iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 13 **Issue:** III **Month of publication:** March 2025

DOI: https://doi.org/10.22214/ijraset.2025.67964

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 13 Issue III Mar 2025- Available at www.ijraset.com

The Rising Burden of Alzheimer's Disease and its Growing Challenges in Healthcare

S. Mercy[1], K. Triveni[2], N. Phani Satyavathi[3], U. Sandhya Rani[4], D. K V Mutthilingachari[5]
Sri Venkateswara College of Pharmacy, Etcherla, Srikakulam, India

Abstract: ***A complex global health concern, Alzheimer's disease has significant social, medical, and economical repercussions. It affects individuals, families, and caregivers profoundly and places a heavy load on healthcare systems. This statement highlights the pressing need for a cohesive and comprehensive approach to address the complexities of Alzheimer's disease. It highlights the significance of increasing research funding, enhancing hospital infrastructure, increasing public awareness, and improving caregiver support. By implementing a multimodal strategy, we can reduce the risk of Alzheimer's, improve early identification and treatment, and ultimately improve the quality of life for those afflicted by this debilitating condition.***
Keywords: Alzheimer's, Memory loss, Dementia, Cognitive function, Isolation, Stigma, Immunotherapy.

I. INTRODUCTION

Alzheimer's disease, which affects not just people but also their families, caregivers, and the larger healthcare system, is becoming a major global public health problem due to its cognitive decline, memory loss, and behavioral disorders. Given that there are more than 50 million Alzheimer's patients globally and that around 10 million new cases are identified each year, the yearly economic burden of the disease is anticipated to be over $1 trillion and is expected to treble by 2030. The illness has a catastrophic impact on people, families, and caregivers, causing financial difficulty, emotional suffering, and caregiver burnout. It also puts a great deal of strain on already overburdened healthcare systems. Governments, healthcare providers, academics, and civil society groups must move quickly to alleviate this mounting burden. This includes boosting research funding, enhancing hospital infrastructure, raising public awareness and educating the public, and providing support for caregivers. A comprehensive and diversified strategy is necessary to meet the enormous medical, social, and economic problems posed by Alzheimer's disease as the whole community joins together to tackle this issue.

II. IMPACT OF ALZHEIMER'S DISEASE

Alzheimer's disease affects not just cognitive performance but also emotional, social, physical, and financial well-being, having a significant effect on patients, caregivers, and society at large. Loss of identity, mood swings, emotional anguish, and strained relationships are examples of the emotional effect; social isolation, loss of social ties, stigma, and caregiver burden are examples of the social impact. The physical effects of cognitive decline include decreased motor function, problems with nutrition and hydration, sleep disorders, and an increased risk of infection. Cognitive decline results in memory loss, language difficulties, problem-solving difficulties, and disorientation.

Healthcare costs, caregiver expenses, lost productivity, and strain on healthcare systems are just a few of the economic effects. Caregivers also face emotional, physical, financial, and social challenges, such as social isolation, financial strain, emotional distress, and physical strain. All things considered, Alzheimer's disease has a terrible impact on every part of life, which emphasizes the urgency with which this expanding global health emergency must be addressed.

A. Epidemiology and Prevalence

Alzheimer's disease is a major global health issue that affects people, families, and societies all over the world. The illness, which affects an estimated 57 million people globally, is the primary cause of dementia in older adults (those over 65). Given rising life expectancy and population aging, it is anticipated that the prevalence of Alzheimer's disease will continue to grow globally, particularly in emerging nations. There have been regional differences in incidence and prevalence, with rising age-specific prevalence in China and Japan and declining trends in North America and Europe. Although there is few research from Latin America, Africa, the Middle East, Eastern Europe, and Russia, the quality and breadth of epidemiological data differ greatly between areas. The prevalence, incidence, and mortality of Alzheimer's disease are predicted to increase globally as a result, underscoring the urgent need to address this escalating global health emergency.

