



TREATMENT MODALITIES IN DEPRESSION: A SYSTEMATIC REVIEW

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ABSTRACT

Depression is defined as a mood disorder in which a person has a persistent feeling of sadness and loss of interest. Although the exact cause of depression is unknown, a number of things can be associated with its development. Usually, depression does not occur from a single event, but due to combination of biological, psychological, social and lifestyle factors. There are different classes of depression, in which symptoms for each can range from relatively minor through to very severe. Depression occurs as: major depression, dysthymic disorder, bipolar disorder (which used to be called manic depression), cyclothymic disorder and seasonal affective disorder (SAD). Several treatment options are available for depression, but how well treatment works depends on the type of depression and its severity. Mild

symptoms may be corrected by: learning about the condition, lifestyle changes (such as regular physical exercise), and psychological therapy. For treating moderate to more severe forms of depression, medical treatments, in combination with these other treatments are used. Psychological treatments (also known as talking therapies) have been observed to be an effective treatment modality to treat depression. Different types of psychological treatments available are: cognitive behaviour therapy (CBT), interpersonal therapy (IPT), behaviour therapy and mindfulness-based cognitive therapy (MBCT). Antidepressant drugs may be

prescribed, along with psychological treatments, when a person experiences a moderate to severe episode of depression. In this paper, we will discuss various treatment modalities in depression.

KEYWORDS: Depression, antidepressant drugs, cognitive behaviour therapy.

INTRODUCTION

Modern complex societies are full of stress and strain. Almost everybody experiences feelings of depression at one time or another. The emotions of feeling sad, unhappy or disappointed are a part of a human being's normal existence and are experienced by everyone almost on a daily basis. On the other hand, if these depressive feelings persist to a greater degree and for a longer time interfering with one's health, they are referred to as a state of "clinical depression". Clinical depression is a state of sadness that has advanced to the point of being disruptive to an individual's social functioning and daily activities requiring clinical intervention.^[1] This painful process of depression can start with an overwhelming trauma or slowly build from a long history of stress and negative thinking or a family history of depression and negative life circumstances. Depression can be viewed as a persistent and recurring state that can involve multiple coexisting conditions such as anxiety and anger.^[2] This condition can clearly affect anyone at any economic level, from childhood to old age. Over the millennium, the painful dysphoric mood of depression has been experienced in similar ways by hundreds of millions. Kessler et al.^[3] found that approximately 16% of adults will experience depression in their lifetime. Depression is the most commonly encountered disorder among psychiatric outpatients (45%) and only 31% of depression sufferers are suffering from depression alone.^[4]

INTERVENTIONS FOR DEPRESSION

Depression is one of the most common and debilitating psychiatric disorder. Moussavi et al.^[5] stated that owing to its prevalence, its chronic and recurrent nature and its frequent co-morbidity with other chronic illnesses - both as a contributing factor and as a consequence - depression is considered to be the condition that is most responsible for health decrements worldwide. It is hence, a global health objective to understand, prevent and treat depression. Lester and Howe^[6] also stated that the recognition and treatment of depression is a challenging area of clinical practice as there are many patients with various presentations and multitude of causes for distress. He viewed that there is a need to identify, treat and

understand the perspectives of people with depression and provide them with effective, high quality, flexible and cost effective interventions.

Since past fifty years, the scientific research on depression has discovered many ways to address and defeat this chronic disability. Depending upon the severity and nature of depression, there is a wide range of effective treatments available.^[7] A number of antidepressant medication and psychotherapies can be used to treat depression. Various research studies have reported that antidepressant medication and psychotherapies are efficacious in treating moderate and severe forms of depression.^[8-10] Some patients with milder symptoms respond well to psychotherapy alone. By taking into consideration, the patient's diagnosis and severity of symptoms, the therapist may suggest antidepressant drugs and/or one of the several forms of psychotherapy that have proven effectiveness in treating depression. There are several biological and psychological interventions for the treatment of depression which are as follows.

(A) Biological Interventions

(a) Electroconvulsive Therapy (ECT)

ECT is employed, particularly for patients whose depression is severe or life threatening or who cannot take antidepressant medication. ECT is usually effective in such cases where antidepressant medications do not provide sufficient relief of symptoms. In recent years, ECT has been much improved. Usually a muscle relaxant is given before treatment, which is done under brief anesthesia. The electrodes are placed at preselected locations on the head to deliver electrical impulses. The electrical impulses lead to stimulation causing (about 30 seconds) seizure within the brain. The patient receiving ECT does not consciously experience the electrical stimulus. For full therapeutic benefit, at least several sessions of ECT, typically given at the rate of three per week, are needed.

