

**KARYA ILMIAH AKHIR NERS**

**PENERAPAN BRAIN GYM EXERCISE UNTUK PEMENUHAN  
KEBUTUHAN MEMORI PADA LANSIA DENGAN GANGGUAN  
KOGNITIF DI BPSTW ABIYOSO YOGYAKARTA**

Isni Alfiani<sup>1</sup>, Nurun Laasara<sup>2</sup>, Bondan Palestin<sup>3</sup>

Mahasiswa Program Studi Profesi Ners<sup>1</sup> Dosen Jurusan Keperawatan<sup>23</sup>

Email : [isni.alfiani@gmail.com](mailto:isni.alfiani@gmail.com)

Jurusan Keperawatan : Poltekkes Kemenkes Yogyakarta

Jl. Tata Bumi No.3, Area Sawah, Banyuraden, Gamping, Sleman, DIY

**Abstrak**

**Latar Belakang :** Penuaan merupakan proses alami yang seringkali disertai dengan penurunan fungsi kognitif pada lansia, sehingga meningkatkan risiko ketergantungan terhadap orang lain. Salah satu upaya yang dapat dilakukan untuk meningkatkan fungsi kognitif pada lansia adalah dengan stimulasi otak melalui latihan fisik seperti brain gym exercise.

**Tujuan :** Memperoleh pengalaman nyata mengenai penerapan *Brain Gym Exercise* sebagai intervensi keperawatan dalam memenuhi kebutuhan memori pada lansia dengan gangguan kognitif di BPSTW Abiyoso Yogyakarta.

**Metode :** Studi kasus ini menggunakan deskriptif kualitatif dengan pendekatan proses keperawatan berbasis evidence based practice. Intervensi *brain gym exercise* diberikan kepada lansia dengan gangguan kognitif, dan penilaian dilakukan menggunakan instrumen Mini-Mental State Examination (MMSE) sebelum dan sesudah intervensi.

**Hasil :** Penerapan *brain gym exercise* menunjukkan adanya peningkatan skor MMSE pada lansia setelah intervensi *brain gym* yang menandakan adanya perbaikan fungsi kognitif sehingga kebutuhan memori terpenuhi. Selain itu, ditemukan bahwa faktor pendukung keberhasilan intervensi meliputi gerakan yang mudah dipahami, dukungan perawat panti, kerjasama klien yang baik, serta tersedianya sarana seperti kursi dan perangkat handphone untuk memutar musik pendukung, sedangkan faktor penghambat pada klien 1 adalah kesulitan mengikuti instruksi, sedangkan pada klien 2 tidak ditemukan faktor penghambat.

**Kesimpulan :** *Brain gym exercise* efektif dalam meningkatkan fungsi kognitif dan memenuhi kebutuhan memori pada lansia dengan gangguan kognitif. Intervensi ini dapat dijadikan alternatif terapi non-farmakologis dalam asuhan keperawatan gerontik untuk pemenuhan kebutuhan memori pada lansia di panti sosial.

**Kata kunci :** Brain gym exercise, lansia, gangguan kognitif, memori, MMSE

**APPLICATION OF BRAIN GYM EXERCISE TO FULFILL MEMORY  
NEEDS IN ELDERLY WITH COGNITIVE DISORDERS AT BPSTW  
ABIYOSO YOGYAKARTA**

Isni Alfiani<sup>1</sup>, Nurun Laasara<sup>2</sup>, Bondan Palestin<sup>3</sup>

Study Program Student of Nurse Profession Education<sup>1</sup>, Lecturer in Nursing  
Department <sup>23</sup>

Email : [isni.alfiani@gmail.com](mailto:isni.alfiani@gmail.com)

Nursing Department: Yogyakarta Health Polytechnic

Jl. Tata Bumi No.3, Area Sawah, Banyuraden, Gamping, Sleman, DIY

**Abstrak**

**Background:** Aging is a natural process that is often accompanied by a decline in cognitive function among the elderly, thereby increasing the risk of dependence on others. One of the efforts that can be made to improve cognitive function in the elderly is brain stimulation through physical exercises such as brain gym exercises.  
**Objective:** To gain real experience in implementing Brain Gym Exercise as a nursing intervention to meet memory needs in elderly individuals with cognitive impairment at BPSTW Abiyoso Yogyakarta.

**Methods:** This case study uses a qualitative descriptive approach with a nursing process based on evidence-based practice. The brain gym exercise intervention was given to elderly individuals with cognitive impairment, and assessments were conducted using the Mini-Mental State Examination (MMSE) instrument before and after the intervention.

**Results:** The implementation of brain gym exercise showed an increase in MMSE scores in the elderly after the brain gym intervention, indicating an improvement in cognitive function and fulfillment of memory needs. Additionally, supporting factors for the success of the intervention included easy-to-understand movements, support from nursing home staff, good cooperation from clients, and the availability of facilities such as chairs and mobile devices to play supporting music. The inhibiting factor for client 1 was difficulty following instructions, while no inhibiting factors were found for client 2.

**Conclusion:** Brain gym exercise is effective in improving cognitive function and fulfilling memory needs in elderly individuals with cognitive impairment. This intervention can be used as an alternative non-pharmacological therapy in gerontological nursing care to enhance the quality of life of the elderly in social institutions.

**Keywords:** *Brain gym exercise, elderly, cognitive impairment, memory, MMSE*