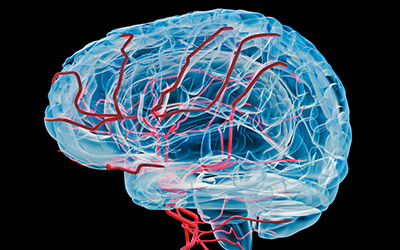
7BH501- Society & Human Health (Dementia)

****

****

**Student Id -**

**Student Name -**

Table of Contents

[Introduction 3](#_Toc133490456)

[“Overview of Dementia” 4](#_Toc133490457)

[“Epidemiology and Aetiology for dementia” 5](#_Toc133490458)

[“Analysing the Treatment and Interventions for dementia” 6](#_Toc133490459)

[“Analysing the Public Health/healthcare challenges associated with dementia” 8](#_Toc133490460)

[Conclusion 9](#_Toc133490461)

[References 11](#_Toc133490462)

# Introduction

Dementia has a significant effect on both people and their families. People who endure memory loss, disorientation, and trouble doing daily tasks may experience severe distress. In addition, it may result in social exclusion, loss of autonomy, and a decline in quality of life. Dementia has major economic repercussions in addition to a significant emotional cost. The cost of dementia worldwide was pegged at over $1 trillion in 2021, and as the global population gets older, that number is anticipated to rise. The medical industry has been researching solutions to address how dementia affects people and their families. There is continuing research to create new medications and lifestyle changes that can reduce or stop the growth of the disease. Additionally, there is an emphasis on upgrading hospital and care facility care as well as care for those who suffer from dementia and their families.

The significance of early identification and care for dementia patients has gained more attention in recent years. This has prompted the creation of fresh methods and instruments for locating those who are at risk for dementia and offering them the assistance and care they need. To encourage more individuals to seek help and guidance when they need it, the healthcare sector has also been striving to increase understanding about dementia and lessen the stigma around the illness. Dementia is a significant public health problem that calls for a coordinated response by the healthcare sector, governments, and society at large. Even though there is no known treatment for dementia that looks there is always optimism that future discoveries and innovations can help those who suffer from this terrible disease.

# “Overview of Dementia”

A collection of symptoms associated with deterioration in cognitive capacities, such as memory, reasoning, and communication, are referred to as ***dementia***. It is a group of symptoms brought on by a number of underlying disorders or diseases rather than a particular ailment. Although it can affect younger people as well, dementia is a degenerative condition that generally affects older folks. Alzheimer's disease, which causes 60 to 70 percent of dementia cases, is the most frequent dementia cause (Gao *et al.,* 2019). Parkinson's disease, dementia of the front temporal cortex, Lewy body dementia, and vascular dementia are some more causes of dementia.

In certain situations, medical ailments including thyroid issues, vitamin shortages, and infections can also contribute to dementia.

Depending on the true root cause of the disease, the symptoms of dementia might vary, but they typically include memory loss, challenges with communicating through language, issues with thinking and judgement, and alterations in mood and behaviour. People experiencing dementia may struggle to conduct basic chores like eating, dressing, and washing as the condition worsens. Although dementia is currently incurable, there are medications that can help control symptoms and halt the disease's development. Memantine and other drugs like cholinesterase inhibitors can enhance cognitive function and postpone the emergence of more severe symptoms. Additionally helpful in enhancing the quality of life among individuals with dementia are behavioural therapies such as cerebral stimulation and music therapy. It may be difficult to care for someone who has dementia, and carers frequently feel significant levels of anxiety and exhaustion. Carers can benefit from support groups, emergency assistance, and counselling to help them cope with the physical as well as emotional responsibilities of caring for a person with dementia. Although dementia cannot always be prevented, there are actions that may be taken to lower the likelihood of getting the illness (Cuffaro *et al.,* 2020). These consist of following a balanced diet, getting regular exercise, quitting smoking, and treating other medical disorders including diabetes and high cholesterol. In closing, dementia is a difficult and progressing condition that may have a big influence of the lives of individuals who have it. The disease has no known cure, although early detection and management can help control symptoms and enhance quality of existence for both dementia patients and their carers.

