

UNIVERSITI TEKNOLOGI MARA

**EFFECTS OF INTEGRATED
EXERCISE AND REMINISCENCE
THERAPY ON PHYSICAL FITNESS,
DEPRESSION AND QUALITY OF
LIFE AMONG ELDERLY WITH
MILD ALZHEIMER'S DISEASE**

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ABSTRACT

Alzheimer's Disease (AD) is a disease that slowly destroys brain cells in a human being, especially in the elderly, which may involve progressive deterioration of intellectual functions and mood disorders. Many elderly are incapable of performing physical activities beyond moderate intensity because of their frailty and comorbidities. Therefore, this elderly would have to gain the benefits of physical activity from low intensity. By combining both interventions, it will help to improve muscle strength, increase endurance performance, reduce depression symptoms and lead to increase in quality of life. Thus, a swift intervention is needed to minimize and delay the progression of the diseases by adding an exercise program with reminiscence therapy in their daily activities. Current study aimed to determine the effects of integrated exercise and reminiscence therapy on physical fitness, depression, and quality of life among elderly with mild AD. About 51 participants in *Rumah Seri Kenangan Cheras* who are above 60 years old were divided into three groups (i) Exercise and Reminiscence Therapy, ER (n=18), (ii) Exercise Only, EO (n=16) and (iii) Reminiscence Only, RO (n=17). Participant in ER had received six weeks exercise and reminiscence therapy. While the participants in EO received exercise similar to that in the ER group. Participants in RO received reminiscence therapy only. The exercises consisted of endurance, strength, balance, and flexibility for one hour per session, three times per week for a duration of six weeks. While the reminiscence therapy was conducted for one time per week for six weeks. All those variables were measured at baseline, 3rd week and 6th week. The variables for physical fitness were strength (5TSTS) and endurance (2MWT), depression (Cornell Scale for Depression in Dementia) and quality of life (EUROHIS-QOL). Results from the 3 x 3 Mixed Model ANOVA reported a significant time main effect for all variables, [F (2, 96) =18.407, $p < .001$, partial $\eta^2 = .28$ for muscle strengths, F (2, 96) =12.512, $p < .001$, partial $\eta^2 = .21$ for endurance, F (2, 96) =30.382, $p < .001$, partial $\eta^2 = .38$ for depression and F (2, 96) =9.038, $p < .001$, partial $\eta^2 = .158$ for quality of life] at baseline, 3rd and 6th weeks. In contrast, results show no significant interaction in between groups and interaction between group and time ($p > 0.05$). However, the minimal mean changes also been noticed between groups which indicates that the benefits gained from the participants can be further highlighted. As a conclusion, the combinations of exercises and reminiscence therapy can help in improving the physical fitness, reduce depression symptoms and improve overall health related quality of life among elderly with AD rather than exercise or reminiscence alone.

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