

COGNITIVE BEHAVIORAL THERAPY (CBT) VS RELAXATION THERAPY (RT) ON FATIGUE AND QUALITY OF LIFE AMONG TEACHING PROFESSIONALS WITH CHRONIC FATIGUE SYNDROME

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ABSTRACT

The study reveals the effectiveness of CBT and RT on fatigue and quality of life among teaching professionals with chronic fatigue syndrome. Quasi-experimental with time series design was adopted. The study was conducted at selected schools in Chennai. 30 samples who fulfilled the inclusive criteria were included in this study using non-probability convenient sampling technique. Fatigue severity scale and quality of life index scale were used for data collection. The mean difference score of fatigue and Quality of life had significant values, showed the effectiveness of cognitive behavioral therapy and relaxation therapy. The reliability of the tool was measured by the test and retest method. The pilot study revealed the data collection tools were reliable and practicable to carry out the main study. There is a significant improvement in fatigue and quality of life in both CBT group and RT group when compared with the control group. When compared to RT, CBT shows better improvement in fatigue and quality of life.

KEYWORDS: *Cognitive Behavioral Therapy, Fatigue, Relaxation Therapy, Quality of Life, Teaching Professionals with Chronic Fatigue Syndrome*

INTRODUCTION

Fatigue is inevitable when we do any sort of activity or some time even at rest. When fatigue accumulates for the prolonged period leads to chronic fatigue. In our busy lifestyle we ignore that we are growing fatigued -- in bad mood, losing ability the ability to pay close attention, having little patience with people, without realizing that we are ending up with the condition called chronic fatigue syndrome.

According to Center for Disease Control and Prevention, Chronic fatigue syndrome (CFS) is essentially a very debilitating and complex disorder characterized by profound fatigue that is not improved by bed rest and that may be worsened by physical or mental activity. Symptoms may include weakness, muscles pain, impaired memory, and/ or mental concentration and insomnia, which can affect several body systems (2). Despite 20 years of research and over 3000 published peer-reviewed papers, the etiology of CFS remains unclear. (5). Researchers have not yet identified the exact cause for CFS, and there are no definite tests to diagnose. (1,2,4)

This condition can be seen in every profession especially health care, Information technology and teaching. Teaching when done properly is physically, mentally and emotionally exhausting. Demanding workloads and extensive job duties in and beyond the classroom have pressured teachers into a state of mental and physical exhaustion leads to fatigue and chronic fatigue syndrome. Furthermore, CFS among teachers may result in health hazards and long-term absence from work, leading to loss of productivity and quality of life.

Worldwide average prevalence of CFS was 1.2 % (2011). Institute of Medicine (IOM) report (2015) says 8,36,000 to 2.5 million suffer from CFS but most of them not been diagnosed. One of the U.S reports says CFS reduced the workforce productivity by 54% leading to 9.1 billion dollars of total productivity loss. (4) There is no real population study in India. Whatever may be the ratio of prevalence, the total number of the person suffering from CFS in hugely populated India must be very large. Only a few people with CFS seek professional help for its treatment in the early stage itself. If left untreated, CFS is unremittingly associated with substantial reduction in occupational, personal and social status. There is no exact treatment option for CFS but Research studies show promising improvement with psychotherapeutic measures like cognitive behavioral therapy and relaxation therapy. Both may help alleviate the symptoms of CFS. (1,3)

The present study aimed to assess the effectiveness of CBT and RT among teaching professionals with CFS.

STATEMENT OF THE PROBLEM

A comparative study to assess the effectiveness of cognitive behavioral therapy (CBT) Vs Relaxation therapy (RT) on fatigue and quality of life among teaching professionals with chronic fatigue syndrome in selected schools, Chennai.

OBJECTIVES OF THE STUDY

- To compare the effectiveness of CBT and RT on the level of fatigue and QOL among teaching professionals with CFS.
- To correlate the level of fatigue and QOL in both study groups and control group.

MATERIALS AND METHODS

Design: Quasi-experimental with time series Design

Setting: The study was conducted at various schools in north and central part of Chennai, Tamil Nadu.

Sample Size: 30 teaching professionals with CFS, who fulfilled the inclusive criteria were taken for study groups and the control group with 10 samples in each group

Sampling Technique: Non-Probability convenient and Purposive Sampling Technique has adopted for the study.

Data Collection Instrument: The standardized instruments were adopted and reproduced with formal permission from the authors and compiled by the investigator with the guidance of experts and review of the literature. The tools used for the present study has the following components.

Part I: Self-reported semi-structured questionnaire for demographic variables:

Age, sex, educational qualification, monthly family income, habitant, religion, marital status, types of family, number of family members, mode of transport, hereditary disease, psychiatric illness, any other illness, attendance to school, gender disadvantage, autonomy

Part II: Krupp LB Fatigue severity scale

It is a self-rating instrument, a standardized tool used to assess the severity level of fatigue developed by Krupp et al., adopted and reproduced with formal permission from the author.

Part III: Ferrans and Powers Quality of life Index(QLI)- Chronic fatigue syndrome- III.

It is a standardized self-rating instrument developed by Ferrans and power. Adopted and reproduced with formal permission from the author.

The reliability of fatigue severity scale and quality of life index scale was measured by the test and retest method and found the r value was 0.68 and 0.72 respectively

INTERVENTION

Cognitive Behavioral Therapy (Study Group I): In this present study the investigator used mindfulness integrated cognitive behavioral therapy aimed to modify behavior and beliefs that maintain disability and symptoms of CFS.