# “Epidemiology and Aetiology for dementia”

A condition known as dementia is characterised by a persistent deterioration in cognitive function that impairs memory, reasoning, behaviour, and the capacity to carry out everyday tasks. Dementia is a significant public health concern, especially in populations that are getting older, with a probable prevalence of 5-7% among adults 60 years of age and beyond, according to epidemiological research. Age-related increases in prevalence mean that there are approximately 35 million dementia sufferers in the world. Dementia has a complex aetiology that combines environmental, genetic, and behavioural variables. .Alzheimer's disease, which causes dementia in 60–70% of cases, is the most frequent cause (Van Maurik *et al.,* 2020). Other causes of dementia include mixed dementia, front temporal dementia, Lewy body dementia, and vascular dementia. Ageing, a family descent into cognitive impairment, cardiovascular disease, smoking, drinking, physical inactivity, and a poor diet are all risk factors for dementia. Maintaining an active way of life, which includes getting regular exercise, eating a balanced diet, controlling coronary artery disease risk factors, and abstaining from tobacco and drinking excessive amounts of alcohol, is one of the best ways to prevent dementia. A further factor in lowering the incidence of dementia may be social interaction and mental stimulation. Dementia can assist enhance quality of life and be slowed down by early identification and treatment.

**“Assessing the Factors that affect the disease”**

Cognitive functions including memory, language, figuring out solutions, and concentration are all impacted by dementia, a degenerative disorder. Although this illness is typically linked to ageing, other causes can also contribute to its occurrence. Some of the variables that may hasten the onset or progression of dementia are covered here.

**Age:** The biggest associated risk for dementia is age (Lam *et al.,* 2020). The brain cells of ageing individuals degrade, making them more vulnerable to accident or disease-related harm. According to estimates, beyond the age of 65, the chance of having dementia increases every five years.

**Genetics:** Dementia develops in part as a result of genetics. The APOE gene is one of many that scientists have found to be linked to a higher risk of dementia. However, other variables, such lifestyle decisions, can change the risk and genetics only cannot predict the onset of dementia.

**Lifestyle factors:** The risk of dementia can also be impacted by lifestyle choices including food, exercise, and smoking. Reduced risk of cognitive deterioration can be achieved by eating a nutritious diet high in vegetables, citrus fruits, and whole grains (Hershen and Coleman-Jackson, 2019). Regular exercise can enhance brain function and lower the risk of dementia. This includes both aerobic and strength training. Contrarily, smoking raises the chance of dementia and cognitive deterioration.

**Medical conditions:** Dementia can be caused by a number of different medical disorders. Cognitive impairment can result from brain blood vessel damage brought on by stroke, diabetes, cardiovascular disease, and high blood pressure. Dementia risk may also be boosted by head trauma and diseases like HIV and Lyme disease.

**Environmental factors:** Dementia can also occur as a result of environmental causes such exposure to chemicals and pollution. Toxins that harm brain cells and raise the risk underlying cognitive decline include pesticides, lead, and mercury.

**Social factors:**

The risk of dementia can also be influenced by socioeconomic variables including education, career, and social interaction. The likelihood of cognitive decline is lower in those with greater levels of both education and employment. Having a solid support system and engaging in social activities can both lower the chance of developing dementia. Therefore, these many variables may have a role in the onset and development of dementia.A good diet and periodic physical activity can lower the risk of cognitive degradation even while other factors, such as age and heredity, are unchangeable (Matziorinis and Koelsch, 2022).

