can be used for improvement of psychological disorders.

It seems that cancer has more effect on quality of life than other chronic diseases. Most of researches related to quality of life are about patients with cancer because this disease is threatening factor of quality of life. There are many evidences denoting that hope is related to effective operation of immunity system and quality of life. In addition, the persons hope think hopefully, will show less distress and more conformity and have better quality of life facing with recognition and treatment of cancer. Therefore, it is necessary for patients to prepare support and increase of hope to confront cancer. Therefore, for filling this gape, we decided to perform a suitable and efficient psychotherapy to increase quality of life of patients with cancer.

Considering to above mentioned subjects and clarifying key role of psychological treatments at different steps of cancer including screening, recognition, treatment, improvement and also high outbreak of cancers, we are going in this research to study effectiveness of integration therapy on improvement of quality of life of women with cancer in Mashhad city.

Methodology:
Statistical society of present search includes women with cancer who referred to cancer hospitals for supplementary treatments (chemical therapy and radiotherapy) in Mashhad city.

Kaplan and Sadock believed that members of group can be from 3 to 15 persons but most of therapists have proposed 8 to 12 persons. Number of samples in this research is 18 persons (9 persons, each group). 18 persons were selected by available purpose based sampling among patients who referred to hospital and they were divided into two experimental and testifier groups according to their consent.

Available sample is members of a society who were selected for simplicity of sampling. In cases that selection of sample was difficult of in some cases impossible randomly or not randomly, researcher can use this method of sampling [9].

At first, a form containing personal information, information about the disease and advantages of participating in psychotherapy plan was presented to oncologists of the hospital and they were asked to give them to the patients in order to fill them if they intend to participate in psychotherapy groups along with medical treatments.

After about 2 and half months, there was not almost any progress at work. Therefore, by agreement of academic advisor who is oncologist of the hospital, we began to study 200 files of patients under treatment in hospital and finally, we called to patients and asked them and their family to present at hospital and explained methods and purposes of this plan for them and then, two 18 persons group were selected by interview with patients appeared in the hospital for treatment and considering to the intended criteria- minimum education for writing and reading, being female, married and single ones, not suffering from another chronic disease other than cancer such as diabetes, etc, not being treated for another disease, not being in metastasis state, suffering from cancer newly-and then they divided to two testifier and experimental groups according to their consent.

Before any action, the considered test was performed for both groups and then, treatments were performed for experimental group in 10 sessions to increase quality of life. At the end of 10 sessions, the test was performed for both groups again in order to be used in statistical analysis.

Present research was semi-experimental one that is performed in unequal control group plan. Independent variable of this research is group therapy in approach of integration and dependent variable includes quality of life.
According to Delavar [9], one of correct statistical methods that can be used for analysis of results of this project includes analysis of difference due to subtract score of pre-test from post-test. After that, average of the scores are calculated and compared by T parametric test.

**Tool of measurement and its validity and justifiability:**

**Quality of life questionnaire (QLQ):**

Lately, comprehensive evaluation of patients with cancer is very important and has gone beyond traditional evaluation of biomedical results and involved study of effect of the disease on quality of life of the patients. European organization of cancer treatment and research has provided a 30 items questionnaire to evaluate effect of the disease and treatment on daily life of the patients with cancer. This questionnaire has translated in various languages and has used in many countries. Lately, Persian copy of this questionnaire has been edited in Iran [34]. This scale is scored from 5 to 21 and higher and lower scores implicate better and worse quality of life respectively [37].

In an analytical study that is performed for determining justifiability and durability of third edition of quality of life questionnaire for some of patients with breast cancer, the questionnaire was filled out by clients referring to chemical treatment ward of Namazi hospital in Shiraz from Dec. 22, 2005 to Feb. 19, 2006 and finally, 132 patients were selected randomly. Its durability was evaluated by internal stability determination (Kronbach alpha ratio). Pierson correlation ratio was used for determining justifiability of structure (integration and differentiation). Clinical justifiability was determined by comparing groups and using variation analysis test and Croscal Vallis. All calculations were performed by SPSS software.

This questionnaire has a suitable justifiability (Kronbach alpha ratio > 0.7). Finally, the third Persian copy of 30 items questionnaire of evaluating quality of life of patients with cancer was recognized as a valid and durable tool that can be used in epidemiological and clinical researches for cancer.

**Finding of the research:**

Here, first, demographic specifications are described. Then, descriptive information gained by results are studied and at the next part, hypothesis of the research will be analyzed by using a suitable statistical test.

**Table 1:** frequency of age variable.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent of frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>31-40</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>41-50</td>
<td>8</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

According to table 1, 28%, 28% and 44% of tested persons were between 20 to 30, 31 to 40 and 41 to 50 years old respectively.

**Table 2:** frequency of education variable.

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percent of frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Primary school</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Guidance school</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Secondary education</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

According to table 2, 6%, 16%, 6%, 38%, 11% and 23% of tested persons were illiterate, education of primary school, guidance school, high school and associates and bachelor's degree respectively.