B. Symptoms and Progression

A deterioration in cognitive, emotional, and physical functioning is a hallmark of Alzheimer's disease, a degenerative neurological condition. Although Alzheimer's disease symptoms might differ from person to person, they usually start with minor cognitive impairment, such as disorientation, memory loss, and trouble understanding problems. Language barriers, confusion, and trouble with everyday tasks like dressing, washing, and handling money are some of the symptoms that may appear as the illness worsens. People may suffer from severe cognitive impairment in the latter stages of the disease, which includes losing the capacity to react to their surroundings and having trouble recognizing friends and relatives. Three phases of Alzheimer's disease progression may be distinguished: early, middle, and late stages. Each stage has unique symptoms and treatment needs. In order to effectively care for and assist those impacted by Alzheimer's disease, it is important to comprehend the illness's symptoms and course.

C. Caregiver Burden and Support

Alzheimer's disease caregivers can bear a heavy burden that includes financial, physical, and emotional difficulties. While the physical demands of caring can lead to health issues, sleep disruptions, and exhaustion, the emotional toll of caregiving can cause stress, worry, and depression. Additionally, in order to care for their loved ones, caregivers sometimes forgo their own social connections, employment, and financial stability, which can result in feelings of loneliness and exhaustion. It is crucial to acknowledge the vital role caregivers play in helping people with Alzheimer's disease and to make sure they get the tools and assistance they need. This might involve counseling, support groups, respite care, and instruction on illness management and caring techniques. In order to address the multifaceted requirements of caregivers and advance their sustainability, health, and well-being, legislators and healthcare professionals must collaborate to create and execute efficient caregiver support programs.

III. ECONOMIC AND SOCIAL CONSEQUENCES

Alzheimer's disease has severe and far-reaching social and economic effects. Alzheimer's disease is thought to cost the world's economy more than $1 trillion a year, and by 2030, that amount is expected to have quadrupled. Alzheimer's disease has substantial indirect costs in addition to direct medical expenses, such as lost productivity, caregiver stress, and unpaid care. Alzheimer's disease has similarly significant social repercussions; those who have the illness and their family frequently endure mental suffering, social exclusion, and stigma. Additionally, underprivileged and marginalized groups may be disproportionately affected by Alzheimer's disease, which might exacerbate already-existing social and health inequities. It is critical that governments, healthcare professionals, and civil society groups collaborate to create and execute efficient plans to lessen the financial and societal effects of Alzheimer's disease, which is becoming more and more common worldwide.

A. Global Economic Burden

Alzheimer's disease is anticipated to cost more than $1 trillion annually worldwide, and by 2030, that amount is expected to treble. In addition to indirect expenses like missed productivity, caregiver stress, and informal care, this also includes direct medical expenditures like hospital stays, prescription drugs, and long-term care. An estimated $355 billion is spent annually on Alzheimer's disease in the United States alone, with Medicare and Medicaid covering around 60% of these expenses. Alzheimer's disease impacts the global economy through decreased economic growth, lost productivity, and greater reliance on social security systems, therefore its financial weight extends beyond medical expenses. Policymakers, healthcare providers, and civil society groups must collaborate to create and execute efficient measures to lessen the financial burden of Alzheimer's disease, which is becoming more and more common worldwide.

B. Healthcare System Challenges

When it comes to Alzheimer's disease, the healthcare system faces several obstacles, such as a lack of staff, resources, and infrastructure. Many nations lack skilled healthcare workers and specialized dementia care services, making it difficult for healthcare systems throughout the world to offer patients with Alzheimer's disease with high-quality, patient-centered care. The issue is made worse by the lack of geriatricians, psychiatrists, and other professionals with dementia care training, which results in poor care coordination, delayed diagnosis, and insufficient treatment. Additionally, acute treatment is frequently given priority over chronic care in healthcare systems, depriving people with Alzheimer's disease and those who care for them of essential support services like adult day care, home care, and respite care. Healthcare systems must make investments in infrastructure, workforce development, and service delivery innovations that put person-centered care, care coordination, and caregiver support first in order to meet these challenges.

