*Review Article*

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# Impaired to Remember, Think and Make Decisions

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**Abstract**

Dementia is the most feared and debilitating late-life condition. According to current estimates, there are approximately 18 million cases of dementia worldwide, with approximately 34 million people suffering from dementia. The general prevalence of dementia is estimated to be between 5% and 7%. Alzheimer's disease is the most common kind of dementia, accounting for 80% of all dementia cases. The number of dementia patients is gradually rising. According to the Alzheimer's Society, meticulous preparation for the future is required today to guarantee that the appropriate care and support are accessible.[1]

Many distinct features of dementia are the subject of current research. India currently has the world's second-largest elderly population.[2]

**Keywords:** Dementia; Elderly; Caregiver; Mental well being; Mental health; Research.

## INTRODUCTION

When India gained independence in 1947, the average life expectancy was 32 years, with a high birth rate and few people living to old age. The crude birth rate and mortality rate both decreased dramatically as medical technology advanced and family planning programmes were implemented, with the average life expectancy of an Indian increasing to 68.3 years. However, living longer did not imply living well, since greater life expectancy did not imply improved quality of life as a result of lifestyle related chronic noncommunicable diseases and their complications. Dementia is one such disease that affects the elderly and has a high morbidity rate as well as a significant socioeconomic impact. Dementia is a complex neurological illness with a wide range of symptoms, presentations, and prognoses.It is marked by a loss in performance and cognitive impairment across various areas, and it has an impact on a person's independence in doing daily activities.[3]

Caring for someone with dementia can be difficult and stressful. It can also have a negative impact on the caregiver's physical and mental well being. Caregivers can begin by taking care of their own health and well being in order to provide the best

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possible care for their patients. Having a solid support system is also beneficial. Help can also come from fellow caregivers in support groups, in addition to friends and family. Caregivers can share their thoughts, get emotional support, and talk to people who understand them in support groups. A healthy lifestyle has been demonstrated in studies to minimise the risk of chronic diseases and certain types of dementia.[4]

Dementia is a brain disease that impairs one's capacity to function. Early detection of warning symptoms can make a significant impact in the patient's and family's lives. People can learn to recognise early indicators of dementia and take preventative actions with the help of education. There are five healthy habits that tend to minimise the risk of dementia greatly. Regular exercise, no smoking, a nutritious diet, and a low alcohol intake are among these behaviours. Dementia primarily affects the elderly, yet cases that begin before the age of 65 are becoming more well known. Adults becoming more aware of dementia will aid in the prevention and early detection of the early indications of dementia. In light of the foregoing, the researcher is eager to educate adults about dementia.[5]

In the United Kingdom, a descriptive study was done to conduct a systematic review and partial meta analysis of physical activity therapies in dementia patients. A total of 896 people were included in the study. The data was gathered by scanning eight databases for English language publications and pertinent paper reference lists. At least one outcome related to physical function, quality of life, or depression was recorded in studies that compared the intervention to a non-active or no-intervention control. Three of the six trials that reported walking as an endpoint, as well as four of the five trials that reported timed get up and go tests, showed an improvement, according to the study. Only one of the four experiments with depression as a result found a beneficial effect.[6]

Another study looked into the prevalence, disruptiveness, and staff burden of agitation in demented patients in an acute care hospital. During the study period, 56 demented patients in the long-term-care unit were included in the study sample. At least one agitated behaviour was observed in 95 percent of dementia patients, and 75 percent exhibited at least one moderately disruptive behaviour. Six individuals (11%) in a small cohort reported 17 or more disruptive behaviours. The frequency of the majority of behaviours did not differ considerably from shift to shift. The amount of agitated behaviours was substantially related to the length of stay in long term care, the Barthel Index score, and the usage of psychiatric drugs. Staff burden was found to be substantially linked with the number of behaviours, their mean frequency, and their mean disruptiveness.[7]

A study was carried out to look into the prevalence of Alzheimer's disease in the US population. The information was gathered from 150 people who were at least 90 years old. According to the findings, the incidence rate of dementia climbed exponentially from 12.7 percent per year for those aged 90 to 94, to 21.2 percent per year for people aged 95 to 99, and 40.7 percent per year for people aged 100 and more.[8]

In Pune, an epidemiological research on dementia was done under the auspices of a mental health initiative. The information was gathered through a door to door survey of 2145 adults aged 65 and up. Dementia was found to be present in 4.1 percent of the participants in the study. Poor public knowledge, according to the report, is a major public health issue. Poor public knowledge, according to the report, is a major public health issue. The elderly's withdrawal from their prior societal function, a reduction in all sorts of engagement, a shift of emphasis from the outer to the inner world, and a reduction in the elderly's power and prestige all contribute to the ageing process.[9]

