

Various Approaches to overcome Depression: A Review

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Abstract

Depression is a global health problem which is elevating constantly. It affects not just the mood of the patient but also it's health, behavior and the quality of life. Diagnosis becomes difficult as there is no exact point for it's confirmation except some symptoms which too vary among patients. The condition can be triggered by various factors such as the surrounding friends and family, social sites, food habits, sleep patterns, food insecurity, childhood traumas, post partum and genetic factors. Since there is a wide range of clinical heterogeneity among patients the treatment approach would depend upon the individual itself. Different patients may show varying efficacy to different approaches. Along with the treatment there is a serious need to promote awareness among people of all age groups regarding various myths of the disorder and make them aware of the seriousness of this rising global health issue. In this review we made an approach to gather information about various treatment approaches available worldwide to fight this disorder as allopathy alone is not feasible to deal with it.

Keywords: Depression, Mental health, antidepressants and Treatment.

1. INTRODUCTION

Depression is a condition of central nervous system which effects the entire mood, appetite, sleep pattern and behavior of the person to the extent of committing suicide (**Kelliher Rabon et al., 2018**). Many factors such as genetic, metabolic, endocrine, neurobiological, adverse childhood experience, social media, alcoholism, substance use, food insecurity, marital problems could result in depression and it can even be postpartum (**Mendoza, J. 2019; Stewart, D. E., & Vigod, S. 2016; Hellman, M. 2018; Radovic et al., 2018; Hayward et al., 2020; Ahuja et al., 2020**). Depression affects both health and the quality of life of the patient (**Semkovska, M. 2019; Prisie et al., 2018**). It causes high levels of inadequate cognitive functioning in adults of above 60 years of age whereas the levels are only mild in the absence of depression (**Chenget al., 2020**). Clinical heterogeneity among such depressed patients make it hard to diagnose the condition accurately and hence the treatment options rely only on the active symptoms (**Pitsillouet al., 2020**). A study showed that there occurs a very low amount of mean overlap among 52 symptoms which was determined using seven scales again making it difficult for the accurate diagnosis and treatment of the disorder (**Fried, E. I. (2017)**). A phenomenon known as inbreeding depression is noticed when two closely related individuals indulge in mating activities that leads in deteriorating health conditions and lowers the rate of survival (**Hedrick et al., 2016**). Reduction in the amount of hippocampal substructures was observed in major depressive

disorder that could serve as its potential marker (Roddy et al., 2019) while on the contrary a rise in hippocampal tail volume could serve as a marker for the susceptibility towards antidepressant treatment (Maller et al., 2018). From a recent study by Robert et al., in the rural areas of Madhya Pradesh, India, it was suggested that there is a serious need to improve the diagnosis of the disorder as patients who were positive for depression sought healthcare options but it was not primarily due to depression also women are at twice higher risks than men for the disorder. Further improvements in the diagnosis would also help in better treatment options (Goldstein et al., 2019; Roberts et al., 2020). The selection method for the treatment might involve various factors to be considered about which an excellent study is published (Zachary D et al) other than that it is necessary to break certain myths around this disorder (Cairns et al., 2018; Haigh et al., 2018) and increase awareness which could in turn enhance understanding of both the patient and the clinician in choosing the best treatment option.

