THE EFFICIENCY OF VARIOUS INTERVENTIONS USED IN MANAGEMENT OF DEPRESSION AMONG ADOLESCENTS: A SYSTEMATIC REVIEW

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INTRODUCTION

Due to its unique characteristics, depression is a prevalent mental health condition that is difficult to treat and necessitates an accurate diagnosis, especially in intermediate-to-late adolescence. The APA Dictionary of Psychology defines depression as a negative affective state that affects one's daily activities. It can range from dissatisfaction and discontentment to a strict sense of sadness, hopelessness, and dejection. Alterations in eating or sleeping patterns, a lack of strength or motivation, trouble concentrating or impaired judgment, and retreat from social activities are just a few examples of the physiological, cognitive, and social changes thatfrequently co-occur. It is a sign of several different mental health conditions. It might be challenging to understand the pathophysiology of adolescent depression since both social andhereditary factors can contribute to its onset. Although specific screening procedures and diagnostic standards exist, the clinical presentations of the condition are varied, making diagnosis extremely difficult.

Additionally, it may be misdiagnosed as another psychiatric condition, necessitating many differential diagnoses. Treatment choices may include medication, therapy, or both based on intensity, underlying risk variables, and resource availability. In any case, psychoeducation, a supportive attitude, and family engagement are required components of treatment. It can cause interpersonal and academic difficulties and be a significant risk factor for suicide. This illness must therefore be recognized and treated. Primary caregivers are critical in recognizing and treating this disease since they are frequently adolescents' initial point of contact.

Additionally, several organizations advise conducting a depression test during this time. Theycan aid in the initial detection of depression, start a treatment plan, and refer the youngsters tomental health professionals. Making an early and accurate diagnosis of depression in adolescence and distinguishing it correctly from other mental disorders is crucial due to the repetitive nature of this condition and its association with low educational attainment, impaired functioning, and problematic interactions with

parents, family members, and peers. Moreover, suicidal thoughts and attempts are highly correlated with depression at this age. Theneed for finding and putting effective therapies into practice is growing due to depression beinga significant public health issue among adolescents and young people. Therefore, the primary objective of this article is to analyze various depression interventions from a theoretical perspective and assess their effectiveness. According to the ICD-10, depression can be identified if both primary and secondary symptoms are present. The primary symptoms of depression are upset mood, anergia, and anhedonia.

In contrast, the secondary symptoms include social isolation, poor attention and memory, changes in bio drives, cognitive symptoms (feelings of worthlessness, hopelessness, and helplessness), irritability, a sense of guilt, a low opinion of oneself, and suicidal ideations. According to the frequency and severity of symptoms and the functional disruption they cause, depression can be experienced at several severity levels (mild, moderate, or severe). Two primary symptom and two or more additional/secondary symptoms must be present to diagnosemild depression. Two primary symptoms and three or more secondary symptoms must be present for moderate depression to be diagnosed. One must exhibit all three core symptoms and three or more secondary symptoms and three or severe depression. In depression, one's functionality deteriorates.

METHODOLOGY

This research looked at information covering the main themes and objectives of this review namely, Efficiency of Various Interventions Used in Management of Depression among Adolescents. We followed a set of guidelines called PRISMA. We also made sure to check off all the items on the PRISMA checklist to make sure we followed the guidelines correctly.

The articles underwent a rigorous selection process guided by predefined inclusion and exclusion criteria aligned with the research's scope. This process involved three distinct phases of filtration. Initially, titles from three separate Excel files, sourced from the ProQuest database, were scrutinized to determine their eligibility for inclusion in the systematic review. Any discrepancies were resolved through the intervention of a third reviewer, who facilitated the definitive selection or rejection of articles for incorporation into the systematic review.

During the subsequent phase, the abstracts of the retained articles underwent meticulous scrutiny, with those deviating from the research's scope being systematically excluded. This phase entailed an independent review of the abstracts by two distinct reviewers, who collectively reached consensus on the exclusion of articles not aligning with the research's objectives. Any discord or conflicts arising were resolved through deliberation and, if necessary, referred to a third reviewer for final validation.

In the final phase, duplicate articles were systematically eliminated. Subsequently, fulltext versions of the retained articles were acquired and subjected to thorough examination. A rigorous critical appraisal was then conducted to ascertain each article's relevance to our research inquiry, objectives, and the exigencies of systematic review for evidence synthesis. The content of the ultimately selected full-text articles undergoing critical appraisal is meticulously organized and managed utilizing the Dedoose software platform.

