International Journal of Psychosocial Rehabilitation, Vol. 25, Issue 03, 2021
ISSN: 1475-7192

THE EFFECT OF COGNITIVE BEHAVIOUR THERAPY TO IMPROVE THE WELL-BEING OF PREGNANT WOMEN

Vijayalakshmi.P[1], R.Subashini,[2] Anitha[2]
[1] Sri Ramachandra Institute of Higher Education and Research (Deemed University)
[2] Madras School of Social Work
[2]Research scholar,

Corresponding author
Dr. P. Vijayalakshmi
Associate Professor,
Faculty of Allied Health Sciences,
Sri Ramachandra Institute of Higher Education and Research (Deemed University)
Email id: vijayalakshmianbu@gmail.com

Abstract

Aim:

To find out the effect of cognitive behavior therapy to improve the well-being of pregnant women.

Methods:

Cognitive Behavioral Therapy (CBT) represents a unique category of psychological interventions based on scientific models of human behavior, cognition, and emotion. Of the 120 pregnant women who attended the counselling session, 58 fall under the category of low score in measure the well-being of pregnant women. 62 fall under the category of high score in measure the well-being of pregnant women. Out of 58, 30 pregnant women were given willingness, selected as a sample. A scale to measure the perceived Well-being of pregnant woman was constructed by the researcher, whereas Content validity was established with the opinion of experts in the field of investigation. Cronbach's alpha reliability =r=0.59, parallel form method of reliability =r=0.61 split-half method reliability is=r=0.62. Both English and Tamil version of questionnaire were administered. Correlation of coefficient was found to be 0.81.

Results:

The obtained 't' value was found to be 0.485 and 0.091. There was no significant difference between experimental group and control group pre-test scores and pre-test and post-test scores of control group of perceived Well being of pregnant women. A paired sample t-test was conducted to compare scores pre-test and post-test intervention. There was a significant difference in the scores for the pre test (M=181.13 S.D=13.789) and post test (M=196.24 S.D=16.835) conditions and the control group (M=179.13 S.D=14015) and experimental group (M=196.27 S.D=16.835) post-test intervention.

Conclusion

Results showed that there was a significant difference between pre-post experimental groups in their perceived level of wellbeing in pregnant women and to manage or reduce their physical or mental imbalance, the behavioural intervention programme is boom to the pregnant women.

Keywords: Pregnancy, cognitive behaviour therapy, well-being

INTRODUCTION

Pregnancy is not a disease. It is an ideal environment to give new life to the baby. At the time of pregnancy, the mother should be more positive and relaxed. Cognitive behavior therapy helps to organize the thoughts in the positive way. Cognitive Behavioral Therapy (CBT) represents a unique category of psychological interventions based on scientific models of human behavior, cognition, and emotion.[14] It includes a wide range of treatment strategies that take the current knowledge about the etiology and maintenance of the different mental disorders into account[4,5]. Patients and therapists work together to identify and understand problems in terms of the relationship between thoughts, feelings, and behavior. The focus lies in the here and now. CBT intends to directly target symptoms, reduce distress, re-evaluate thinking and promote helpful behavioral responses.

CBT & Psychodynamic Psychotherapy putting what has been learned into practice between sessions ("homework"). The patient learns to attribute improvement to his or her own efforts (self-efficacy). Behavioral interventions are considered as clinical applications of learning theory[29]. Systematic Desensitization (counter conditioning), Exposure/response prevention (ERP), Relaxation, Positive and negative reinforcement, Cognitive modification, Assertiveness training (social skills training), Stress management, Problem solving are the methods and techniques used in cbt[29]. Donalds Meichenbaum's (1977) cognitive approach was even more structured and directive than Beck's. Meichenbaum uses self-instructional training to help clients replace their maladaptive cognitions with rational, positive thoughts, particularly when they are in stressful situations.

Antenatal Cognitive-behavioral Therapy for Prevention of Postpartum Depression a study conducted by **Hyun Ju Cho, et al (2008)** conducted a study to examine the efficacy of cognitive-behavioral therapy (CBT) for the prevention of postpartum depression (PPD) in "at risk" women. In conclusion, the analysis of covariance (ANCOVA) showed that there were significant differences in all postpartum measures between the 2 groups, indicating that the antenatal intervention with CBT was effective in reducing depressive symptoms and improving marital satisfaction, which lasted until the postpartum period.

