# Hypertensive Patients' Practices Regarding Lifestyle Changes in AL- Amarah City at South of Iraq 

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#### Abstract

The study aims to assess hypertensive patient's practices regarding lifestyle changes and to find out the relationship between patients practices and certain variables; age, gender, marital status, educational status, number years of diagnosis with hypertension, history of family member with hypertension source of information\& Employment. A descriptive study was carried out in medical wards of Al-sadder teaching hospital at south of Iraq. A non-probability sample of (100) hypertensive patients (male \& female), who were admitting in medical wards, the data was collected through the use of instrument. Direct interview technique was used to collect data from hypertensive patients. Descriptive statistical analysis procedures (frequency, percentage, mean of score) and inferential analysis procedures (chi-Square) were used for the data analysis. the results of the study indicate that the majority of items have low mean score (less than1.66) for practice. There is a significant relationship between patients' practice regarding hypertension and some socio-demographic characteristics (level of education, Number Years of diagnosis with hypertension, History of Family member with hypertension). From the results it is concluded that the patient have inadequate or deficit in some aspects related lifestyle change regarding hypertension disease.


Keyword: Hypertensive, Risk factors, Public health

## INTRODUCTION

Universally, hypertension is a major public health problem. Identification of risk factors for hypertension supports intervention policies to minimize the disease morbidity and mortality. Hypertension is the second most common reason for an outpatient physician visit in the United States, accounting for approximately 30 million visits a year ${ }^{1}$. Hypertension disease is a silent killer, and many people with hypertension are not aware that they have the condition. Hypertension disease is influenced by many risk factors, which are connected to the lifestyle. Global modifiable risk factors of hypertension are either preventable or controllable either by health education or health promotion programs. Identifying risk factors for hypertension leads to specific preventive interventions that are favorably affect public health in all countries ${ }^{2}$. Iraq is experiencing urbanization and modernization which cause changes in diet and physical activity particularly in the cities including. Like many other developing countries, as a result of
increased longevity and improvement in the standard of living as well as the influence of the western lifestyle such as cigarette smoking, hypertension has assumed a major public health dilemma (Researcher). Lifestyle modifications were including; weight control, limitation of alcohol consumption, increased physical activity, increased fruit and vegetable consumption, reduced total fat and saturated fat intake, and smoking cessation ${ }^{3}$. Also dietary approach to control hypertension, (DASH) eating plan which are effectively lower hypertension should be encouraged for these patients. It emphasizes fruits, vegetables, and low-fat dairy products and reduces in fat and cholesterol, other dietary factors, such as a greater intake of protein or monounsaturated fatty acids, may also reduce blood pressure ${ }^{4-7}$. Furthermore, hypertension is one of the leading causes of premature death worldwide, accounting for 7.6 million deaths in 2001. The number of adults with hypertension in 2025 was predicted to increase by $60 \%$ to a total of 1.56 billion adults ${ }^{8}$. Hypertension is the most common
chronic disease with sudden onset, and it is called the "silent killer" because it progressively and permanently damages organs. Hypertension causes several heart, brain and kidney diseases, resulting in severe and lifethreatening complications, as well as death ${ }^{9-12}$. Global burden of hypertension by Kearney et al, 2005 projected that the number of adults with hypertension will increase by $60 \%$ to a total of 1.56 billion ( 1.54 billion- -1.58 billion) in 2025. Most of this rise can be attributed to an expected increase in the number of people with hypertension in economically developing regions, where by between 2000 and 2025, the worldwide prevalence of hypertension was predicted to increase by $9 \%$ in men and $13 \%$ in women because of projected changes in the age distribution of the population. Specifically, a larger proportion of the world population is expected to be older by 2025 (Alphonce,2012). The present study was conducted to develop an instrument for measuring the knowledge level and practices of iraqi adults concerning hypertension and to establish the instrument's validity and reliability.

## MATERIALS AND METHOD

A descriptive study was carried out at medical wards in Al-sader teaching hospital. The study started from November $11^{\text {th }}, 2017$ to January $20^{\text {th }}, 2018$. A nonprobability sample of (100) hypertensive patients (male \& female), who were admitting in medical wards, The data was collected through the use of instrument, which consists of two parts. Part (1), demographic data form, consists of (8) items and part(2), consist from (11) items dealing with hypertensive patient practices toward lifestyle changes. Direct interview technique was used to collect data from hypertensive patients. The validity of the instrument was determined through presenting it to (5) specialist's experts and its reliability was determined through a pilot study which was carried out through the period November 11 ${ }^{\text {th }}, 2017$ to December $20^{\text {th }}, 2017$. Descriptive statistical analysis procedures (frequency, percentage, mean of score) and inferential analysis procedures (chi-Square) were used for the data analysis.

