MOST-LIKED RESEARCH PRESENTATION AWARDED BY THE PUBLIC

ORIGINAL RESEARCH

09. Cognitive Impairment and Its Influencing Factors Among Elderly at Residential Homes in Western Tamil Nadu -A Cross-sectional Study

Sri Thabasni S K [1], Muthathal S[2], Dhaarani Dharmaraj[3], S Supriya Sri[1]

[1]Final-year Medical [MBBS] Student. Karpagam Faculty of Medical Science and Research, Coimbatore, India.

[2] M.B.B.S, MD – Community Medicine. Assistant Professor. Karpagam Faculty of Medical Science and Research, Coimbatore, India.

[3] Final year post graduate Student: MD – Community Medicine. Karpagam Faculty of Medical Science and Research, Coimbatore, India.

https://www.youtube.com/watch?v=hJIcIJ1w8oM&list=PLhqNq3xJClbafO0Y5bvBcgMmXpgzJxd44&index=5&t=12918s

Background: The global population is experiencing rapid aging, with projections indicating that the number of older adults will double by 2050. In India, it is anticipated that one in every five individuals will be aged 60 years or above in the near future. This demographic transition brings with it an increasing prevalence of cognitive impairment (CI), characterized by declines in memory, attention, or executive functioning that are more severe than typical age-related changes but do not meet criteria for dementia. Elderly individuals living in old age homes face additional vulnerabilities due to social isolation, weakened family support, and adjustments to institutional care. Despite these challenges, cognitive health within residential care settings has received limited attention in the Indian context. Identifying the prevalence and contributing factors of CI is essential for promoting appropriate healthcare interventions and safeguarding the autonomy and well-being of older adults.

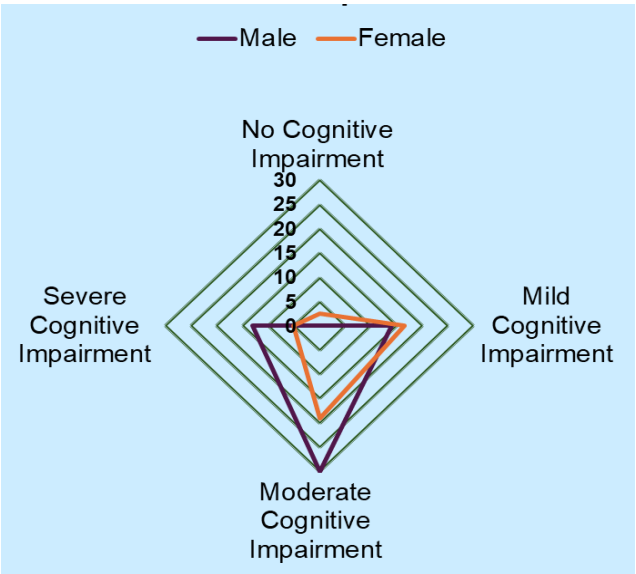
Aim: The present study was designed to evaluate the prevalence of cognitive impairment and to examine the factors associated with it among elderly residents of old age homes in Coimbatore.

Methods: A cross-sectional study was carried out between November 2024 and February 2025 across selected old age homes in Coimbatore. Using multistage random sampling, 200 individuals aged ≥60 years were recruited. Cognitive function was assessed with the Montreal Cognitive Assessment (MoCA). A pretested semi-structured questionnaire collected data on demographic and socioeconomic characteristics, financial dependence, and past occupations, as well as health conditions and lifestyle factors. Anthropometric measurements and clinical parameters such as blood pressure and pulse were recorded. Data were analysed using SPSS v25.0, and associations were tested at a significance level of $p<0.05$.

Results: Among 200 elderly participants (mean (± SD) age 69.8 ± 9.8 years; 57% men, 43% women), one-third were illiterate and only 10.5% received a pension. The mean MoCA score was 15.2 ± 5.6, with 30.5% showing mild, 49% moderate, and 18% severe cognitive impairment, and it was notably higher among women (figure 1). Cognitive impairment was significantly associated with sex ($p = 0.03$), education ($p < 0.001$), past occupation ($p = 0.020$), pension status ($p < 0.001$), and financial dependence ($p < 0.001$). Hypertension (34%), diabetes (16.5%), and sleep disturbances (28.5%) were the common comorbidities. These findings indicate a high burden of cognitive impairment among institutionalized older adults, with socioeconomic and health factors playing a critical role.

Conclusion: Cognitive impairment was highly prevalent among elderly residents of old age homes and was associated with socioeconomic factors. These findings highlight the urgent need for the annual cognitive screening in the institutional settings and its integration into the existing national geriatric health program in the country. Addressing modifiable risk factors including financial dependence, limited social interaction, and sleep problems can improve the overall quality of life, reduce the caregiver burden, and promote cognitive health as a cornerstone of dignity and healthy aging.

Figure 1. Gender-based distribution of Cognitive Impairment Using Radar Plot.



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