INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS

ISSN(print): 2643-9840, ISSN(online): 2643-9875

Volume 07 Issue 07 July 2024

DOI: 10.47191/ijmra/v7-i07-27, Impact Factor: 8.22

Page No. 3275-3277

Identify the Blood Pressure Parameters and Associated Risk Factors Among Teaching Faculty

Dr. A.Hepsi Rachel Chellarani Ph.D (N)

Principal, Paavai college of Nursing and Research, Namakkal

ABSTRACT:

Back ground of the study: Identifying the risk factors leading to hypertension can help explain why some populations are at a greater risk for developing hypertension than others. The present study seeks to identify the association between the risk factors of hypertension in 35- to 65-year-old participants in south India .

Methods: This cross-sectional survey was conducted on 100 teaching faculty working at Paavai engineering college, Namakkal we assessed the direct and indirect effects of factors associated with blood pressure.

Results: Socioeconomic status (SES), physical activity, kidney diseases, cardio vascular diseases, diabetes and family history of hypertension had a diverse impact on the blood pressure, directly and (or) indirectly. The standardized total effect of SES, physical activity, kidney diseases, cardio vascular diseases were -0.09 vs. -0.14, -0.04 vs. -0.04, 0.13 vs. 0.13 and 0.24 vs. 0.15 in men and women, respectively. Diabetes had a direct relationship with the blood pressure in women (0.03).

KEYWORDS: Blood pressure, Risk factors, kidney diseases, Diabetes, cardio vascular diseases

INTRODUCTION

Hypertension is one of the most important risk factors for chronic heart diseases The incidence of hypertension has increased over the last few decades; the number of adults with hypertension has increased from 595 million in 1975 to 1.13 billion in 2015. The prevalence of hypertension is predicted to increase 29.2% by 2025 and this increase has largely occurred in low-to middle-income countries The relationship between high blood pressure and cardiovascular disease and its mortality has been addressed in a number of observational studies Hypertension shows an independent relationship with the incidence of several cardiovascular events such as stroke, myocardial infarction, heart failure and peripheral arterial disease as well as kidney disease. This relationship is shown for all ages and in all ethnic groups

Hypertension has a wide range of risk factors including, genetic, behavioral and environmental risks Identifying the risk factors associated with hypertension explains why some populations are at a greater risk for developing hypertension than others. Studies have shown that, after adjustments for age and gender, hypertension are associated with body mass index (BMI), the level of physical activity and genetic factors, smoking, high cholesterol, diabetes mellitus (DM), and other lifestyle factors [Nonetheless, these risk factors have not yet been simultaneously examining the inter correlation of all contributing factors. However, Few studies have been published, addressing the interrelationship between factors associated with mean of blood pressure using structural equation modeling

Statement of pProblem

A study to identify the blood pressure parameters and associated risk factors among teaching faculty working at Paavai engineering college, Namakkal

Objectives

- To identify the blood pressure parameters and associated risk factors among teaching faculty
- To find the association between associated risk factors with their demographic variables

Inclusion criteria

Participants who are

- Willing to participate in the study.

- Available during data collection.
- Working as a teaching faculty

Research methodology

Research Approach and Research Design : A descriptive study design with cross sectional survey approach.

Setting of the study: Paavai engineering college, Namakkal

Population : All the teaching faculty

Sampling Technique: Purpose sampling technique was used for the present study.

Sample size : 100 teaching faculty

Developmental Tool: The tool consistent of items regarding the demographic data and physical assessments.

METHOD OF DATA COLLECTION

Ethical Consideration

- Written permission was obtained from the chairman Paavai group of institution. After the only consent will obtain from each sample prior to data collecting process.After explaining the purpose of the data collection procedure, prior to interview self introduction and purpose of interview was clearly explained to each faculty to obtain maximum co - operation , and consent from them.