In Sao Paulo, a cross sectional study was done to explore the public's attitude toward seeking help and treatment preferences for Alzheimer's disease. Face to face interviews illustrating Alzheimer's disease and a standardised questionnaire were used to collect data from 500 home occupants over the age of 18. The findings of the survey revealed that public opinion is strongly rooted in the lay support system, with several alternative treatments (such as vitamins, physical activity, and vacation) being frequently recognised as beneficial. According to the findings, attitudes and belief systems have a significant impact on seeking help and treatment recommendations.[10]

The goal of the study was to provide a descriptive overview of the literature on everyday dialogue in dementia so that practise and research could be informed. A total of 50 titles were found after searching a variety of databases with key terms and explicitly stated inclusion criteria. Each publication was reviewed and data gathered using this qualitative process. Implications: According to the analysis, therapies focusing on dialogue in dementia are frequently proposed in the literature, although such approaches have yet to

be systematically assessed. Furthermore, many of the major findings from these studies have yet to be applied to interdisciplinary dementia treatment.[11]

There is a scarcity of data on the prevalence of dementia in India, which has a big and ageing population. Researchers looked examined the frequency of Alzheimer's disease and dementia in Kerala, India, as well as the effects of age, education, and gender. A two phase survey of 2466 community residents aged 55 years was conducted. Men made up 41% of the population, with 75 years of age accounting for 76.9% and a four-year education accounting for 69.6%. Screening (Phase I) with the Addenbrooke's cognition evaluation and the instrumental activities of daily living scale for the elderly (IADL-E) (ACE). In 532 screen positives and 247 (10%) screen-negatives, diagnostic assessment (Phase II) was performed. The prevalence of dementia and Alzheimer's disease is higher than anywhere else on the subcontinent, implying that dementia is not rare in Kerala, South India.[12]

In addition, a study was conducted to determine the prevalence of undiagnosed dementia and its associations. Until October 2016, a systematic search was done for studies that reported the proportion of undiagnosed dementia and/or its factors in the community or in residential care settings around the world. The pooled rate of undiscovered dementia was computed using random effects models, and subgroup studies were used to identify reasons of variation. Dementia goes undiscovered in a large number of people all over the world. Wide disparities in dementia detection must be investigated immediately, particularly in low-income communities.[13]

Dementia and Alzheimer's disease (AD) show a favourable relationship with age, according to prevalence surveys. The tendency of association in the oldest old categories, on the other hand, has been a source of debate. These research have found no link between sex and Alzheimer's disease. The meta-analysis included population based studies that used personal interviews, standard clinical diagnosis criteria (DSM-III for dementia, National Institute of Neurological and Communicative Disorders for AD, and Stroke Disease Alzheimer's and Related Disorders Association for AD), and reported age specific incidence rates. Although there is no evidence of a rate drop, the acceleration of AD and dementia incidence rates diminishes as people get older. Women are more likely than men to develop Alzheimer's disease.[14]

Another study looked into whether social relationships at work were linked to the onset of dementia in the elderly. Methods: From 1986 through 2014, a total of 1,572 occupationally active males from the Copenhagen Male Study Cohort were monitored. At the start of the study, participants were given a clinical examination and asked to fill out questions about whether they (1) had the ability to communicate with coworkers, (2) could get along with coworkers, and (3) were satisfied with their supervisor. During an average of 15.8 years of follow-up, 245 men (15.6%) were diagnosed with dementia. After controlling for relevant confounders, less contact with coworkers was linked to an increased risk of dementia (IRR 142.49), while the other two measures were not.[15]

In Tasmania, Australia, a study was conducted to examine staff stress and coping in response to high job expectations in community-based dementia care organisations. Data from a self report questionnaire was used to evaluate 25 community based dementia care practitioners. Data was analysed for descriptive outcomes as well as on a case by case basis. There were two adjustment profiles discovered. Workers with the 'global resilience' profile demonstrated positive adjustment and resilience, indicating that they regarded their professions to be highly satisfying, that they were very confident in their talents at work, and that their personal and organisational values were a good match. Only a small percentage of people fit the second 'isolated anguish' description, which includes limited chances for promotion, a misalignment of personal and professional values, or clinically severe levels of psychological discomfort. Workplaces in the aged care industry that promote employee well being and help employees cope with their responsibilities may be more likely to retain motivated and devoted personnel.[16]

