

## ASSESSMENT OF NURSES' KNOWLEDGE REGARDING NON- PHARMACOLOGICAL MEASURES TO CONTROL HYPERTENSION IN BASRA TEACHING HOSPITALS

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### Abstract

To assessing nurses 'knowledge about non-pharmacological measures to control hypertension in Basra educational hospitals. Data were collected through a questionnaire of 50 samples that included two axes, The demographic information for nurses and the second their scientific knowledge through a group of questions amounting to 20 questions.

The results showed that the nurses answers regarding weight reeducation in over weight individual is needed to reduce high blood pressure, 96% were correct, with highly significant mean of score 2.94 , regular physical activity is need to reduce high blood pressure 88% with significant mean of score 2.76. Also, t relaxation techniques such as shopping, watching a movie, meditation and sitting on the beach can reduce high blood pressure were 80%, with significant mean of score 2.68. While the nurses had non correct answer regarding the person's dependence on a diet Rich in saturated fats, found in animal products, does not affect his high blood pressure, by 70%, with non-significant mean of score 1.86 The study concluded that nurses' knowledge of non-pharmacological measures to control high blood pressure summarizes that the majority of nurses were aware of the importance of non-pharmacological measures to control high blood pressure, and despite this, more knowledge about this must appear through conducting educational courses, educational programs and publication Paying attention to diet in hospitals and encouraging a healthy lifestyle.

**Keywords: Nurses. hypertension .non-pharmacological measures**

## **Introduction**

Hypertension is defined as a systolic blood pressure greater than 140 mmHg and a diastolic blood pressure greater than 90 mmHg based on the average of two or more correct blood pressure measurements taken during two or more contacts with a health care provider (1).

Keeping blood pressure under control is vital for preserving health and reducing the risk of these dangerous conditions and Changing modifiable risk factors may result in a reduced burden of hypertension, and people have to know that they are at risk of hypertension to be able to make voluntary lifestyle changes Hypertension alone is responsible for 14% of deaths globally (2).

Food prepared in restaurants, canned foods, and prepackaged foods (dry or frozen) tend to contain more sodium than home-cooked meals or frozen vegetables.(3).

A study that suggest that vitamin D deficiency may lead to development of hypertension (4).

Relaxation Techniques, The mechanism by which relaxation techniques lower blood pressure is unclear. One theory suggests that they may help lower the stress and physiologic arousal produced by the autonomic nervous system, thereby reducing blood pressure. Evidence shows that transcendental meditation may modestly lower blood pressure However, no specific method has been proven beneficial. Because of mixed results in trials and numerous limitations, the AHA does not recommend yoga or acupuncture to lower blood pressure Biofeedback techniques have been proven effective and may be considered in clinical practice to lower blood pressure(5)..

Cigarette smoking is the leading preventable cause of death in the United States and significantly increases the risk of cardiovascular disease (6).. High-level thinking skills, such as the ability to digest and filter information and spot patterns, are fostered via concept-based curriculum and teaching (16) . Nursing is a work done to help the individual – sick or healthy – to do activities that contribute to his or her health (17).

**Material and methods**

This study was across-sectional involving (50) nurses (male and female in Basra hospitals. To achieve the aim of the questionnaire was designed translated to Arabic language to assessment nurses knowledge about non-pharmacological measure to control hypertension. The study carried out in nursing collage- University of Basra- Basra hospitals( Al- Basra Teaching hospital and Al- sader Teaching hospital. .A fifty nurses male and female to assessment nurses knowledge the regarding non-pharmacological measure to control hypertension. Assessment questionnaire was used to collect the study instrument was comprised of questions divided in to Main parts, the first parts to identify the socio- demographic characteristic include gender, education level, years of experience and work filed. Second part twenty questionnaire items to assess nurses knowledge about non-pharmacological measure to control hypertension all nurses answered about (20) questions through send the questionnaire on the internet by Google form statistical data analysis include Percentage .Frequency and Mean of score .

**Results and discussion**

To improve the quality of life of the patient Proper management of hypertension is necessary in order to prevent its complications ,Hypertension management involves both pharmacological and non-pharmacological interventions for effective control.

