LEVEL OF AWARENESS ABOUT HYPERTENSION AND FACTORS ASSOCIATED WITH HYPERTENSION AMONG NURSES IN DHQ HOSPITAL SAHIWAL

Aamer Shahzad, Student of BSN(Post RN) Independent College of Nursing, Faisalabad.

ABSTRACT

Introduction: Hypertension is a term used to describe high blood pressure. Flow of blood is based on the beat of which the heart pumps blood. Cardiac pressure does not remain at the same level all the time. This will vary depending on the specific point in time. Hypertension occurs the main arteries of abnormal pressure due to the long duration. **Objective:** The main objectives of this study were to identify the level of awareness among nurses and the factors associated with hypertension. **Study Design:** Descriptive comparative research design was used in this research. **Setting:** This research was conducted in DHQ hospital Sahiwal. **Method:** A questionnaire was designed to be filled by the nurses working in the hospital. The gathered data was processed and analyzed by SPSS to examine their results and to view. **Result:** The sample size of this research was 131 respondents' nurses working in hospital to identify the level of hypertension and factors associated with hypertension. There are different factors like overload, duty shifting, family issues, organizational barriers which caused hypertension.

Keywords: Hypertension, Nurses, Factors associated with hypertension

Correspondence Address

Aamer Shahzad
Student of BSN(Post RN)
Independent College of
Nursing, Faisalabad
aamershahzad14@gmail.com

INTRODUCTION

Hypertension is a term used to describe high blood pressure. Flow of blood is based on the beat of which the heart pumps blood. Cardiac pressure does not remain at the same level all the time. This will vary depending on the specific point in time. Hypertension occurs the main arteries of abnormal pressure due to the long duration. Hypertension is divided into two main categories. These include primary and secondary hypertension. Primary hypertension is also called essential hypertension and affects 95% of people with medical conditions.

The causes of hypertension remain unknown, but such factors as age, high salt intake, low potassium levels, a sedentary lifestyle, stress and genes have been highlighted in hypertension.[1] Alternatively, a disorder or side effect of the drug present due to high blood pressure, high blood pressure is called secondary. These disorders may include those with kidney failure or renal vascular disease. This type of pressure is evident in about 5 to 10% of cases.[2]

As indicated by the National Healthcare Excellence Institute, Hypertension is characterized as continued raised blood pressure of 140 mmHg or higher or potentially blood pressure of 90mmHg or more (National Institute of Health and Care Excellence, 2011). Hypertension is quickly turning into a worldwide general health issue representing over half of mortality from stroke. The worldwide prevalence of hypertension is 40% and in created nations, the prevalence of hypertension is 35%. In Africa, one in each three grown-ups is hypertensive, the prevalence of hypertension is 46% (WHO, 2013). The prevalence of hypertension in Ghana extends between 19.3% (for the populace in provincial regions) to 54.6% for the populace in urban region.

Hypertension is gathered into two crucial classes. These join basic and assistant hypertensions. From the past examinations, different risk aspects related to hypertension, including age, sex, weight, physical movement, family ancestry, Overweight, high sodium admissions and financial status. Solid data about the prevalence and risk factors of hypertension is imperative for understanding the size of the issue, recognizing the risk gatherings and creating compelling preventive systems.[3] Hypertension happening as needs be to a result of another disarray or a response of drug is insinuated as discretionary hypertension. Such disperses may fuse renal disillusionment or renovascular affliction. This sort of blood pressure is evident in around five to 10% of cases.[2]

The risk factors related with hypertension incorporate yet are not restricted to age, physical inertia, high salt admission, family ancestry of hypertension, smoking and liquor utilization.[4] As of late, business related pressure coming about because of high employment requests, low occupation control and poor relationship at work has been ensnared in the etiology of hypertension (Rosenthal and Alter, 2012). Business related pressure has been depicted as one's reaction to difficulties and pressures at work that don't coordinate the person's information and capacities (WHO, 2013). These difficulties could show themselves as poor work structure, job uncertainty, and sporadic move, boisterous clamor, high encompassing temperature, poor supervisory and associate help in the workplace.

