



## RESEARCH ARTICLE

### THE EFFECTIVENESS OF COGNITIVE BEHAVIOUR THERAPY ON DEPRESSED CERVICAL CANCER PATIENTS

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#### ARTICLE INFO

##### Article History:

Received 16<sup>th</sup> August, 2016

Received in revised form

22<sup>nd</sup> September, 2016

Accepted 28<sup>th</sup> October, 2016

Published online 30<sup>th</sup> November, 2016

##### Key words:

Cognitive Behaviour Therapy,  
Depression,  
Automatic Thoughts.

#### ABSTRACT

Cognitive behaviour therapy is geared towards the identification, evaluation, and modification of situation thoughts (i.e., automatic thoughts) that patients experience after diagnosis of cancer. The present study is to assess the effectiveness of cognitive behaviour therapy on depressed cervical cancer patients. Sample of 80 cervical cancer patients from various hospitals in Chennai are selected. All eligible patients completed the consent form, demographic sheet, and Hamilton depression scale (HAM-D). Based on the assessment and degree of problem the clients are classified as mild, moderate and severe group. Individuals with severe and moderate degree of depression were selected. The cognitive behaviour therapy sessions extended for 45 minutes, and were held thrice in a week, and continuous follow up for 3 months. The present study is a pre-post test design before and after intervention programme. Data were analysed by using t-test. Results revealed that there is significant difference in depression level between pre-test and post-test. The study concluded that after the applications of cognitive behaviour therapy to the patients level of depression has been minimised.

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**Citation: Anujavenkatesh and Neelakandan, 2016.** "The effectiveness of cognitive behaviour therapy on depressed cervical cancer patients", *International Journal of Current Research*, 8, (11), 41808-41810.

## INTRODUCTION

The problems that occur in relation to the cancer disease and its treatment vary with the type of cancer, disease stage and type of medical treatment. Difficulties may develop in the period between diagnosis and primary treatment, during primary treatment, and during follow-up. Surgery, chemotherapy and radiotherapy may result in several types of difficulties. Affected patients may pass through repeated periods of side effects from various treatments. Besides physical and social effects, the emotional burden may be substantial for some patients. Cancer patients need some information and support to change negative thoughts that experience by disease. The first (Bottomley *et al.*, 1996) evaluated the effects of the programme with newly diagnosed cancer patients (various sites) who had been screened for high levels of distress. Nine participants were randomised to attend eight sessions of CBT, while eight were randomised to attend a standard support group. A further 14 patients who refused to participate in therapy served as a standard care control. The study found that in the period immediately after therapy patients who participated in the CBT intervention showed significant reductions in anxiety and increased

'Fighting Spirit', while the support group and the non-therapy participants showed no significant improvements. These differences were no longer apparent in the 3 month follow-up. When psychological interventions are analyzed we find that a meta-analysis of 45 psychological intervention studies with cancer patients concluded all interventions were better than usual care in positively affecting patient's psychosocial wellbeing. McCorkle *et al.* found that for postoperative gynaecological cancer patients (61.8% diagnosed with primary ovarian cancer), interventions aimed at better self-management and more active decision-making were associated with less uncertainty and symptom distress, and improvements in mental/physical HRQOL. Consistent with the medical model of psychiatry, the overall goal of treatment is symptom reduction, improvement in functioning, and remission of the disorder. In order to achieve this goal, the patient becomes an active participant in a collaborative problem-solving process to test and challenge the validity of maladaptive cognitions and to modify maladaptive behavioural patterns. Thus, modern CBT refers to a family of interventions that combine a variety of cognitive, behavioural, and emotion-focused techniques (e.g., Hofmann, 2012; Hofmann, Asmundson, & Beck, in press). Although these strategies greatly emphasize cognitive factors, physiological, emotional, and behavioural components are also recognized for the role that they play in the maintenance of the disease.

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The diagnosis of cancer is a traumatic experience and may cause various emotional reactions such as feelings of chaos, uncertainty, anxiety, hopelessness. Faced with poor prognoses, stressful treatment effects and a high likelihood of recurrence, survivors must confront significant physical and psychological morbidities that negatively impact health-related quality of life. Frequently reported side effects include cancer-related fatigue, peripheral neuropathy, and psychological distress.

### Objectives of the study

- To analysis the effectiveness of cognitive behaviour therapy on depressed cervical cancer patients.

### Hypothesis

- There is significant difference in their depression level between pre –post test after intervention.

## METHODOLOGY

### Procedure

This study implemented survey method the self reported questionnaires were used to collected the data for a variable of the study along with the personal data sheet. The selected cancer patients of (N=80) were given the standardized questionnaire under personal supervision. The sample consists of women with cervical cancer from various hospitals in Chennai. Convenient sample technique was been employed. The sample was classified in terms of age (30-40), (41-50) and (51 & above) education, type of family, occupation, marital status as socio demographic factors and stages of cancer as clinical factors. Inclusion and exclusion criteria: female age group between 30 years to 50years above, they were diagnosed cancer stage 1, 2, and 3 and widower, and individual underwent radiotherapy these are inclusion criteria. Below 30, and stage 4, chemotherapy and except cervical cancer others cancer type are come under exclusion criteria. According to geographical extend selection of sampling refer researcher where limited only in Chennai.

