Effectiveness of Self-Management Program on Knowledge, Medication Adherence and Blood Pressure Control among Hypertensive Patients: Randomized Controlled Trial

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Introduction:

Hypertension (HTN) is one of the major public health challenges worldwide and it is one of the key risk factor for cardiovascular and renal diseases. Hypertension is the leading preventable risk factor for premature mortality and disability worldwide. Hypertension is known as the "silent killer" and usually don't overt manifestations that can be easily detected and more than 50% of hypertensive patients do not know they have HTN until organ damage has been established to heart, brain and kidney.

Self-management support is the care and encouragement assuming to people with chronic conditions and their families to assist them understand their focal role in managing their illness, make informed decisions about care, and engage in healthy behaviors. Chronic disease self-management programs or supports systematically provide education and support interventions by health care staff to increase patients' skill.

Aim of the study

Aim of the study: To examine effectiveness self-management program on knowledge, medication adherence and blood pressure control among hypertensive patients.

Research hypotheses:

It is hypothesized that the improvement in patient knowledge, blood pressure control and compliance to treatment regimen post implementing of the self-management program.

2. Subjects and methods:

Study design:

A quiz experimental study using pretest – posttest design.

Setting of the Study:

The study was conducted in the hypertension outpatient clinic in Mansoura University Hospital (MUH) and Fayoum University Hospital (FUH), Egypt. **Subjects of the Study:**

A Convenience sample of 50 adults' hypertensive patients constituted the study subjects, diagnosed with hypertension (less than one year) and presenting the outpatient clinics. Patients who had hypertension complications or any other chronic disease were excluded from the study.

Tools:

Data collection tools consisted of:

I. Demographic Data Sheet to assess subjects characteristics

II. Knowledge Assessment Questionnaire:

This questionnaire was designed by the researcher to evaluate baseline knowledge of patients about hypertension and therapeutic regimen; it was used as pre and posttest. The same questionnaire was used after teaching sessions and after 3 months to obtain comparable means of knowledge level.

III. Hypertension and Medication Adherence Scales: The Hill-Bone Compliance to High Blood Pressure Therapy Scale. The scale assesses patient behavior domains of high blood pressure treatment. It constructed by Kim et al. and adopted by researcher to assess patient's compliance through three behavioral domains.

IV-The Physical Assessment Sheet: This sheet was designed to record patient's blood pressure using a standard method of measurement. Also, weight and body mass index.

Results:

- There were statistically significant improvements in correct knowledge regarding to hypertension post program implementation compared to pre and follow up of program ($p < 0.001$).

- The study results revealed that statistically significant improvement of full compliance from preprogram to post- program (p<0.0001).

- There was a slight decrease in systolic blood pressure and diastolic blood pressure post program (140/88) relative to preprogram (155/94).

- There were statistical significantly correlation between age and compliance rate.
- There was no change in body mass index post program when compared to preprogram implementation.

Conclusion and recommendations:

Self-management program improvement was detected in patient's knowledge and compliance to therapeutic regimen and blood pressure (BP) after implementing educational program.

Future studies conducting to provide health program a routine care for hypertensive population in the study setting and similar clinical areas. Also regularly plan interventions to support and improve long-term compliance and BP control.

توقيع مقدم البحث   مقدم البحث

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