

DOI: <http://dx.doi.org/10.33846/hn40201>
<http://heanoti.com/index.php/hn>



RESEARCH ARTICLE

URL of this article: <http://heanoti.com/index.php/hn/article/view/hn40201>

The Dominant Personality Type in Patient with Hypertension at Dr. Soetomo General Hospital Based on The Big Five Personality Theory

Chorisma Permata Putri Nurazizah¹, Abdurachman^{2(CA)}, Soetjipto³, Yudi Her Oktaviono⁴, Luqman Hakim Andira⁵

¹Faculty of Medicine, Universitas Airlangga, Indonesia; chorismapermataputri@gmail.com

^{2(CA)}Department of Anatomy and Histology, Universitas Airlangga, Indonesia; abdurachman1166@gmail.com
(Corresponding Author)

³Department of Psychiatry, Universitas Airlangga / Dr. Soetomo General Hospital Surabaya, Indonesia; soetjipto@fk.unair.ac.id

⁴Department of Cardiology and Vascular Medicine, Universitas Airlangga / Dr. Soetomo General Hospital Surabaya, Indonesia; yudi.her@fk.unair.ac.id

⁵Faculty of Medicine, Universitas Airlangga, Indonesia; luqmanhakimandira13@gmail.com

ABSTRACT

Introduction: Hypertension which reaches 1.13 billion people in the world is a major risk factor of global death. One of the factors of hypertension is a lifestyle that is highly favored by personality. Therefore, it is necessary to do research on the dominant personality in people with hypertension. **Purpose:** To identify the dominant personality type according to Big Five Personality in patients with hypertension in RSUD Dr. Soetomo Surabaya in September 2019. **Methods:** The research's method was descriptive research. The sample of this research was patient with hypertension in Outpatient Clinic RSUD Dr. Soetomo Surabaya in September 2019. Personality variables were identified by Big Five Personality questionnaire. After the data was collected, the dominant personality type was determined by looking for mode. **Results:** According to Big Five Personality, the dominant personality in patients with hypertension in RSUD Dr. Soetomo Surabaya, September, 2019 period was Openness.

Keywords: big five personality; hypertension; personality type; openness

INTRODUCTION

Background

Cardiovascular disease (CVD) takes the lives of 17.7 million people each year, 31% of all global deaths⁽¹⁾. Amongst all, hypertension is one of the leading causes of heart disease, stroke, kidney disease, and death. Hypertension, also known as high blood pressure, is a long-term medical condition in which the blood pressure in the arteries is persistently elevated. It is also called the "silent killer" because it often has no warning signs or symptoms, and many people do not know they have it⁽²⁾.

In the past 20 years, most researchers have chosen to use The Big Five Personality Structure to measure a person's personality⁽⁵⁾. This grouping is considered universal and is easily interpreted. According to Lewis Goldberg, personality is divided into five traits and known as *The Big Five Personality Traits*. There are *Openness to Experience*, *Conscientiousness*, *Extraversion*, *Agreeableness*, and *Neuroticism*.

Although no clear cause is known, several studies have examined the risk factors that can cause hypertension. JNC7 recommends lifestyle changes to reduce the risk of heart disease⁽³⁾. Extraversion is thought to be specifically related to lowering blood pressure⁽⁴⁾. A study using 16PF conducted by Cattell and his colleagues in 1970 found a negative relationship between neuroticism and hypertension. A person's lifestyle is generally based on the personality that exists in that person. There is a lot of literature that has examined the relationship between personality and health^(5,6).

Research that discusses the dominant personality types in people with hypertension still be a rare research. This study aims to determine the dominant personality type in a person based on *The Big Five Personality Traits* that diagnosed with hypertensio. So, through this study, We hope that preventive efforts can be found in new and more effective ways that focus on personality factors to help reduce the incidence of hypertension in Indonesia.

METHODS

This study used a descriptive research in adult patients that was diagnosed with hypertension in Cardiology Outpatient Clinic Dr. Soetomo Surabaya in September 2019. Variable as the main focus of this research was personality type according to The Big Five Personality Traits Theory which is divided into Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. This research used the Big Five questionnaire. From these questionnaires obtained patient personality data. Then the data was calculated by finding the value that often appears (mode).

RESULTS

From the data, we obtained a sample of 50 patients with hypertension. From all patient data collected, 16 (32%) had *Openness* personality, and 12 (24%) had *Extraversion* personality. And continue by 11 (22%) categorized as a *Conscientiousness* personality, 7 (14%) had *Agreeableness* personality, and 4 (8%) had *Neuroticism* personality.

Table 1. Patient personality data at Cardiology of Dr. Soetomo General Hospital in 2019

Personality Type	Frequency	Percentage
Openness	16	32.0
Extraversion	12	24.0
Conscientiousness	11	22.0
Agreeableness	7	14.0
Neuroticsm	4	8.0
Total	100	100.0

DISCUSSION

In this study it can be concluded that the dominant personality type in 50 hypertensive patients at RSUD Dr. Soetomo is Openness, as much as 32% of the total sample. These results differ from studies conducted by Sanz et al., 2010. According to the study, conscientiousness is the most influential character in controlling one's health⁽⁷⁾. A meta-analysis of data also indicates that high conscientiousness is inversely proportional to behavior that is not good for health, such as smoking, using drugs indiscriminately, consuming alcohol, and unhealthy eating patterns. On the other hand, high conscientiousness is associated with good habit such as exercise⁽⁸⁾. Several other studies have the same results with this study.

Openness personality types are related to health, especially with cardiovascular health. In a study with 62 young adult women, the role of openness was examined in cardiovascular response when exposed to stress. Significant effects were found in the study subjects. Analysis shows the interaction between openness with systolic blood pressure and cardiac output. Conversely, subjects with high openness cause a hemodynamic response to the heart muscle which increases when exposed to stress⁽⁹⁾. Further research from the Health and Retirement Study concluded that higher openness reduced stroke by 31%, high blood pressure by 29%, and various heart conditions (myocardial infarction, CHD, angina, cardiac heart failure, or other heart problems) by 17%⁽¹⁰⁾.

Openness is a type of personality that involves a person's motivation and openness to many experiences. Therefore, openness is one of one's natural responses to stressful experiences that are very important and crucial. Based on the high or low score of openness, openness itself is divided into high openness and low openness⁽¹¹⁾. Further research also reported that higher openness was associated with reactions with lower heart rates to exposure to social stress, also accompanied by lower systolic blood pressure⁽¹²⁾.

Later, Williams found that people who had high openness would have systolic blood pressure and diastolic blood pressure that was low and stable even when faced with unpleasant experiences. After further investigation, it was concluded that openness and blood pressure had a positive relationship in the sample with middle age⁽¹³⁾. O' Su'illeabháin in his research said that someone with the highest openness must have the ability to stimulate a short-term response to stress, while at the same time having the ability to adjust⁽¹²⁾.

CONCLUSION

The dominant personality type in patients with hypertension at Dr Soetomo Hospital in the period of September 2019 according to *The Big Five Personality of Traits* is *Openness*. With these results it is expected to help prevent and manage hypertension in terms of personality. Similar studies with more samples need to be done to confirm the result of this study.

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