

Effect Of Structure Teaching Program On Knowledge Regarding Preventive Management Of Varicose Vein Among Traffic Police In Selected Police Station Kolkata

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ABSTRACT

A quasi-experimental study entitled to assess the knowledge regarding preventive management of varicose vein among traffic police in selected police station Kolkata. The People who are involved with prolonged sitting or standing during their daily activities are prone to develop the varicose veins. The purpose of the study is to improve the knowledge regarding preventive management of varicose veins among traffic polices. A quasi- experimental study was conducted to find out the effect of structured teaching program (STP) on knowledge regarding the preventive management of varicose veins among traffic Polices, Newtown Kolkata. One group pre-test, post-test design was adopted for the study. Purposive sampling technique was used to select 40 traffic polices employed in selected district (Kolkata) of West Bengal. Structured questionnaire was developed to collect socio- demographic data & structured knowledge questionnaire developed to assess knowledge before and after introduction of Structured Teaching Program (STP). The Structure Teaching Program was developed & validated by seven expertise. Validity and reliability of knowledge questionnaire was established before data collection. The findings revealed that, the mean post-test knowledge score (16.625) was higher than the mean pre-test knowledge score (10.225) with significant difference between pre-test and post-test knowledge score $t = 3.186$, $P < 0.05$. Significant association ($P < 0.05$) were found between Pre-test score of knowledge on preventive management of varicose veins with age, BMI and year of experience among traffic Police. Therefore, the study concluded that STP was highly effective in improving the knowledge of the traffic police employee regarding preventive management of varicose veins.

Keywords: Varicose vein, knowledge, Structure Teaching Program, Traffic Police, Preventive management

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INTRODUCTION

Introduction of the study

India consists of diverse populations with different types of occupations. The list of occupational hazards just seems to be increasing. Varicose vein are one of the occupational hazards disease. The varicose veins are veins with incompetent valve that are enlarged tortuous and thickened most frequently seen in the legs, particularly in the veins close to the skin's surface (superficial veins).

Veins have one way valves that prevent blood from flowing backward. If valves weaken or vein walls stretch, blood can pool and cause the vein to enlarge & twist.

Certain factors such as prolong standing, obesity family history of varicose veins, can increase pressure in the veins, contributing to their enlargement.

The prevalence rate of varicose vein all over the India (2024) are about 25% of total population. It is much more common in adult.

Background of the study Varicose veins are elongated, twisted and sometimes painful veins that have filled with an abnormal collection of blood. Varicose veins are common in superficial veins of the legs which are subjected to high pressure when standing.

Chetan Naik, Priya Jyathi Montero (2025):

Conducted a study selected at Mangalore prevalence of varicose veins among Nurses in a selected tertiary care hospital with sample size 210. The study found that 8.6% of nurses were diagnosed with varicose veins. The majority of participants were female (97.6%) with a normal body mass index (86.7%) prevalent symptoms included worsened leg pain (77.6%), night cramps (62.4%), and throbbing in lower legs (37.6%). Visible spider veins (19.5%) and other symptoms were reported less frequently.^[1]

Lal Shailendra from Naraina Nursing College Kanpur (2024) was conducted a pre experimental study to assess the effectiveness of structured teaching program on knowledge regarding prevention and management of varicose vein among (50) security guard recruitment agencies in Kanpur Nagar. The research method adopted there was pre- experimental one group pre-test post-test design. The analysed results showed that improvement ($t = 29.2$ $P < 0.05$) in the level of knowledge after implementation of structured teaching program.^[2]

Kumari Nisha Vishwakarma from Malawanchan University Journal of Creative Research, volume 12, 7th July (2024) conducted a descriptive study to assess the knowledge & prevalence of varicose vein among traffic police at Ahmedabad with a view to develop an information booklet. Selecting 100 samples

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the analysed results shows that 63.33 % have poor knowledge, 36.63 % have average knowledge. [3]

Sunitha Priya Menzes (2023): Conducted a study selected at Mangaluru assessment of knowledge on prevention of varicose veins among the security guards at a selected security recruitment agency sample size 60. Mean pretest knowledge score was found to be 13.4. there was a slight association between knowledge score and demographic variables such as age, educational status & previous information $T=3.84$. [4]

Karma Charya, Robin; Prajapati, Laxmi; Rai Sangeeta: (2019) Conducted a study selected in Nepal, Risk assessment of varicose veins among the traffic police of Kathmandu metropolitan city, Nepal sample size 200. Out of 200 respondents, 24 (12%) were at risk of varicose veins out of which 22 were male and the rest were female. The results of study suggest that over all risk of varicose vein is 12%, with males accounting for 12.3% and females for 9.5%. In this study the risk of varicose veins is statistically significantly with the family history of varicose vein and associated smoking. [5]