Objectives of the research study
- To identify the awareness level of nurses about hypertension
- To identify the associated factors of hypertension

LITERATURE REVIEW
Fauci et al (2008) studied the causes of hypertension. According to them the global pervasiveness of hypertension is assessed to be 30% of adult populace, changing between financially created and creating nations and among country and urban zones of a similar populace. As indicated by a fundamental survey of the global weight of hypertension, the least commonness of hypertension was 3.4% in rustic India and the most noteworthy was 72.5% in Polish ladies. Created nations had pervasiveness going somewhere in the range of 20% and half while creating nations had fundamentally bring down rates, aside from Zimbabwe (urban) which had rates similar to the created nations.

Scholl et al. (2008) studied awareness, prevalence, control and treatment of hypertension. In the United States, the unity, attentiveness, treatment and control of hypertension were 62.9%, 87.3%, 83.2%, and 66.4% respectively in the United States .8 The results showed that overall well-being problems were moderately robust to raise awareness and treatment. Exam population, African Americans. In a general public examination in Turkey, it was observed that 44% were hypertensive and women were higher (46.1%) than men (41.6%). Most hypertensive members (54.5%) were treated with hypertension, but only 24.3% of them had satisfactory blood pressure control.16 This means that over 85% of hypertensive members are still at high risk of developing hypertension-related events and mortality.

Addo et al. (2007) investigated the causes of hypertension in sub-Saharan Africa. According to them, obesity in hypertension was unequivocally observed with age, 16.9% and 84.4% of hypertensive individuals aged 20-29 and 60-69 years of age.16 A similar example was found in Egypt, where the youngest age (25 to 34 years) was hypertension. 7.8% of the population exists, while the prevalence was 59.4% for the 65-74 age group. In any case, overall 26.3% compliance was much lower than in Turkey (44%).

In another study in Egypt, ong et al. (2007) 37.5%, 23.9%, and 8.0%, respectively, of factors causing

hypertension, treatment and control of hypertension. 17 These figures are too small to affect labor and mortality. hypertension-related disorders that extend to creative countries. Thus, it is assumed that general well-being mediated causes care, treatment and control of hypertension.

In the study, Erem et al (2009) studied the treatment and causes of hypertension in France on the basis of gender equality. A survey was conducted to collect data. The data obtained were analyzed by statistical means. The results showed that women were found to be at higher pressure on hypertension than men (69.8% and 51.8%), and their hypertension was better treated and controlled (51.2% and 25.3% versus 30.0% and 9.2%). % of treatment and 9.2%). women and boys separately).

In Mozambique, Mbanya et al. (1998) examined 33.1%, 14.8%, 51.9%, 39.9% of hypertension permeation, treatment and control individually. Pervasiveness was higher in men than in women, but women were higher, care and control. Unlike Mozambique, Cameroon significantly reduced the proportion of men in 16.4% and in urban areas by 12.1%, and 5.4% and 5.9% in rural areas. Age, male sexual orientation, obesity (estimated by BMI), low training dimension, non-smokers, family ancestors from hypertension, regenerative conditions, occupation and equality (in women) were identified as major risk factors for hypertension in Turkey. The ideal control of hypertension is the purpose of pharmacological and non-pharmacological mediation. In the United States, factors associated with high control of disease-related hypertension were those that visited a similar well-being that was seen by a similar human service provider whose blood pressure was checked during the previous six months and went down before 6 to 11 months and reported that you were using lifestyle adjustments.

