

# Description of Physical Activity and Sedentary Lifestyle in Employees of the Medical Faculty of Swadaya Gunung Jati University

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**Abstract**—Low physical activity and sedentary lifestyle are among the risk factors for various non-communicable diseases, such as obesity, diabetes, and cardiovascular disease. Employees as a group who spend most of their time at work are at high risk of sedentary lifestyle. Therefore, it is important to know the description of physical activity and the level of sedentary lifestyle in employees in the college environment. This study aims to determine the description of physical activity and sedentary lifestyle in employees of Swadaya Gunung Jati University. The type of research used is descriptive analytic with a sample size of 78 employees. Data processing was carried out by analytical method using the Global Physical Activity Questionnaire (GPAQ) instrument to measure the intensity and duration of physical activity and sedentary lifestyle patterns. The results showed that 20.51% of employees had heavy physical activity with an average duration of 16 minutes per day, 61.54% of employees did moderate physical activity with an average duration of 55 minutes per day, 65.38% of employees walked or cycled when going to work with an average activity duration of 27 minutes per day. A total of 28.21% of employees do vigorous exercise with an average duration of 20 minutes per day, and 57.69% of employees do moderate exercise with an average duration of 37 minutes per day. The average employee does not do much physical activity with a total duration of 120 minutes per day, indicating a tendency towards a sedentary lifestyle. This study shows that most employees of Universitas Swadaya Gunung Jati have moderate physical activity, but there are still sedentary lifestyle tendencies in

**this group. These findings emphasize the importance of efforts to increase physical activity and interventions to reduce sedentary lifestyle among employees.**

**Keywords**— *physical activity; Sedentary Lifes Style; Employee; Swadaya Gunung Jati University; Global Physical Activity Quesioner*

## I. INTRODUCTION

Occupational health is health insurance when doing work which aims to improve and maintain the highest degree of physical, mental, social health for all employees in all sectors of work [1]. The working population is one of the populations at risk of having health problems while working. Characteristics of occupational health hazard risks in workers, namely, biology, lifestyle or behavior of workers at work and the environment.[1]

Poor worker or employee behavior will cause problems for these workers, especially health, one of the health problems that can be caused by employees, especially in office workers, namely physical activity and sedentary lifestyle. Sedentary lifestyles have a major impact on the overall health of the global population.[2] The average employee spends a lot of time working while sitting more than 6 hours a day.[2],[3] Occupational health efforts are mandated by Indonesian Law No.36 of 2009 concerning occupational health article 165 states that occupational health efforts are intended for workers to live healthy lives. Data released by WHO in 2015, workers who have a sedentary

lifestyle or workers who sit too long at work have the fourth rank of causes of death.[4]

A study published by the American Journal of preventive medicine found that workers who sit more than 3 hours / day increase the risk of 3.8% risk of premature death. Dr. James Levine, a doctor at the Mayo Clinic in Rochester, mentioned that prolonged sitting can cause the same diseases as the side effects of smoking. He also mentioned that adult workers who sit more than 4 hours per day have an 80% risk of death from cardiovascular disease.

Employees of the Faculty of Medicine of Universitas Swadaya Gunung Jati are also one of the groups that spend a lot of time at work, for that want to see what percentage of employees who do physical activity and the duration of physical activity. The purpose of this study was to see a description of physical activity and sedentary lifestyles in employees at the Faculty of Medicine, Universitas Swadaya Gunung Jati Cirebon (UGJ)..

## II. METHOD

This type of research is quantitative research with descriptive analytic study design. The study was conducted in March-June 2024 at the UGJ Faculty of Medicine Building. The population in this study were all employees of the UGJ Faculty of Medicine who were present when sampling as many as 78 people. The sample selection in this study used a total sample where a sample of 78 people was obtained according to the inclusion and exclusion criteria. This research process uses data collection techniques by distributing standardized questionnaires according to the required variables, namely the Global Physical Activity Questionnaire, and data processing is carried out with steps, editing, coding, entry and cleaning. Data analysis in this study used univariate analysis to see a description of heavy physical activity, moderate physical activity, and sedentary lifestyle.[5].

## III. RESULTS AND DISCUSSION

TABLE I. DESCRIPTION OF PHYSICAL ACTIVITY IN EMPLOYEES

Physical Activity	%	Duration/day
Heavy	20,51	16 menit
Medium	61,54	55 menit

The results showed that 61.54% of employees from a total of 78 samples had moderate physical activity. The results of this study are also in line with Abadini's research in 2018 that adult physical activity in office workers is found to be more in the category of mild to moderate physical activity.[6]

Physical activity is a movement in the body that occurs as a result of skeletal muscle work so as to increase energy expenditure and energy, physical activity is also an activity carried out at home, at work, during travel and used to fill spare time. Activity is divided into 3 categories, namely light, moderate and heavy physical activity. Physical activity is important to prevent health problems.[7]

The results of distributing physical activity questionnaires to employees of the UGJ Faculty of Medicine found that the

physical activity carried out was classified as moderate to mild so that the risk of health problems in workers would increase. This is influenced by the work of employees who demand to do work in a lot of sitting conditions.

TABLE II. DESCRIPTION OF SEDENTARY LIFESTYLE IN EMPLOYEES

Activity	%	Duration/day
Strenuous exercise	28,21	20 menit
Moderate exercise	57,69	37 menit
Cycling to work	65,38	27
Not much activity	100%	120 menit

The results of the study found that all employees spend an average of 120 minutes per day without doing any activity. Mandriyani's research in 2016 explains the factor of health problems in employees is sedentary behavior. Changes in social status, lifestyle and progress as a form of convenience produce a relaxed lifestyle in society. Some studies mention that workers/employees have a tendency to stay in one place or at the work desk. The amount of time in the workplace and sedentary activities are thought to be the cause of the inactivity of office workers.[8]

Sedentary lifestyle is one of the light physical activity activities. The limitation is that the average physical activity performed is less and very low. The researcher's assumption is that the high risk of sedentary lifestyle in employees of the UGJ Faculty of Medicine is due to the environment and type of work that requires a lot of sitting and working behind a desk, as well as a lack of knowledge about sedentary lifestyle behavior. This can have an impact on the physical and health of workers due to sedentary lifestyle [9],[10].

## IV. CONCLUSIONS

Based on the results of research conclusions by distributing questionnaires, it was found that most employees of the Faculty of Medicine, Swadaya Gunung Jati University had moderate physical activity during work.

Based on the results of the research conclusions, it was also found that employees of the Faculty of Medicine, Universitas Swadaya Gunung Jati Cirebon have a tendency to have a sedentary lifestyle related to sedentary habits in employees which can be a risk to long-term health.

The results of research that has been conducted by researchers. Researchers have conducted promotions and campaigns related to sedentary behavior in employees of the Faculty of Medicine, Swadaya Gunung Jati University.

Suggestions

For employees of the Faculty of Medicine, Swadaya Gunung Jati University, it is expected to increase knowledge about physical activity both at home and at work.

Faculty of Medicine, Swadaya Gunung Jati University leaders are expected to promote and implement physical activity programs for employees at the Faculty of Medicine Swadaya Gunung Jati University.

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