C. Social Isolation and Stigma

The widespread and devasting effects of Alzheimer's disease include social isolation and stigma, which impact not just those who have the illness but also their relatives and caregivers. Due to issues with mobility, communication, and cognitive function, people with Alzheimer's disease frequently suffer social isolation, which can result in emotions of worry, sadness, and loneliness . Furthermore, the stigma associated with Alzheimer's disease may keep people and families from getting support, talking about their diagnosis, and seeking assistance. Because their caring obligations restrict their social connections and relationships, caregivers also face social isolation . Promoting knowledge, education, and comprehension of Alzheimer's disease is crucial in order to fight social isolation and stigma. Supportive services like counseling, support groups, and respite care should also be made available.

IV. ADDRESSING THE BURDEN

A multifaceted strategy including governments, healthcare institutions, civil society groups, and people is needed to address the burden of Alzheimer's disease. This entails boosting public awareness and education, expanding research funding, and upgrading healthcare facilities. Additionally, caregivers' financial, physical, and emotional responsibilities might be lessened by providing them with counseling, respite care, and other services. The burden of Alzheimer's disease can also be lessened by putting laws and initiatives in place that support early diagnosis, detection, and treatment. Additionally, the risk of Alzheimer's disease can be decreased by promoting good lifestyle choices such consistent exercise, a balanced diet, and social interaction. In the end, addressing the intricate and extensive burden of Alzheimer's disease requires a thorough and coordinated strategy.

A. Research and Development

To better understand the origins of Alzheimer's disease, enhance diagnosis and therapy, and eventually discover a solution, research and development initiatives are being carried out. Researchers are looking into a number of options, such as creating novel drugs, immunotherapies, and gene therapies. Additionally, improvements in imaging technology like magnetic resonance imaging (MRI) and positron emission tomography (PET) are enabling early intervention and increasing diagnostic accuracy. Additionally, studies on lifestyle modifications including nutrition, exercise, and cognitive training are showing promise in lowering the risk of Alzheimer's disease and cognitive decline. Another important field of study is the creation of biomarkers for the early identification and tracking of Alzheimer's disease; a number of intriguing candidates are presently being studied in this regard.

B. Healthcare Infrastructure and Policy

For people with Alzheimer's disease to get high-quality treatment, a robust healthcare system and supporting regulations are essential. Increasing access to specialist dementia care services, such home care programs and memory clinics, is one aspect of this. Policies that support early diagnosis, treatment, and detection can also lessen the burden of Alzheimer's disease. Additionally, workforce development—including educating and training medical staff on dementia care and management—must be a top priority for healthcare systems. Additionally, caregiver-supporting policies like caregiver leave and respite care can lessen the financial, physical, and emotional strain on caregivers. To address the increasing requirements of people with Alzheimer's disease and their caregivers, governments and healthcare institutions must collaborate to create and carry out comprehensive programs.

C. Public Awareness and Education

To increase knowledge, lessen stigma, and support early identification and intervention for Alzheimer's disease, public education and awareness campaigns are crucial. Increasing public knowledge of the illness can aid in debunking widespread beliefs and misunderstandings and advance a deeper comprehension of its causes, signs, and consequences. Additionally, families and individuals can be empowered by education programs to take charge of their health, make knowledgeable decisions about care and treatment, and access resources and support services. Campaigns for public awareness can also assist advocacy and research initiatives, encourage healthy lifestyle choices, and boost brain health. We can create a more knowledgeable and encouraging community for people with Alzheimer's disease and their caregivers by collaborating to advance public awareness and education.

V. FUTURE DIRECTIONS

Addressing Alzheimer's disease in the future will necessitate a multimodal strategy that takes into account developments in public awareness, healthcare infrastructure, research, and legislation. New fields of study including gene therapy, immunotherapy, and precision medicine have the potential to produce better cures and maybe even prevent the illness. Furthermore, the use of wearable technology and artificial intelligence into dementia care may enhance care coordination, diagnosis, and therapy.

