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Research Article

IMPACT OF COGNITIVE BEHAVIOURAL THERAPY IN STRESS, ANXIETY AND DEPRESSION DURING PREGNANCY AND CHILD BIRTH

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ABSTRACT

Anxiety, stress and depression are common in pregnancy and significant levels of anxiety symptoms are experienced by up to half of all women during pregnancy. Mild to moderate perinatal depression, stress and anxiety may cause serious adverse effects on mothers and children which includes preterm birth and low birth weight, child developmental delay and poor child mental health.

Cognitive behavioural therapy (CBT) is recommended as an early intervention for improving maternal-child outcomes. CBT, in conjunction with antipsychotic drugs, are powerful in lowering distressing symptoms and hospitalizations, in comparison with medication alone. Mindfulness based interventions (MBIs) also have effects on reducing psychological and physiological indices of stress arousal. MBIs reduces the exposure of the foetus towards stress, anxiety and depression, and it helps to maintain a more positive intrauterine environment for the developing foetus. Mindfulness-based Cognitive Therapy (MBCT) can effectively reduce the symptoms of stress and anxiety and may help in preventing recurrence of depression.

Studies had proved that early detection and treatment of anxiety, stress and depression can benefit both mother and child. Studies showed that behavioural therapy is most cost effective therapy in reducing maternal stress, depression and anxiety when compared to pharmacotherapy. CBT is a highly effective treatment for depression and anxiety and it consists of psycho-education, behavioural activation, cognitive therapy and relapse prevention. Majority of studies concluded that, blended CBT is most cost-effective than pharmacotherapy.

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INTRODUCTION

Anxiety, stress and depression are common in pregnancy and significant levels of anxiety symptoms are experienced by up to half of all women during pregnancy.¹ Fear of childbirth (FoC) is a tremendously established terrible emotion amongst pregnant women that is characterized by excessive tiers of stress and emotional maladaptation to the ordinary physiological and psychological strategies of pregnancy and giving birth.² Studies showed that about 25% of pregnant women suffer from an excessive level of FoC and about 10 to 15% of mothers have depressive symptoms.³ FoC can be caused due to fear of pain, worry of physical damage or fear of infant's health, listening to horror memories about labour from circle of relatives, friends, and media resources.⁴

Certain studies proved that even mild to moderate perinatal depression, stress and anxiety may cause serious adverse effects on mothers and children which includes preterm birth

and low birth weight, child developmental delay, and poor child mental health.^{5,6,7} Children who are exposed to maternal depression during pregnancy have a higher risk of adverse birth outcomes, together with low birth weight, and greater often show cognitive, emotional and behavioural problems.⁸ Without treatment, women with prenatal anxiety and those with prenatal depression preserve to experience signs and symptoms through the postpartum period and into their children's early years of life.^{9,1}

Socio-Demographic Characteristics

Researches on antepartum and postpartum mainly includes collection of sociodemographic information which includes marital popularity, ethnicity, age, own family socioeconomic reputation (household income, education level, neighbourhood characteristics of the house), working popularity and number of kids in the home. Health practices includes smoking, alcohol consumption, and level of routine exercise. Evaluation of

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preceding mental fitness troubles and assessment of psychotropic medication use.¹¹ Studies had found that individuals of age group between 18 to 20 years who are having lower education profile and socioeconomic background had miscarriage or abortion.¹² A study conducted in African Americans had found that antepartum and postpartum anxiety, stress and depression were more common in working women.¹³

Anxiety and Depression Outcomes

Depression, anxiety and stress are common in pregnancy. One in four pregnant females experiences symptoms of depression, stress, or anxiety.¹ The studies proved that, there was a significantly higher rate of ante- and postpartum depression in women who received an Elective Caesarean (ECS) than a women who delivered vaginally.¹⁴ Comparison has been done in women with and without preference for ECS, and women who were requested for an ECS is found to be have higher antepartum depression.¹⁵ Antepartum depression and anxiety were high in women requesting and receiving an ECS but the postpartum depression were the same as in women without a wish for ECS. These findings are supported with the aid of 8 studies of adequate quality that combined data of ECS on medical indication and on maternal request.¹⁶