**Table 3:** Frequency of marriage status variable in experimental group.

<table>
<thead>
<tr>
<th>Marriage status</th>
<th>Frequency</th>
<th>Percent of frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>17</td>
<td>94</td>
</tr>
<tr>
<td>Single</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Divorced</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

According to table 3, 94% and 6% of tested persons are married and single respectively.

**Table 4:** Frequency of social-economic situation variable.

<table>
<thead>
<tr>
<th>Social-economic situation</th>
<th>Frequency</th>
<th>Percent of frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Medium</td>
<td>10</td>
<td>55</td>
</tr>
<tr>
<td>Good</td>
<td>7</td>
<td>39</td>
</tr>
<tr>
<td>Excellent</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

According to table 4, 6%, 55% and 39% of tested persons had weak, medium and good economic situation respectively.
**Hypothesis of research:**

Group therapy based on approach of integration comparing with testifier group increased significantly quality of life of women with cancer.

For studying whether there is significant difference between average of scores of quality of life in experimental and testifier groups at the steps of pre-test and post-test, T test method was used for independent groups and the results presented in table 5 showed that the averages has significant difference.

<table>
<thead>
<tr>
<th>Component/group</th>
<th>Frequency</th>
<th>Average</th>
<th>Average of standard error</th>
<th>Difference of averages</th>
<th>Difference of standard error</th>
<th>Degree of freedom</th>
<th>T test</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>9</td>
<td>3.24</td>
<td>0.34</td>
<td>-3.50</td>
<td>0.34</td>
<td>16</td>
<td>-10.21</td>
<td>0.000</td>
</tr>
<tr>
<td>Testifier</td>
<td>9</td>
<td>-0.26</td>
<td>0.07</td>
<td>0.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in table 5, the T is -10.21 which is 0.99 significant and 0.000 reliability and shows that hypothesis zero is rejected and reverse hypothesis is confirmed. Therefore, group therapy based on approach of integrations increased significantly quality of life of women with cancer.

Columnar diagram 1 shows results of analysis and changes of pre-test and post-test scores of quality of life in experimental and testifier groups.

**Diagram 1:** Columnar diagram of comparing pre-test and post-test scores of quality of life in both groups.

**Discussion and Conclusion:**

This study aimed to evaluate the effectiveness of group therapy based on an integrated approach for enhancing the quality of life in women with cancer. As the data show in Table 5, the research hypothesis in this testing has been admitted with rate of meaningfulness (0.01> P) or 0.99 per cent reliability and indicated: group therapy based on an integrated approach-oriented, quality of life of women with cancer has been significantly increased more than evident group. The current research results have done to approve by study of Cheavens, Feldman et al in 2006. The aim of the study of Cheavens et al examined the effectiveness of group therapy based on an integrated approach to component-oriented expectancy, quality of life, self-esteem, depression and anxiety. The results showed that the intervention caused to increase expectancy, quality of life, self-esteem and reduce symptoms of depression and anxiety with statistical meaningfulness (0.05> P) and 0.95 per cent reliability.

The results of the current research is also consistent with results from the following studies: [5,20,7,11,43,36,1,28,48,12,47,3,26,15,38,24,2,40] are consistent.

Some researchers also suggests that group therapy have no any effect on quality of life of patients, for example the researches of [27].

The results and findings of this study after completion of the group therapy and closed relationship with tangible experiences, feelings and problems of patients with cancer showed that, the lack of psychological treatments is quite palpable alongside conventional medical treatments. Moreover, there are many negative and detrimental effects on quality of life according to depression, anxiety, stress, restlessness, anger, adjustment problems and communication, and even is also affected in the response of chemotherapy, and the treatment of pain.

Unfortunately, in the treatment of cancer patients, mostly pay attention to the form of a single physical treatment by neglecting the next psychological and human approaches, while many studies have emphasis and approved the impact of mental mutual object on each other. If, due to this study, it was observed that people
who have released from dangerous disease by physical therapy, they have a good feeling towards life and in our country this issue is related to the quality of life that it has been not paid attention but most of the physical dimensions and quantification of life have given consideration the manner of treatments patients.

Psychological treatments of cancer is known as something beyond bring out a malignant disease or a gland with radiation therapy and chemotherapy, and tries to act the potential inner abilities of the patient with mental and intellectual forces, that make them alive by positive and negative thoughts and beliefs rather than logical and non-logical, mobility, dynamism, the hope and the desire to fight.

According to the subject of empty places in the different psychological therapies, particularly existential and meaningful treatments they are related to deep human concepts such as "death, alone, love, choice, etc. and in other side, there are more visible authenticity with religious and cultural concepts.

On the one hand, due to an expression and behavior that there are with these patients, these are often filled with artificial and lying behaviors. These patients lived in the ambiguous space between accepting a harsh reality and trying to overcome illness or disease or confused by denying their diseases. In such an atmosphere of stress and depression - according to the experience of group therapy with cancer patients- psychological disorders are recognized and diagnosed by qualified psychologists by giving recognition and awareness in the majority of patients, they are accepted their disease in spite of denying it, and used their power and energy to overcome illness instead of denying and at least they enjoyed the reminded time of their life.

