# Assessing Knowledge Regarding Risk Factors of Hypertension among Faculties of Selected School of the Assam Royal Global University, Guwahati, Assam

### Y. Renubala Devi<sup>1</sup>, Chochong Rema Namsa<sup>2</sup>

<sup>1</sup>Vice Principal, Department of Midwifery and Gynecology, The Assam Royal Global University, Royal School of Nursing, Guwahati, Ph. D Scholar, DBU, Punjab

<sup>2</sup>Nursing Tutor, Iqra Academy of Nursing, Nagoan.

**Abstract:** Hypertension is a major contributor to the global disease burden. It poses an important public health challenge to both economically developing and developed countries, including Asia. The prevalence and rate of diagnosis of hypertension in children and adolescents are rising. Hypertension confers the highest attributable risk to deaths from cardiovascular disease and epidemiological data provide convincing evidence that the risk of cardiovascular disease related to blood pressure is graded and continuous. This risk is evident even in childhood, with elevated blood pressure predicting hypertension in adulthood. Methods and Materials: The research approach adopted for the study was a quantitative research approach. A descriptive survey design was used in this study to accomplish the objectives. The study was undertaken on 170 faculties of Royal Global University, using sample random sampling technique. The demographic data and knowledge of the faculties were assessed by using a self - administered structured questionnaire. <u>Results</u>: Study findings revealed that most of the participants, 128 (76%) faculties, had adequate knowledge, 24 (14%) had inadequate knowledge, and 18 (10%) had adequate knowledge of hypertension risk factors. A significant association was found between knowledge of the student and selected demographic variables age ( $x^2$ =12.0964), p<0.05985 and marital status ( $x^2$ =6.0221), p<0.05985 <u>Conclusion</u>: The current study reveals that faculty members had a moderate understanding of the risk factors for hypertension, which should be taken seriously for their own well - being. Effective health education is crucial in the current situation to increase awareness of the risk factors for hypertension; in a similar vein, primary education should place a strong emphasis on routine health examinations and care. They must be made aware of the helpful services that are available.

Keywords: Faculty Knowledge, risk factors, hypertension

#### 1. Introduction

Hypertension is defined as a consistent elevation of arterial pressure above the normal range expected for a particular age group. Globally, the overall prevalence of raised blood pressure in adults aged 25 and over was around 40% in 2008. The number of people with hypertension rose from 600 million in 1980 to nearly 1 billion in 2008. The prevalence is significantly higher in the geriatric population. Worldwide, raised blood pressure is estimated to cause 7.5 million deaths, about 12.8% of the total of all annual deaths. This accounts for 57 million daily 9 disability - adjusted life year) or 3.7% of total DALY. Raised blood pressure is a major risk factor for coronary heart disease and ischemic as well as haemorrhagic stroke. Hypertension is now identified as one of the most significant risk factors for cardiovascular (CV) disease in the United States. Hypertension is characterized by persistently high blood pressure (BP) in the systemic arteries. Hypertension is the force that a person's blood exerts against the walls of their blood vessels. this pressure depends on the resistance of the blood vessels and how hard the heart has to work. Hypertension is diagnosed if the systolic blood pressure is >140mmHg and or the diastolic blood pressure is >90mmHg for two consecutive days.

#### Objectives

1) To assess the knowledge regarding risk factors of hypertension among faculties of Royal Global University.

 To find out the association between the knowledge score and the selected demographic variables.

#### Hypothesis

H1: There will be a significant association between the knowledge regarding risk factors of hypertension and selected demographic variables.

#### Need of the Study

Hypertension is a significant public health concern among the elderly population, with far - reaching consequences on cardiovascular health and overall well - being. A study conducted by Hazarika N C et al. (2018) in Assam revealed a high prevalence of hypertension (63.63%) among elderly individuals, with a significant proportion (26.90%) being unaware of their increased blood pressure. The study's findings underscore the need for targeted public health interventions to address the alarming burden of hypertension in this vulnerable population.

However, there is a paucity of research focusing on the risk factors of hypertension and the effectiveness of lifestyle interventions in managing hypertension. This study aims to bridge this knowledge gap by investigating the risk factors of hypertension. The findings of this study will contribute to the development of evidence - based strategies for hypertension management and control, ultimately improving the health outcomes of young and elderly individuals.

Volume 14 Issue 3, March 2025 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal www.ijsr.net

#### Variable Under Study:

- Research variable: Risk factors for hypertension
- Socio demographic variable: Gender, education, socio economic status, family history of hypertension

# 2. Materials and Methods

A descriptive survey design was adopted for this study to assess knowledge regarding risk factors of hypertension among the faculties of Royal Global University, Guwahati, Assam, 2023. A structured self - administered questionnaire was used to gather the information from 170 faculties of the selected school of the Assam Royal Global University using a simple random sampling technique. The reliability of the tools was tested by using the Split half method with Spearman's Brown Prophecy formula and was found to be reliable at r (correlation coefficient) = 0.72.

#### **Description of tool:**

The instrument consists of three sections:

**Section 1** - The Structured self - administered questionnaire consists of 9 items to assess demographic data.

**Section 2** - The Structured self - administered questionnaire consists of 16 items to assess knowledge regarding risk factors of hypertension. For each correct response, the score is given one; for every wrong response, the score is zero. So, the maximum score was 16.