Teaching professionals with CFS who fulfilled inclusive and exclusive criteria and assigned to Study group I are given CBT by group therapy using PPT, discussion, homework assignment and revision and demonstration for 8sessions in 8 weeks duration. Each session lasts for 1hr. Every session begins with homework homework review and ended with an agreement on homework task which was revealed in daily diaries maintained by the teaching professionals with CFS. The investigator followed detailed session by session therapy plan with modules devised for CBT. Information leaflet supplemented each session and worksheets given for practice in each session.

Relaxation Therapy (Study Group II): The investigator used Jacobson progressive muscle relaxation technique, breathing technique, rapid relaxation skills, and guided imagery technique.

Teaching professionals with CFS who fulfilled inclusive and exclusive criteria and assigned to Study group II are given RT by group therapy using PPT, discussion, and demonstration for 8 sessions in 8 weeks duration after completion of the total of 7 months of intervention and reinforcement sessions for study group 1(CBT). Each session for RT lasts for 1hr. Every session begins with a revision of the previous session and ended with return demonstration by the teaching professionals with CFS.

The investigator followed detailed session by session therapy plan with modules devised for RT. Information leaflet supplemented each session.

Control Group: Teaching professionals with CFS in the control group given no treatment.After the data collection period, they were given CBT for 4 weeks with an information leaflet

RESULTS

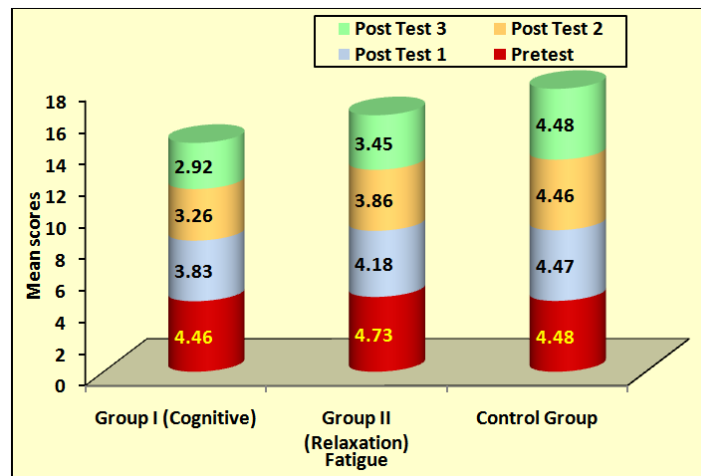


Figure 1: Shows the Comparison of Pretest and Post Tests Level of Fatigue among Teaching Professionals with CFS in Study Group I (CBT), Study Group II (RT) and Control Group and Difference Between the Scores Show Highly Significant at $p = 0.0001$ in All Three Groups

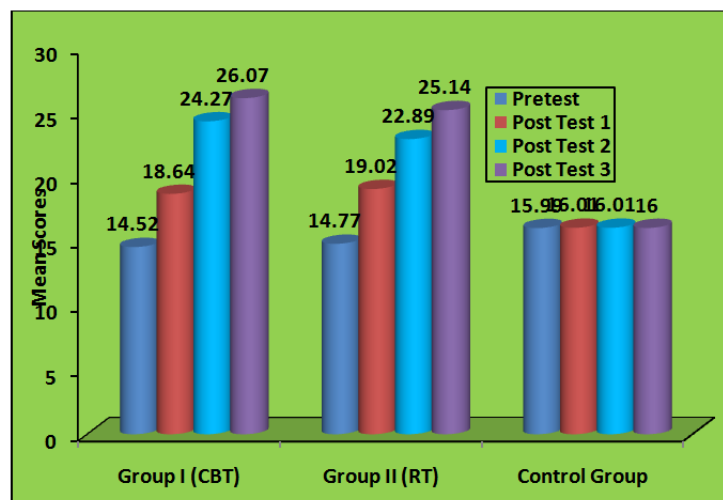


Figure 2: Shows the Comparison of Pretest and Post Tests Level of Fatigue among Teaching Professionals with CFS in Study Group I (CBT), Study Group II (RT) and Control Group and the difference Between the Scores Show Highly Significant at $p = 0.0001$ in Both Study Groups

Table 1: Shows the Correlation between Post Test Level of Fatigue and Quality of Life Score among Teaching Professionals with CFS in Study Group I (CBT), Study Group II (RT) and Control Group N = 30

Group	Variables	Mean	S.D	'r' Value
Study Group I (CBT) n = 10	Fatigue	2.92	1.04	$r = -0.503$
	Quality of life	26.07	4.12	$p = 0.002, S^{**}$
Study Group II (RT) n = 10	Fatigue	3.44	0.64	$r = -0.420$
	Quality of life	25.14	4.18	$p = 0.012, S^*$
Control Group n = 10	Fatigue	3.80	0.41	$r = 0.227$
	Quality of life	16.39	3.44	$p = 0.170, N.S$

** $p < 0.01$, * $p < 0.05$, S – Significant, N.S – Not Significant

The correlation between post level of fatigue and quality of life score among teaching professionals with CFS in the study group I (CBT) and Study group (RT) shows significant relationship at $p = 0.002$ and $p = 0.012$ respectively.

CONCLUSIONS

The pilot study revealed that the tool was reliable and practicable. The findings revealed that There is a significant improvement in fatigue and quality of life in both CBT group and RT group when compared with the control group. When compared to RT, CBT shows better improvement in fatigue and quality of life.

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