# “Analysing the Treatment and Interventions for dementia”

Cholinesterase inhibitors, such as donepezil, rivastigmine, and others and the medication galantamine, may help patients with from mild to severe Alzheimer's condition, **for example**, by improving memory and cognitive function. Memantine, a medication for mild to moderate Alzheimer's disease, has been shown to improve cognitive function and delay the onset of symptoms. Another medication that has been shown to be effective in treating dementia is this one. In addition to medicine, many non-pharmacological treatments can be used to manage dementia (Moreno-Morales *et al.*, 2020). For instance, cognition tasks and exercises designed to improve patients' concentration, memory, and problem-solving skills are a part of cognitive stimulation therapy (CST).

CST is an intervention without the use of drugs. Another non-pharmacological approach that has shown promise in the treatment of dementia is music therapy (Taylor *et al.*, 2020). Music therapy is the practise of using music to improve mood, reduce anxiety, and promote social interaction. In dementia patients, it has been shown to be effective in boosting mood and decreasing agitation. It is also feasible to change the surroundings to improve dementia patients' quality of life on a daily basis. **For example,** changing the living environment to lower hazards and improve accessibility can help reduce falls and improve safety. Giving patients photographs and familiar objects might also help patients feel less confused and improve their cognitive abilities. Behavioural therapy can be used to treat the symptoms of dementia as well. For instance, using behaviour management techniques like redirection, rewarding behaving well, and behavioural contracting, one may lessen undesired tendencies like anger and aggressiveness.

Social therapy like cooperation and support groups can also increase social involvement and minimise melancholy and isolated feelings. It is important to keep in mind that the finest dementia psychological treatment and intervention techniques may vary depending on the kind and severity of the disease and additionally the unique requirements and preferences of the patient (Zhang *et al.,* 2021).Additionally, despite the fact that these treatments may be effective in handling symptoms and improving quality of life, they do not provide a solution for the underlying issue. As a result, dementia patients need to continue receiving the proper assistance and care, which necessitates ongoing assessment and care.

Although there is no proven treatment for Alzheimer's disease, there are several therapy and intervention alternatives that can help people with dementia better manage their symptoms and overall quality of life. In dementia patients, symptoms can be managed and cognitive function can be improved through the use of drugs, non-pharmacological therapy, environmental modifications, and behavioural interventions. To ensure that patients continue to receive the proper support and care, ongoing monitoring and management are necessary. The most effective techniques will, however, differ based on the distinctive demands and needs of the individual undergoing treatment.

# “Analysing the Public Health/healthcare challenges associated with dementia”

A sizable section of the older population globally suffers from dementia, a complicated and crippling disorder. The World Health Organisation (WHO) estimates that over 50 million individuals worldwide suffer from dementia, with over 10 million new cases occurring year. The hallmark of dementia is a deterioration in cognitive skills including memory, logic, and speech, which makes it challenging to carry out daily tasks (Jafari *et al.*, 2019). In addition to the person, this disorder has an impact on their family, carers, and the community at large.

**Lack of Awareness and Understanding**

The lack of knowledge and understanding regarding dementia is one of the biggest obstacles to coping with it. Delays in detection and therapy might occur as a result of the frequent confusion between dementia and normal ageing. Additionally, many medical workers lack the necessary training to recognise and treat dementia, which results in an inadequate level of patient care.

**High Healthcare Costs**

It costs a lot to have dementia, both financially and socially. The projected yearly cost of dementia in the United States is roughly $259 billion, with family and carers bearing the brunt of these expenses. Numerous variables, such as the requirement for specialised medical care, drugs, and long-term care facilities, contribute to the high expense of dementia care.

**Caregiver Burden**

The burden of caring for someone with dementia typically falls on close relatives or other carers. Giving care to a patient with dementia may be emotionally, mentally, and financially taxing, placing a heavy strain on the carer. Additionally to raising healthcare expenditures, this load may have an adverse effect on the caregiver's health, happiness, and quality of life.