(b) Antidepressant Medication

Several antidepressant medications are used to treat depressive disorders. Since last 4 decades, there has been considerable research on the effectiveness of antidepressants in treating depression. The use of antidepressant medication has increased greatly during the past decade.^[11] Antidepressant medication has been shown to prevent the return of symptoms associated with depression as long as it is continued or maintained. American Psychiatric Association^[8], and Nierenberg & Dececco^[12] found that antidepressants can prove helpful for between 25% and 60% of people suffering from depression. Gitlin^[13] found that response

rates to a single antidepressant medication were found to be 60-70%, compared to placebo response rates of 30%. Kocsis^[14] found that the efficacy of antidepressant medication has been established for the short-term treatments of chronic depressions by randomized, placebo-controlled clinical trials. Nelson and colleagues^[15] recently reported that combining SSRI's and norepinephrine reuptake inhibitors significantly increases the remission rates. Bauer *et al.*^[16] and Wijkstra *et al.*^[17] suggested that lithium improves overall outcome in depressed patients. Trivedi *et al.*^[18] Found that approximately 55% of patients with Major Depressive Disorder (MDD) will respond to treatment with an initial antidepressant medication. Leventhal and Antonuccio^[19] stated that the prescription of antidepressant drugs for the treatment of depression have increased enormously over the years. Avasthi *et al.*^[20] and Dube *et al.*^[21] found that antidepressants are greatly efficacious in the treatment of depressive disorders. Isacson *et al.*^[22] and Selvaraj *et al.*^[23] found that the increased use of antidepressants has contributed to the worldwide reduction in suicide rates as suicide is caused by depression and antidepressants relieve depression. The new international study by Goodwin *et al.*^[24] showed Valdoxan's (a novel antidepressant), efficacy in preventing relapse in patients with major depressive disorder, irrespective of the severity of depression.

A prime biological theory for depression is that deficiencies in the neurochemical serotonin play a significant role in promoting depression. Serotonin depletions in brain areas such as the hypothalamus, amygdala and the cortical areas are associated with disturbances in sleep, appetite, mood and sex. Various antidepressants are thus designed to address the biological symptoms of depression that are caused by serotonin deficiencies and tend to change the more primitive limbic area of the brain which is associated with functions such as sleep, appetite, sex etc. The newer antidepressant medications include chiefly the selective serotonin reuptake inhibitors (SSRIs) (such as Prozac, Zoloft), the tricyclics and the monoamine oxidase inhibitors (MAOIs). The SSRIs and other newer drugs that affect neurotransmitters such as dopamine or norepinephrine - generally have lesser side effects than tricyclic antidepressants. Few brand names of SSRIs are Zoloft, Prozac, Paxil and Lexapro. Tricyclic antidepressants (TCAs) work in the same manner but affect the reuptake of all three neurotransmitters associated with mood: serotonin, norepinephrine and dopamine. However, TCAs could be dangerous if overdosed. TCAs are not recommended to patients with heart trouble. Some tricyclic antidepressant brand names are Allegron, Tryptizol, Anafranil and Ortrip. Monoamine oxidase inhibitors (MAOIs), an older classical class of antidepressant therapy, also raise levels of all three neurotransmitters by blocking an enzyme

responsible for inactivating them. However, MAOIs also affect tyramine, a molecule linked to blood pressure. As a consequence, any person taking MAOIs must avoid common foods like cheeses, yogurt, certain meats, bananas and many more foods. Failure to comply with this precaution can cause hypertensive crisis and may even result in death. Sometimes the doctor tries a variety of antidepressants before finding the most effective medication or combination of medications. Although some improvements may be seen in the first two weeks of the treatment^[25], antidepressant medications must be taken regularly for 3 to 4 weeks^[26] before the full therapeutic effect occurs. Anti-anxiety drugs or sedatives are not antidepressants. They are sometimes suggested in combination with antidepressants; however, they are not effective when taken alone for a depressive disorder.

(B) Psychological Interventions

Bortolotti *et al.*^[27] and Cuijpers *et al.*^[28] found that psychological forms of interventions are quite effective and significantly linked to clinical improvement in depressive symptomatology. In the recent years, there has been an increase in attention to psychological treatments for depression, because of the demand of depressed patients and their families for non drug approaches as there is little evidence that having taken medication does anything to alter the risk factors that lead to subsequent relapse and recurrence^[29] and most patients with chronic or recurrent depression are encouraged to stay on medication indefinitely.^[30] Further, there is a recognized need for alternatives to medications, given their potential for side effects and some patients' preferences for non-pharmacological treatments for depression.^[31, 32] And as such clinicians have welcomed the development of more systematic psychological approaches for patients who cannot be prescribed standard antidepressant drugs or who are unlikely to respond to this intervention alone.