Result:

Socioeconomic status (SES), physical activity, kidney diseases, cardio vascular diseases, diabetes and family history of hypertension had a diverse impact on the blood pressure, directly and (or) indirectly. The standardized total effect of SES, physical activity, kidney diseases, cardio vascular diseases were -0.09 vs. -0.14, -0.04 vs. -0.04, 0.13 vs. 0.13 and 0.24 vs. 0.15 in men and women, respectively. Diabetes had a direct relationship with the blood pressure in women (0.03).highly significant association was found between risk factors with their demographic variables

Table 1: Demographic features

	Female	**Males**	***P* value**
Population, n (%)	53(52.6%)	47(47.4%)	
Age (years)	47.53 ± 8.47	46.93 ± 8.10	< 0.001
HTN drug, n(%)			
Yes	14(14.8%)	7(7.5%)	< 0.001
No	36(85.2%)	43(92.5%)	
Diabetes, n(%)			
Yes	12(11.8%)	(8%)	< 0.001
No	48(88.2%)	42(92.0%)	
Family history of hypertension			
None	12(48.1%)	11(42.5%)	
Second degree	13(5%)	12(4.30%)	< 0.001
First degree	25(46.8%)	27(52.9%)	
Blood pressure			
SBP	108.31 ± 17.01	110.73 ± 16.07	< 0.001
DBP	69.90 ± 9.92	71.38 ± 9.59	

Table:2 Association between associated risk factors with their selected demographic variables (n = 100)

S. No.	Demographic Variables	Associated risk factors of blood pressure			
		Df	Table value	?[2]	p-value
Biographic variables					
1	Age in years	15	24.996	186.104	0.000*** S
2	Sex	15	24.996	181.607	0.000***S
3	Family history of hypertension	10	18.307	155.714	0.000*** S

CONCLUSION

With regard to control of high blood pressure, public health interventions must target obesity, lifestyle and other risk related to nutritional status such as hyperlipidemia and hyperglycemia.

RECOMMENDATIONS

- Comparative study can be done between the rural and urban population.
- A similar study can be replicated on a large sample to generalize the findings by using various instruction material.

REFERENCES

1) Amick, B., Brewer, S., Tullar, J., Van Eerd, D., Cole, D., & Tompa, E.(2009). Blood pressure . Examining best practices for prevention. Professional Safety, 54(3), 24-28.
2) Andos, Ono Y et al.(2000). Associated disorders of blood pressure. Occupational Environmental Medicines. 211-6
3) Barabara C.Long, Wilma J.Philpps, Virginia L. Cassmeyer,(1993).Medical Surgical Nursing. A Nursing Process Approach: 3rd Edition. Mosby.Pp164.
4) Surendran P et al. Trans-ancestry meta-analyses identify rare and common variants associated with blood pressure and hypertension. Nat. Genet 48, 1151–1161 (2016)
5) Dominiczak A, Delles C & Padmanabhan S Genomics and Precision Medicine for Clinicians and Scientists in Hypertension. Hypertension 69, e10–e13 (2017)
6) Forouzanfar MH et al. Global Burden of Hypertension and Systolic Blood Pressure of at Least 110 to 115 mm Hg, 1990–2015. JAMA 317, 165 (2017)
7) Ahmed A., Rahman M., Hasan R., et al. Hypertension and associated risk factors in some selected rural areas of Bangladesh. International Journal of Research in Medical Sciences. 2014
8) Mishra C. P., Kumar S. Risk factors of hypertension in a rural area of Varanasi. Indian Journal of Preventive and Social Medicine. 2011;42(1):101–111
9) Kumar M. R., Shankar R., Singh S. Hypertension among the adults in rural Varanasi: a cross-sectional study on prevalence and health seeking behavior. Indian Journal of Preventive and Social Medicine. 2016;47(1-2):78–83
10) Rani R., Mengi V., Gupta R. K., Sharma H. K. Hypertension and its risk factors—a cross sectional study in an urban population of a North Indian District. Public Health Research. 2015;5(3):67–72.