Severity of Depressive Symptoms

In several studies, authors described depressive symptoms as a medical or psychiatric disorder that includes both psychological and physiological aspects. It appears within four weeks after childbirth. Certain mothers become vulnerable due to a lack of social support combined with the presence of negative social factors.¹⁷ Postpartum depression (PPD) involves desperation, sleeping disorders, depressive mood, anxiety and loss of concentration, bad mind of oneself or even thoughts of death.¹⁸ Different view of depressive symptoms, certain physical symptoms and awareness of new sensations during pregnancy which can influence premature childbirth.¹⁹ Pregnant women always have worry about their health, baby's health, labour pain and delivery.²⁰ Self-report version of the Inventory of Depressive Symptoms (IDS-SR) will be used to measure the severity of depressive symptoms.²¹ The IDS-SR has highly acceptable psychometric properties and has been verified to be sensitive to treatment effects in depressed out patients.²² Patients with $\geq 50\%$ symptom reduction on the IDS-SR could be deemed to be treatment responders.²³ Sufferers are endorsed to complete the IDS-SR on a weekly basis.²⁴

MATERIALS AND METHODS

A search on pubmed data based for articles published between 2000-2016 on impact of cognitive behavioural therapy in stress, anxiety and depression during pregnancy and child birth. English language articles were selected for inclusion along with selected cross-references.

RESULTS AND DISCUSSION

Treatment Preference

Cognitive Behavioural Therapy (CBT) in conjunction with antipsychotic drugs are powerful in lowering distressing symptoms and hospitalizations, in comparison with medications alone.²⁵ MBCT is a method for reducing the symptoms of psychological distress and prevents the

development of postpartum mood disorders.²⁶ Psychological Therapy programmes, viz; graded exposure and behavioural activation are effective in reducing anxiety and depression.²⁷ This programmes are often applied in CBT to assist concurrent problems with mood disorders and psychotic symptoms.²⁸ Patients are asked what their treatment preference might had been and the answers of preference were blended cognitive behavioural therapy (bCBT) or cognitive behavioural therapy as usual (CBTAU). Studies proved that MBCT in pregnancy had reduced worry, anxiety and comorbid symptoms of depression in pregnant women with clinically elevated symptoms of generalized anxiety disorder (GAD).²⁹ Online treatment has the ability to provide effectiveness in reducing depressive symptoms.³⁰

Mindfulness and Health

Mindfulness based interventions (MBI) are found to be beneficial in improving psychological symptoms.³¹ MBIs also have effects on reducing psychological and physiological indices of stress arousal,³² reduction in blood pressure (BP), improved heart rate variability (HRV) and improvements in sleep quality.³³ MBIs reduces the exposure of foetus towards stress, anxiety and depression, it helps to maintain a more positive intrauterine environment for the developing foetus. Several studies of MBIs in pregnancy suggested that researchers need to seek biological evidence of the effect of mindfulness, and the future research need to check whether there may be any changes in the physiological pathways underlying the stress reaction because of intervention.³⁴

MBCT can effectively reduce the symptoms of anxiety and stress and may help in preventing recurrence of depression.³⁵

Cognitive Behavioural Therapy (CBT)

CBT is suggested as an early intervention for improving maternal-child outcomes.³⁶ CBT is an incredibly effective remedy for depression and anxiety.³⁷ Randomized controlled trials of group-based CBT for new mothers and pregnant women demonstrated that group CBT is appropriate and efficacious in decreasing risk and symptoms of postpartum depression.³⁸

CBT is effective in the treatment of anxiety disorders. Recent research strongly suggests that treatment for antenatal anxiety is acceptable and relevant to pregnant women.³⁹ The CBT protocol consists of psycho-education, behavioural activation, cognitive therapy and relapse prevention. The final MBCT includes an initial engagement session, which integrated Motivational Interviewing (MI), and three treatment modules: Behavioural Activation (BA), Cognitive Restructuring (CR) and Interpersonal Support (IS).