Despite the availability of very effective medications, the blood pressure cannot be controlled in about 70% of patients receive only pharmacological treatment for hypertension (7). Demographic characteristic of nurses participants in Table (1) showed that the percentage of male was (34%). While female was (66%) , the percentage of nursing secondary school was(38%). While medical institute was (34%). While nursing college was (26%). While high study was (2%), the percentage 1-5 years was (54%). While 6-10 years was (28%). While 11-15 years was (2%). While furthermore was (16%), the percentage of CCU was (14%). While ICU was (12%). While emergency was (22%) . while other departments was (52%)

**Tablet (1) : The frequent and percentage regarding Demographic information**

	F	%
<b>Gender</b>		
Male	17	34%

Female	33	66%
<b>Education level</b>		
Nursing secondary school	19	38%
Medical institute	17	34%
Nursing college	13	26%
High study	1	2%
<b>Years of experience</b>		
1-5	27	54%
6-10	14	28%
11-15	1	2%
Furthermore	8	16%
<b>Work filed</b>		
CCU	7	14%
ICU	6	12%
Emergency	11	22%
Other departments	26	52%

The non-pharmacological interventions can be utilized alone before starting the pharmacological therapy or in combination after. The lifestyle modifications can help reduce the use of medications(8).

**Table (2) Awareness about non pharmacological measure to control hypertension**

NO	Questionnaire	correct		Non correct		Don't know		MS	S
		F	%	F	%	F	%		
1	high blood pressure can be reduced by making change in your diet	47	94%	3	6%	0	0%	2.94	S
2	Reduces psychological stress is needed to reduce high blood pressure	50	100%	0	0%	0	0%	3	S
3	Regular physical activity is need to reduce high blood pressure	44	88%	0	0%	6	12%	2.76	S
4	sodium intake restriction reduces blood pressure	42	84%	2	4%	6	12%	2.72	S

5	You should avoid eating bananas in case of high blood pressure	10	20%	23	46%	17	34%	1.86	NS
6	A daily dose of garlic help to reduce hypertension	35	70%	5	10%	10	20%	2.5	S
7	Drinking liquids that contain caffeine , such as coffee does not affect blood pressure in patients with high blood pressure	6	12%	28	56%	16	32%	1.8	NS
8	high pressure patients must drink enough water throughout the day to improve blood flow in the arteries and blood vessels	44	88%	3	6%	3	6%	2.82	S
9	food rich in potassium does not help lower blood pressure	13	26%	19	38%	18	36%	1.9	NS

10	Relaxation techniques such as shopping ,watching a movie meditation and sitting on the beach can help reduce high blood pressure	40	80%	4	8%	6	12%	2.68	S
11	There is no link to normal anemia with high blood pressure	31	62%	11	22%	8	16%	2.46	S
12	Eating a small square of dark chocolate daily can help lower blood pressure for people with high blood pressure	22	44%	11	22%	17	34%	2.1	S
13	There is no link between vitamin D deficiency and high blood pressure	11	22%	19	38%	20	40%	1.82	NS
14	People who sleep five hours or less a night may be at high risk of development or worsening already high blood pressure	36	72%	8	16%	6	12%	2.6	S
15	Weigh reduction in over weight individuals is needed to reduce high blood pressure	48	96%	1	2%	1	2%	2.94	S
16	The patient is advised to avoid bathing with warm water in case of high blood pressure	18	36%	19	38%	13	26%	2.1	S
17	stop smoking is need to regularly hypertension	46	92%	1	2%	3	6%	2.86	S
18	Citrus fruit , especially lemons , help reduce high blood pressure	48	96%	1	2%	1	2%	2.92	S
19	Restriction of alcohol consumption is important to reduce hypertension	40	80%	2	4%	8	16%	2.64	S
20	A person's dependence on a diet rich in saturated fats found in animal products does not affect his high blood pressure	4	8%	35	70%	11	22%	1.86	NS

The study showed that the correct answers of the nurse proved the importance of lifestyle which directly affects the level of blood pressure. regarding high blood pressure can be reduced by making change in diet correct answers was (94%). non correct was (6%). was do not know was (0%), Most randomized controlled studies have shown that even a modest weight loss of 39% is associated with a significant reduction in systolic and diastolic blood pressure of roughly 3 mm Hg in overweight people(9).