Yang et al. (2002) studied hypertension factors

between ASIA and China, members who were former smokers, overweight / large, higher wages or their blood pressure, which is estimated to have become known to their hypertension over the last five years before the study. Current smokers, people who eat liquid or less dynamic members, were more aware of their hypertension. In a similar report, treatment of hypertension was directly related to the control of seasoning, sexual orientation of women, stoutness and blood pressure in the first year, but on the other hand, smoking and flow were associated with smoking, fluid use and physical dynamics. Blood pressure control was related to female, previous smoker, obese, and blood pressure assessment over the past year.

An efficient audit by Viswanathan et al., (2012) was done to evaluate the relative adequacy of patient, supplier, frameworks, and approach mediations that plan to improve drug adherence for interminable health conditions in the United States. As indicated by Viswanathan et al. the proof from their examination, which included 62 preliminaries (68 articles) proposes that numerous pathways give chances to improve prescription adherence crosswise over clinical conditions. The survey was keen on how unique mediations, for example, giving rankle bundling, case the executives, collective care (face to face and phone), training (up close and personal with drug specialist), instruction and conduct support (phone, mail or potentially video), instruction and social help, health training, quiet access to therapeutic records, updates, risk correspondence, self-administration, shared or clinical basic leadership, phone directing (with care the board and observing), and virtual centers would affect adherence to meds to treat perpetual infections, for example, diabetes, hyperlipidemia, hypertension, heart disappointment, myocardial dead tissue, asthma, gloom, glaucoma, numerous sclerosis and musculoskeletal ailments.

DATA AND METHODOLOGY

Present research study was descriptive and quantitative in nature, so descriptive. This research was conducted in the DHQ hospital Sahiwal. Basically, this research was conducted to identify the level of hypertension and its associated factors. For this purpose, a questionnaire was developed by using the five likert scale. Data was collected randomly from 131 nurses working in the hospital. Briefly interview survey method was used for the collection of data. The nurse's questionnaires consisted on different questions related to the factors associated with hypertension. Each item has five response options like strongly disagree, disagree, agree, neutral and strongly agree against their perceptions and experiences.

RESULTS AND DISCUSSION

Above table shows the results of reliability statistics of Cronbach's Alpha test for nurse's hypertension level and factors associated with it. The reliability is .773 which is greater than .7

Table 1. Cronbach's Alpha Reliability Statistics	
Cronbach's Alpha Reliability Statistics	No; of Items
.773	23

which shows the reliability.

Above Table shows showed the demographic information about nurses working in DHQ hospital Sahiwal. The results indicated that there

Table 2. Demographic Information			
Demographic Information		**Results**	
		Frequency	**%**
Gender	Male	2	1.5
	Female	129	98.5
Age	18-28	39	39.0
	29-39	51	51.0
	Above 40	10	10.0
Marital Status	single	53	40.5
	Married	78	59.5
Education	General Nursing	104	79.4
	BSN	27	18.6
Personal Income	15000-25000	1	.8
	26000-35000	3	2.3
	36000-45000	11	8.4
	46000-55000	12	9.2
	More than 55000	104	79.4

Working Hours	1-5 hours	10	7.5
	6-10 hours	64	48.9
	Above 10 hours	57	43.5

were 2 male nurses and 1129 female nurses in DHQ hospital Sahiwal. 39 nurses age is between 18-28 years, 51 nurses age is between 29 to 39 years and 10 having more than 40 years.53 nurses single, 58 are married, 104 nurse education having general nursing and 27 having BSN level of education, moreover personal income of nurses between 15000 to 25000 is 1, 26000 to 35000 are 3, 36000 to 45000 are 11, 46000 to 55000 are 12 and whose income is more than 55000 are 104.

