Pharmacological therapy adherence and non-pharmacological therapy adherence of hypertensive patients

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Abstract

Background: Hypertension is a chronic disease that requires long-term therapy, therefore adherence to pharmacological therapy and non-pharmacological therapy is important to optimize outcome therapy.

Objective: This study aimed to determine the profile of pharmacological therapy adherence and non-pharmacological therapy adherence of hypertensive patients.

Method: This study is a descriptive study with non-random and 116 hypertensive patients from a Community Health Center, located at West Surabaya, agreed to participate. Adherence measurement was performed by using three methods: ARMS questionnaire, pill-count, and lifestyle questionnaire.

Result: The result of ARMS indicated that the majority of respondents, 92.2% (n = 116), had moderate levels of adherence while the rest, 7.8% (n = 116) had a high level of adherence. Meanwhile, the results of measurement of adherence to therapy by pill-count method showed that more than 50 percent of respondents (57.8%, n = 116) adhered to the therapeutic regimen and the rest (42.2%, n = 116) were not compliant. Patient adherence to non-pharmacological therapy measured by lifestyle questionnaire showed that the majority of respondents, 94% (n=116) had a moderate level of adherence while the rest had a high and low level of adherence respectively 5.2% and 0.8%

Conclusion: The results of measuring adherence to the pharmacology of therapy with the ARMS Questionnaire showed moderate to high adherence, but in contrast, the measurement with the pill count showed that only 50 percent were adherent. Meanwhile, adherence to non-pharmacological therapy, the majority of respondents, had moderate adherence.

Keywords: adherence, an antihypertensive drug, hypertensive patient, ARMS, lifestyle, pill count

Introduction

Hypertension therapy and control of risk factors are very important to prevent complications. Pharmacological therapy can be carried out by administering antihypertensive drugs while non-pharmacological therapy can be carried out with lifestyle modifications including stopping smoking, controlling blood sugar and fat, consuming fruits and vegetables, reducing alcohol consumption, reducing salt consumption, and doing regular physical activity (1).

Methods and Materials

This study is a descriptive study with non-random and 116 hypertensive patients from a Community Health Center, located at West Surabaya, agreed to participate. Adherence measurement was performed by using three methods: ARMS questionnaire (2), pill-count, and lifestyle questionnaire.

Results

The result of ARMS indicated that the majority of respondents, 92.2% (n = 116), had moderate levels of adherence while the rest, 7.8% (n = 116) had a high level of adherence. Patient adherence to non-pharmacological therapy measured by lifestyle questionnaire showed that the majority of respondents, 94% (n=116) had a moderate level of adherence while the rest had a high and low level of adherence respectively 5.2% and 0.8%. Meanwhile, the results of measurement of adherence to treatment by pill-count method showed that more than 50 percent of respondents (57.8%, n = 116) adhered to the therapeutic regimen and the rest unadhered to the therapeutic regimen therapy (42.2%, n = 116) as shown on Chart 1. Chart 1 showed that more than three quarter of respondent, 75.9% (n=116), had not achieved their blood pressure target.

Chart 1. Profile of pharmacological adherence by pillcount and blood pressure

Discussion

Despite the result of pill counts showed a higher level of adherence than self-reported, however this was not in line with the number of patients achieving their blood pressure targets. Three-quarters of respondents failed to reach their blood pressure targets. The disadvantage of the pill count is that medicine consumption is assumed but not confirmed; can exaggerate adherence (eg throw away / share pills); and no information on compliance issues (4,5).

The number of patients who fully adhere to non-pharmacological therapies is very low even though this non-pharmacological therapy can support pharmacological therapy to achieve the expected blood pressure targets (6,7).

Conclusion

The results of measuring adherence to the pharmacology of therapy with the ARMS questionnaire showed moderate to high adherence, but in contrast, the measurement with the pill count showed that only 50 percent were adherent. Meanwhile, adherence to non-pharmacological the majority of respondents, had moderate adherence.

References


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