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A SYSTEMATIC REVIEW OF EFFICACY OF NON-PHARMACOLOGICAL INTERVENTIONS IN ADOLESCENTS WITH DEPRESSION IN TERMS OF PSYCHOLOGICAL OUTCOMES

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ABSTRACT

Depression is a serious public health issue that can have a detrimental effect on many facets of a person's life. It is the main factor influencing the population of adolescents and young adults' disability-adjusted life years. In the context of Alzheimer's disease (AD), non-pharmacological treatments are tools that can be advantageous, multifaceted, and cost-effective in how they handle care. This research aims to investigate the theoretical underpinnings and empirical evidence for non-pharmacological therapies that enhance cognitive performance, encourage independence in day-to-day activities, and alleviate neuropsychiatric symptoms in young adults and adolescents diagnosed with Alzheimer's disease. The existence of mediated actor effects implies a correlation between measures of poorer scholastic achievement and higher levels of depression. Depression is one of the biggest issues facing medicine in the twenty-first century, according to common consensus. This is because it has significantly contributed to both the decline in life quality and the rise in healthcare expenses. Additionally, there's a chance that patients would experience a relapse of their heart problems, which would raise their risk of morbidity and death and provide a poor prognosis.

Keywords: None-Pharmacological Intervention, Depression, Adolescents, Psychological Outcomes

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INTRODUCTION

Depression is a substantial public health concern that can negatively impact numerous aspects of an individual's existence. It constitutes the principal contributor to disability-adjusted life years among the adolescent and young adult population. In the realm of Alzheimer's disease (AD), non-pharmacological therapies serve as instruments that have the potential to be beneficial, diverse, and economically efficient in their approach to care management. The goal of this study is to look into the theoretical foundations and empirical support for non-drug interventions that improve cognitive function, inspire independence in daily tasks, and ease neuropsychiatric symptoms in young adults and teens with Alzheimer's disease. The presence of mediated actor effects suggests that elevated levels of depression are correlated with indicators of diminished academic performance. According to research by Ferguson DM et al. (2005), depression-related symptoms like diminished motivation, social isolation, sleep disturbances, and fatigue may be to blame for a decline in academic attendance. The following assignment suggestions may prove beneficial to academic researchers, government commissioners, and medical practitioners as they strive to advance the development of non-pharmacological integrated treatments. Empirical data should serve as a foundation for these advancements, theoretical frameworks should serve as a driving force, and patient and healthcare professional perspectives should serve as a guide.

A multitude of factors, encompassing biological characteristics, physical ailments, gender, psychosocial dynamics, and socioeconomic conditions, presumably contributed to its formation. Although depression is comparatively more prevalent in women than in men, it continues to be a substantial public health concern despite the fact that men have received comparatively less attention regarding it. A substantial amount of prior research indicates that the prevalence of poor mental health can differ considerably between social groups. An umbrella term denoting substandard mental health generally encompasses self-reported symptoms of anxiety or distress, in addition to mental disorders like depression and anxiety (SBU, 2010). Although mild mental health issues do not inherently indicate the presence of a disorder or the necessity for therapy, they can still have an impact on an individual's overall welfare and daily functioning. A mental disorder is distinguished by a compilation of symptoms that, when considered collectively, satisfy specific diagnostic criteria (Hälsa, U. T. B. O., & Omsorg, V. O., 2013).

Depression

Depression is widely recognized as a paramount challenge confronting the field of medicine in the twenty-first century. This is as a result of its substantial contribution to the deterioration of

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quality of life and the escalation of healthcare costs (Shimizu Y. et al., 2011). There is also a likelihood that patients will develop a recurrence of their cardiac disorders, which would result in an elevated risk of morbidity and mortality and an unfavorable prognosis. Based on reports published by the World Health Organization (WHO), psychological conditions are projected to surpass physical ailments as the foremost healthcare concern in countries worldwide by the year 2020. Pozuelo L. et al. (2009) found that the incidence of melancholy is notably greater in comparison to other psychiatric disorders. Cardiovascular diseases are the primary cause of disability in developing countries; depression ranks second in this regard.

Academic performance was negatively impacted by students who experienced mental health challenges, specifically depression. On average, they missed 11.8 days per year from Years 1 to 6, 23.1 days per year from Years 7 to 10, and 25.8 days per year from Years 11 to 12. Conversely, pupils lacking mental disorders exhibited an average absence rate of 8.3 days from Years 1 to 6, 10.6 days from Years 7 to 10, and 12.0 days from Years 11 to 12. Children afflicted with mental illnesses missed an average of 13.4 percent of the academic year due to absences resulting from their condition. This progressed with the pupil throughout their academic career, rising from 8.9% in Years 1–6 to 16.6% in Years 11–12. Significant improvements in mental health prevention, early intervention, treatment, and management may potentially lead to substantial increases in school attendance (Zhang, 2006).

CAUSE OF THE DEPRESSION

The subject of depression among young individuals is becoming an increasingly prevalent topic of discussion. A considerable cohort of scholars has devoted their professional lives to the investigation of this subject matter. The matter becomes of the utmost significance when one takes into account the consistent increase in the percentage of young people who display symptoms of depression. Diagnosing the condition can be difficult because the changes that are so characteristic of puberty frequently manifest. This category includes issues such as mood swings, explosiveness, propulsion difficulties, puissance, insomnia, and concentration problems, among others. These could potentially be the initial indications of melancholy as well. Antidepressant medication cannot identify a single cause due to the fact that the condition is influenced by a multitude of factors. The aforementioned elements encompass a spectrum of influences, including familial, environmental, and genetic factors, in addition to sociocultural components (Bembnowska, M., et al., 2015).

Depression is an instance of an emotional and behavioral disorder that is prevalent during

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adolescence. This type of difficulty is typical during adolescence. This condition is associated with the age-related natural alterations that transpire in the endocrine system. The aforementioned changes arise from the development of novel cognitive abilities and the acceptance of additional obligations within the societal structure. During this developmental phase, a child attains both formal independence from their family and emotional autonomy. Those years are considered by every young individual to be among the most difficult of their lives. They necessitate a heightened level of comprehension from their family and surroundings, in addition to greater consideration given to atypical behaviors (Bomba J. et al., 2006).

The occurrence of depression among young individuals is not universally predictable. Additional evidence is presented by the results, which suggests that a wide range of factors are involved in the etiology of depressive disorders and contribute to their progression. Additionally, the results indicate that the lifetime occurrence of melancholy differs between men and women. The prevalence of depression among school-aged males and girls is comparable. Evidently, these disparities become apparent during the period spanning from 13 to 15 years of age and attain their highest point between 15 and 18 years; consequently, this demographic is more susceptible to depression, particularly among the female population (Hamkin BL et al., 1998).

A singular causative factor cannot be identified in the case of melancholy. Due to its complex nature, this disease may be induced by a multitude of factors, including familial and sociocultural influences as well as genetic, hormonal, and biochemical components (Lautieri, A. 2019).

EFFECT OF THE DEPRESSION

Negative Impact

Anxiety and depression almost always go hand in hand, and students may experience emotional effects as a result. Additionally, one may manifest symptoms of insomnia. Patients who are melancholy experience negative, pessimistic thoughts, perpetual self-deprecation, inferiority complexes, pessimistic outlooks, and hopelessness regarding the future. Additionally, anxiety is frequently present during depressive episodes. There is certain evidence suggesting that the progression of age significantly contributes to the development of melancholy in an individual. Lastly, among all medical issues, untreated depression is one of numerous psychosocial factors associated with patients who are required to have physician assistants (R. B. Jarrett, A. J. Rush, 199). This depressive disorder is linked to patients who are in need of the assistance of physician

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assistants.

The "action" pathway is supported by the fact that depression therapy has a positive effect on both investing in human capital and avoiding bad events. By diminishing the actual or perceived benefit or by increasing the cost of reaching a decision, depression may impede progress. There is a potential correlation between the reduction of anhedonia, indecision, and pessimism in children and an increase in their capacity to invest in their human capital, as well as protection against unfavorable circumstances. Notwithstanding the concurrence of our findings with this interpretation, we are incapable of distinguishing among the diverse potential pathways.

It is anticipated that both the demand for preventive measures and the occurrence of adverse events will decline due to the implemented interventions. This research suggests that depression treatment could potentially increase the statistical life expectancy. The willingness to pay to mitigate the risk of mortality is frequently employed as a metric to assess the value of statistical life (Eeckhoudt and Hammitt, 2004; Le'on and Miguel, 2017). This result indicates that treatment for depression might increase this value. Additionally, it suggests the existence of a secondary pathway through which depression could potentially perpetuate cycles of poverty. Carter and Barrett (2006) and Lybbert et al. (2004) discovered that the capacity to escape poverty was significantly and dynamically affected by the avoidance of negative shocks. Depression may potentially impede the generation of funds due to its potential to heighten the pain threshold induced by negative stimuli. In summary, these results align with the growing corpus of evidence indicating that preventive and risk management actions are influenced by an individual's emotional state in addition to their personal experiences. (Guiso et al., 2018).

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NON-PHARMACOLOGICAL CONCEPTS OF DEPRESSION

An extensive array of therapeutic alternatives is accessible for the treatment of melancholy. The idea that a lack of signaling substances like serotonin is what causes depression has served as the foundation for a sizable portion of pharmacological treatments. Nevertheless, alternative

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therapeutic approaches emphasize the impact of the mind (SBU, 2014). Electroconvulsive therapy (ECT), an additional therapeutic alternative, has demonstrated its highest efficacy among patients afflicted with severe maladies. Hallgren et al. (2015) state that physical activity is an effective adjunctive treatment. Sometimes, patients are undergoing multiple treatments concurrently. Due to the fact that the overwhelming majority of treatment research is conducted on adults, significantly less is known about its effects on children and adolescents. Conversely, certain data indicate that the combination of fluoxetine, cognitive behavioral therapy, and interpersonal therapy yields positive results when administered for a reduced duration. Further refinement is required for the treatments in their entirety, especially in light of the fact that the presently accessible treatments fail to achieve success in all cases and fail to reach all individuals (Holmes EA. Et al., 2018). Despite considerable variation throughout the country, the number of prescriptions written for antidepressant medication in children and adolescents in Sweden increased by a factor of two between 2006 and 2015, according to NBHW (2015).

Non-pharmacological interventions (NPIs), alongside traditional medical treatments, have emerged as critical resolutions for enhancing quality of life, illness prevention, and self-care, as well as for extending lifespan without compromising health. Over the course of the last two decades, these practices have undergone a transformation, shifting from offering general guidance on hygiene and nutrition to delivering customized and specific remedies for disease prevention, care optimization, and the treatment of cured ailments. Globally, their development is diversifying and expanding (Ninot, G., 2021). Since ancient times, or more recently, with the aid of technological advancements and interventions in epigenetics, medicine, and economics, they have been selected empirically.

Reeves S. et al. (2017) state that non-pharmacological integrated care frequently utilizes a variety of approaches to enhance patient outcomes and quality of life. To achieve this objective, professionals collaborate as a multidisciplinary team or contribute to other services and/or teams. They identify problematic behaviors and deliver personalized treatment by utilizing the skills they have acquired in their diverse areas of expertise. Baxter S. et al. (2018) posit that non-pharmacological interventions frequently employed with patients who also suffer from substance use disorders and type 2 diabetes encompass motivational interviewing, psychoeducation, dietary support, physical activity support, and talking therapies (e.g., cognitive behavioral therapy with a specific focus on diabetes or depression). Frequently, these interventions encompass the implementation of behavior modification strategies with the aim of promoting healthier modes of conduct. Examples of "active ingredients" in interventions that

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have the potential to induce desired changes in behavior include techniques for modifying behaviors, such as reinforcement (Coventry PA. et al., 2021).

Motivation and action control are commonly emphasized aspects in the context of health behavior interventions. Motivation-focused interventions endeavor to modify attitudes and beliefs with the ultimate goal of fostering the intention to participate in the targeted healthy behavior. Interventions that target control of action can facilitate the transformation of intentions into actions by motivating individuals to pursue problem-solving strategies or other approaches that mitigate the difficulties associated with implementing a desired health behaviour (Wearden A, Bundy C., 2010).

World Health Organization (WHO) on Depression

As per the World Health Organization (WHO), a chronic health condition is characterized by an extended duration of manifestation, a gradual onset, and a lack of inter-individual transmission. Non-communicable diseases (NCDs) are the medical term for this condition (WHO, 2022). (Vos et al., 2015; Vos, T.) In 2013, the Global Burden of Disease Study examined 35,620 distinct data sources to compile and estimate the prevalence of 301 diseases, injuries, and 2,337 sequelae. The number of years spent living with a disability (YLD) increased significantly from 1990 to 2013, peaking at 42.3%, according to the study's findings (Vos, T., et al., 2015). The results were overpowering as a result of non-communicable diseases (NCDs), and as of 2013, no infectious diseases were among the top 20 main causes of YLDs globally. Prior to that year, in 2011, Organization for Economic Co-operation and Development (OECD) member states allocated an average of 9.3% of their gross domestic product (GDP) towards healthcare expenditures. Among these nations, the United States exhibited the highest expenditure rate, allocating 17.7% of GDP to health care (Robertson, R., et al., 2014). The expenditure levels of the subsequent eight countries examined in this study were comparatively lower, with Korea accounting for 7.4% of GDP and the Netherlands for 11.9% of GDP. The expenses mentioned encompass both public and private funds allocated towards healthcare, along with financial commitments towards the establishment of medical facilities' tangible infrastructure. Furthermore, it is critical to underscore that assigning families the onus of providing care will result in an exponential increase in the financial and emotional burdens they must bear, ultimately reaching an immense magnitude. Gaining insight into the difficulties faced by informal caregivers, who are often family members of the patient, is crucial when it comes to managing chronic diseases and non-communicable diseases. The potential for tailoring daily care to the patient's specific and constantly changing requirements is one of these obstacles.

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Another concern is how informal caregivers can sustain care for an extended period of time.

CONCLUSION

The objective of this study is to identify and classify non-pharmacological interventions for depression that are commonly found in reputable Persian medical texts. Furthermore, it seeks to assess the comparative efficacy of these treatments in relation to the latest advancements in the field of medicine. A designated initiative explored the application of non-pharmacological interventions for the treatment of depression. During this analysis, we examined the theoretical underpinnings, fundamental attributes, and goals of these interventions, as well as the specific demographics for whom they are intended. Furthermore, we examined the scientific data that supports their ability to enhance cognitive and functional abilities while concurrently mitigating neuropsychiatric symptoms. The results support the hypothesis that non-pharmacological interventions may assist Alzheimer's disease patients in improving their cognitive abilities and daily independence, in addition to alleviating the mental and behavioral symptoms associated with the condition. Tertiary preventive measures encompass interventions that do not entail the administration of pharmaceutical substances. These methods are designed to be utilized in conjunction with one another, as opposed to being in opposition to one another. It is imperative to emphasize that non-pharmacological interventions hold promise for beneficial outcomes in the healthcare context when it comes to the treatment of depression. Various factors should be considered when determining which interventions to implement. These include the patient's medical condition, level of resilience, and adherence to treatment. Additionally, the availability of health and social services and professional resources, as well as the caregiver's commitment and support, should be taken into account. The term "prevalence" refers to the prevailing viewpoint.

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