MI was used at any point in the interaction that pertained to behaviour change, which includes ambivalence or motivation about behaviour change. Specific BA techniques includes the use of a functional analytical approach to develop an understanding of behaviours that interfere with meaningful intention-oriented behaviours, self-monitoring, identifying depressed behaviours, developing alternative goal-oriented behaviours and scheduling.⁴⁰

The advantages of CBT within the antenatal period is to decrease maternal anxiety. Antenatal intervention gives the

capacity to prevent some episodes of postnatal depression and anxiety and so to improve maternal well-being, similarly to decrease the developmental risk of child exposure to maternal postnatal depression and anxiety.⁴¹

In the Cognitive behavioural treatment-as-usual (CBTAU), patients receive a 20-45 mins sessions of face-to-face CBT over 20 weeks. All individual sessions should involve monitoring of depressive symptoms, addressing the week long past and the present day issues, discussing facts and homework exercises for the previous week and the week to return. Classes can be concluded with a precise and assessment.⁴⁰

In the bCBT, patients receive a 10-45 mins face-to-face sessions and 9 online sessions. The treatment will be delivered over a period of ten weeks (one face-to-face and one online session consistent with week). Treatment begins off evolved and ends with a face-to-face session. The blended face-to-face sessions are based in a similar manner to the regular face-to-face sessions. A brief video fragment is protected in every online session wherein a therapist explains the concept in lay terms. In addition, sufferers use the internet site to complete homework sporting events, consisting of monitoring their activities, feelings, thoughts and behaviour. Therapists monitor their patients' online progress and provide feedback every week before the following face-to-face session. The feedback messages take about 15 minutes to put in writing and are despatched on the online platform to make sure secure communication. On completion of treatment, patients can continue to access the online treatment platform to reread records and look up homework exercises consisting of relapse prevention plan.⁴⁰

Without treatment, there is proof that 48% of pregnant women with anxiety and 71% of those with depression continue to experience symptoms throughout the postpartum period.⁴² CBT is clinically appropriate, accessible and cost effective and it has been endorsed for treatment of anxiety and depression in the primary care.⁴³ Some research suggested that online CBT produces moderate to huge outcomes, is as effective as face-to-face CBT, and has decrease attrition charges than group-based CBT.⁴⁴ There is evidence that CBT, at the side of antipsychotic drugs are effective in lowering distressing signs and symptoms and hospitalizations. Consequently, the latest National Institute for Health and Care Excellence (NICE) guidance states that CBT have to be offered to everybody with psychosis or schizophrenia.⁴⁵

Cost-Effectiveness of Cognitive Behavioural Therapy

In the proposed studies, integrated blended cognitive behavioural treatment will be compared with face-to-face cognitive behavioural treatment for major depression. From the proposed studies it was found that blended CBT is cost-effective in comparison with face-to-face CBT.

The availability of affordable evidence-based treatments are relevant in specialized mental health care. Blended care can provide a way to enhance the cost-effectiveness of depression treatment. This form of treatment combines factors of online and face-to-face treatment, with the purpose of diminishing the variety of face-to-face sessions needed to deliver the treatment protocol.⁴⁶ It is crucial that cost-effective treatments should be developed for antenatal anxiety and it can improve short- and

long-term outcomes for both mother and child.⁴⁷ Majority of studies concluded that, blended CBT for major depression might be more cost-effective than face-to-face CBT as usual.⁴⁰

CONCLUSION

The psychological status of pregnant women should be investigated in prenatal care services and CBT should be implemented depending on available resources. CBT is effective in lowering anxiety, depression and stress in pregnancy. Integrating mental health interventions into home visitation seems to be a promising technique for preventing postpartum depression. Studies suggest that it is feasible to integrate a cognitive behavioural intervention into routine care in clinical settings to decrease antepartum depressive symptoms. If the cognitive behavioural intervention is efficacious in a larger trial, it can be used as a national model to integrate mental health services to lessen anxiety, stress and depression. Studies had proved that early detection and treatment of anxiety, stress and depression can benefit both mother and child, behavioural therapy is most cost-effective therapy in reducing maternal stress, depression and anxiety when compared to pharmacotherapy.

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