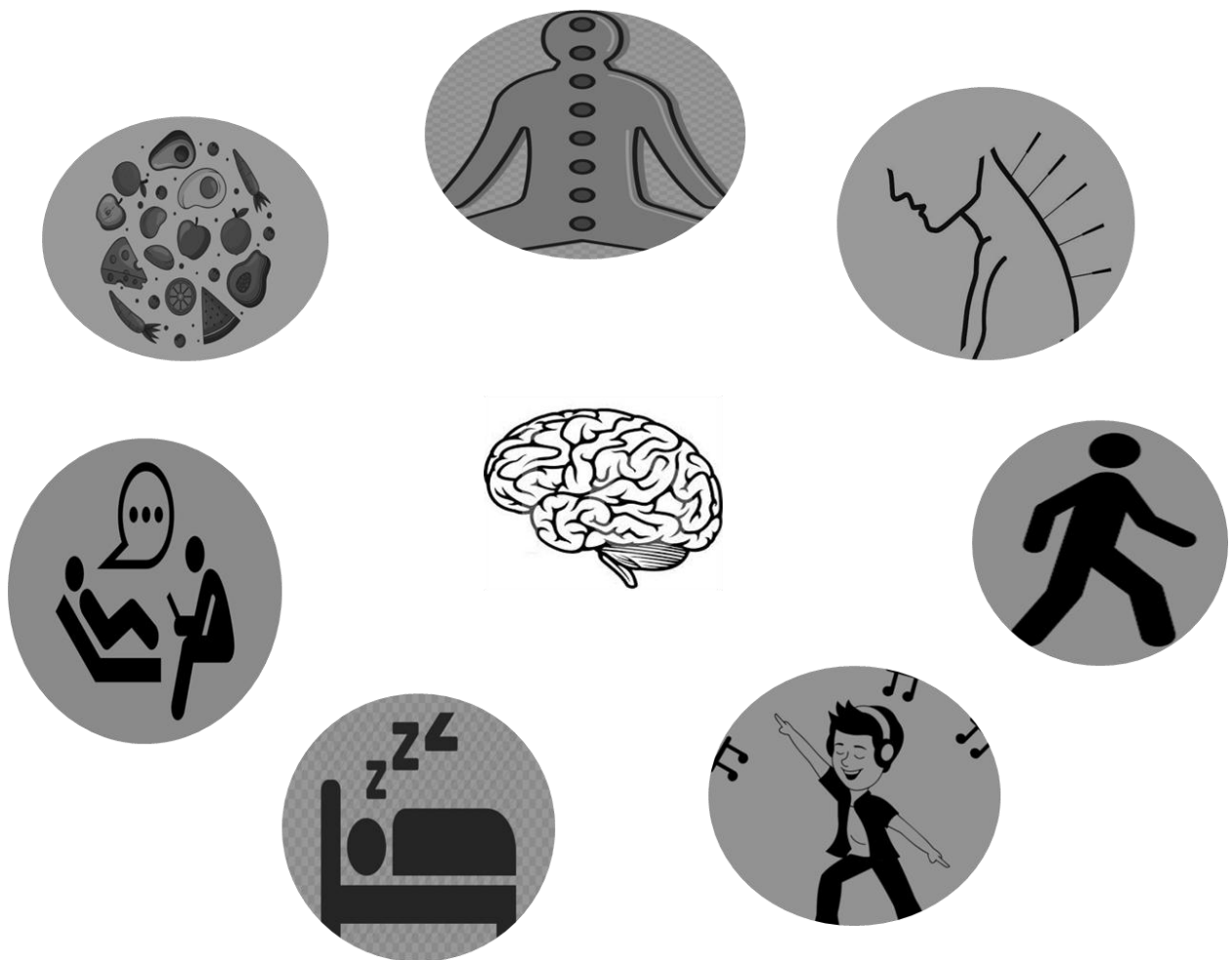


Fig: Various approaches used to heal depression

2. VARIOUS TREATMENT APPROACHES

2.1. Antidepressants

The standard antidepressant medication used for the treatment may help by relieving depressive symptoms but they do have many side effects associated with them such as weight gain, tremor, sexual problems, nervousness, insomnia, constipation and these are also costly (Maiese, M. 2018). According to a study Psilocybin has shown negligible side effects and can

constitute to be a good therapeutic drug candidate as compared to other antidepressants available (**Carhart – Harris et al., 2016**). In comparison to placebo treatment drugs still remain a better option for the treatment (**Xu et al., 2016**). A recent study clearly demonstrates that the positive effects of antidepressant drugs are negligible and hence these should not be used to treat depression (**Jakobsen et al., 2020**).