**Stigma and Social Isolation**

Many people stigmatise dementia and see it as an individual's failing or weakness. The stigma surrounding dementia can cause social exclusion and prejudice for those who have it in addition to their loved ones and carers (Tisher and Salardini, 2019). Increased despair and anxiety, a drop in cognitive function, and a reduction in quality of life are all effects of social isolation.

**Lack of Effective Treatments**

There are presently no proven dementia therapies, despite decades of study. While certain drugs can help some individuals manage their symptoms, these therapies are not a kind of cure that do not halt the disease's development. For individuals, their families, and carers, this lack of viable therapies can cause despair and pessimism.

**Lack of Research Funding**

Despite having a huge influence on public health, research into dementia is gravely underfunded. The paucity of funding for research into dementia impedes efforts to better understand the condition, provide efficient treatments, and discover a cure (Licher *et al.,* 2019). Additionally, a lack of research funding may result in a shortage of dementia care training for medical workers. Given that dementia is a difficult and complicated disorder that impacts not only the person with the condition but also their family, carers, and society as a whole. Healthcare professionals, legislators, and society at large must work together to address the problems brought on by dementia. It can enhance the standards of life for persons suffering from dementia and their families by raising knowledge and understanding of the condition, providing proper support for carers, eliminating stigma and isolation in society, and boosting research funding.

# Conclusion

As the above discussion summarise that, millions of individuals throughout the world suffer with dementia, a degenerative and crippling affliction. Genetics, ageing, lifestyle choices, and factors related to the environment are only a few of the causes. Dementia has no known therapy, although early identification and the right care can greatly enhance a person's quality of life. Medication, cognitive therapy, and alterations in lifestyle are just a few of the strategies that might assist manage dementia symptoms. Among other things, these therapies seek to enhance memory, mood, and regular daily activities. However, according on the person along with the kind of schizophrenia they have, these therapies may or may not be successful. Poor nutrition, inactivity, smoking, and excessive alcohol use are some of the risk factors for dementia. Delaying or preventing the onset of schizophrenia may be possible by reducing certain risk factors. Additionally, keeping your brain healthy and lowering the risk of dementia development are having a nutritious diet, being socially and cognitively engaged, and engaging in regular exercise. In light of the foregoing, dementia is a complicated and difficult condition that calls for prompt diagnosis and good management. Although dementia cannot be cured, interventions including medicine, cognitive therapy, and lifestyle modifications can help individuals who are affected live better lives.

Additionally, lowering risk factors for dementia can aid in delaying or preventing the disease's emergence. It is essential to increase awareness of schizophrenia and fund research in order to better comprehend and manage this disorder as the population ages.

# References

Bianchetti, A., Rozzini, R., Guerini, F., Boffelli, S., Ranieri, P., Minelli, G., Bianchetti, L. and Trabucchi, M., 2020. Clinical presentation of COVID19 in dementia patients. *The journal of nutrition, health & aging*, *24*, pp.560-562.

Cuffaro, L., Di Lorenzo, F., Bonavita, S., Tedeschi, G., Leocani, L. and Lavorgna, L., 2020. Dementia care and COVID-19 pandemic: a necessary digital revolution. *Neurological Sciences*, *41*, pp.1977-1979.

Davis, J.J., Fournakis, N. and Ellison, J., 2021. Ketogenic diet for the treatment and prevention of dementia: a review. *Journal of geriatric psychiatry and neurology*, *34*(1), pp.3-10.

Fortea, J., Zaman, S.H., Hartley, S., Rafii, M.S., Head, E. and Carmona-Iragui, M., 2021. Alzheimer's disease associated with Down syndrome: a genetic form of dementia. *The Lancet Neurology*, *20*(11), pp.930-942.

Gao, C., Chapagain, N.Y. and Scullin, M.K., 2019. Sleep duration and sleep quality in caregivers of patients with dementia: A systematic review and meta-analysis. *JAMA network open*, *2*(8), pp.e199891-e199891.