Methodology

The aim of the study was to design, implement and evaluate the effectiveness of cognitive behavior therapy to improve the well-being of pregnant women. The investigation was adopted an experimental design, described as "Pre- Post Experimental design with Control Group". Cognitive behavior therapy was independent variables and the research was intended / implied to study the changes brought about by evaluating its effects on the well being of pregnant women which was treated as a dependent variable. First prime (first conceived pregnant women) of the pregnant women from third month till the date of delivery was the sample for the research; hence the purposive sampling method was adopted. Of the 120 pregnant women who attended the counselling session, 58 fall under the category of low score in measure the well-being of pregnant women. 62 fall under the category of high score in measure the well-being of pregnant women. So, the investigator selected only a low score in measure the well-being of pregnant women. The investigator personally approached the participant for willingness to participate

undergo the intervention programme and as well as the type of therapy, through the written statement. Out of 58, 30 pregnant women were given willingness and they are the group of "experimental and control group," during the intervention programme. A scale to measure the perceived Well-being of pregnant woman was constructed for the study by the researcher for the fulfillment of objectives of the present study. The face validity was done by the investigator, whereas Content validity was established with the opinion of experts in the field of investigation. Cronbach's alpha reliability =r=0.59, parallel form method of reliability =r=0.61 split-half method reliability is=r=0.62. Both English and Tamil version of questionnaire were administered. Correlation of coefficient was found to be 0.81.

Hypotheses

a. There will be no significant difference between experimental group and control group pre-test scores of perceived Well-being of pregnant women among the cognitive behavior therapy, difference between pre-test and post-test scores of perceived Well-being of pregnant women among the cognitive behavior therapy control group

b. There will be a significant difference between pre-test and post-test scores of perceived Well-being of pregnant woman among the experimental group, difference between experimental group and control group post-test scores of perceived well-being of pregnant women

c. The present investigation was adopted an experimental design, described as "Pre- Post Experimental design with Control Group".

Based on DOBSON,2000, MASTER ET AL 1987, BECK 1995 model for helping pregnant women to develop the current research outlines an innovative, intentional, empirically derived approach to the hospital, that are devised as simple do-able to participate by the pregnant women.

COGNITIVE BEHAVIOUR THERAPY FOR PREGNANT WOMEN

Problem indentified	Person education	Goal setting	Therapy	Self efficacy in front of the mirror
Worry about pregnancy, anxious about delivery, anxious about the sex of the baby, laziness, food intake, fear about safe delivery, feeling of low, mood swings, worry about growth of the baby, dissatisfaction-	Flash card, paper, pencil, sheets of papers, perception card, alternate therapy information, with power point presentation, change view, nutrition, week	Irrational thoughts of problems has to change as rational thoughts of well being.	Role play, home work, diary, self talk, talk therapy, active listening, systematic desensitization, exposture/respo nse prevent, relaxation, positive reinforcement,	I am alright now, my baby is alright. My baby and I are healthy and my baby is growing. I will have a safe delivery. my baby's growth will be good.I will

weight gain or loss, Physiological problems like Constipation, breast changes, weak or tiredness, worry about discharge from private parts, unreasonable hunger, swelling feet, difficulty in breathing, urinary infection, loss of appetite and emotional problems like Friction in the relationship between in-laws and partner, worry about features of the baby, fear about medical report, worry about body structures, worry about baby growth, worry about some health related problems, more information about pregnancy, worry about back pain, weight gain after delivery, worry about frequent vomiting, worry about position of the baby, worry about fetal movement	by week growth and delivery videos,		cognitive modification, assertive training	regain my body structure after deliver and I shall maintain my body structure. I will deliver my baby at the time of delivery.

Cognitive behavior therapy for pregnant women

The therapy were built mainly to facilitate to examine how effective it was in alleviating negative thoughts and improving/ enjoy the labour and experience a sense of fulfillment.

Table 2 shows the cognitive behavior therapy for pregnant women

Systematic desensitization	The pregnant women learnt gradually weaken anxious reactions (like anxious about pregnancy, delivery, sex of baby, growth of baby, features of the baby) by exposing herself in a relaxed state (either through imagination or in the real world) with sufficient reputation, (like by saying positive thoughts :I am happy everything went on well"). The situation loses its power to make the person severely anxious.
Exposure/ response prevention (ERP)	Pregnant women were confronted with an anxiety or stress provoking stimulus while refraining from avoidance behavior.
Relaxation	Techniques, such as progressive muscle relaxation are taught and practiced to reduce the physiological arousal level of pregnant women
Positive /negative reinforcement	Systematic reinforcement is used to establish new behavior "negative consequences may be systematically used to weaken disruptive behavior such as aggression or impulsivity.
Cognitive modification	Techniques such as identification of maladaptive automatic thoughts and cognitive schemas (e.g. I am so fat and my delivery will be critical") by use of standardize protocols, corrective thinking errors, establishing guiding self statement (e.g. stop, think, act) or verbal self instruction(e.g. what are all of my options to solve this problem)
Stress management	A combination of strategies to reduce tension and distress, reexamine the importance of current life stressor, prioritize goals, manage and diffuse anger, resolve interpersonal conflict, improve time management
Problem solving	The process of problem identification, description, goal definition, generation of possible solution, decision making (weighing costs and benefits) and evaluation of new experiences is thought and practiced.
Active listening	In PowerPoint presentation explain about week by week growth of the baby that active listening created more information and exposure for pregnant women and her partner.
Talk therapy	Along with the gynecologist the therapist explained about current condition, then talk about preparation for labor