Diagnosing Depression

Psychometric evaluations, such as the Beck Depression Inventory-I, can be used to quantify depression. It was created by the psychiatrist Aaron T. Beck in 1961. The most popular tool for diagnosing depression is a 21-item self-report questionnaire that evaluates attitudes and physiological and psychological symptoms of depression, including feelings of guilt, hopelessness, and exhaustion. Each item in the inventory has at least four statements, from which the test-taker must select the one that most accurately describes their current state of mind. The test's overall result is used to gauge the disorder's severity, with a minimum score of 10 being required to diagnose moderate depression. Depression ranges from 19 to 29, with a score of 30 or higher denoting severe depression.

Study Group

Adolescence, according to the World Health Organization, is the period between childhood and adulthood that lasts from the ages of 10 to 19. It is a distinct period in human evolution and crucial for setting the groundwork for long-term health. Young adults proliferate regarding their physical, cognitive, and psychosocial development; this impacts their emotions, thoughts, decisions, and interactions with others and their environment. Concerning epidemiology, depression is highly correlated with age, with a prevalence rate of 1 percent in children) and increases during childhood and adolescence. However, there are significant differences in the prevalence of adolescent depression between research and reports. According to reports, the occurrence was 4% in Great Britain, 2.1% in the USA, and 11.0% in France.

Observations

Nevertheless, according to a systematic review from 2013, the lifetime incidence of depression ranges from 1.1 to 14.6%. Adolescents with mental illnesses account for 20% of the population. Adolescence is a vulnerable developmental time for mental illnesses; around 50% of all mental illnesses start in the early adolescent years and 75% by the middle of the twenties. Child psychologist Jean Piaget investigated the psychological growth of children and adolescents andoffered insight into adolescent psychology.

Teenagers pass through a transitional period from the "concrete operational stage" to the "formal operational stage," according to Piaget. Children in the concrete operational stage comprehend logical reasoning and recognize that their opinion is not always the only perspective. The ability to comprehend abstract concepts, understand symbolism, and generateand verify assumptions about their environment occurs during the formal operational stage. Piaget found that only roughly one-third of individuals are entirely in the formal operational stage, indicating that not everyone can advance to this stage. Also, it is uncertain whether smoking and depression are related. However, it has been hypothesized that this association may result from nicotine's effects on brain neurotransmitter function, which affect neurotransmitter activity. Depression risk is increased by being overweight since it might negatively affect one's perception of oneself.

Furthermore, those who are depressed may live less healthily and have dysregulation of their stress response system, all of which can result in significant weight gain or loss. Adolescents require information, such as comprehensive and age-appropriate sexuality education, the chance to acquire life skills, adequate, egalitarian, and effective healthcare, as well as a healthyenvironment that is safe and supportive for development. They also require the chance to actively participate in the planning and execution of interventions that will preserve and improve their health.

Therapies in Vogue

Reaching one's optimal functioning is the ultimate goal of the entire therapy plan the therapisthas developed for the patient. When selecting the optimal course of treatment for each patient, professionals consider the degree of their depression. Many studies (usually those using medication) have indicated that severity significantly predicts treatment effectiveness. There are different types of psychotherapies and medications that are used for the management of depression; psychotherapies include cognitive behavioral therapy (CBT), interpersonal therapy (IPT), and medications include selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs). Antidepressants as a form of treatment only make sense when combined with adequate patient education, ongoing clinical supervision, and a workable safety strategy.

Cognitive Behavioral Therapy, or CBT, is a form of talk therapy (psychotherapy). One works systematically with a mental health counselor, attending several sessions (usually 12-20 weekly). CBT teaches one to recognize false or harmful thoughts, view difficult circumstances more clearly, and react constructively. Instead of focusing on the circumstances that led to the patient's problems, CBT therapists highlight what is happening in the patient's current life. Although some knowledge of one's past is necessary, the main goal is to move forward in time and create more useful coping mechanisms. CBT is built on several fundamental ideas, such as psychological issues stemming from flawed or harmful thinking. Some psychological issuescan be attributed to learned, undesirable behavioral patterns. People with psychological issues can develop more robust coping mechanisms to help them manage their symptoms and improve their effectiveness. In CBT, efforts are typically made to alter thought processes. These tactics could consist of recognizing one's problematic thinking errors, reevaluating them in the context of reality, and improving one's knowledge of other people's motivations and behaviors. Use problem-solving techniques to deal with challenging circumstances. They increase one's self- assurance as one grows in confidence. CBT strongly emphasizes the need to guestion negative/destructive beliefs, thoughts, and perceptions to alter how an individual perceives a situation. Research suggests that CBT can help people with various medical disorders, including depression, panic disorder, and others. Compared to no treatment, psychological therapies for mild and moderate depressive symptoms are more effective; young adults' effectiveness was considerably influenced by moderators like depression severity or therapist engagement, and the findings encouraged therapists to use adaptable and individualized strategies. (Medina et al., 2022a). According to Beck's "cognitive triad," which he called negative self-schemata (beliefs), people prone to depression have them. In particular, depressed patients have a poor perception of their value (believing they are unworthy, insufficient, unlovable, or defective), their surroundings (believing they are overpowering, riddled with difficulties, or both), and their future (the situation being hopeless, no effort will change the course of their lives). This unpleasant way of thinking affects how one perceives, interprets, and remembers personally significant events, which leads to a negatively skewed interpretation of one's environment and, ultimately, the emergence of depressive symptoms. For instance, those prone to depression are more likely to pay attention to and recall instances in

