STUDENTS' CORNER
LETTER TO THE EDITOR

Dietary interventions for Alzheimer's in Pakistan: The MIND diet perspective

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Dear Editor, Alzheimer's disease (AD) stands as the prevalent type of dementia, making up 50–75% of total cases, and showing a higher incidence among elderly patients.[1] Pakistan is a lower-middle-income country with an estimated 150,000–200,000 patients affected by dementia.[2] Nevertheless, the patient population faces inadequate healthcare resources, with only one neurosurgeon for every 1,000,000 patients.[3] The Alzheimer's Association Facts and Figures Guidelines (2014) have highlighted diet as a modifiable risk factor in progression of AD.[4] Thus, investigating lifestyle modifications in the early stages of AD to potentially alleviate the disease progression becomes imperative, considering the significant burden the disease imposes on the healthcare system.

The MIND diet is a composite dietary approach, derived from both the Mediterranean and DASH diets. It underscores the consumption of leafy greens, berries, nuts, whole grains, fish, legumes, and poultry while advocating for the use of olive oil. Conversely, it discourages the intake of red meat, butter, cheese, pastries, and fried or fast-food items.[5] Agarwal et al. investigated the impact of the MIND diet on AD pathology in 581 autopsied participants from the Rush Memory and Aging Project. Their research demonstrated a significant correlation between adherence to the MIND diet and a decline in overall disease pathology, particularly in the reduction of β-amyloid plaques.[6] Furthermore, another study illustrated that increased compliance with the MIND diet was associated with a reduced risk of hippocampal sclerosis (HS), a neurodegenerative condition linked to AD, even after accounting for other factors, such as APOE-ε4 status and AD pathology.[7] Moreover, Morris et al.'s longitudinal study on US participants found a 53% lower risk for AD among individuals who adhered closely to the MIND diet and a 35% lower risk for those with moderate adherence after a follow-up of approximately 4.5 years.[8] These findings indicate a potential role for the MIND diet in reducing the risk of AD and slowing cognitive decline.

A comprehensive literature search on PubMed and PakMediNet revealed a lack of research, evaluating the efficacy of the MIND diet in the management of AD in Pakistan. This underscores the inadequacy in the implementation of the MIND diet among the patients. Consequently, it is recommended that researchers submit research grant proposals about the efficacy of the MIND diet in AD to different funding organizations. This approach serves to encourage the systematic exploration of this pivotal subject. Moreover, it is proposed to advocate for the widespread adoption of the MIND diet among AD patients by conducting public awareness campaigns, implementing educational programs within healthcare facilities, and building collaborations with community organizations. This strategic approach emphasizes the importance of creating awareness and guiding patients to make well-informed dietary modifications to improve cognitive health and simultaneously mitigate the strain on healthcare resources.

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FA: Agreement to be accountable for all aspects of the work.