

Current Trends (Drugs and Therapy) in Controlling Depression: A Scientific Approach and Review

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Abstract

In this review we will discuss about the stressful life of youngsters and their lifestyle to counterbalance the burden for survival and living. Also, we will lighten up day by day increasing depression patients and consequently increasing suicide cases. To control this dreadful disease and social issue, current scientific research and development in the field of medicine is also listed and is the main objective of this review.

Keywords: Depression; Stress; Antidepressant drugs; Anxiety; Lithium; Addiction; Mental health

Introduction

In today's fast forward world everybody is trying to improve quality of life and to achieve a better lifestyle, which is not leading to a sustainable lifestyle but to a stressful life. Youngsters also handle their stress with their own survival skills and living style. To counter balance, today's youngsters are keener to alcohol and other addictive drugs in their early years of life, which is affecting their Physical as well as mental health. Now days, in early stages of life teenagers start taking addictive drugs, which lead to chronic physical and mental disorders. Dementia, depression, Anxiety, psychosis, schizophrenia is the common disorders caused by drug abuse and other addictive drugs.

Factors Enhancing Depression and Current Progression in Treatment

Between the ages of 12 and 17, many teens experiment with addictive drugs of all kinds – alcohol, marijuana, cocaine, heroin, prescription drugs and others. For some, drug addiction become a problem and creates chronic health problems like depression and other psychological problems and increases the chance of overdose and death due to it [1]. Addictive drugs also decrease the stress tolerance ability. Any failure in life can trigger depression symptoms and suicide tendencies in addicted people. A provocative new study suggests additional suicide prevention strategies are necessary to help individuals who may take their own life despite no signs of a serious mental disorder [2].

The risk for anxiety and depression is higher among smokers. Increased nicotine addiction severity is associated with increased risk for mental illness and increased scores of anxiety and depression [3].

Depressive symptoms play a key role in Eating Disorder outcome. From a 8-year follow-up study on a sample of ED patients treated with a multimodal model aims to produce a better insight in the intertwined aspects of depression, and eating psychopathology [4].

Also due to hectic lifestyle especially teens do not take enough sleep and do not take a balanced diet. Exercise is also nearly out of schedule. These all factors contribute to the increasing chances of mental disorders like depression and anxiety.

Depression is treated with drugs, talk therapy (where a person talks with a trained professional about his or her thoughts and feelings; sometimes called “psychotherapy” or “counseling”), or a combination of the two [5].

There are several medicine (Drugs) available which can control the symptoms of Depression. But in most of cases where drugs are used, severe depression occurs after a long span of time.

Lithium is a gold standard or best therapy for treating bipolar disorder and depression. It is the best mood stabilizer. From a case study it is found that High dose of lithium can cause chronic interstitial nephritis of solitary kidney. The patient had every reason to discontinue lithium, but in her opinion, guided by her medical providers, lithium provided the best mood stabilization for management of bipolar disorder and depression [6].

But, Lithium interferes with thyroid metabolism and increases the incidence of overt and subclinical hypothyroidism and may cause hyperparathyroidism with a high incidence of multi glandular disease [7].

Antidepressant drugs may have a considerable effect but that is for a short span of time, e.g. ketamine promotes a rapid anti-depressive effect and also promotes neuroplasticity but strong and fast responses rarely outlast up to a week after infusion, and leaves patients either as depressed as in initial stages or provoking continuous, long term treatment with a drug for which disadvantageous cognitive and morphological consequences can occur [8].

From a study it is found that Antidepressant drugs can also cause adverse effects to the infants on breast feeding. Fluoxetine has a long half-life which can lead to a long infant exposition through breast milk and citalopram can have adverse effects in infants exposed through breast milk [9].

From a research it is found that Working Memory Training may be helpful in decreasing symptoms of depression and anxiety. Individuals

suffering from depression are less able to remove negative thoughts from their Working memory and have difficulty in shifts between negative and positive information. Also it is found that working memory capacity can be increased by training and can remove the symptoms of depression and ADHA (Attention Deficit Hyperactivity Disorder syndrome) [10].