2.2. Acupuncture

In their study **Smith et al., 2018** checked the efficiency of acupuncture treatment control condition. The study include a comparative analysis of all together 64 studies, depicting some reduction in depression severity along HAMD scale with a point of 1.69. Overall, the results of acupuncture versus medication or physiological therapy or in combination medication and no medication showed very low quality results (**Dong et al., 2017**).

2.3. Aromatherapy

Intervention with aromatherapy by lavender essential oil showed a reduction in severity of depression. The results were obtained by comparing severity before and after two and four weeks of intervention (**Bagheri Naesamiet al., 2017**). 20 minute inhalation of 2% essential lavender oil was effective in depression symptoms over four week period (**Jokar et al.,2020**). Similar results were obtained by oral administration of oil for eight weeks period. In case of postpartum and before postpartum women convincing results are obtained by 15 minute lavender oil massage and inhalation for each four consecutive weeks and by inhalation of three drops three times a day for four weeks respectively. Hemodialysis patient with depression also felt slight relief upon inhalation with demark rose (**Dehkordi et al., 2017**). Clinical evidences for the efficiency of aromatherapy were also derived with females who were pregnant, were in their menopause phase, post partum women, healthy female volunteers, cancer patient and those with depression/ anxiety. Inhalation of yuzu essential oil and a conjugation of lavender along with rose otto showed some relieve in depression symptoms. Beneficial effects were also observed in 5 studies using aromatherapy message (**Sánchez-Vidaña et al.,2017**).

2.4. Curanderismo

Curanderismo is a holistic approach prevalent in roman catholic region, which includes whispering prayers and using spices and many herbs to heal (**Ramirez et al., 2017**). By understanding these cultural practices counselors can effectively incorporate Curanderismo in their session (**Torres & Hicks., 2016**).**R.Del Castillo et al., 2020** in their studies makes us aware about the need and benefits of engaging western PR actioners with this holistic treatment approach in mental health conditions for a deeper level healing.

2.5. Food, Nutrients and Probiotics

In a study to find the link between probiotics and depression it was found that people with lower health quality were more prone to depression and no direct association was found between depression and caloric and alcohol intake (**Cepeda et al., 2017**). In the recent time the antioxidant property of probiotics has gained much interest because of it's healing effect on mood disorders and degenerative aging disease (**Gayathri et al., 2017**). Tight junctions of the intestine are affected by stress conditions which leads to inflammation and an increased risk of infections, loss of normal functioning of intestinal barrier and an elevated epithelial permeability. Probiotics have shown to affect the integral proteins within the tight junction and maintain the it's structure (**Sharma et al., 2016**). Similar studies have been published who throw some light on the effect of probiotics to relieve depression symptoms and reduce risk taking behavior (**Kim et al., 2019; Tillman et al., 2019; Huang et al., 2016**). On the

contrary a meta analysis by **Liu et al., 2019** reports no significant role of prebiotics in depression. Some studies provide us with the role of various elements in our diet to prevent or control depression (**Khosravi et al., 2019**). Sufficient consumption of micronutrients, polyphenol diet, and dietary fibers is advisable (**Khosravi et al., 2019; Kontogianni et al., 2020**). Terminalia Bellirica fruit has gallic acid content which is known to have antidepressant activity and could serve as a natural antidepressant eliminating the side effects caused by antidepressant drugs (**Yadavalli et al., 2020**).