Zeiss *et al.*^[33] proposed that any psychological treatment that meets the following criteria should be effective in overcoming depression.

- Therapy should begin with an elaborate, well-planned rationale. This rationale should provide initial structure that guides the patient to the belief that he or she can control his or her own behaviour and thereby, his or her depression.
- Therapy should provide training in skills that the patient can utilize to feel more effective in handling his or her daily life. These skills must be of significance to the patient and must fit with the rationale that has been presented.

- Therapy should emphasize the independent use of these skills by the patient outside of the therapy context and must provide enough structure so that the attainment of independent skill is possible for the patient.
- Therapy should encourage the patient's attribution that improvement in mood is caused by the patient's increased skillfulness and not by the therapist's skillfulness.

Based on the research literature and the American Psychiatric Association Practice Guidelines, Markowitz^[34] reviewed potential cautions and relative indications for initiating treatment with psychotherapies for major depressive disorder.

Potential indicators include:

- Patient preference
- Symptom severity
- Relative contraindications to pharmacotherapy
- Prior treatment history
- Nature of symptoms
- Psychosocial context, and
- New and enduring skills

Hautzinger^[35] suggested that there are a number of structured psychological interventions that have been shown to be effective in reducing the symptoms of patients with depression, which are as follows.

(a) Psychodynamic Therapy

Psychodynamic therapy is based on the assumption that a person experiences depression as a result of unresolved, generally unconscious conflicts, often stemming from childhood. The goal of this type of therapy is for the patient to understand and cope better with these feelings by re-experiencing them through talking about them. Psychodynamic therapy is administered over a period of three to four months, although it can last longer, even for years. Several researchers have found that psychodynamic therapy is effective in treating depression.^[36, 37]

(b) Interpersonal Therapy

Another therapy used with depressed patients is Interpersonal Therapy (IPT) which is a short-term psychotherapy, normally consisting of 12 to 16 weekly sessions. Weissman & Markowitz^[38] found that IPT focuses on factors that interfere with social relations. It is a treatment that focuses on the behaviour and social interactions a patient has with family and friends. The main objective of this therapy is to improve communication skills and elevate

self-esteem of the patient during a short period of time. It usually lasts 3-4 months. Craighead et al.^[39] found that IPT has been shown to be an effective treatment for major depressive disorder, equaling the effects of CBT.

(c) Cognitive Behavioural Therapy

Still another promising psychosocial intervention is Cognitive Behavioural Therapy. Over the past 50 years, Cognitive Behavioural Therapy (CBT) has become one of the most effective mainstream psychosocial treatment for many emotional and behavioural problems. CBT is a psychotherapeutic approach, which is used by psychologists and therapists to help promote positive change in individuals, to help alleviate emotional distress and to address a myriad of psychological, social and behavioural issues. CBT aims to alleviate distress by modifying cognitive content and process, realigning thinking with reality.^[40] CBT is based on the scientific fact that our thoughts cause our feelings and behaviours, not external things like people, situations and events. This therapy can be conducted with individual persons, families or groups. CBT includes cognitive techniques as well as behavioural components. The former emphasizes on recognizing and challenging negative thoughts and maladaptive beliefs while the latter involves graded task assignments, pleasant events scheduling as well as other skills training such as relaxation skills, communication skills, assertiveness skills and problem solving skills.^[41]

CONCLUSION

Various treatment modalities are effective in the management of depression. Antidepressants are an effective modality of treatment. Depression may present risks to everyone, especially children, teens, and young adults. Antidepressants are not usually suggested in children and are not the first line of treatment in adults. Antidepressants may sometimes cause some patients to have negative reactions when they first start taking the medications. Few may become agitated at first before it begins to work. ECT is useful for patients who are not responsive to medications or are having suicidal tendency. Beginning of action may be faster than that of drug treatments, with benefit often seen within 1 week of commencing it. CBT is a structured and didactic form of therapy that aims on helping individuals in identifying and modifying maladaptive thinking and behavior patterns. There is enough research evidence supporting the effectiveness of CBT with individuals of all age groups. It is also said to be efficacious for the prevention of relapse of the symptoms. Interpersonal therapy (IPT) is

based on reducing or eliminating depressive symptoms by improving the quality of the patient's current interpersonal relations and social functioning.

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