Hershey, L.A. and Coleman-Jackson, R., 2019. Pharmacological management of dementia with Lewy bodies. *Drugs & Aging*, *36*, pp.309-319.

Isaacson, R.S., Hristov, H., Saif, N., Hackett, K., Hendrix, S., Melendez, J., Safdieh, J., Fink, M., Thambisetty, M., Sadek, G. and Bellara, S., 2019. Individualized clinical management of patients at risk for Alzheimer's dementia. *Alzheimer's & Dementia*, *15*(12), pp.1588-1602.

Jafari, Z., Kolb, B.E. and Mohajerani, M.H., 2019. Age-related hearing loss and tinnitus, dementia risk, and auditory amplification outcomes. *Ageing research reviews*, *56*, p.100963.

Jennings, A., Cunnane, S.C. and Minihane, A.M., 2020. Can nutrition support healthy cognitive ageing and reduce dementia risk?. *Bmj*, *369*.

Lam, H.L., Li, W.T.V., Laher, I. and Wong, R.Y., 2020. Effects of music therapy on patients with dementia—A systematic review. *Geriatrics*, *5*(4), p.62.

Licher, S., Ahmad, S., Karamujić-Čomić, H., Voortman, T., Leening, M.J., Ikram, M.A. and Ikram, M.K., 2019. Genetic predisposition, modifiable-risk-factor profile and long-term dementia risk in the general population. *Nature medicine*, *25*(9), pp.1364-1369.

Matziorinis, A.M. and Koelsch, S., 2022. The promise of music therapy for Alzheimer's disease: A review. *Annals of the New York Academy of Sciences*, *1516*(1), pp.11-17.

Maust, D.T., Solway, E., Langa, K.M., Kullgren, J.T., Kirch, M., Singer, D.C. and Malani, P., 2020. Perception of dementia risk and preventive actions among US adults aged 50 to 64 years. *JAMA neurology*, *77*(2), pp.259-262.

McKeith, I.G., Ferman, T.J., Thomas, A.J., Blanc, F., Boeve, B.F., Fujishiro, H., Kantarci, K., Muscio, C., O'Brien, J.T., Postuma, R.B. and Aarsland, D., 2020. Research criteria for the diagnosis of prodromal dementia with Lewy bodies. *Neurology*, *94*(17), pp.743-755.

Moreno-Morales, C., Calero, R., Moreno-Morales, P. and Pintado, C., 2020. Music therapy in the treatment of dementia: A systematic review and meta-analysis. *Frontiers in medicine*, *7*, p.160.

Shirsat, A., Jha, R.K. and Verma, P., 2023. Music Therapy in the Treatment of Dementia: A Review Article. *Cureus*, *15*(3).

Taylor, J.P., McKeith, I.G., Burn, D.J., Boeve, B.F., Weintraub, D., Bamford, C., Allan, L.M., Thomas, A.J. and T O'Brien, J., 2020. New evidence on the management of Lewy body dementia. *The Lancet Neurology*, *19*(2), pp.157-169.

Tisher, A. and Salardini, A., 2019, April. A comprehensive update on treatment of dementia. In *Seminars in neurology* (Vol. 39, No. 02, pp. 167-178). Thieme Medical Publishers.

Van Maurik, I.S., Bakker, E.D., Van den Buuse, S., Gillissen, F., Van de Beek, M., Lemstra, E., Mank, A., van den Bosch, K.A., van Leeuwenstijn, M., Bouwman, F.H. and Scheltens, P., 2020. Psychosocial effects of corona measures on patients with dementia, mild cognitive impairment and subjective cognitive decline. *Frontiers in psychiatry*, *11*, p.585686.

Zhang, B., Wang, H.E., Bai, Y.M., Tsai, S.J., Su, T.P., Chen, T.J., Wang, Y.P. and Chen, M.H., 2021. Inflammatory bowel disease is associated with higher dementia risk: a nationwide longitudinal study. *Gut*, *70*(1), pp.85-91.