The creation of comprehensive dementia plans, which include investments in care infrastructure, workforce development, and supportive services for caregivers, must also be a top priority for legislators and hospital executives. Ultimately, to solve the complex issues raised by Alzheimer's disease and enhance the quality of life for those impacted by this debilitating condition, a persistent dedication to research, innovation, and cooperation will be required.

A. Innovative Therapies and Technologies

Innovative medicines and technology are being developed to better the diagnosis, treatment, and care of patients with Alzheimer's disease. There is hope that developments in precision medicine, gene therapy, and immunotherapy can reduce or perhaps stop the course of illness. Furthermore, the potential of cutting-edge technology like wearables, machine learning, and artificial intelligence to enhance diagnosis, monitoring, and care coordination is being investigated. In order to enhance the cognitive and emotional well-being of people with Alzheimer's disease, virtual reality and augmented reality are also being utilized to create captivating and immersive experiences. Additionally, researchers are looking at how assistive technology and robots might help people with Alzheimer's disease and their caregivers with everyday tasks and enhance their quality of life.

B. Personalized Medicine and Care

Alzheimer's disease diagnosis, treatment, and management are being transformed by personalized medication and care. Healthcare professionals may now customize treatment regimens to each patient's distinct genetic, biological, and lifestyle profile because to developments in genetic testing, biomarkers, and imaging technology. This individualized strategy can enhance patient outcomes, minimize adverse effects, and maximize therapy efficacy. Furthermore, an individual's autonomy, dignity, and quality of life can all be enhanced by customized care plans that include their needs, values, and preferences. By facilitating real-time monitoring, data-driven insights, and focused treatments, digital technology like wearables and smartphone applications can also help to enhance individualized care.

C. Global Collaboration and Action

In order to combat the increasing global burden of Alzheimer's disease, international cooperation and action are crucial. A framework for creating and carrying out national dementia plans is provided by the World Health Organization's (WHO) Global Action Plan on the Public Health Response to Dementia 2017–2025. Global awareness, research, and policy development are also being promoted by international partnerships like the Global Alzheimer's and Dementia Action Alliance. Moreover, international collaborations among governments, businesses, academic institutions, and civil society groups are essential for fostering innovation, enhancing care, and furthering research in dementia diagnosis, prevention, and treatment. The world community can address the difficult issues raised by Alzheimer's disease and enhance the lives of those impacted by this debilitating condition by pooling resources, knowledge, and experience.

