

Self-Efficacy for Clients with Hypertension who Attend Primary Health care Centers in Diwaniyah City

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Abstract

Background : High blood pressure is a chronic and dangerous disease spread around the world, causing many complications for its sufferers, including stroke, heart attack, kidney failure, vision loss, and others. This disease is treated by using antihypertensive drugs and also following a healthy lifestyle based on reducing salt and fat, giving up smoking, engaging in daily moderate physical activity, and adhering to the treatment plan prepared by the health care team in order to avoid possible complications.

Objectives: The objective of the study is to examine the Self-Efficacy of clients with hypertension and to identify the association between clients' some socio and clinical characteristics with their Self-Efficacy.

Method: Descriptive study design was used to conduct the study. This study was conducted at the Primary Health care Centers in Al-Diwaniya City for the period from (September 2020 to May 2021) on a non-probability (convenience) sample consist of (360) client who attended with hypertension and attends the primary health care centers in Al-Diwaniya City.

Results: The study findings show, more than a half of study sample described their general health as fair (n = 187; 51.9%). Less than a half are overweight (n = 164; 45.6%). The mean duration of having hypertension is 4.86 ± 4.37 ; most have hypertension for 1-5-years (n = 251; 69.7%). The clients' overall Self-Efficacy for managing hypertension, the majority displayed a fair Self-Efficacy (n = 312; 86.7%).

Conclusion: The study concludes that concerning clients' Self-Efficacy for dietary regimen, most demonstrated a fair Self-Efficacy, Regarding Self-Efficacy for disease management, more than a half displayed a poor Self-Efficacy, With respect to clients' Self-Efficacy for adherence to medications, and most displayed a poor Self-Efficacy.

Recommendations: The study recommended the necessity of conducting further studies on large sample, and importance of follow up regarding improvement of disease management, dietary regimen and medication adherence of hypertensive patients in order to increase the Self-Efficacy for managing hypertension, and provide medical clinics in primary health care centers with simple guidelines booklets, posters and pamphlets containing all necessary information and practice about how to act with hypertension to hypertensive patients to help them to remember the information about the disease and facilitate adherence to self-care activities.

Keyword : Client ,Self-Efficacy, Hypertension

Introduction

High blood pressure (HTN) is the most common health problem among people and can cause stroke, myocardial infarction (heart attack), kidney failure, and death if not treated early and effectively, and patients who have specific risk factors for developing high blood pressure. It should be treated at any age, as described later with drug therapy (Ignatavicius et al., 2016)

There are more than three types of high blood pressure that can affect humans and each type of high blood pressure, and there are special diagnoses and effective treatment types are: primary hypertension, rebound, and secondary hypertension (Davis et al., 2016).

Essential hypertension also called; primary hypertension(EH) denotes high blood pressure from an unknown cause, rebound hypertension: blood pressure that is controlled with drugs and that becomes uncontrolled (abnormally high) with the abrupt discontinuation of medication, secondary hypertension: high blood pressure from an determine cause, such as renal disease (Cheever and Hinkle, 2014)

Self-efficacy refers to the self-confidence and self-esteem of individuals in self-care activities in which desired results are achieved, behavior changes, and symptoms of chronic diseases reduced. Self-efficacy is one of the factors that can predict an individual's ability to change high-risk health behaviors regarding personal performance. People who have strong beliefs about self-efficacy choose more difficult tasks, set themselves bigger goals, and are more consistent in different situations. Positive self-efficacy in chronic patients is an indicator of disease compliance and is associated with adherence to medications, diet, exercise regimens, and behavioral self-management (Gheshlagh et al., 2018)

Methodology

Descriptive study design was used to conduct the study. This study was conducted at the Primary Health care Centers in Al-Diwaniya City for the period from (September 2020 to May 2021) on a non-probability (convenience) sample consist of (360) client who attended with hypertension and attends the primary health care centers in Al-Diwaniya City. The researcher uses a questionnaire format in order to reach the objectives of the study. The questionnaire was consisting of three parts: Part I: Socio-demographic Data consist of (seven) items, includes (age, gender, marital status, level of education, occupation, house ownership, and monthly income). Part II: Clinical information Data Form: consists of (four) items, includes (how to describe self-health status, body max index, duration of illness, and blood pressure level). Part III: self-efficacy scale for patients with hypertension consist: The Self-Efficacy Questionnaire in clients with Hypertension (Gheshlagh et al., 2018) was used which consists of (17) items self-rated questionnaire that involves three dimensions. These are dietary regimen (nine items), disease management (four items), and adherence to medication (four items). These items are measured on a (3) point Likert-type scale of 3 (always), 2 (Sometimes), and 1 (never). The validity of the questionnaire was verified by presenting it to (17) experts, and a pilot study was conducted to achieve the reliability of the questionnaire (Cronbach's Alpha values are all above 0.70).