## RESULTS AND DISCUSSION

The results of table (1) show that the majority of age group of the study sample are within (56-60) years $(27 \%)$. The above table also shows that the majority of participants are female ( $55 \%$ ). Also, regarding to the
subjects level of education, the results show that more than half of them No read \& write ( $52 \%$ ). In addition, majority of them was married ( $71 \%$ ). More than of the half of the samples has (1-5) years of diagnosis with hypertension $(53 \%)$. In regarding to the subjects Family history member with hypertension, the majority of the study sample ( $70 \%$ ) have positive history. In the above table the results show that the Sources of information's regarding disease from health care workers $(92 \%)$. Finally, concerning the Employment, the majority of study sample ( $51 \%$ ) was housewife. Table(2) reveals that there is low mean of scores for all items related to Patients practices regarding life style changes except items $(2,5,10)$ which show moderate mean of score and item (9) is of high mean of score, with average mean score of (1.66). Table (3) indicates that there was a significant relationship between patients' practices regarding hypertension and their level of education at ( $\mathrm{P}<0.05$ ), when analyzed by chi-square test. Table (4) indicates that there was a significant relationship between patients' practices regarding hypertension and their Number Years of diagnosis with hypertension. at ( $\mathrm{P}<0.05$ ), when analyzed by chi-square test. Table ( 5 indicates that there was a significant relationship between patients' practices and History of Family member with hypertension. at ( $\mathrm{P}<0.05$ ), when analyzed by chi-square test. The highest proportion ( $27 \%$ ) of them are within age group ( $56-60$ )yrs, and ( $15 \%$ ) within age group ( $60 y r s$ \& above), which indicate that approximately $(42 \%)$ of studied samples are within age group ( 56 \& above)yrs. This result disagrees with Awotidebe, et al., 2014, who showed that the majority $(70 \%)$ of the his study sample were within age group ( 55 \& above)yrs. Through the data analysis distribution of demographic variables, table (1) reveals that the most of the samples are female ( $55 \%$ ). Result of this study disagree to study done by Malik, (2015) which revealed those ( $60 \%$ ) of hypertensive patients were males. Regarding the subject of the educational levels, approximately ( $52 \%$ ) of the study sample are illiteracy. This finding disagree with Seham ,(2015)who found that the ( $10 \%$ ) of sample were illiteracy. Concerning Marital status, the majority of participants ( $71 \%$ ) were married. this result comes with (Seham, 2015) who demonstrate that the (70\%) were married. Regarding Number Years of diagnosis with hypertension, ( $53 \%$ ) of the study sample have ( $1-5$ )yrs since diagnosis. This result disagrees with Awotidebe ,(2014) who found that the ( $20 \%$ ) of hypertensive patient less than 5 years. Concerning History of Family
member with hypertension, ( $70 \%$ ) of the sample havep positive history. This result comes in agreement with (Metintas. 2009), who reported that ( $71 \%$ ) of the study sample have family history. Regarding Sources of information of disease The findings indicate that the ( $92 \%$ ) of study sample have source from health care workers, this result disagree with Ahmed , (2013) who found that $61 \%$ of source of information from television and internet. Finally, the majority of study sample (52) housewife, this result disagree with (Shankar,2014) who found that the majority of his sample was Retired. Table (2) reveals that there is low mean of scores for all items related to Patients practices regarding life style changes except items $(2,5,10)$ which show moderate mean of score and item (9) is of high mean of score, with average mean score of (1.606), this result disagree with Williams and Hopper (2015) who recommended to important life style changes for controlling hypertension. Table (3) indicates that there was a significant relationship
between patients' practices regarding hypertension and their level of education at ( $\mathrm{P}<0.05$ ), when analyzed by chi-square test \& this result agree with Shankar, (2015) who demonstrate that the patient practice increasing with level of education. Table (4) indicates that there was a significant relationship between patients' practices regarding hypertension and their Number Years of diagnosis with hypertension. at ( $\mathrm{P}<0.05$ ), when analyzed by chi-square test. This result agree with Smeltzer et. al, (2010) who demonstrate that the patient practice increase with number of years. Table (5) indicates that there was a significant relationship between patients' practices and History of Family member with hypertension. at ( $\mathrm{P}<0.05$ ), when analyzed by chi-square test. History of family member with hypertension play major role in practice of patient, this result agree with (Susan,2007) who demonstrate that the practice of patient may increase when the family members suffering from the same disease.

Table 1. Distribution of (100) patients by their demographic characteristics

| No. | Variables | ( $\mathrm{n}=100$ ) | F | \% |
| :---: | :---: | :---: | :---: | :---: |
| 1- | Age (year) | 30-35 | 7 | 7.0 |
|  |  | 36-40 | 9 | 9.0 |
|  |  | 41-45 | 9 | 9.0 |
|  |  | 46-50 | 18 | 18.0 |
|  |  | 51-55 | 15 | 15.0 |
|  |  | 56-60 | 27 | 27.0 |
|  |  | 61 \& more | 15 | 15.0 |
|  |  | Total | 100 | 100.0 |
| $2-$ | Gender | Male | 45 | 45.0 |
|  |  | Female | 55 | 55.0 |
|  |  | Total | 100 | 100.0 |