	helped the pregnant women increase the confident and enjoyment.
Self talk	Self talk statement like "I am whole heartily carrying my pregnancy, I eat well because my food went to my womb, I am sending happiness to my baby,…….
Home work/ dairy	

PARENTGRAFT MEETING

The parent craft meetings were conducted with the help of the organizers such as gynecologist, nutritionist, psychotherapist, assistants, experts and nurses. The pregnant woman was advised to attend all the sessions along with her husband. File, note book, perception card, paper, pencil, power point presentation and flash card are some of the materials required for the parent craft program.

The selected pregnant women for the intervention plan were given a preliminary orientation about the programme which involved getting introduced and meeting up with the therapist. In the orientation session, the group was informed about the concept of parent crafting. The objective here was to create familiarity and getting motivated about the new approach. The participants were handed out a folder to file in all work done during the course of programme. There were also given individual notebooks to be used as a personal journal and record their thought, feelings and introspective reports. The pregnant women were advised to attend the programme along with the husband in order to take full benefit of the course. It was also emphasized that maintaining a diary, being prompt with home work and taking note of their doubts was vital. They were also given paper, pencil, file and note book at the opening session.

The psychotherapist would introduce each session, interact with each participant at regular intervals and their feedback, encourage and give assurance to them. At the end of each session they were advised to continue with the auto suggestion thought in front of the mirror by the psychotherapist and also to maintain record of the diet and thought processing.

The therapist explained that parent crafting is a crafting a baby who is an emotionally, physically and psychologically fit and also it helps in improving your (pregnant women) physical fitness, psychological stability, emotional maturity, healthy relationship with husband, in-laws and preparation for a labour. They were also enlightened on fertilization. A power point presentation on the growth of fetus week by week was given. They were also given a detailed talk on symptoms of pregnancy and adviced how to overcome the difficulties with the help of the gynecologist.

In the course of the program, the nutritionist gave lot of information on nutrition required for both the mother as well as the baby. They were also thought what a balanced diet is and why it is necessary for pregnant women.

The experts gave lecture on alternate therapy, change view, and explained how these would facilitate the well being of the mother and the fetus. They were shown perception card with pictures of healthy mother and baby. At the same time, flash card

showing weak mother and baby was also shown to highlight the contrast. Relaxation techniques through breathing were thought. They were encouraged to touch the sides of the belly and give auto suggestions like "I am alright now, my baby is alright. My baby and I are healthy and my baby is growing". While doing this, they were required to imagine a healthy baby and a beautiful relationship between a mother and a baby.

Pregnant women were taught breathing techniques to be used at the time of delivery so that they could have a stress-free delivery. They were also shown videos of normal delivery in order to help them have a clear, prior knowledge about delivery. Explanations about various physiological changes were given in detail to the pregnant women. They were also given suggestion like mild exercises to reduce some of the problems and to apply oil to reduce cracks in the skin.

Many positive thoughts to boost the morale of the pregnant women were administered to them. They were asked to repeat ideas like, I will have a safe delivery', 'my baby's growth will be good,' 'I will regain my body structure after deliver and I shall maintain my body structure after that', and 'I will deliver my baby at the time of delivery', repeatedly to themselves so that, psychologically the pregnant woman will have a good feeling when she thinks of labour and the baby.