VI. CONCLUSION

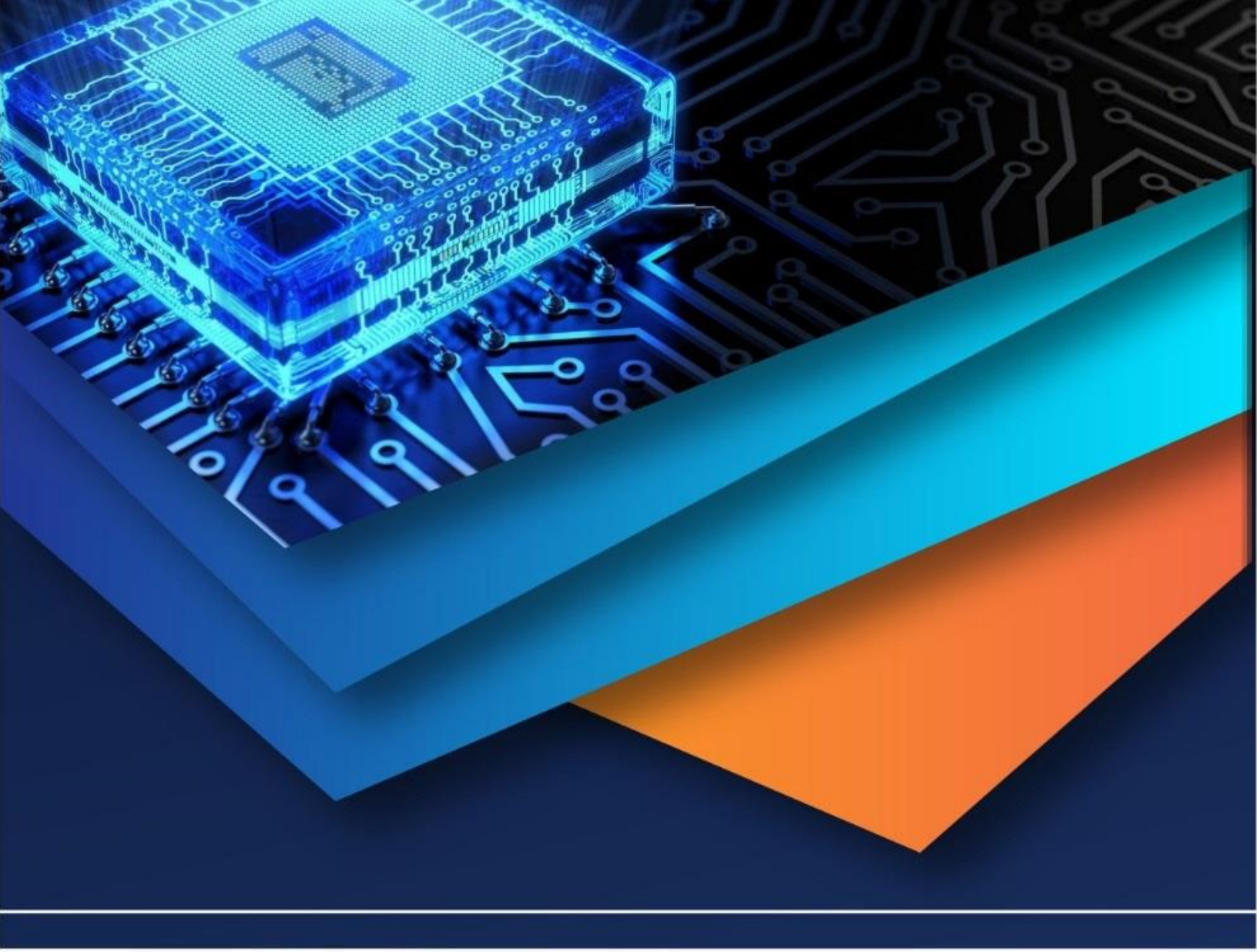
The medical, social, and economic effects of Alzheimer's disease necessitate a thorough and coordinated approach because it is a complicated and varied global health concern. This illness has a significant impact on people, families, and caretakers, and it puts a significant strain on healthcare systems. Governments, medical professionals, researchers, and civil society organizations must work together to address these issues. Funding for research should be increased, hospital facilities should be improved, public awareness should be raised, and caregivers should receive crucial support. We may endeavor to lower the risk of Alzheimer's disease, improve early detection and treatment, and ultimately raise the standard of living for individuals afflicted by this crippling condition by putting a comprehensive approach into practice.

REFERENCES

[1] World Health Organization. (2019). Dementia.
[2] Alzheimer's Disease International. (2020). World Alzheimer Report 2020.
[3] Alzheimer's Association. (2022). 2022 Alzheimer's disease facts and figures.
[4] National Institute on Aging. (2022). Alzheimer's Disease and Related Dementias.
[5] Prince, M. J., et al. (2015). The global prevalence of dementia: a systematic review and metaanalysis. Alzheimer's & Dementia, 11(7), 783-793.
[6] Gaugler, J. E., et al. (2019). The effects of Alzheimer's disease on caregivers. Journal of Gerontology: Social Sciences, 74(4), 539-548.
[7] Schulz, R., & Martire, L. M. (2004). Family caregiving of persons with dementia: prevalence, health effects, and support strategies. American Journal of Geriatric Psychiatry, 12(3), 240-249.

