

THE EFFECTIVENESS OF CHRONIC DISEASE MANAGEMENT PROGRAM IN BLOOD PRESSURE CONTROL AMONG HYPERTENSIVE PATIENTS

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ABSTRACT

Background: The prevention and management of hypertension are major public health challenges for Indonesia and the rest of the world. If the rise in blood pressure with age could be prevented or diminished, much of hypertension, cardiovascular and renal disease, and stroke might be prevented. In Indonesia, the Social Security Administration Agency (BPJS) has administered a government program to control chronic diseases, including hypertension, namely *Prolanis* (chronic disease management program). This study aimed to determine the effectiveness of chronic disease management program in controlling systolic blood pressure in hypertensive patients.

Subjects and Method: This was an analytic observational study with case control design. The study was conducted at Pratama Griya Husada Clinic 2 Tasikmadu, Karanganyar, Central Java, in April 2017. A sample of 120 hypertensive patients, consisting of 60 controlled hypertensive patients and 60 uncontrolled hypertension patients, were selected for this study using fixed disease sampling. The dependent variable was systolic blood pressure. The independent variable was chronic disease management program for systolic blood pressure control, consisting of health status monitoring, reminder, club activity, home visit, dietary education, and physical activity education. Data on diet were collected by Food Frequency Questionnaire (FFQ) based on the DASH eating plan. Physical activity data were collected by short-form International Physical Activity Questionnaire (IPAQ). The other data were collected using questionnaires. Multiple linear regression was used to analyze the data.

Results: Blood pressure of hypertensive patients was reduced by chronic disease management program, including monitoring health status ($b = -6.34$; 95% CI = -12.42 to -0.26; $p = 0.041$), reminder ($b = -6.22$; 95% CI = -13.30 to -0.87; $p = 0.085$), club activity ($b = -3.46$; 95% CI = -6.40 to -0.53; $p = 0.021$), home visit ($b = -22.01$; 95% CI = -41.85 to -2.17; $p = 0.030$), dietary education ($b = -3.61$; 95% CI = -6.66 to -0.57; $p = 0.020$), and physical activity education ($b = -0.40$; 95% CI = -0.79 to -0.01; $p = 0.001$).

Conclusion: Chronic disease management program is effective to control blood pressure of hypertensive patients. The program's components including monitoring health status, reminder, club activity, home visit, dietary education, and physical activity education, are effective in reducing blood pressure in hypertensive patients.

Keywords: hypertension, chronic disease management program

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