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Effectiveness of Brain Gym Exercises on Cognition and Quality of Life Among Diabetic Individuals: A Narrative Review

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ABSTRACT

Introduction: There are currently 246 million people with diabetes worldwide, and by 2025, that number is projected to rise to 380 million, accounting for 7.1 percent of all adults. Cognitive decline and risk of dementia have been linked to diabetes. Diabetes-related changes in the cerebral microvasculature effect in cognitive decline. It is crucial to maintain general health in order to safeguard brain function and lower the risk of cognitive impairment.

Aim: This narrative review synthesises recent research on the effectiveness of brain gym exercises on cognition and quality of life among diabetic individuals. It explores the impact of brain gym exercises on prevention of cognitive impairment.

Methodology: A literature search was performed using Google Scholar, PubMed, Scopus database. The MeSH term used were "diabetes", "brain gym exercises", "cognition". Peer-reviewed journal articles, Randomised Controlled Trials (RCTs), systematic reviews, and meta-analyses from the previous five years were the main focus of a narrative review. A total of more than 30 articles showed up in which it is mentioned on the basis of eligibility criteria. The duration of intervention varied across studies, depending on the rehabilitation protocol used. These articles were reviewed in a narrative way. Studies evaluating the effects of brain gym exercises on cognition and balance in diabetic individuals.

Result: The mechanism that occurs is through increased brain volume and blood flow in physical exercise that can improve brain function and maintain neuroplasticity. As a result, this review appears to show significant improvement in the cognition, activities of daily living and quality of life.

Conclusion: Cognitive exercises are an essential intervention for improving diabetics' quality of life, balance, and cognitive function. It can greatly enhance cognitive function and lower the risk of falls when incorporated into rehabilitation programmes.

Implication: Brain Gym Exercises enhances help manage blood sugar levels, reduce stress, and improve overall well-being, contributing to a better quality of life.

Keywords: Diabetes, Brain gym exercises, Cognition

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