This suggests that assessing well-being may add important practical utility to assessing for and preventing depression. Low well-being may increase the chances of developing depression could allow individuals and caregivers to take preventative steps before the onset of depressive symptoms [11]. Findings also suggest that efforts specifically designed to increase well-being may be effective in protecting against depression and may aid in decreasing the overall health care costs associated with the disorder.

Effective medications exist for treating alcohol, and nicotine addiction and for alleviating the symptoms of many other mental disorders, yet most have not been well studied in populations. Some medications may benefit multiple problems. For example, bupropion (trade names: Wellbutrin, Zyban), approved for treating depression and nicotine dependence, might also help reduce craving and use of the drug methamphetamine. More research is needed, however, to understand the functioning and side effects of these medications, particularly when combined in patients with more than one disorders [12].

Individuals may not present significant depressive symptoms but he or she may be at risk for future suicide risk, because of the vulnerability of underlying personality traits. Personality traits may be more predictive of suicide risk than symptoms of depression [13].

Conclusion

Medications may be effective in treating depression and other mental disorders, but somewhat they also have adverse effect on our health, e.g. lithium is considered as the best mood stabilizer can cause chronic kidney disease. Ketamine's strong and fast response in major depression rarely outlast a week after infusion, and patients feel depressed as initially or provoking continuous, long term treatment with a drug for which disadvantageous cognitive and morphological consequences may occur [14].

Drug abuse is the best example of the adverse effects of pharmaceutical drugs. A higher dose can increase the symptoms as

well as can make the disease worse. Also patients with Comorbidity are in the higher risk of side effects of drugs. Addictive drugs can also initiate psychological problems or can increase its extent. Despite using drug, Exercise, Good sleep and healthy diet can be the best medication for the treatment of depression in collaboration with talk therapy, behavior therapy and psychotherapy.

References

1. <http://www.newportacademy.com/teen-drug-addiction/>.
2. <http://psychcentral.com/news/2014/02/27/rejection-and-sense-of-failure-can-lead-to-suicide/66465.html>.
3. Emre N, Topal K, Bozkurt N and Topaktas E (2014) Mental health screening and increased risk for anxiety and depression among treatment-seeking smokers. *Tobacco Induced Diseases* 12: 20.
4. Amianto F, Settanta C, Marzola E, Spalatro A, Abbate DG, et al. (2014) Depressive and Anxiety Symptoms in the Outcome of Eating Disorders: 8-Year Follow-Up. *J Depress Anxiety* S2: 007.
5. http://www.effectivehealthcare.ahrq.gov/ehc/products/210/1142/sec_gen_anti_dep_cons_fin_to_post.pdf.
6. Fuentes Salgado ME, Sutor B, Albright Jr RC and Frye MA (2014) Every reason to discontinue lithium. *International Journal of Bipolar Disorders* 2: 12.
7. Hundley JC, Woodrum DT, Saunders BD, Doherty GM, Gauger PG (2005) Revisiting lithium-associated hyperparathyroidism in the era of intraoperative parathyroid hormone monitoring. *Surgery* 138: 1027-1031.
8. Li S, Demenescu LR, Krause AL, Neubacher K, Wolfer M, et al. (2014) Neurobiological Augmentation of Psychotherapy in Treatment Resistant Depression. *J Depress Anxiety* S2: 002.
9. Fonseca AP, Leala V (2014) Use of Antidepressants to Treat Postpartum Depression, During Breast Feeding. *J Depress Anxiety* 3: 148.
10. Wanmaker S, Hopstaken JF, Asselbergs J, Geraerts E, Franken IHA (2014) Decreasing Dysphoric Thoughts by a Working Memory Training: A Randomized Double-Blind Placebo-Controlled Trial. *J Depress Anxiety* 3: 165.
11. Grant F, Guille C, Sen S (2013) Well-being and the risk of depression under stress. *PLoS One* 8: e67395.
12. <http://www.drugabuse.gov/publications/drugfacts/comorbidity-addiction-other-mental-disorders>.
13. Campos RC, Besser A (2014) Depressive Traits and Suicide Risk in Young Adults: A Brief Report. *J Depress Anxiety* S2: 006.
14. Li S, Demenescu LR, Krause AL, Neubacher K, Wölfer M, et al. (2014) Neurobiological Augmentation of Psychotherapy in Treatment Resistant Depression. *J Depress Anxiety*: S2-002.