The percentage of reduces psychological stress is needed to reduce high blood pressure correct was (100%) ,non correct was(0%). ,don not was (0%), Studies have suggested that chronic exposure to stress may have an influence on increased blood pressure(10).

The percentage of Regular physical activity is need to reduce high blood pressure correct was (88%). non correct was (0%). do not know was (12%), A review showed that the

most recent evidence for the role of physical activity in the prevention of hypertension and discuss recent studies that have sought to address these unanswered questions(11).

The percentage of sodium intake restriction reduces blood pressure correct was (84%). non correct was (4%),do not know was (6%),A study focused on the effects of sodium intake on vascular hemodynamics and their implication in the pathogenesis of hypertension and showed that Prolonged modest reduction in salt intake induces a relevant fall in blood pressure in both hypertensive and normotensive individuals.(12) . Foods that are rich in potassium (bananas )are important in managing and control high blood pressure (HBP or hypertension) because potassium lessens the effects of sodium the present study results showed that the percentage regarding the question (you should avoid eating bananas in case of high blood pressure ) correct was (20%). non correct was (46%). do not know was (34%). Garlic (*Allium sativum*) is a vegetable that has been used as a natural blood-pressure-lowering remedy since ancient times (13) . Our data showed that the percentage of a daily dose of garlic help to reduce hypertension correct was (70%). non correct was (10%), do not know was(20%), the percentage of drinking liquids that contain caffeine , such as coffee does not affect blood pressure in patients with high blood pressure correct (12%). was, non correct (56%). do not know was (32%),

Based on the evidence from studies, coffee consumption in moderation, is safe and is beneficial in both healthy persons as well as patients with high BP, CVD, HF, cardiac arrhythmias or DM.(14), on the present study the percentage regarding high pressure patients must drink enough water throughout the day to improve blood flow in the arteries and blood vessels correct was(88%), non correct was(6%). While do not know was (6%), the percentage of food rich in potassium does not help lower blood pressure correct was (26%). While non correct was (38%). While do not was (36%), the percentage of relaxation techniques such as shopping ,watching a movie meditation and sitting on the beach can help reduce high blood pressure correct was (80%). While non correct was (8%). While was do not know was (12%), the percentage of There is no link to normal anemia with high blood pressure was (62%) . non correct was(22%),don not was (16%),

(15) pointed that Anemia causing Hypertension (High blood pressure & great psychological stress) is directly effecting the social life via women's are very common. the percentage of eating a small square of dark chocolate daily can help lower blood pressure for people with high blood pressure was (44%) . while non correct was(22%). While don

not was (34), the percentage of There is no link between vitamin D deficiency and high blood pressure was (22%) . while non correct was(26%). While don not was (40%), The percentage of People who sleep five hours or less a night may be at high risk of development or worsening already high blood pressure was (72%) . while non correct was(16%). While don not was (12), the percentage of Weigh reduction in over weight individuals is needed to reduce high blood pressure was (96%) . while non correct was(2%). While don not was (2%),

Regarding the patient advised to avoid bathing with warm water in case of high blood pressure correct was (36%). While non correct was (38%). While do not know was (26%) , the percentage of stop smoking is need to regularly hypertension was (92%). while non correct was (2%). While don not was. (6%), the percentage of Citrus fruit , especially lemons , help reduce high blood pressure was (96%). While non correct was (2%). While was do not know was (2%),the percentage of Restriction of alcohol consumption is important to reduce hypertension was (80%). non correct was (4%). While was do not know was (16%), the percentage of A person's dependence on a diet rich in saturated fats found in animal products does not affect his high blood pressure was (8%) . while non correct was(22%). While don not was (70%),

### **Conclusion**

The study conclude that the most participants have a good knowledge regarding the non – pharmacological control for hypertension .

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