Cont... Table 1. Distribution of (100) patients by their demographic characteristics

| 3- | Level of education | Literacy | 52 | 52.0 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Primary school graduate | 27 | 27.0 |
|  |  | Secondary school graduate | 12 | 12.0 |
|  |  | College graduate | 9 | 9.0 |
|  |  | Total | 100 | 100.0 |
| 4 | Marital status | Single | 2 | 2.0 |
|  |  | Married | 71 | 71.0 |
|  |  | Speared | 25 | 25.0 |
|  |  | Divorced | 2 | 2.0 |
|  |  | Total | 100 | 100.0 |

Table 2. Patients practices regarding life style changes

| No | Items | Always |  | Sometime |  | Never |  | M.S. | Severity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | \% | F | \% | F | \% |  |  |
| 1 | Eating food contain low sodium | 15 | 15.0 | 29 | 29.0 | 56 | 56.0 | 1.59 | Low |
| 2 | Eating food contain low fat | 22 | 22.0 | 23 | 23.0 | 55 | 55.0 | 1.68 | moderate |
| 3 | Avoidance of stress | 1 | 1.0 | 21 | 21.0 | 78 | 78.0 | 1.23 | Low |
| 4 | Exercises practices regularly | 6 | 6.0 | 27 | 27.0 | 67 | 67.0 | 1.39 | Low |
| 5 | Taking enough rest when you feel tired | 22 | 22.0 | 40 | 40.0 | 38 | 38.0 | 1.84 | moderate |
| 6 | Avoidance of smoking | 14 | 14.0 | 14 | 14.0 | 72 | 72.0 | 1.32 | Low |
| 7 | Avoidance of sweetmeats | 6 | 6.0 | 47 | 47.0 | 47 | 47.0 | 1.39 | Low |
| 8 | Check your weight regularly | 0 | 0 | 0 | 0 | 100 | 100 | 1.00 | Low |
| 9 | Increase fruits and vegetables intake | 80 | 80.0 | 18 | 18.0 | 2 | 2.0 | 2.78 | High |
| 10 | Like to eat fish instate of beef | 52 | 52.0 | 26 | 26.0 | 22 | 22.0 | 2.30 | moderate |
| 11 | Eating food that cooking with low cholesterol | 30 | 30.0 | 2 | 2.0 | 68 | 68.0 | 1.62 | Low |
|  | Total |  |  |  |  |  |  | 1.66 | moderate |

Table 3. Association between the patients' practicese and their level of education.


Table 4. Association between the patients' practices and their Number Years of diagnosis with hypertension.

| Number Years of diagnosis with hypertension. low |  |  | patients' knowledge |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Moderate |  |  |
| 1-5 years | F |  | 38 | 15 | 53 |
|  | \% |  | 38.0\% | 15.0\% | 53.0\% |
| 6-10 years | F |  | 23 | 5 | 28 |
|  | \% |  | 23.0\% | 5.0\% | 28.0\% |
| 11 - and more | F |  | 16 | 3 | 19 |
|  | \% |  | 16.0\% | 3.0\% | 19.0\% |
| Total | F |  | 77 | 23 | 100 |
|  | \% |  | 77.0\% | 23.0\% | 100.0\% |
| $\chi^{2}$ obs. $=4.432$ | $\chi^{2}$ crit. $=3.543 \quad \mathrm{df}=2 \quad \mathrm{p}$ value $=0.03$ |  |  | 0.05 |  |

Table 5. Association between the patients' practices and their History of Family member with hypertension

| History of Family member with hypertension low |  |  | patients' practices |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Moderate |  |  |
| yes |  | F | 27 | 43 | 70 |
|  |  | \% | 27.0\% | 43.0\% | 70.0\% |
| No |  | F | 15 | 15 | 30 |
|  |  | \% | 15.0\% | 15.0\% | 30.0\% |
| Total |  | F | 42 | 58 | 100 |
|  |  | \% | 42.0\% | 58.0\% | 100.0\% |
| $\chi^{2}$ obs. $=$ | 2.231 | $\chi^{2}$ crit. $=2.123$ | 2 p value $=0.04 \quad \mathrm{P}<0.05$ |  |  |

## CONCLUSION

The results of the study show that the more than half of the study sample is female. Most of study sample are within age group (56-60)yrs . The majority of study sample had literacy. Majority of patients (71\%) were married. Majority of patients have History of Family member with hypertension ( $70 \%$ ). Thehighest percentage from those who have Sources of information regarding disease from health care worker. The majority of items have low M.S (less than 1.66 ) regarding knowledge and practice. There is a significant relationship between patients' practice regarding hypertension and some socio-demographic characteristics (level of education, Number Years of diagnosis with hypertension, History of Family member with hypertension).

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Conflict of Interest: None to declare.
Ethical Clearance: All experimental protocols were approved under the Adult Nursing Department, College of Nursing, University of Misan, Iraq and all experiments were carried out in accordance with approved guidelines.

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