[8] Scarmeas, N., et al. (2011). Physical activity, diet, and risk of Alzheimer disease. Journal of the American Medical Association, 306(6), 627-634.
[9] Spector, A., et al. (2010). Cognitive-behavioural therapy for anxiety in dementia: a systematic review. Aging & Mental Health, 14(8), 933-942.
[10] Zhu, C. W., et al. (2018). The economic impact of Alzheimer's disease and related dementias in the United States. Alzheimer's & Dementia, 14(7), 943-951.
[11] Pinquart, M., & Sorensen, S. (2011). Spouses, adult children, and children-in-law as caregivers of older adults: a meta-analytic comparison. Psychology and Aging, 26(1), 1-14.
[12] Ferri, C. P., et al. (2005). Global prevalence of dementia: a Delphi consensus study. Lancet, 366(9503), 2112-2117.
[13] Qiu, C., et al. (2019). Epidemiology of Alzheimer's disease: a global perspective. Journal of Alzheimer's Disease, 67(2), 257-273.
[14] United Nations. (2019). World Population Prospects 2019.
[15] Dodge, H. H., et al. (2019). Geographic and temporal variations in Alzheimer's disease incidence and mortality. Alzheimer's & Dementia, 15(3), 341-351.
[16] Llibre-Rodriguez, J. J., et al. (2019). Dementia in Latin America and the Caribbean: a systematic review. Alzheimer's & Dementia, 15(3), 352-363.
[17] Wu, Y. T., et al. (2017). The global prevalence of dementia: a systematic review and meta-analysis. Alzheimer's & Dementia, 13(3), 279-291.
[18] Burns, A., & Iliffe, S. (2009). Alzheimer's disease. British Medical Journal, 338, b158.
[19] Galvin, J. E., et al. (2010). The ADOC: a brief clinical tool to diagnose dementia. Archives of Neurology, 67(5), 549-554.
[20] Cummings, J. L., et al. (2010). Assessment of cognitive decline in Alzheimer's disease. Alzheimer's & Dementia, 6(3), 236-244.
[21] Morris, J. C., et al. (2012). The Uniform Data Set (UDS): clinical and cognitive variables and descriptive data from Alzheimer Disease Centers. Alzheimer Disease & Associated Disorders, 26(2), 117-125.
[22] Reisberg, B., et al. (2003). Staging dementia. Psychopharmacology Bulletin, 37(2), 46-55.
[23] Seltzer, B., et al. (2014). Clinical diagnosis and management of Alzheimer's disease. Journal of Clinical Psychiatry, 75(6), 633-641
[24] Schulz, R., & Sherwood, P. R. (2008). Physical and mental health effects of family caregiving. American Journal of Nursing, 108(9), 23-27.
[25] Vitaliano, P. P., et al. (2003). The role of caregiver stress and coping in the development of depression. Aging & Mental Health, 7(4), 297-307.
[26] Kramer, B. J. (2000). Husbands caring for wives with dementia: a longitudinal study of continuity and change. Journal of Gerontology: Social Sciences, 55B(4), S221-S231.
[27] Pinquart, M., & Sorensen, S. (2006). Helping caregivers of persons with dementia: which interventions work and why? Aging & Mental Health, 10(5), 443-456.
[28] Acton, G. J., & Kang, J. (2001). Interventions to reduce the burden of caregiving for an adult with dementia: a meta-analysis. Research in Nursing & Health, 24(5), 349-360.
[29] Talley, R. C., & Crews, J. E. (2007). Framing the public health of caregiving. American Journal of Public Health, 97(2), 224-228.
[30] Wimo, A., et al. (2017). The worldwide costs of dementia 2015 and comparisons with 2010. Alzheimer's & Dementia, 13(1), 1-7.
[31] Bloom, D. E., et al. (2015). The global economic burden of dementia. World Alzheimer Report 2015.
[32] Leibson, C. L., et al. (2018). The economic burden of Alzheimer's disease and related dementias in the United States. Alzheimer's & Dementia, 14(7), 931-941.
[33] Kang, J., et al. (2018). The impact of dementia on family caregivers: a systematic review. Aging & Mental Health, 22(10), 1231-1243.
[34] Prince, M., et al. (2016). The global impact of dementia: a review of the evidence. Alzheimer's & Dementia, 12(7), 763-775.