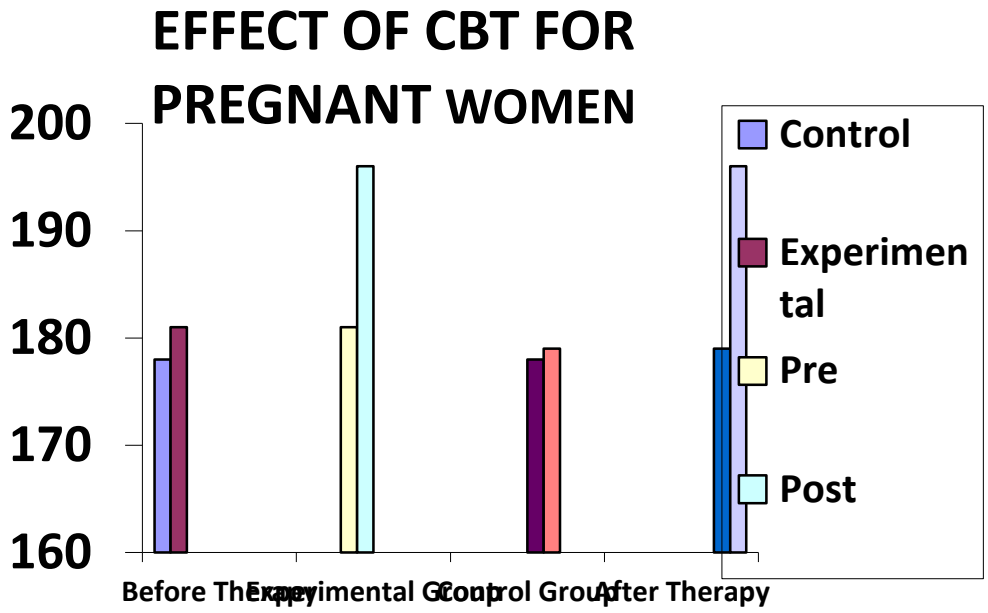

Table-3

Shows the significant mean difference between experimental group and control group pre –test scores in cognitive behaviour therapy.

Groups	N	Mean	S.D	M.D	S.E	't' - value
Control Experimental	15 15	178.67 181.13	14.090 13.789	2.467	5.090	0.485 (NS)

NS- not significant

The obtained t value is found to be 0.485. This indicates that there is no significant difference between experimental group and control group pre-test scores of perceived Well-being of pregnant women among the cognitive behavior therapy.

Table-4

Shows the significant mean difference between pre-test and post test scores of experimental group in cognitive behaviour therapy.

Groups	N	Mean	S.D	M.D	S.E	't' - value
Pre-test Post test	15 15	181.13 196.24	13.789 16.835	15.110	5.443	2.77**

****Significant at 0.01 level**

A paired sample t-test was conducted to compare scores pre-test and post-test intervention. There was a significant difference in the scores for the pre test (M=181.13 S.D=13.789) and post test (M=196.24 S.D=16.835) conditions.

From the above table it can be see that a significant difference was found with the pregnant women scoring higher on well-being in the post test compared to the pre test of experimental group with the t score=2.77, being significant at the 0.01 level.

Table-5

Shows the significant mean difference between pre-test and post test scores of control group in cognitive behaviour therapy.

Groups	N	Mean	S.D	M.D	S.E	't' - value
Pre- test Post-test	15 15	178.67 179.13	14.090 14.015	0.467	45.131	0.091 (NS)

NS- not significant

The obtained t value is found to be 0.091. This indicates that there is no significant difference pre-test and post-test scores of control group of perceived Well-being of pregnant women among the cognitive behavior therapy.

Table-6

Shows the significant mean difference between control group and experimental group-I post test scores in cognitive behaviour therapy.

Groups	N	Mean	S.D	M.D	S.E	't' - value
Control Experimental	15 15	179.13 196.27	14.015 16.835	17.11	5.475	3.12**

0.01 level **Significant at 0.01 level

A paired sample t-test was conducted to compare scores experimental and control group post-test scores intervention. There was a significant difference in the scores for the control group (M=179.13 S.D=14015) and experimental group (M=196.27 S.D=16.835) post-test intervention.

Results

In the present study, a total of samples were subjected to statistical analysis of percentage and following conclusions were no significant difference was found between experimental group and control group pre-test scores and pre-test and post-test scores of perceived Well-being of pregnant women among the cognitive behavior therapy. A significant difference was found between pre-test and post-test scores and experimental group and control group post-test scores of perceived Well-being of pregnant woman among the experimental group.

Conclusion

In the western countries the pregnant woman, attends counselling sessions along with her husband attends and gains knowledge regarding the physiological, psychological and emotional changes, the special attention needed the economic commitment and tension free delivery which required for a healthy baby. They are well equipped for a normal labour with proper safty. Whereas, the scenario is entirely different in our country the factors like People's fears, superstitious beliefs and lack of knowledge causes enormous stress for the pregnant women. In order to manage or reduce their physical or mental imbalance, the behavioural intervention programme is boom to the pregnant women.

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