The authors conducted a thorough review of the literature on psychological approaches to treating dementia's neuropsychiatric symptoms. A total of 1,632 studies were found, with 162 meeting the review's inclusion criteria. Specific types of caregiver psychoeducation about managing neuropsychiatric symptoms proved to be effective therapies with long-term effects, but other caregiver interventions were not. Cognitive stimulation, as well as behavioural management strategies based on individual patients' or caregivers' conduct, provided similar effects. Music therapy and Snoezelen, as well as presumably sensory stimulation, were effective during the treatment session but had no long term effects; visual environment therapies appeared promising, but further research is needed. For the therapy of dementia related neuropsychiatric symptoms, only

behaviour management therapies, specific types of caregiver and residential care staff education, and maybe cognitive stimulation appear to be useful.[17]

They looked at the evidence for clinical effectiveness and cost effectiveness of non pharmacological interventions for reducing agitation in dementia, taking into account dementia severity, the setting, the person with whom the intervention is implemented, whether the effects are immediate or long term, and cost effectiveness. They included 160 papers out of a total of 1916 that were screened. Person centered care, communication skills, and DCM (all under supervision), sensory therapy activities, and structured music therapies all help dementia patients feel less agitated.[18]

The purpose of another study was to see how the usage of medical records affected numbers for dementia incidence and how the apolipoprotein E (APOE) polymorphism affected this incidence and neuropathologically defined Alzheimer's disease (AD) in very elderly people. The incidence of dementia was nearly 20% greater (85 vs. 69 per 1,000 person years) if the cognitive status at death was identified by medical and social work records than without this evaluation, regardless of age, gender, or APOE. In investigations on the occurrence of dementia in the elderly, medical records should be examined. In this age range, the APOE polymorphism has no effect on the incidence of dementia.[19] Over the course of six months, each Alzheimer's centre recruited twenty new patients with objective memory impairment. The anonymous patient protocol was used to record patient data. Seven hundred and four participants from 36 memory clinics in 13 European nations took part in the research. The M:F ratio is 0.67. The average age was 75.4 SD 9.3 (51-102) and the average MMSE was 21 SD 6 (0-30). A clinical diagnosis of dementia was found in 555 patients [Alzheimer's disease (68.5%), vascular dementia (10.3%), frontal lobe dementia (5.6%), Lewy body dementia (4.1%), and mixed dementia (5.6%)].[20]

Researchers proposed explanations for this drop based on a comparative examination of factors that contribute to the incidence of dementia. To ensure that the US population aged 65 and up is represented in the National Long Term Care Surveys (NLTCS), 42,000 disabled and non disabled adults aged 65 and up were selected from Medicare enrolment lists. The drop in vascular and mixed dementias, but not Alzheimer's disease alone, is a key component of disability decline in the older population of the United States. Improved medical treatments and older people's education appear to be key factors in this drop.[21]

On first letter and semantic category fluency tasks, patients with autopsy confirmed fronto-temporal dementia (FTD; n = 16) and Alzheimer's disease (AD; n = 32) were compared. The semantic index, a measure of the difference between letter and semantic category fluency, was successful in distinguishing FTD from AD patients, and this disparity grew as dementia severity rose. These distinct patterns of letter and semantic category fluency impairments could point to differences in the relative contribution of frontal lobe mediated retrieval deficits vs temporal lobe mediated semantic deficits in FTD and AD.[22]

The purpose of the present research was to see if there was a link between physical activity and the risk of cognitive impairment and dementia. The data comes from a population sample of 9008 men and women aged 65 and up who were chosen at random. A dementia prospective cohort research was conducted. Physical activity was linked to a lower risk of cognitive impairment (age, sex, and education adjusted odds ratio, 0.58; 95 percent confidence interval, 0.41-0.83), Alzheimer disease (odds ratio, 0.50; 95 percent confidence interval, 0.28-0.90), and dementia of any kind (odds ratio, 0.50; 95 percent confidence interval, 0.28-0.90). (odds ratio, 0.63; 95 percent confidence interval, 0.40-0.98).[23]

## CONCLUSION

Dementia is a rising issue and an unflaggable disorder of the elderly. With the progress in Dementia. The researches in early diagnoses and early progression show that, early progression of dementia remains unrecognised and hence the treatment and care also delayed. Hence to deal with the disorder in the later age of life, we need to start with the awareness and knowledge in the early age so that the population can take effective steps towards the prevention of disorder in the later stages of life.

***Conflict of Interest:*** Nil

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