The results indicated that 4 respondents strongly disagreed with the given statement that the

Table 3. Awareness about hypertension					
Statements	**Strongly disagree**	**disagree**	**Neutral**	**Agree**	**Strongly agree**
	Freq %	**Freq %**	**Freq %**	**Freq %**	**Freq %**
High blood pressure means the same as "hypertension"	4 3.1	2 1.5	2 1.5	8 6.1	115 87.8
High blood pressure runs in families	0 0	3 2.3	17 13	81 61.8	30 22.9
Blood pressure may go up as a person gets older	0 0	9 6.9	25 19.1	72 55	25 19.1
High blood pressure symptoms are well known for nurses	2 1.5	2 1.5	3 2.3	31 23.7	93 71
High blood pressure can cause a person to have a stroke	0 0	0 0	6 4.6	81 61.8	44 33.6
High blood pressure can cause a person to have a heart attack	0 0	3 2.3	8 6.1	81 61.8	30 22.9
High blood pressure can be treated with medicine	0 0	3 2.3	17 13	73 55.7	47 35.9
A person who has high blood pressure should eat less salt	0 0	3 2.3	6 4.6	69 52.7	53 40.5
A person who has high blood pressure should eat more fruits and vegetables	0 0	0 0	2 1.5	22 16.8	107 81.7
Being overweight can cause high blood pressure	0 0	0 0	2 1.5	80 61.1	49 37.4
Controlling of blood pressure reduces your complications	0 0	0 0	3 2.3	86 65.6	42 32.1
Uncontrolled hypertension can lead to your organ's damage	0 0	0 0	6 4.6	81 61.8	44 33.6

hypertension is high blood pressure problem. 2 respondents disagreed with the given statement; 2 respondents marked the neutral response. 8 agreed with the statement and 115 respondents strongly disagreed with the gives statement. No one respondents strongly disagreed with the given statement that hypertension is a family problem. 3 respondents disagreed with the given statement; 17 respondents marked the neutral response. 81 agreed with the statement and 30 respondents strongly disagreed with the gives statement.9 respondents disagreed with the given statement; 25 respondents marked the neutral response. 72 agreed with the statement and 25 respondents strongly disagreed with the gives statement.2 respondents strongly disagreed with the given statement that nurses well known the hypertension symptoms. 2 respondents disagreed with the given statement; 3 respondents marked the neutral response. 31 agreed with the statement and 93 respondents strongly disagreed with the gives statement. The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure can cause stroke in a person. 0 respondents disagreed with the given statement; 6 respondents marked the neutral response. 81 agreed with the statement and 44 respondents strongly disagreed with the gives statement.

The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure can cause heart attack. 3 respondents disagreed with the given statement; 8 respondents marked the neutral response. 73 agreed with the statement and 47 respondents strongly disagreed with the gives statement.3 respondents disagreed with the given statement; 6 respondents marked the neutral response. 69 agreed with the statement and 53 respondents strongly disagreed with the gives statement. The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure

patient should eat less salt. no respondents disagreed with the given statement; 2 respondents marked the neutral response. 22 agreed with the statement and 107 respondents strongly disagreed with the gives statement.

The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure patient should eat more fruits and vegetables. no respondents disagreed with the given statement; 6 respondents marked the neutral response. 81 agreed with the statement and 44 respondents strongly disagreed with the gives statement.The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure is also caused due to overweight. no respondents disagreed with the given statement; 2 respondents marked the neutral response. 80 agreed with the statement and 49 respondents strongly disagreed with the gives statement.3 respondents marked the neutral response. 86 agreed with the statement and 42 respondents strongly disagreed with the gives statement. The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure can cause organs damage. no respondents disagreed with the given statement; 6 respondents marked the neutral response. 81 agreed with the statement and 44 respondents strongly disagreed with the gives statement.