Need for the study

Standing is a daily activity for us but for long hours on a daily basis can cause several body complaints. The study aimed at assess the knowledge regarding preventive management of varicose vein among traffic police. Prevalence of varicose vein increases with age. Millions of workers spend many hours in static position. Prolong standing can lead to tightness in legs and increase health risk. This risk includes the swelling of feet and legs, joint damage, varicose vein, heart and circulatory disorders. Varicose veins can have an impact on the lives of the people who work on their feet specially the security guards, teachers, nursing staffs, traffic police, bar workers, construction workers and bank staff.

Mr. Oshogowtham. A. P, Mrs. Daisy Vincent(2025) conducted a study at selected college of nursing Bangalore. A study to assess the effectiveness of hands on training on knowledge and skill regarding prevention of varicose vein among nursing student. The study result shows that pre-test mean score of knowledge was 9.72 and SD was 2.28 and post-test mean score was 16.26 and SD was 2.27. The mean score of skill was 19.44 with SD 8.51 and post-test mean score was 53.14 with SD 5.74. The calculated paired t-test value of $t=34.793$. [6]

Bains Singh Manmeet and Dr. Latif Abtul (2022) was conducted a study on effect of structured teaching program on knowledge regarding prevention & management of varicose vein at Jaipur. A pre-experimental design and purposive sampling technique was

used to select 60 traffic polices. The analysed result showed that pre-test highest score 91.6%. [7]

Sikder Sunita and Adhikari Rani Uma (2020) was conducted a study on effect of self-instructional module regarding prevention and management of varicose vein among traffic police in selected district of West Bengal. This was a pre-experimental study where purposive sampling technique was used to select 60 traffic Police. The finding revealed that mean pre-test score 6.83 with significant difference between pre-test & post test score ' t ' = 15.51, $P < 0.05$. [8]

Dr. Patel G Punit, Dr. Jani K Dr. Yagnavalkya, Bala V D conducted a study at Ahmedabad city. Study of morbidity pattern in traffic police. Sample size 100. Mean age was 40.22 year with SD 8.1 year. Mean working hours were 7.9 hr with SD 0.6 hr. Mean of working experience was 13.47 year with SD 7.6 year. One third of subjects were obese according BMI 57 % subjects had current or past addiction.

Respiratory (21%) was the most common self reported systemic condition followed by varicose vein (20%) in traffic polices. Most of traffic polices (13%) who belong to 46 to 55 year age group were more prone to develop varicose vein than younger traffic polices (p value = 0.005) the severity of the varicose vein increase when the duration of exposure increases (p value = 0.003). [9]

So from few of these above studies, it is revealed that long standing plays an important role for development of varicose vein. And it has been proved that varicose vein would be prevented if person received appropriate knowledge regarding prevention and management of varicose vein. This urged the investigators to take up the present study with an intention to provide planned teaching program on knowledge regarding preventive management of varicose vein among traffic polices.

Problem statement

Effect of structured teaching programme on knowledge regarding preventive management of varicose vein among traffic police in selected police station, Kolkata.

Objectives of the study

- i) To develop and validate structured teaching programme regarding preventive management of varicose vein.
- ii) To assess the knowledge regarding preventive management of varicose vein before and after administration of structured teaching programme.
- iii) To identify the effect of structured teaching programme in knowledge regarding preventive management of varicose vein in terms of change of score.
- iv) To determine the association between pre-test knowledge score regarding preventive management of varicose vein among traffic police and selected demographic variables.

Assumption

The study assumes that –

1. Traffic police are able to understand English.
2. Traffic police are willing to participate in this study.
3. Traffic police have some knowledge about preventive management of varicose vein.

Hypothesis

H1: - There is a significant difference between the mean pre-test knowledge score & mean post-test knowledge score among traffic police regarding preventive management of varicose vein at 0.05 level of significance.

H2: - There is a significance association between pre-test knowledge score of traffic police regarding preventive management of varicose vein with selected demographic variables at 0.05 level of significance.

Operational Definition

Knowledge:

In this study the knowledge refers to the correct response of the traffic police regarding preventive management of varicose vein as measured by self-prepared knowledge questionnaire.

Effect:In the study, effect refers to the extent to which the structured teaching program help in changing knowledge score on preventive management of varicose vein among traffic police.