In this study, the total score was:

Table	1	:
-------	---	---

Knowledge	Score in marks (Percentage)			
Adequate	>13 (81%)			
Moderate adequate	9 - 13 (56 - 81)			
Inadequate	<9 (56%)			

**Section 3**: Association between knowledge regarding risk factors of hypertension among faculties of selected schools of the Assam Royal Global University with the selected demographic variables

#### **Inclusive Criteria**

- Faculty of The Assam Royal Global University
- Who is willing to participate in the study.
- Faculty who are available at the time of data collection.

#### **Exclusive** Criteria

• Faculty who are not willing to participate in the study.

#### **Statistical Analysis**

The collected data were organized, tabulated, analysed and interpreted through graphs and tables. Frequencies, percentages, mean, median, mode, and standard deviation for descriptive analysis and chi - square test for inferential statistics.

# 3. Result

The study was conducted among 170 faculties of the Assam Royal Global University, Guwahati, Assam. Most faculties 66 (39%) were under 31 - 35 years old, 104 (61%) were female, 112 (67%) were Hindu, 143 (84%) were belongs to nuclear family, 122 (72%) were post graduate, 90 (53%) have 1 - 5

years of teaching experiences, 114 (67%) were married, 99 (58%) have the family history of hypertension and 83 (49%) have the source of information from family history and health professional.

Table 2: Mean, standard deviation, frequency, and
percentage distribution of the faculty according to their
grading of knowledge

grading of knowledge					
Score	Frequency	%	Mean	SD	
Adequate knowledge (>13)	24	14			
Moderate knowledge (9 - 13)	128	76	11.17059	2.083624	
Inadequate knowledge (<9)	18	10			



Figure 1: Overall knowledge score of respondents regarding risk factors of hypertension among faculties.

# Results of association between knowledge score and socio - demographic variables:

The above study reveals that there is a significant association between the age ( $x^2=12.0964$ ), p<0.05985 and marital status ( $x^2=6.0221$ ), p<0.05985 of the respondents with the knowledge level on risk factors of hypertension among faculties. Whereas, there is no association between gender, religion, types of family, educational qualification, year of experience, previous history of hypertension and the source of information.

# 4. Discussion

Blood pressure is created by the force of blood pushing against the walls of blood vessels (arteries) as it is pumped by the heart. The higher the pressure, the harder the heart to pump. Hypertension is a serious medical condition and can increase the risk of heart, brain, kidney, and other diseases.

The current study reveals that most participants, 128 (76%), faculties had moderate knowledge, 24 (14%) had adequate knowledge, and 18 (10%) had inadequate knowledge. The study also found that there was a significant association between the age ( $x^2$ =12.0964), p<0.05985 and marital status ( $x^2$ =6.0221), p<0.05985 of the respondents with the knowledge level on risk factors of hypertension among faculties.

Volume 14 Issue 3, March 2025 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal www.ijsr.net

### 5. Conclusion

This study assessed faculty knowledge of hypertension risk factors at Assam Royal Global University, finding that 76% demonstrated adequate understanding, 14% excelled, and 10% lagged. This suggests a solid baseline of awareness, yet targeted education could bridge gaps, empowering faculty to model preventive health for students and beyond. "

### 6. Recommendations

- 1) Workshops and Training Programs: Conduct regular workshops and training programs to educate faculties about hypertension risk factors and prevention strategies.
- Health Education Initiatives: Develop and implement health education initiatives to promote awareness about hypertension risk factors among students and the university community.
- 3) **Collaboration with Healthcare Professionals:** Collaborate with healthcare professionals to provide expert lectures and counselling services on hypertension prevention and management.

# References

- [1] EL Nacional. hypertension arterials a Venezuela es ulna de las mas atlas de Latin American. Caracas, Venezuela, 15 may 2014.
- [2] Available on: https: //www.eluniversal. co m/Vida/140515/ hypertension - arterial - end -Venezuela - es - un a - de - las - mas - atlas - de - Latino an.
- [3] National heart, lung and blood institute, complication de la person arterial altar. Bethesda, estados, Unidos, 2 nov 2015
- [4] Available form: https: //www.nhlbi. ni. h gov /health \_Spanish /health - topics /teams /bhp /at - risk
- [5] E. martinez. la activated fiscal an ell control of hypertension arterial pp 230 - 236 Available on: https: //aprendeenlinea. udea. edu. co/revisits/index phn/article/view file/3782.
- [6] Barraza, C Sarmiento. conocimiento de la entermeted an use población hypertension Colombian pp 399 404.
- [7] Available on: https: //www.crossref. org/ipage? Dol. com
- [8] J. Acosta, Luis glop eg, Pedro Monsalve, et al. hypertension arterial 2015.
- [9] Available on: http: //svcardiologia. org/es/image /discharge's/guise / - htt.2015
- [10] Erem C., Hacihasanoglu A., Kocak M., Deger O., Tobas M. Prevalence of hypertension and hypertension associated risk factors among Turkish adults: Trabzon hypertension study. Journal of Public Health.2009; 31 (1): 47–58. Doi: 10.1093/pub med/fdn078.
- [11] 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; 2 (3): p.925. Doi: 10.5455/2320 - 6012. ijrms20140816.
- [12] 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.

- [13] Abebe S. M., Berhane Y., Worku A., Getachew A. Prevalence and associated factors of hypertension: a cross sectional community - based study in Northwest. Ethiopia. PLoS ONE.2015; 10 (4) Doi: 10.1371/journal. Pone.0125210. e0125210.
- [14] Mendis S. World Health Organisation; 2010. Global status report on high risk of hypertension2010.
- [15] Available on: http://www.who. int/nmh/publications/ncd\_report2010/en/, family history, previous information.

#### Volume 14 Issue 3, March 2025 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal www.ijsr.net