### Tool description

#### HAM-D

Hamilton depression rating scale abbreviated HAM-D. It is multiple item question used to provide an indication of depression. Max Hamilton originally published the scale in 1960 later it was revised in the year 1980. It consist of 21 item generally takes 15-20 minutes eight item are scored on a 5 points scale ranging from 0-not present , 4- severe. Nine items score from 0-2. 0-7 normal, 8-13 mild, 14-18 moderate, 19 above severe. Correlation coefficient for Ham-D was 0.61 and 0.63.

### Therapy modules

Patients were selected basis on degree of depression, and inclusion and exclusion criteria. Session are divide into 3 modules consist of four session each. First four session work on how thoughts t influence mood. Next four sessions discuss daily activities and last four session work on to strength the relationship.

Base line (N=98)1st month	Pre-test (N=78)2nd month	Post-test (N=78) 3rd month
<ul style="list-style-type: none"> <li>•consent and demograhic sheet</li> <li>•HAM-D</li> </ul>	<ul style="list-style-type: none"> <li>•N=7 were not interested and N=13 were under went for chemotherapy</li> <li>•HAM-D</li> </ul>	<ul style="list-style-type: none"> <li>•assess with</li> <li>•HAM-D</li> </ul>

**Module I:** Thoughts (Sessions 1-4) (How our THOUGHT affect our mood) the main purpose of this module is to present information about how our thoughts influence our mood. The initial session establishes the structure and purpose of the subsequent sessions. Also, the time and day of the sessions will be established as well as rules for therapy and limits of confidentiality. It is important that participants are clear on the limits and scope of confidentiality since this can have an effect on the type and quality of the therapeutic relationship. The first session begins a dialogue on depression: what it is and how the participant experiences it. The therapist also presents the purpose of the first module, which is to understand how our thoughts influence our mood. Thoughts are defined in this session. The next three sessions work with different types of thinking errors and dysfunctional thoughts associated with depression, as well as how they can be debated and modified to improve our mood. In-session exercises are used to identify thinking errors. The design of the third session meets the purpose of providing the participant with strategies for increasing positive thoughts and decreasing unhealthy or dysfunctional negative thoughts, and thus, decreasing depressive symptoms.

**Module II:** Activities (Sessions 5-8) (How our ACTIVITIES affect our mood) The sessions in this module allow the participant to associate participation in pleasant activities with depressive symptoms. There is a discussion on how the presence of depression can limit participation in pleasant activities, which in turn, increases depressive symptoms. During these sessions, pleasant activities are defined and obstacles for engaging in them are identified. This module also works with how learning to establish clear goals can help decrease depression. Steps in establishing reachable goals are taught and practiced in session. The main purpose of this module is that the participant increase his/her control over his/her life and learn to identify alternatives that will allow him/her to have more freedom and choices. Together with the therapist, goals and activities are established that will help improve the participant's mood.

**Module III:** Relationships (Sessions 9-12) (How our RELATIONSHIPS affect our mood) The sessions in this module introduce the concept of how our relationships affect our mood. Social support and how it helps us confront difficult situations is discussed. The participant learns to identify and strengthen their social support networks. The last sessions integrate themes from the previous modules. The therapist together with the participant examine how thoughts affect the activities, social support and relationships the participant engages in. Exercises are used to teach assertive communication skills that will help the participant establish healthy satisfying relationships. The therapeutic process ends reconsidering and integrating the main themes of each module. During the final session, an evaluation of the therapy experience is carried out with the participant to identify strengths and successes achieved.

Recommendations related to follow up and areas to continue working on are discussed with the participant and his/her parents.

## RESULTS AND DISCUSSION

It is observed from the table 1 that, pre-test the respondents scored mean value 21.32, and in post-test the mean score is 16.83.

**Table 1. Shows the difference between pre- post test after intervention (N=78)**

Group test	N	Mean	SD	t- value	p-value
Pre-test	78	21.32	.730	29.87	0.001
Post-test	78	16.83	1.074		

This mean difference is statistically proved by the obtained t-value which is significant  $p < 0.001$ . So it concluded that in post-test after cognitive behaviour therapy the depression level was minimised among the respondents.

## DISCUSSION

The primary purpose of this study was to evaluate the effects of a cognitive behavioural therapy program on cervical cancer patients. More specifically, it addressed whether participants in the program experienced a change in mood state as reflected in levels of tension, depression, anger, fatigue, confusion, vigour, and overall mood disturbance. The data gathered from this study suggest that the described group cognitive behavioural therapy intervention provided at least some short-term benefits to participants. In the post therapy period the participants in the program experienced significant improvements in levels of tension, depression, vigour, fatigue, confusion, and total mood disturbance. These results are consistent with research by Fawzy *et al.* (1995) in their analysis of 68 participants with stage I or II malignant melanoma in weekly 90-minute sessions of structured group intervention group therapy for 6 weeks. Each individual were more likely benefit and complete the intervention. CBT address the needs of patients presenting with severe symptoms, which affect their physical, emotional and social wellbeing. It is also one type of social support facilitating positive treatment, and also protecting individuals from developing depression (Lewinsohn, 1974, Mooroe, 1983, Keller, 2000).

## Conclusion

The efficacy of cognitive behaviour therapy for depressive disorder has been well documented, combining CBT with antidepressant for improving depressed patients. In a particular with cognitive behaviour therapy patients undergo a process of being educated about their illness and their treatment process. Cognitive behaviour therapy for cervical cancer patients indicate significant minimise the symptom of depression from pre-test to post-test. Ultimately this study has provided evidence of CBT is an effective non- pharmacological treatment for major depression among cancer patients.

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