Result

Table 1. Participants' clinical profile

<i>Variable</i>	<i>Frequency</i>	<i>Percent</i>
<i>Duration of illness (Years): Mean (SD) = 4.86 ± 4.37</i>		
1-5	251	69.7
6-10	78	21.7
11-15	19	5.3
16-20	7	1.9
21-25	5	1.4
<i>Systolic blood pressure</i>		
< 120	23	6.4
120-140	128	35.6
> 140	209	58.1
<i>Diastolic blood pressure</i>		
< 80	27	7.5
80-90	118	32.8
> 90	215	59.7

Table 2. Correlations among study variables

	1.	2.	3.	4..	5.	6.	7.
1. Age							
2. BMI	.107 [*]						
3. Duration of having HT	.617 ^{**}	.095					
4. Dietary Regimen	-.005	.157 ^{**}	.038				
5. Disease Management	-.220 ^{**}	.012	-.150 ^{**}	.384 ^{**}			
6. Adherence to Medications	.179 ^{**}	.132 [*]	.159 ^{**}	.389 ^{**}	.237 ^{**}		
7. Overall Self-Efficacy	-.020	.146 ^{**}	.025	.887 ^{**}	.663 ^{**}	.656 ^{**}	-

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3. Difference in participants' Self-Efficacy between systolic blood pressure group

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Dietary Regimen	Between Groups	85.823	2	42.912	4.303	.014
	Within Groups	3559.774	357	9.971		
	Total	3645.597	359			
Disease Management	Between Groups	3.501	2	1.751	.570	.566
	Within Groups	1096.399	357	3.071		
	Total	1099.900	359			
Adherence to Medications	Between Groups	59.836	2	29.918	11.102	.000
	Within Groups	962.028	357	2.695		
	Total	1021.864	359			
Self-Efficacy	Between Groups	273.423	2	136.712	5.401	.005
	Within Groups	9037.199	357	25.314		
	Total	9310.622	359			

There are statistically significant differences in participants' Self-Efficacy for dietary regimen, adherence to medications, and overall Self-Efficacy for managing hypertension among systolic blood pressure groups (p-value = 0.01; 0.01, 0.01) respectively

Table 4. Difference in participants' Self-Efficacy between diastolic blood pressure groups

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Dietary Regimen	Between Groups	53.790	2	26.895	2.673	.070
	Within Groups	3591.807	357	10.061		
	Total	3645.597	359			
Disease Management	Between Groups	.643	2	.321	.104	.901
	Within Groups	1099.257	357	3.079		
	Total	1099.900	359			
Adherence to Medications	Between Groups	57.831	2	28.916	10.708	.000
	Within Groups	964.033	357	2.700		
	Total	1021.864	359			
Self-Efficacy	Between Groups	208.331	2	104.165	4.085	.018
	Within Groups	9102.292	357	25.497		
	Total	9310.622	359			

There are statistically significant differences in participants' Self-Efficacy for adherence to medications and overall Self-Efficacy for managing hypertension among diastolic blood pressure groups (p-value = 0.01, 0.01) respectively

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Discussion of the Study Results

Concerning duration of illness, most of participant have hypertension for (1-5years), This result is supported by **Gheshlagh et al., (2018)**, conducted study in Iran, which revealed that (35%) of participants with duration of illness 2-5 years. Concerning clients' knowing about their systolic blood pressure (SBP), the finding show that more than a half reported that it ranges >140 mm/Hg. This result is agree with study conducted by **Polanska, et al., (2016)** made a study to evaluate medication of adherence among elderly hypertensive patients and to assess whether other factors influence adherence in this group of patients they founded that (53.4%) of them had Grade I hypertension according to the classification of blood pressure level (systolic blood pressure range between 140-159 mm/hg and diastolic blood pressure range between 90-99 mm/hg) according to European Society of Cardiology.

There were statistically inverse correlations between participants' age and their Self-Efficacy for disease management and adherence to medications. This result agree with study conducted by **Ahmed (2014)** the current study showed that there was a statistically significant relation between patients' age and their compliance to treatment regimen. There were statistically significant positive correlations between participants' BMI and their Self-Efficacy for dietary regimen, adherence to medications, and overall Self-Efficacy for managing hypertension. This result is supported by Khairy et al., (2021) about "Factors associated with self-efficacy in patients with hypertension" we also found body mass index associated with a significant difference in the self-efficacy.

