ABSTRACT

EFECTIVENESS OF *ALOE VERA* AND AEROBIC ACTIVITY (AVAA) TO REDUCE TOTAL BLOOD CHOLESTEROL LEVELS FOR ELDERS WITH HYPERCHOLESTEROLEMIA

Pre-Experimental Research

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Introduction: Hypercholesterolemia in elderly is caused by aging proses and risk factors. *Aloe Vera* can reduce levels of Low Density Lipoprotein (LDL) and increase levels of High Density Lipoprotein (HDL). Aerobic activity can increase HDL levels. The purpose of this study was to analyze the effectiveness of administration of *Aloe Vera* and aerobic activity to reduce total cholesterol levels in older adults with hypercholesterolemia. **Methods:** This study used a Pre-Experimental design. Its population was 60 elders people in Tresna Werda Social Institutions Mulia Dharma West Kalimantan. Samples were obtained using purposive sampling, consist of 12 respondents taken based on inclusion criteria. The samples were divided into 3 groups. Group A treated with *Aloe Vera*. Group B treated with aerobic activity. Group C treated with *Aloe Vera* and aerobic activity (AVAA). The independent variable was the administration of *Aloe Vera*, aerobic activity and intervention AVAA. The dependent variable was total blood cholesterol levels. Data were analyzed using paired t-test with significance $p \leq 0,05$ and comparisons between groups were tested with One Way ANOVA with a significance $p \leq 0,05$. **Results:** The result showed there is a reduction in total blood cholesterol levels in all groups ($p < 0,05$). There is a difference between groups ($p < 0.035$), and the largest decrease of total blood cholesterol levels was in group C (73.75 mg/dl). **Analysis:** *Aloe Vera* and aerobic activity (AVAA) most effective to decreas total blood cholesterol levels for elders hypercholesterolemia. **Discussion:** Aloe Vera and aerobic activity (AVAA) can be used as an alternative treatment for elders with hypercholesterolemia.

Keywords: *Aloe Vera*, aerobic activity, hypercholesterolemia, elderly