The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure family history developing the hypertension. no respondents disagreed with the given statement; 10 respondents marked the neutral response. 58 agreed with the statement and 63 respondents strongly disagreed with the gives statement.no one respondents strongly disagreed with the given statement that high blood pressure aging is greater risk factor of hypertension. 2 respondents disagreed with the given statement; 26 respondents marked the neutral

response. 83 agreed with the statement and 20 respondents strongly disagreed with the gives statement.19 respondents marked the neutral response. 72 agreed with the statement and 40 respondents strongly disagreed with the gives statement. No one respondents strongly disagreed with the given statement that high blood pressure is caused by overweight. no respondents disagreed with the given statement; 8 respondents marked the neutral response. 68 agreed with the statement and 55 respondents strongly disagreed with the gives statement. No respondents disagreed with the given statement; 10 respondents marked the neutral response. 78 agreed with the statement and 43 respondents strongly disagreed with the gives statement.1 respondent disagreed with the given statement; 14 respondents marked the neutral response. 87 agreed with the statement and 29 respondents strongly disagreed with the gives statement. No respondent disagreed with the given statement; 11 respondents marked the neutral response. 53 agreed with the statement and 67 respondents strongly disagreed with the gives statement. 9 respondents disagreed with the given statement; 24 respondents marked the neutral response. 83 agreed with the statement and 8 respondents strongly disagreed with the gives statement.

The results indicated that no one respondents strongly disagreed with the given statement that high blood pressure is caused in those who lived in stressed environments. No respondents disagreed with the given statement; 15 respondents marked the neutral response. 83 agreed with the statement and 33 respondents strongly disagreed with the gives statement.no one respondents strongly disagreed with the given statement that high blood pressure is caused due to workloads. 2 respondents disagreed with the given statement; 21 respondents marked the neutral response. 68 agreed with the statement and 40 respondents strongly disagreed with the gives statement. No one respondents strongly disagreed with the

given statement that high blood pressure is side effect of medications. 2 respondents disagreed with the given statement; 72 respondents marked the neutral response. 37 agreed with the statement and 20 respondents strongly disagreed with the gives statement.

CONCLUSION
The study showed cleared results that there were lot of factors involved for hypertension. These factors are salt, tension, workload, duty shifting etc. moreover the results indicated that nurses have knowledge about hypertension as it concerned and affected their performance and patients care. 71% of nurses strongly agreed that High blood pressure symptoms are well known for nurses. More than 70% of nurses agreed / strongly agreed that aging, overweight& eating fatty food are among the factors causing greater risk of HT.

REFERENCES
1.   Chobanian, A. V. (2009). The hypertension paradox—more uncontrolled disease despite improved therapy. *New England Journal of Medicine*, *361*(9), 878-887.

2.   Cunha, A. R., Umbelino, B., Correia, M. L., & Neves, M. F. (2012). Magnesium and vascular changes in hypertension. *International journal of hypertension*, *2012*.

3.   Rasool, A. H. G., Rahman, A. R. A., Yuen, K. H., & Wong, A. R. (2008). Arterial compliance and vitamin E blood levels with a self-emulsifying preparation of tocotrienol rich vitamin E. *Archives of Pharmacal Research*, *31*(9), 1212.

4.   Addo, J., Smeeth, L., & Leon, D. A. (2009). Hypertensive target organ damage in Ghanaian civil servants with hypertension. *PloS one*, *4*(8), e6672.

5.   Addo, J., Agyemang, C., Smeeth, L., Aikins, A. D. G., Adusei, A. K., & Ogedegbe, O. (2012). A review of population-based studies on hypertension in Ghana.

Ghana medical journal, *46*(2), 4-11.

6.   Scholl, U. I., Stölting, G., Nelson-Williams, C., Vichot, A. A., Choi, M., Loring, E., ... & Quack, I. (2015). Recurrent gain of function mutation in calcium channel CACNA1H causes early-onset hypertension with primary aldosteronism. *elife*, *4*, e06315.

7.   Ong, R. (2007). *China's security interests in the 21st century*. Routledge. Yang, H. Y., Yang, S. C., Chen, J. R., Tzeng, Y. H., & Han, B. C. (2004). Soyabean protein hydrolysate prevents the development of hypertension in spontaneously hypertensive rats. *British Journal of Nutrition*, *92*(3), 507-512.

AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Aamer Shahzad		