

**ABSTRACT****The Influence of Routine Aerobic Exercise Program and Progressive Muscle Relaxation Training to The Latency and Sleep Duration on elderly at UPT PSLU Magetan***Quasy Experiment Research***By:  
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Sleep is human basic need which has to be fulfilled by each person. One of non-pharmacological intervention to enhance sleep was aerobic exercise and progressive muscle relaxation training, it can stimulate optimal melatonin secretion and beta-endorphin to help sleep improvement in elderly and mechanism of progressive muscle relaxation with using principle of sympathetic and parasympathetic nervous system theory. The purpose of this study was to analyze the influence of routine aerobic exercise program and progressive muscle relaxation training to the latency and sleep duration on elderly.

This study was used quasy-experiment design. Total sample was 20 elderly at UPT PSLU Magetan, divided into experiment and control group. Variable independent were routine aerobic exercise program and progressive muscle relaxation training, while variable dependent were latency and sleep duration on elderly. Data were collected by using structured interview. Data were then examine by using paired t-test and independent t-test with level of significance  $\alpha < 0.05$ .

The result had showed that sleep latency and duration on elderly after intervention. The improvement of sleep latency based on paired t-test showed  $p=0.000$  for intervention group and  $p=0.726$  for control group and independent t-test  $p=0.000$  for post intervention and post control. Duration of sleep based on paired t-test had  $p=0.000$  for intervention group and  $p=0.591$  for control group and independent t-test  $p=0.000$  for post intervention and post control.

It can be concluded that routine aerobic exercise program and progressive muscle relaxation training can be used as one of alternative intervention to enhance latency and sleep duration on elderly. Routine aerobic exercise program and progressive muscle relaxation training affect fulfillment of sleep need for elderly. Further research should involved bigger number of elderly as samples.

**Keyword:** routine aerobic exercise program, progressive muscle relaxation, sleep latency, sleep duration, elderly.