Effectiveness of Art Therapy on Stress among Patients with Cancer

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I. Introduction
Recent times have seen an increase in the incidence of cancer. This is mainly attributed to urbanization, industrialization, lifestyle changes, population growth and increased life span (in turn leading to an increase in the elderly population). In India, the life expectancy at birth has steadily risen from 45 years in 1971 to 62 years in 1991, indicating a shift in the demographic profile. It is estimated that life expectancy of the Indian population will increase to 70 years by 2021–25. This has caused a paradigm shift in the disease pattern from communicable diseases to non-communicable diseases like cancer, diabetes and hypertension.

Non communicable diseases are the leading killer of today and are on the increase, 36.1 million people died due to non communicable disease. In that Cancer is a leading cause of death worldwide, contributes 7.6 million people death in 2008. Approximately 70% of cancer deaths occurs in low and middle income countries and 30% of can be prevented. Deaths from cancer worldwide are projected to continue to over 11 million in 2030.

Complementary approaches that may be used with cancer treatment are acupuncture, art therapy, aroma therapy, biofeed back, massage, prayer, meditation, music therapy and yoga. Complementary and alternative medicine (CAM) use among cancer patients varies according to geographical area, gender, and disease diagnosis.

Art therapy is the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes, people can increase awareness of self and others cope with symptoms, stress and traumatic experiences; enhance cognitive abilities; and enjoy the life-affirming pleasures of making art.

Statement of the problem
A study to evaluate the effectiveness of art therapy on stress among patients with cancer at selected hospital in Thanjavur district.

Objectives
1. To assess the level of the stress among patients with cancer before and after art therapy.
2. To evaluate the effectiveness of art therapy on stress among patients with cancer.
3. To associate the post test level of stress with selected demographic variables among patients with cancer.

Hypothesis
H1 – There will be a significant difference in the level of stress before and after art therapy among patients with cancer at P<0.05 level of significance.
H2 – There will be a significant association between the post test level of stress and selected demographic variables among patients with cancer at P<0.05 level of significance.

Methodology
The investigator used the quantitative evaluative approach and adopted the pre experimental design with one group pre test and post test. The Permission was obtained from the hospital authorities and oral consent was received from the samples in a selected hospital in Thanjavur district. Convenience sampling technique was used. Based on the inclusion criteria, 40 samples were selected. The ethical guidelines were followed throughout the study.

Research Tool and technique
The data collection tool is presented with 2 sections:
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Section A: Demographic profile of Patients with Cancer:
It comprised of demographic data of the patients with cancer such as age, gender, religion, type of family, education, occupation, marital status, family income, duration of illness, site of cancer, modality of treatment, duration of treatment and habits. No score was allotted for this section and it was used for descriptive analysis.

Section B: 4 Point Stress Assessment Rating Scale
It helps to assess the level of stress for the patients with cancer and it consists of 25 items, which measures physical discomfort, emotional discomfort, cognitive discomfort and personal discomfort. The scale was translated in Tamil. The accuracy of the translation was confirmed by back translation. This scale score ranging from 0-3(0-never, 1-rarely, 2-frequently and 3-always).The total score of each subject was calculated and converted in to percentage. The level of stress was divided in to 3 categories as follows:

<table>
<thead>
<tr>
<th>Level of stress</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild stress</td>
<td>50% or below</td>
</tr>
<tr>
<td>Moderate</td>
<td>51% to 75%</td>
</tr>
<tr>
<td>Severe</td>
<td>Above 76%</td>
</tr>
</tbody>
</table>

II. Results

Table 1: Comparison between the pre test and post test level of stress among patients with cancer

<table>
<thead>
<tr>
<th>Level of stress</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Mild</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Moderate</td>
<td>28</td>
<td>70</td>
</tr>
<tr>
<td>Severe</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 2: Effectiveness of art therapy on stress among patients with Cancer

<table>
<thead>
<tr>
<th>Variable</th>
<th>Max. score</th>
<th>Pre test</th>
<th>Post test</th>
<th>Mean difference</th>
<th>t value</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>75</td>
<td>48.05</td>
<td>33.75</td>
<td>14.3</td>
<td>22.05**</td>
<td>39</td>
</tr>
</tbody>
</table>

The major findings of the study was summarized as follows.

- In pre test, 28 (70%) samples had moderate stress, 10 (25%) samples had severe stress and 2(5%) had mild stress before an art therapy. In post test, majorit of the subjects 31(77.5%) had mild stress, 8(20%) had moderate stress and 1(2.5%) had severe stress after an art therapy.
- The mean pre-test stress score was 48.05(±6.95) and the post test stress score was 33.75(±7.25). The paired ‘t’ value at p<0.01 level for stress was 22.05. This shows that art therapy is highly effective in reducing the level of stress among patients with Cancer. Hence H1 is retained.
- There was a significant association between the level of stress and the selected demographic variable of age. age group [ \( \chi^2 =14.394 *(9.488) \) ] at P<0.05 level of significance. There was no association between stress and other variables like gender, religion, type of family, education, occupation, marital status, income, duration of illness, site of cancer, modality of treatment, duration of treatment and habits at P<0.05 level of significance. Hence H2 is retained.

III. Conclusion

The main focus of the study was to evaluate the effectiveness of art therapy on stress among patients with cancer. Findings shows that the art therapy has significant in reducing the level of stress among cancer patients. The demographic variable, age was associated with the post test level of stress among patients with cancer.

Reference