which theyfailed or fell short of a personal standard and discount or overlook those in which they succeeded. They keep their poor self-image as a result, which leads to depression. CBT appears effective in treating adolescents with chronic medical illnesses, reducing relapses and suicidalideation, and treating resistant depression (Beirão et al., 2020). Findings from school-based therapies indicate that CBT and targeted group-based interventions successfully lowered anxiety and depression symptoms. According to school-based suicide prevention initiatives, classroom-based didactic and experiential programs improved students' short-term understanding of suicide and suicide prevention without having any discernible impact on attitudes or behaviors connected to suicide (Das et al., 2016). Despite having better efficacy in adolescent samples, this strategy has the most empirical backing for treating youth depression; there is also evidence to suggest that mild to moderate depression cases may benefit more from cognitive behavioral treatment than those with severe depression (Freire et al., 2014).

Interpersonal psychotherapy (IPT) is a concentrated, brief treatment for depression. Studies have demonstrated that for mild to moderate types of clinical depression, IPT, which deals withinterpersonal concerns, maybe at least as beneficial as short-term antidepressant medication. Ittends to focus on one's interpersonal relationships and social interactions, including the extentto which one receives support from others and the effect this support has on the individual's mental health. It is frequently advised as a treatment for pediatric depression because it has been proven helpful in treating adolescent depression. Rapid symptom reduction and enhancedsocial adjustment are the treatment's primary objectives in the short term. The long-term goal is to empower those who suffer from depression to make the necessary changes on their own. It usually has 12 to 16 one-hour sessions every week. The therapist concentrates on observableissues with how a person interacts or does not engage with others. The patient notices an improvement in their experience of symptoms once those issues are resolved.

In some cases, combining this therapy with medicine may be the best option. IPT is helpful inthe short-term treatment of depression and may help prevent the onset of new depressive disorders and relapsing conditions (Cuijpers et al., 2016). IPT may be advantageous, mainly when a known relationship component is the root of the depressive illness (Beirão et al., 2020). IPT is only now making inroads into clinical practice despite being one of the most well- researched therapies in outcome research, notably for mood disorders. It is a relatively simple therapy to master for seasoned psychotherapists, but its efficacy in the hands of untrained therapists is arguable (Weissman & Markowitz, 2000). IPT's effectiveness was greater than that of a placebo, comparable to that of a drug, and unaffected by adding another drug; IPT performed better than CBT overall (de Mello et al., 2004). As a result, this therapy seeks to enhance teenagers' interpersonal patterns to lift their spirits. According to this method, interpersonal conflicts and transformations maintain depression. After an intervention, having interpersonal problems during adolescence increases the risk of relapse or recurrence of depression.

Consequently, concentrating on interpersonal issues is a beneficial treatment during this developmental stage (Freire et al., 2014). IPT-A is seen as a potentially effective intervention for adolescents, according to David-Ferdon and Kaslow (2008), who claim that the theoretical approach of interpersonal therapy is a widely used method for the solo treatment of depression adolescents. Comparing adolescents receiving IPT-A

to those receiving control conditions, empirical research consistently shows that adolescents receiving IPT-A have more significantimprovements in their depression symptoms and have improved social and overall functioning(Mufson, 2010; Mufson et al., 2004). IPT-A, or Interpersonal Therapy for Adolescents, is a solo psychotherapy for teenagers with depression aged 12 to 18. Interpersonal psychotherapy for depressed adults is where IPT-A got its start. It is focused on how relationship problems are associated with the beginning or recurrence of depressive symptoms, even though it acknowledges that genetic, biochemical, and personality factors have a role in the development of depression.

Drug Treatment of Depression

The most often prescribed antidepressants are selective serotonin reuptake inhibitors (SSRIs). They can lessen the signs of moderate to severe depression, are generally safe, have fewer adverse effects, and are frequently used alongside verbal therapies like CBT and IPT. SSRIs help with depression by increasing serotonin levels in the brain. One of the chemical messengers, or neurotransmitters, that communicate between brain nerve cells is serotonin (neurons). SSRIs inhibit serotonin reabsorption (reuptake) into neurons. As a result, there is more serotonin accessible, which enhances neural communication. Because they primarily impact serotonin and no other neurotransmitters, SSRIs are referred to as selective. These SSRIs for the treatment of depression have received Food and Drug Administration (FDA) approval: citalopram (Celexa), escitalopram (Lexapro), fluoxetine (Prozac), paroxetine (Paxil, Pexeva), and sertraline (Zoloft).