[35] Comas-Herrera, A., et al. (2017). World Alzheimer Report 2017: the global impact of dementia. Alzheimer's Disease International.
[36] Hurd, M. D., et al. (2013). Monetary costs of dementia in the United States. New England Journal of Medicine, 369(5), 489-490.
[37] Leibson, C. L., et al. (2018). The economic burden of Alzheimer's disease and related dementias in the United States. Alzheimer's & Dementia, 14(7), 931-941.
[38] Kuo, T. C., et al. (2019). The economic burden of Alzheimer's disease in the United States: a systematic review. American Journal of Alzheimer's Disease & Other Dementias, 34(1), 3-13.
[39] Access Economics. (2009). The economic cost of dementia in Australia. Access Economics.
[40] Connolly, S., et al. (2019). The economic impact of dementia. Journal of Alzheimer's Disease, 67(2), 257-273.
[41] Brodaty, H., et al. (2014). The health care system and dementia. International Journal of Geriatric Psychiatry, 29(8), 741-748.
[42] Finkelstein, E. A., et al. (2017). The economic burden of Alzheimer's disease: a systematic review. Alzheimer's & Dementia, 13(7), 771-781.
[43] Olazarán, J., et al. (2019). The need for specialized dementia care services. International Journal of Geriatric Psychiatry, 34(1), 3-4.
[44] Reuben, D. B., et al. (2019). Geriatrics at the crossroads: the urgent need for health care reform. Journal of the American Geriatrics Society, 67(5), 931-936.
[45] Vickrey, B. G., et al. (2019). Health care system challenges and opportunities for improving dementia care. Alzheimer's & Dementia, 15(3), 351-359.
[46] Clyburn, L. D., et al. (2018). The impact of Alzheimer's disease on social relationships. Journal of Alzheimer's Disease, 61(2), 531-541.
[47] Garcia-Alberca, J. M., et al. (2018). Social isolation in Alzheimer's disease: a systematic review. International Journal of Geriatric Psychiatry, 33(1), 15-25.
[48] Werner, P., et al. (2019). Stigma and Alzheimer's disease: a systematic review. Aging & Mental Health, 23(10), 1231-1243.
[49] Sanders, S., et al. (2017). Caregiver social isolation and its correlates. Journal of Gerontology: Social Sciences, 72(4), 539-548.
[50] Gaugler, J. E., et al. (2019). The role of education in reducing stigma and promoting support for people with Alzheimer's disease. Alzheimer's & Dementia, 15(3), 360-368.
[51] Gitlin, L. N., et al. (2019). Supporting caregivers of people with Alzheimer's disease: a systematic review. American Journal of Alzheimer's Disease & Other Dementias, 34(1), 14-25.
[52] Mittelman, M. S., et al. (2018). Taking a multifaceted approach to addressing the burden of Alzheimer's disease. Alzheimer's & Dementia, 14(7), 942-951.
[53] D'Onofrio, G., et al. (2017). A comprehensive approach to address the burden of Alzheimer's disease. Journal of Alzheimer's Disease, 56(2), 551-561.
[54] Livingston, G., et al. (2018). Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. Lancet, 392(10146), 547-554.
[55] Fazio, S., et al. (2018). The role of policy in addressing the burden of Alzheimer's disease. Alzheimer's & Dementia, 14(7), 952-959.
[56] Norton, S., et al. (2014). Potential lifestyle interventions for reducing risk of dementia. International Review of Psychiatry, 26(3), 261-273.
[57] Chodosh, J., et al. (2018). A comprehensive approach to addressing the burden of Alzheimer's disease. Journal of the American Geriatrics Society, 66(9), 1641-1648.
[58] Selkoe, D. J. (2019). Alzheimer's disease: a central role for amyloid. Journal of Clinical Investigation, 129(10), 3739-3746.
[59] Golde, T. E., et al. (2018). Targeting the β-secretase enzyme for Alzheimer's disease therapy. Nature Reviews Neurology, 14(10), 577-586.
[60] Frisoni, G. B., et al. (2019). Imaging biomarkers for Alzheimer's disease: a systematic review. Neurobiology of Aging, 76, 105-118.