There was a statistically significant inverse correlation between the duration of having hypertension and participants' Self-Efficacy for disease management. On the other hand, there is a statistically significant positive correlation between duration of having hypertension and participants' Self-Efficacy for adherence to medications. This result comes with Breux et al.,(2012). There are statistically significant differences in participants' Self-Efficacy for dietary regimen, adherence to medications, and overall Self-Efficacy for managing hypertension among systolic blood pressure groups. This result was in agreement with the study carried out in Rafsanjani by **Mazar et al., (2019)**. There are statistically significant differences in participants' Self-Efficacy for adherence to medications and overall Self-Efficacy for managing hypertension among diastolic blood pressure groups. This result agree with study conducted by **Mersal ,2015)**

Conclusion

The study concludes that concerning clients' Self-Efficacy for dietary regimen, most demonstrated a fair Self-Efficacy, Regarding Self-Efficacy for disease management, more than a half displayed a poor Self-Efficacy, With respect to clients' Self-Efficacy for adherence to medications, and most displayed a poor Self-Efficacy.

Recommendations

The study recommended the necessity of conducting further studies on large sample, and importance of follow up regarding improvement of disease management, dietary regimen and medication adherence of hypertensive patients in order to increase the Self-Efficacy for managing hypertension, and provide medical clinics in primary health care centers with simple guidelines booklets, posters and pamphlets containing all necessary information and practice about how to act with hypertension to hypertensive patients to help them to remember the information about the disease and facilitate adherence to self-care activities.

Reference

1. Ahmed, B. I., Abd EL-Razi, B. G., & Mohammed, M. A. E. A. (2014). Factors Affecting Compliance of Patients with Essential Hypertension toward Therapeutic Regimen. *Zagazig Nursing Journal*, 10(1), 66-85.
2. Breaux-Shropshire, T. L., Brown, K. C., Pryor, E. R., & Maples, E. H. (2012). Prevalence of blood pressure self-monitoring, medication adherence, self-efficacy, stage of change, and blood pressure control among municipal workers with hypertension. *Workplace health & safety*, 60(6), 265-271.
3. Davis AV, Bakris GL, Black HR, Cushman WC, Green LA, Izzo Jr JL, Jones DW, et.al.,. The seventh report of the joint national committee on prevention, detection, evaluation, and treatment of high blood pressure: the JNC 7 report. *Jama*. 2016 May 21;289(19):2560-71.
4. Gheshlagh, R. G., Parizad, N., Ghalenoe, M., Dalvand, S., Baghi, V., Najafi, F., & Ebadi, A. (2018). Psychometric features of the persian version of self-efficacy tool for patients with hypertension. *International Cardiovascular Research Journal*, 12(2), 50-56.
5. Hinkle JL, Cheever KH. *Brunner & Suddarth's Textbook of Medical surgical Nursing: Suzanne C. Smeltzer...[et Al.]*: Wolters Kluwer Health. 2014.
6. Ignatavicius, D.; Workman, M.; Blair, M.; Rebar, C.; and Winkelman, C.:*Medical-Surgical Nursing Patient-Centered Collaborative Care*, Elsevier , 8th Edition,(2016),P:2040.
7. Khairy, S., Aslan, A., Samara, A. M., Mousa, I., Alkaiyat, A. S., & Sa'ed, H. Z. (2021). Factors associated with self-efficacy in patients with hypertension: a cross-sectional study from Palestine. *Journal of Health, Population and Nutrition*, 40(1), 1-10.
8. Mazar, L., Salimabadi, Y., Nasirzadeh, M., & Safarian, E. (2019). SELF-efficacy analysis of health promoting behaviors of hypertensive patients in rafsanjan. *pakistan heart journal*, 52(4).
9. Mersal, F. A., & Mersal, N. A. (2015). Effect of evidence based lifestyle guidelines on self efficacy of patients with hypertension. *Int. J. Curr. Microbiol. App. Sci*, 4(3), 244-263.
10. Polańska, B.: Dudek, K.; Szymanska-Chabowska, A.; and Uchmanowicz, I.: *The Influence Of Frailty Syndrome On Medication Adherence Among Elderly Patients With Hypertension, Clinical Interventions In Aging*, Vol(11),2016, P :1781.