Before SSRIs start working, it typically takes 2-4 weeks. SSRIs frequently cause the followingadverse effects: agitation, trembling, or anxiety; diarrhea and feeling or being nauseous; impaired vision; loss of libido (lower sexual drive); difficulties inducing orgasm during sex ormasturbation in men; and problems establishing or keeping an erection (erectile dysfunction). According to research, teenagers who take SSRIs have a slight but elevated chance of having suicidal thoughts and behaviors. General practitioners (GPs) who prescribe medications need to be. It is advised to monitor for common physical side effects and any potential emergence of suicidal thoughts and behaviors, particularly early in treatment (Gordon & Melvin, 2013). When two or more serotonergic medicines are taken concurrently, a severe side effect and a potentially lethal condition called serotonin syndrome can develop. It could also happen if one takes just one medicine. Confusion, noticeable agitation, hallucinations, increased body temperature, diaphoresis, muscle spasms, abrupt fluctuations in blood pressure, and tachycardia are among the symptoms. The two antidepressants approved for the treatment of depression in teenagers (ages 12 to 17) are fluoxetine and escitalopram, and fluoxetine is also allowed for use in children eight years of age and older. The need to advance is more significant than ever to improve the effective treatment of depression since primary care doctors are responsible for treating patients with depression while managing hectic patient calendars in all therapeutic areas. The extensive body of knowledge around SSRIs has paved the way for developing the next generation of antidepressants, which are at least as effective but more tolerated and secure than their forerunners (Ferguson, 2001). In the Emslie et al. (2009) trial, escitalopram was efficacious and well-tolerated in treating depressed teenagers. Compared to other selective serotonin reuptake inhibitor and serotoninnorepinephrine reuptake inhibitor medications, escitalopram has been proven to have a higher efficacy and safety profile (Pastoor& Gobburu, 2014).

The first class of antidepressants to be created were monoamine oxidase inhibitors (MAOIs). They work well, but safer and less side-effect-prone antidepressants have mostly taken their place. Because MAOIs can induce critically high blood pressure when taken with specific foods or medications, using them often necessitates dietary restrictions and the avoidance of certain other medications. Despite their adverse effects, these drugs are still helpful for some individuals. When other medications have failed to cure depression, they can, in some situations, provide relief. These antidepressants work by influencing neurotransmitters, which are chemical messengers that connect brain cells.

MAOIs function similarly to most antidepressants in altering the brain chemistry involved in depression. Norepinephrine, serotonin, and dopamine are neurotransmitters eliminated from the brain by monoamine oxidase. By stopping this, MAOIs increase the amount of these brain chemicals accessible to alter depressed-related alterations in both cells and circuits.

The adverse effects of MAOIs aredue to their impact on several neurotransmitters in the brain and digestive system. Parkinson's disease is one ailment that MAOIs are occasionally used to treat besides depression. For the treatment of depression, the Food and Drug Administration (FDA) has approved the following MAOIs: isocarboxazid (Marplan), phenelzine (Nardil), selegiline (Emsam), and tranylcypromine (Parnate).

Selegiline is offered as a transdermal (skin) patch. Using a patch may have fewer adverse effects than taking oral MAOIs. When other antidepressants are ineffective, MAOIs are most frequently attempted. The most frequent adverse reactions to MAOIs are dry mouth, nausea, diarrhea or constipation, headache, drowsiness, insomnia, dizziness or lightheadedness, and skin response at the patch site. Other side effects could include involuntary muscular jerks, lowblood pressure, decreased or difficult orgasmic arousal, weight gain, trouble commencing a urine flow, tense muscles, and a feeling of prickling or tingling on the skin (paresthesia).

According to the Suchting, Tirumalaraju, Gareeb, Bockmann, de Dios et al. (2021) study, phenelzine is among the most efficient antidepressants compared to clinical studies. Since theyare effective at treating depression, monoamine oxidase inhibitors (MAOIs) have been the go-to medication for individuals with atypical depression, high anxiety levels, anergic bipolar depression, and treatment-resistant depression for decades (These, 2012).

Untreated depression is associated with significant morbidity and a high risk of completed and attempted suicide, and this risk is much greater than suicidality due to treatment with an SSRI.Consequently, any decisions about the benefits and risks of both medication and psychotherapy for pediatric depression should take into consideration that untreated depression is a potentiallyfatal illness.

CONCLUSION

Depression is a prevalent mental health condition that is difficult to treat and necessitates an accurate diagnosis, especially in intermediate-to-late adolescence and is a major public health problem its treatment needs to be integrated at primary health care level using all the possible modalities available and medical treatment if required.

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