[61] Smith, P. J., et al. (2019). The effects of exercise and cognitive training on cognitive function in adults with Alzheimer's disease: a systematic review. Alzheimer's & Dementia, 15(3), 369-378.
[62] Blennow, K., et al. (2018). Cerebrospinal fluid biomarkers for Alzheimer's disease: a systematic review. Alzheimer's & Dementia, 14(7), 962-971.
[63] Callahan, C. M., et al. (2019). Healthcare systems and dementia care: a systematic review. Alzheimer's & Dementia, 15(3), 379-388.
[64] Fazio, S., et al. (2018). The role of policy in addressing the burden of Alzheimer's disease. Alzheimer's & Dementia, 14(7), 952-959.
[65] Brodaty, H., et al. (2014). The health care system and dementia. International Journal of Geriatric Psychiatry, 29(8), 741-748.
[66] Carpenter, B. D., et al. (2019). Public awareness and education about Alzheimer's disease: a systematic review. Alzheimer's & Dementia, 15(3), 389-398.
[67] Gaugler, J. E., et al. (2019). The role of education in reducing stigma and promoting support for people with Alzheimer's disease. Alzheimer's & Dementia, 15(3), 360-368.
[68] Mittelman, M. S., et al. (2018). Taking a multifaceted approach to addressing the burden of Alzheimer's disease. Alzheimer's & Dementia, 14(7), 942-951.
[69] Selkoe, D. J. (2019). Alzheimer's disease: a central role for amyloid. Journal of Clinical Investigation, 129(10), 3739-3746.
[70] Golde, T. E., et al. (2018). Targeting the β-secretase enzyme for Alzheimer's disease therapy. Nature Reviews Neurology, 14(10), 577-586.
[71] Ienca, M., et al. (2018). Artificial intelligence in healthcare: a systematic review. Journal of Medical Systems, 42(10), 214.
[72] Livingston, G., et al. (2018). Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. Lancet, 392(10146), 547-554.
[73] Hampel, H., et al. (2019). The future of Alzheimer's disease therapy: novel drugs, targets, and diagnostics. Journal of Alzheimer's Disease, 67(2), 247-256.
[74] Golde, T. E., et al. (2018). Targeting the β-secretase enzyme for Alzheimer's disease therapy. Nature Reviews Neurology, 14(10), 577-586.
[75] Ienca, M., et al. (2018). Artificial intelligence in healthcare: a systematic review. Journal of Medical Systems, 42(10), 214.
[76] Snyder, P. J., et al. (2019). Personalized medicine for Alzheimer's disease: a systematic review. Alzheimer's & Dementia, 15(3), 399-408.
[77] Cummings, J. L., et al. (2018). Biomarkers for Alzheimer's disease: a systematic review. Alzheimer's & Dementia, 14(7), 872-883.
[78] Hampel, H., et al. (2019). Precision medicine in Alzheimer's disease: a systematic review. Journal of Alzheimer's Disease, 67(2), 257-266.
[79] World Health Organization. (2017). Global Action Plan on the Public Health Response to Dementia 2017–2025.
[80] World Health Organization. (2019). Global status report on the public health response to dementia.
[81] Global Alzheimer's and Dementia Action Alliance. (2020). Global Alzheimer's and dementia action plan 2020–2025.



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY