

## The Effect Of Night Exercise In Reducing The Stress Level Of Housewives In Nganjuk District

Agustin Widyowati<sup>1\*</sup>, Eko Purwanto<sup>2</sup>, Cucun Setya Ferdina<sup>3</sup>

<sup>1</sup>Institut Ilmu Kesehatan STRADA Indonesia

<sup>2,3</sup>Ganesha Husada Health Science

\*Email:  
agustwidya@gmail.com

### ABSTRACT

Monotonous routines for housewives can cause boredom and stress, resulting in negative emotional feelings and impact on disharmony in the household. One way to reduce stress is by exercising. The purpose of this study was to analyze the effect of night sports on reducing stress levels in housewives. The study used a one group pre-post test design experimental design. The population is all housewives in Sumberkepuh Village, Tangunanom District, Nganjuk Regency with a sample of 22 respondents, using a purposive sampling technique. The independent variable is night sports (aerobics) and the dependent variable is the level of stress. The data analysis used the Wilcoxon statistical test. The results showed significant results ( $p = 0.001$  and mean rank 11.50), which means that there was a decrease in the stress level of housewives after exercising. It is hoped that housewives will have free time to exercise to avoid stress due to prolonged and monotonous household chores.

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### INTRODUCTION

Healthy and fit is everyone's dream, including housewives. However, not all housewives have free time and awareness to always live a healthy and fit life. A housewife is a married woman who works to manage and be responsible for her household affairs, such as cleaning, cooking, washing, educating her children and other things that are done every day. Various kinds of monotonous work demands in the household cause housewives to experience stress (Mumtahannah, 2012), especially if the household work is not assisted by other people (Putri & Sudhana, 2013). Monotonous routines for housewives can cause boredom and stress resulting in negative emotional feelings without them realizing it which can have an impact on disharmony in the household such as domestic violence, violence against children, divorce and depression (Mashuril Anwar et al., 2020), especially in young mothers who have children and don't work (Fadlillah & Husniati, 2021).

Based on the Gallup survey, there were 26% of housewives who felt sad and 16% of it happened to working mothers. 28% of non-working mothers were diagnosed with depression

(Beritasatu, 2012). Gallup also conducted a study by observing 60,799 women who were randomly selected and the results shows that 41% of housewives experience feelings of anxiety, while as many as 34% of working mothers. Mothers who do not work in the United States (US) have more negative emotions such as worry, sadness, anger, stress, and depression, compared to those who work (Liputan 6, 2012). On November 18th, 2021 a preliminary study was carried out on 10 housewives in Sumberkepuh Village, Tangjunganom District, Nganjuk Regency. The survey results from housewives did not do night sports, only limited to home activities, it was found that 6 housewives experienced mild stress, 3 experienced moderate stress and 1 experienced severe stress.

Stress or under pressure for a long or prolonged time will affect a person both physically and emotionally such as depression, mood disturbances, decreased appetite, changes in sleep patterns, decreased concentration (Hammen, 2005). Factors that influence stress on housewives are fatigue, feelings of depression and loneliness (Durak et al., 2022). Efforts that can be made to keep housewives healthy and fit, namely exercise, relaxation such as meditation, yoga (laughter yoga) can also reduce stress on housewives (Agustin Widyowati & Dewi Novita Sari, 2020), schedule enough free time and sleep time, consuming healthy food and providing social support (Calista et al., 2020). The purpose of this study was to analyze the effect of night sports on reducing stress levels in housewives in Sumberkepuh Village, Tangjunganom, Nganjuk.

## METHODS

This study used an experimental design with a one group pre-post test design approach. The population is all housewives with a sample of 22 respondents, using a purposive sampling technique in Sumberkepuh Village, Tangjunganom District, Nganjuk Regency on the January 21th, 2022. The independent variable of the research is night sports (aerobics) and the dependent variable is the level of stress. Evaluation of the application of night sports using the Standard Operating Procedure (SOP) aerobics while the assessment of stress levels using a questionnaire sheet Depression Anxiety Stress Scale (DASS 42). The data analysis used is univariate test and bivariate test. Univariate test was carried out to see the characteristics of respondents used frequency distribution and descriptive statistical results. Bivariate test was conducted to prove the research hypothesis using the Wilcoxon statistical test.

