



## IDENTIFICATION OF RISK STATUS AND KNOWLEDGE OF RISK FACTORS RELATED TO HYPERTENSION AMONG WORKERS OF THERMAL POWER PLANT, KOLAGHAT, WEST BENGAL

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**ABSTRACT** Non communicable disease kills 40 million people each year, equivalent to 70 % of all globally. A descriptive study was conducted to identification of risk status and knowledge of risk factors

related to hypertension among workers of thermal power plant, Kolaghat, West Bengal, with the objectives to identify the risk status of workers, to assess the knowledge of risk factors related to hypertension among workers. The study setting was in West Bengal Power Development Co. Ltd. Kolaghat ( WBPDCCL). A valid and reliable data collection tools were used to collect the required data from 100 respondents, selected through non probability convenient sampling technique. The study finding revealed that 84 % were male and 16 % were female, 40 % of the respondent belonged to the age group of 41 – 50 years of age, 82 % were married and 65 % were educated up to graduate level, 57 % had the habit of walking whereas 43 % did not had the habit of daily walking. The collected data also showed that 60 % of the respondents had low risk of developing hypertension among them 08 % respondents were female whereas 52 % were male workers. It also shows that 40 % respondents were having moderate risk of developing hypertension, among them 08 % were female workers and 32 % were male workers. The mean knowledge score was 17.59, median 18 and mean percentage was 70.36 %, depicting that the obtained knowledge score was almost normally distributed. The standard deviation calculated was 2.47, means, the moderated dispersion of the scores. The study concluded that most of the respondents had very good (60%–80%) knowledge about risk of developing hypertension.

### KEYWORDS :

#### Introduction

The good health show is for everybody, not just for people who consider them fit or lead a healthy lifestyle, but also for those who are serious about changing their habits and improving their mind, body, vitality and wellbeing.

An elevated arterial pressure commonly known as hypertension is probably the most important public health problem. It is common asymptomatic, readily detectable and usually easily treatable and often leads to lethal complications if left untreated.

Hypertension is becoming a public health emergency worldwide, especially in developing countries, where studies projected an increase by 80% in the number of hypertension by the year 2025. There is a direct relationship between hypertension and cardiovascular disease (CVD). The huge burden of CVD in India and other sub continent is the consequences of increase population and high prevalence of risk factors.

#### Materials and Methods

##### Study area

The present study was conducted in the West Bengal Power Development Co. Ltd. Kolaghat (WBPDCCL).

##### Research Variables

- Risk Status
- Knowledge of risk factors on hypertension

##### Study Design

Descriptive survey research design.

##### Sample

Workers working in WBPDCCL

##### Sampling Technique

Non probability convenient sampling technique was adopted for the present study.

##### Ethical consideration

The study was conducted after taking permission from ethical committee of respective institute. Formal permission was taken from Principal Govt. College of Nursing, Burdwan, Director Health Services of W.B, respective authority of WBPDCCL. Informed consent was taken from each and every participant for maintenance of confidentiality.

#### Data collection tools and techniques

**Table 1 Data collection tools and techniques**

Tool No.	Name of the tools	Variables to be measured	Techniques/ Methods
I	Structured questionnaire	Demographic Variables	Paper pencil test
II	Structured knowledge questionnaire	Knowledge Level	Paper pencil test
III	Hypertension Self Assessment Tool ( HSAT)	Risk status of hypertension	Paper pencil test

#### Validity

The content validity was obtained by giving the tools to 7 experts. The experts were selected on the basis of experience to related fields and interest in the problem area.

#### Reliability

Reliability testing of the Tool II was done by Split half method and Spearman Brown Prophecy formula and the calculated r was 0.88, considering the knowledge questionnaire to be reliable.

Reliability of the Tool III, HSAT was also computed by test retest method and the calculated r was 0.98, considering the tool to be reliable.

#### Results and interpretations

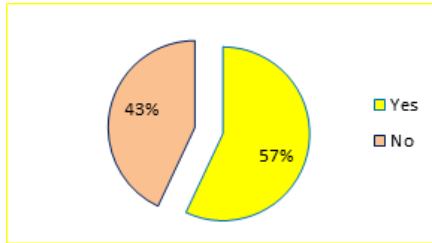
**Table 2 Frequency and percentage showing the Demographic characteristics of the respondents**

n= 100

Variables	Frequency	Percentage (%)
Age ( in years)		
30-40	34	34
41-50	40	40
51-60	26	26
Gender		
Male	84	84
Female	16	16
Marital status		
Single	16	16
Married	82	82
Widow/Widower	02	02

Educational Status		
Under Graduate	13	13
Graduate	65	65
Post graduate and above	22	22
Working experience		
Below 5 years	23	23
5- 10 years	15	15
>10 years	62	62

Data presented in table 2 shows that maximum number that is 40 % of the respondent belonged to the age group of 41 – 50 years of age. It also shows that 84 % were male and 16 % were female. It also depicts that 82 % were married and 65 % were educated up to graduate level. It also shows that 62 % respondents had working experience more than 10 years. n= 100



**Fig. 1** Pie diagram showing the percentage distribution of walking habits of respondents

Data presented in the figure 1 depicts that 57 % had the habit of walking whereas 43 % did not had the habit of daily walking.

**Table 3** Frequency and percentage distribution of risk status among respondents n = 100

Risk Status	Male		Female	
	Frequency	Percentage	Frequency	Percentage
Low Risk	52	52	08	08
Moderate risk	32	32	08	08
High risk	Nil	-	Nil	-

Data presented in table 3 shows that 60 % of the respondents had low risk of developing hypertension among them 08 respondents were female whereas 52 % were male workers.

It also shows that 40 % respondents were having moderate risk of developing hypertension, among them 08 % were female workers and 32 % were male workers.

**Table 4** Mean, median, mean % and standard deviation of knowledge score of the workers regarding knowledge of risk factors of hypertension n = 100

Variables	Mean	Median	Mean %	Standard Deviations
Knowledge Score	17.59	18	70.36	2.47

Data presented in table 4 shows that the mean knowledge score was 17.59, median 18 and mean percentage was 70.36 %, showing that the obtained knowledge score was almost normally distributed with mild skewness.

The standard deviation calculated was 2.47, showing the moderate dispersion of the scores.

**Table 5** Distribution of respondents according to knowledge score n = 100

Gradation of knowledge score	Frequency	Percentage
Excellent (> 80 %)	23	23
Very good (60 %– 80 %)	64	64
Good ( 30 % - 59 %)	13	13
Poor (< 30 %)	Nil	-

Data presented in table 5 shows that 23 % respondents had excellent knowledge about risk factors of hypertension, 64 % had very good knowledge, 13 % had good knowledge and none of the respondents had poor knowledge about risk factors of hypertension.

**Conclusions**

From the above study it can be concluded that majority of the respondent had very good knowledge about risk factors of hypertension. The obtained knowledge score were almost normally

distributed with mild skewness and moderate dispersion. Among the workers 40 % had moderate risk of developing the hypertension.

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