

THE EFFECT OF CUCUMBER JUICE ON BLOOD PRESSURE FOR PATIENTS WITH HYPERTENSION

Arneliwati¹, Agrina²

Departement Community of Nursing PSIK UR

Email: ners_neli@yahoo.co.id

Abstract

The aim of this research was to determine the effectiveness of cucumber juice for blood pressure of the hypertension patient. This was a quasy experiment pre-post without control group research. The samples of this research were 23 hypertension patients who were taken by using purposive sampling technique in Sidomulyo Public Health Centre. Data was taken two times;before cucumber juice was given and after 4 days giving. This research used descriptive analysis and dependent T test. Descriptive analysis is used to describe the demography characteristic of samples;age, sex, work, ethnic, and education. Dependent T test is used to know the influence of cucumber juice for hypertension patients blood pressure. The result showed that most of the samples were in the end adult age (60,9%), most of the samples were female (69,9%), Minangese was the majority ethnic of the samples (43,5%), most of samples were housewife (60,9%), most of the samples were graduate from senior high school (43,5%), and most of blood pressure of hypertension patient were decrease, it was 20 people (87%). The result of dependent T test showed that there was a decreasing of hypertension patients blood pressure average, the decreasing was 11,6 mmHg with standard deviation 10,02. The result of statistic test showed that there was a significant difference of blood pressure before and after giving the cucumber juice (p value 0,000). Suggestion for hypertension patients is to consume cucumber juice as a natural healing to decrease blood pressure.

Keywords: Hypertension, cucumber juice, Blood Pressure

BACKGROUND

Hypertension is a cardiovascular disease when the systole is more than 140 mmHg and dystole is more than 90 mmHg (Black & Hawks, 2005). The prevalence of hypertension in the world is 29,2% for man and 24,8% for women. Data from WHO explain that almost a bilion people or about a quarter of all the adult population in the world suffer from hypertension and these case tend to increase every year (Palmer & Williams, 2007). Indonesia has higher

prevalency than the world's, it is 32% for man and 29,3% for women (WHO, 2012).

Based on the data from Pekanbaru Health Departement (2012), hypertension is in the top ten of the most common disease in Pekanbaru. Most of the hypertension cases happen in Sidomulyo Public Health Center (2081 cases), followed by Lima Puluh Public Health Center (1527 cases), then Harapan Raya Public Health Center (1267 cases), Sail Public Health Center (1194 cases), and Pekanbaru Public Health Center (1094 cases).

Susilo and Wulandari (2011) said that there are two kinds of hypertension treatment; pharmacology and non pharmacology. Pharmacology treatment have side effects and it makes patient tend to neglect their treatment regimens. Because of that phenomenon, non pharmacology treatment is a choice to cure the hypertension. Cucumber is one of the non pharmacology treatments for hypertension because it consist of Kalium and Magnesium which can decrease blood preassure without side effect.

The purpose of this study is to determine the effectiveness of cucumber juice for blood pressure of the hypertension patient.

METHODS

This research used quasy experiment pre-post without control group with non-equivalent control group, where the samples of this research were observed first before intervention. Then, the samples were observed again after intervention (Hidayat, 2012).

This research used descriptive analysis and dependent T test. Descriptive analysis is used to describe the demography characteristic of samples; age, sex, work, ethnic, and education. Dependent T test is used to know the influence of cucumber juice for hypertension patients blood pressure.

This design has two groups; experiment and control group. Both of the groups are observed before and after intervention. In the experiment groups the samples are given the cucumber juice. And for the control group, there is no intervention at all.

RESULTS

The result showed that most of the samples were in the end adult age (60,9%), most of the samples were female (69,9%), Minangese was the majority ethnic of the samples (43,5%), most of samples were housewife (60,9%), most of the samples were graduate from senior high school (43,5%), and most of blood pressure of hypertension patient were decrease, it was 20 people (87%). The result of dependent T test showed that there was a decreasing of hypertension patients blood pressure average, the decreasing was 11,6 mmHg with standard deviation 10,02. The result of statistic test showed that there was a significant difference of blood pressure before and after giving the cucumber juice (p value 0,000).

DISCUSSION

The result showed that most of the samples were in the end adult age (60,9%). This is supported by the statemen of Udjianti (2010) that said that people tend to

suffer from hypertension because of the increasing of their age.

The result showed that most of the samples were female (69,9%). It is relevant with the theory from Susilo and Wulandari (2011), they said that women are tend to suffer from hypertension in the age of over 50 years old.

Most of samples were housewife (60,9%). It is because most of them just stay at home without any activities that make them bored and finally it makes them feel stress. Susilo and Wulandari (2011) said that stress is one of the causes of hypertension.

The result of dependent T test showed that there was a decreasing of hypertension patients blood pressure average, the decreasing was 11,6 mmHg with standard deviation 10,02. The result of statistic test showed that there was a significant difference of blood pressure before and after giving the cucumber juice (p value 0,000). This result is relevant with Kusnul and Munir research (2012) that after giving cucumber juice in 6 days for 20 elder responden with hypertension, there is significant effect for the decreasing of blood pressure. It is also supported by the statement of Martha (2012) that potassium and magnesium in cucumber can cure the hypertension.

CONCLUSION

This research showed that there is a significant decreasing of blood pressure in responden that consume cucumber juice with p value $< (0,05)$. So, the conclusion is consuming cucumber juice can decrease blood pressure effectively for hypertension patient.

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