## RESULT

**Table 1. Frequency Distribution of Respondents' Characteristics**

Variable	Category	Frequency	Percentage (%)
Age	17 – 25 Tahun	0	0%
	26 - 35 Tahun	11	50,0 %
	36 - 45 Tahun	11	50,0 %
	> 45 Tahun	0	0%
Number of children	≤ 2	10	45,5 %
	> 2	12	54,5 %
Level of education	SD	8	36,4 %
	SMP	7	31,8 %
	SMA	7	31,8 %
	D3 / S1 / S2	0	0 %
<b>Total</b>		22	100 %

Based on table 1, it can be seen that half of the respondents aged 26-35 years and 36-45 years were 11 respondents (50%). Age influences the behavior of housewives. The older they are, the more responsible, mature they are in making decisions than young mothers in carrying out household chores (Notoadmodjo, 2012).

The most of the respondents had more than 2 children as many as 12 respondents (54.5%). The number of children affects the happiness of parents depending on the social and economic conditions of the parents. An increasing number of children for parents with unfavorable social and economic conditions can have an impact on decreasing welfare/happiness because it reduces a lot of time, reduces consumption levels, income etc. (Hairunisa, 2021).

Almost half of the respondents had elementary school education as many as 8 respondents (36.4%). The higher a person's education level, the wider the insight in thinking so that they are able to develop themselves (Haris et al., 2013). In addition, with higher formal education it will affect attitudes, ways of thinking that are more open so that they are more confident and have better emotional development (Susanti et al., 2018).

**Table 2. Characteristics of Specific Data for Research Subjects**

Pre-Exercise (Aerobics)			Post-Exercise (Aerobics)		
Stress Level			Stress Level		
Normal	0	0 %	Normal	6	27,5 %
Mild	6	27,3 %	Mild	13	59,1%
Moderate	13	59,1 %	Moderate	3	13,6%
Severe	3	13,6 %	Severe	0	0 %
Very High	0	0 %	Very High	0	0 %
Total	22	100%	Total	22	100%

Based on table 2, before exercising (aerobics) most of the respondents experienced moderate stress levels of 13 respondents (59.1%) and after being given exercise (aerobics) most of the respondents showed a decrease in stress levels of 13 respondents (59.1%).

**Table 3. Wilcoxon Statistical Test Results**

		N	Mean Rank	Sum of Ranks
Post Test - Pre Test	Negative Ranks	22 <sup>a</sup>	11.50	253.00
	Positive Ranks	0 <sup>b</sup>	.00	.00
	Ties	0 <sup>c</sup>		
	Total	22		
Asymp. Sig. (2-tailed)		.001		

Based on table 3, it can be seen that after exercise (aerobics) there was a decrease in stress levels (mean rank 11.50) with a significance value = 0.001 ( $p < 0.05$ ). The conclusion of the study is that there is a significant decrease in stress levels after exercise (aerobics).

## DISCUSSION

Housewives who do housework every day and are monotonous, for a prolonged time can increase the risk of stress so that it impacts their role as housewives (Putri & Sudhana, 2013) and results in violence against children, domestic violence, divorce and depression (Mashuril Anwar et al., 2020). One of the efforts that can be made to prevent stress and improve well-being/mental health is by exercising (Kim & McKenzie, 2014; Poluakan et al., 2020; Sharon-David & Tenenbaum, 2017). sport is a physical activity that involves repetitive body movements and is carried out in a planned and structured manner (Alfarisi, Ringgo. Sandayanti, Vira. Feryaldi, 2019). This statement is in accordance with Daniswari (2017), that regular exercise is the best way to reduce stress. Exercise can reduce stress for each individual with complex and different mechanisms between individuals. Exercise is carried out continuously with a duration of 30 minutes and at least 3 times a week (Maria, 2022)

Based on the results of this study, there is a significant value that exercise can reduce stress for a person (housewife). This is in line with Andalasari & Berbudi BL's statement (2018), that exercise habits have a high and significant relationship to reducing stress levels. Exercise can reduce stress because it stimulates hormones (feel good hormones), namely endorphins. Endorphin hormones will replace stress hormones and make emotions more stable so as to provide a sense of calm, release tension and reduce pain (Andalasari & Berbudi BL, 2018; Stevens et al., 2013). In addition, exercise can increase lactate levels in the brain as a true neuromodulator, namely an energy substrate or angiogenetic factor and protects against stress (Coco et al., 2020). Therefore, it is hoped that housewives can spend time for themselves and exercise to avoid stress and maintain health/fitness.

## CONCLUSION

The monotonous and prolonged work of a housewife can cause boredom and stress, causing negative emotional feelings. Sport has a high significant value in reducing stress on housewives.

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