2.6. Yoga and physical movements

An excellent study by **Zhao et al., 2020** summarizes the importance of exercise in depression and brain plasticity. Exercises such as mind body, aerobic and resistance exercise help decrease the levels of depression, delays cognitive dysfunctions and rebuild structures of brain leaving a positive effect in behavior of the patient (**Kandola et al., 2019**). Hatha yoga which is a combination of high temperature exposures and yoga and laughter yoga both have impressive results on mildly depressive patients by improving quality of their lives, lowering anxiety levels, depression symptoms and also help those with chronic pain (**Nyer et al., 2019; Armat et al., 2020; Schmid et al., 2019; Naragatti, S., & Gupta, R. 2019; Bressington et al., 2019**). Practicing mindfulness by training the mind to detach from outcomes and remain in a calm and peaceful state helps in reduction of depressive state (**Saeed et al., 2019; Shulman et al., 2018**). For those who are not very good at yoga poses or are not comfortable with meditation exercise can just by spending some time outdoors get relief from depressive symptoms (**Beyer et al., 2016**). Following these impactful results yoga and meditation techniques can also be adapted by college and universities to help students deal with such health issues freely within their comfort (**Falsafi, N. 2016**). **Bhalla et al., 2019** in their study make it evident that naturopathy and yoga are more potential therapeutic option than pharmacological therapy for chronic orofacial pain.

2.7. Music and Dance Therapy

Meekums et al., 2015 from their study conclude that although dance movement therapy add some benefits to relieve depression symptoms but the results remain clinically irrelevant. But recent studies suggest dance/movement therapy include making varying body postures, breathing, gesturing and movement. This approach is usually preferred in a group setting beginning with warm up movements, followed by dancing and help relieve depressive symptoms and improve the quality of life (**Hyvönen et al., 2020; Tavormina, R., & Tavormina, M. G. M. 2018; Mala et al., 2012; Prewitt et al., 2017**). Just like dance therapy music therapy sessions can benefit patients who are not good or are comfortable with expressing their feelings in words (**Maiese, M. 2018; Punkanenet al., 2018**). Music also gives elderly people a feeling of joy, confidence and independence and helps deal with situations of hopelessness (**Gök Ugur et al., 2017**).

2.8. Additional Approaches

Therapeutic Approach	Description	Reference
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IPC AND BPS	Interpersonal counseling sessions and brief psychosocial support provided inside the school premises is proven to be very effective method to treat depression within six month period.	Parhiala et al., 2018
ADepT	Augmented depression therapy when given by three different therapists showed improvement in depressive symptoms.	Dunn et al., 2019
Residential blue and green spaces	The link between blue and green spaces near residential area and mental health was studied on 1190 patients those who were above sixty years of age with the help of some questionnaires' in China. The data obtained supports the protective potential of such spaces against depression in elderly.	Helbich et al., 2019; Browning et al., 2019
Chromium Supplementation	Chromium, a crucial element can be either taken in form of natural diet or via supplementation medication. Chromium along with other components like folate, calcium, vitamin B12, polyunsaturated fatty acids, magnesium, zinc can serve as an antidepressant.	Khodavirdipour et al., 2020; Lang et al., 2015

Contextual Therapy	Another cause for depression in people was marital problems and hence in such cases marital therapy was proven to be more beneficial in comparison with individual therapies. Contextual therapy can be given to couple wherein both the depressed and non depressed partner can work together into a mutual loving relation and hence cope up with depression.	Beach et al., 1998; Cohen et al., 2014; McPhee et al., 2019; Whisman, M. A., & Beach, S. R. 2012
Telephone administered psychotherapy	Castro et al., 2020 in their study demonstrates the effectiveness of telephone administered psychotherapy to heal depression.	Castro et al., 2020
Vagal nerve stimulation	Epileptic patients with resistance to drugs show enhanced results upon stimulation of vagal nerve to cure depression.	Assenza et al., 2020

3. CONCLUSION

In this review we looked at various therapeutic approaches available to treat depression. Each of these methods have it's own effect upon different individuals. The choice of method of treatment solely depends upon the patient. But still the overall risks associated with pharmacological therapy can't be denied and this leads to an inclination towards the other method. Other methods mentioned can be used in combination or individually, in both the cases patients will have some amount of positive effect on his health. Furthermore, studies are to be performed to test the efficacy of each method in detail and also there is a serious need to improve the methods of diagnosis which remains the first step towards the healing.

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