A family is very important factor and other fundamental role that it cannot clear on the quality of life of these patients. It is necessary to afford the exorbitant cost and long-term treatment, traffic in long distances on the one hand and the psychological pressure arising from disrupting the normal relations between the members of the family and marital life, employment problems, the possibility of losing one who they are love them despite physical and mental effort, which leads to feelings of anger, depression, anxiety, fatigue and frustration on the other hand, for participating an educational classes and group therapies to decrease these stresses between families.

A critical and other significant factor in the quality of life is the relationship between the patient and the patient's treatment team (includes: physician, nurse, radiotherapist, etc., particularly physician. In this research, according to the motivation of herself/himself physician to psychiatrics, it is caused to match the psychotherapy mental status of patients with medical conditions and understand mental process. Communication with patients who have very fragile emotions, especially in the first few days after the announcement of the early stages of the disease or chemotherapy in where the patient is experiencing a difficult situation, it is determined in the course of treatment. During the 10 sessions of therapy experience has shown that having a human connection with understanding, empathy and honesty is used the time to give information to the patients with recognition and knowledge of this disease. Especially, in this disease, the patients have more dependence with her/his physician that the type of relationship between them played an important role in their treatment.

Another important factor in the quality of life of cancer patients is the role of relevant organizations and agencies such as the Ministry of health and insurance companies. The high cost of treatment put the patients and their family under the intense psychological pressure that unfortunately, there are not any suitable performances to reduce the costs or preparing the finance. The problem is made double form if despite of all the existing costs, family lost their patient. During the treatment, one of its members with cancer stated that due to feeling guilty in order to coercion the treatment costs, decided to cut the treatment period that has been gave up this treatment according to an emotional and financial support of the family.

Another important point is the recurrence of disease in some patients, which in addition to having the very bad psychological impact on the patient and his/her family; it has bad psychological impact on other patients. Especially in patients who have been exaggerated by doctor for having successful medical treatment. That will be caused to have a lot of frustration and disappointment on the patient. Although the group, whom are under the treatment, was not seen any relapses, but there are signs based on the possibility of full relapses emotionally on the other members of group.

Although the existence of the hidden resistance of members of the group during their selection to participate in group therapy which it is the same as successive inquiries towards the positive impact on the group, other members had complaint and want to continue this method of group therapy. In this study effective reasons of group therapy was to create a very secure and quiet space away from any judgment or advice that these patients have been excluded this spaces.

Patients who have placed safely and quietly in this space:
1- There are no Fear and shames to show the disturbing and repressed emotions and express their ideas and opinions.
2- Found that they are not alone with the fears and problems of disease.
3- Due to have joint pain and problems, they are well understood and took communion with each other.
4- The members give hope and supported each other.
5- Members give medical knowledge and experience to each other.
6- Members experience the meetings of the group, living in the here and now
The findings of this research expressed that space, communications and laws of treatment rooms could increase the quality of life of patients, as well as caused to follow more and better medical treatments by the patients.

Propositions for the future:
• According to special communications between group therapy team, especially physician with patient and deep effects in the relationship for treatment it is recommended that is to perform psychological training for the treatment team.
• According to the important role of family members of patients with cancer, it is recommended that psychological therapy for patients along with family therapy have more effective signs.
• According to the key role of hope and self-esteem in the fight against cancer and enhance the quality of life, it is recommended that the applied treatment method also used in the current research for patients with other types of cancer especially in men.
• Other treatment methods are used patients, are including human-oriented psychotherapy, cognitive-behavioral, and mutual behavior analysis and ... Especially existential therapy.
• It is recommended that in clinics, hospitals and cancer institutes throughout the city, take attention to consider the psychological problems of patients by experienced and trained psychologists.
• In order to ignore not the problems of individual users, we recommend using individual clinical interview before the starting of group therapy, as well as the treatment of people who have communication and group problems individually.
• To reduce patient and family stress, related organizations paid some costs of treatment through treatment insurances that issued by insurance companies and ministries of health.

REFERENCES
[14] Irajyan, H., (1999. Study the effect of suggestion and massage the forehead and the temples for nausea and vomiting results of chemotherapy in women with breast cancer who referred to chemical treatment teaching hospitals of ShahidBeheshti University of Medical Sciences, MSc thesis, Faculty of Nursing and Obstetrics, ShahidBeheshti University of Medical Sciences and Health Services.
[29] Poordehkordi, A., 2003. The quality of life and related factors in patients with cancer under the treatment of chemotherapy, Oncology Hospital, Tehran University of Medical Sciences, MS Thesis, Faculty of Nursing and Obstetrics, University of Shahr-e-kord.
[36] Samiei, M., 1989. Evaluation of the hope and a sense of inability in patients who have been paralyzed and comparison with healthy and disabled people, nursing, master's thesis, Faculty of nursing and Obstetrics, Iran University of medical sciences.
[45] Tigrari, 2009. Relationship between mastectomy or breast removal surgery and tissue involved with cancer, with behavior and quality of life in breast cancer patients, MS Thesis , Faculty of Nursing and Obstetrics, University of Shahr-e-kord.