Structured teaching program:In the study, structured teaching program refers to the systematically organized and developed Instructions teaching program, designed for traffic police regarding preventive management of varicose vein.

Preventive Management:In this study, it refers to the fact from happening by following measures one can able to avoid the occurrence of varicose vein like avoid long standing, maintaining appropriate body weight, elevating the leg periodically, leg exercise, wearing compression stocking and clothing, elevation of foot after prolong standing and sitting.

Varicose vein:

In the study, it refers to the bluish enlarged or dilated veins that are superficial and most commonly seen in the legs, feet and thighs. They are often painful when standing or walking.

Traffic police:

In this study, it refers to traffic police officer who are in the age group between 25 to 60 years working in selected police station, Kolkata.

Selected Demographic variables:

In this study it refers to the demographic variables which are age, sex, body weight, height, BMI, education, year of experience, family history of varicose vein, and previous source of information among traffic police.

Variables

Independent Variables

Structured teaching program.

Dependent Variables

Knowledge regarding preventive management of varicose vein

Delimitation

The study will be delimited to –

- Traffic police who are on duty on day of data collection.
- Study was done in selected police station only.

REVIEW OF LITERATURE

Review of literature is an essential step in the development of research project. It involves a systematic identification of location, security, and summary of written relevant materials. It enables the researcher to develop an insight into the study and plan for methodology.

The literature review was organized and presented under following sections-

- **Section 1: Literature review related to knowledge regarding preventive management of varicose vein.**
- **Section 2: Literature review related to effect of structure teaching program on knowledge regarding preventive management of varicose vein.**
- **Section 1: Literature review related to knowledge regarding preventive management of**

Sachin kalpal, Sanjay M Peerapur, Anil Kumar J.(2023):Conducted a descriptive study at Hubballi, Dharwad to assess knowledge regarding prevention and management of varicose veins among 50 traffic police. The overall result of the study revealed that 02 (4%) subjects had good knowledge,39(78%)subjects had average knowledge and 09(18%)subjects had poor knowledge on varicose veins and its management. ^[10]

Ramesh Timilsina(2021)Belagavi city: Risk assessment for varicose veins among city police- a cross sectional study was conducted among 150 police and result shows that mean age of participant was 39.28years .The mean standing our per day was found to be 6.69 hours and mean year of service was found to be 9.11 years .It was found that 14.7% of police personnel had varicose vein and 20% of them were in the risk of developing varicose vein. ^[11]

Dr.Faseeh Kak Mohiddina, Dr Midhila Gopinath (2021):Conduct a cross sectional study at Bangaluru, Karnataka,to assessment of risk factors of varicose veins among traffic police personnel with 50 samples out of the 50 participants involved in the study, 60% were found to have long working hours >6hours predisposing them to the development of varicose vein. ^[12]

Abhirup, H.Ramu. Priyanka Kenchetty, Aishwarya

K.Chidananda (2021): Was conducted a prospective study at KVG medical college and hospital Karnataka involved 50 patients admitted in KBG hospital with clinical diagnosis of varicose vein. Most patient was between 41 to 50 years (26%), males (74%), left side involvement in (70%) with pain and most common presenting symptoms (76%). (76%). (76%). [13]

Regan Shakya, Robin Man Karmacharya, (2020): conduct a cross sectional study at Dhulikhel Hospital to assess risk factor of varicose vein among nurses with 181 samples study result shows that 83 (46%) had varicose veins. The mean standing time was 4.28 (0.8) hours/day, mean sitting time was 1.28 (0.6) hours/day mean walking time was 2.37 (0.8) hours/day. In the adjusted model the odds of having varicose veins was 27 times greater with every hour increase in standing time per day (adjusted OR: 27.44, 95% CI 4.04-180.77, P-value < 0.05) [14]

Tara Gaire and Krishna Prasad Pathak (2020): Conducted a prescriptive cross sectional study at Kathmandu Nepal, assess knowledge regarding Prevention of varicose vein among 50 traffic police.

Result shows that majority (93.3%) respondents had not heard about varicose vein. Only 6.7% respondents heard about varicose vein. [15]

Anuja Srivastava, Harsh Rastogi, Nisha Yadav (2025): Conducted a cross-sectional study. Prevalence and occupational determinant of varicose veins among nursing students at New Delhi. Sample size 60 nursing students. Varicose veins were identified in 23 of 60 participants (38%) among those affected, 70% were female and 30% were male. Prolonged standing was significantly associated with the presence of varicose veins, (P < 0.05). [16]

Miss Joyti Vishwas, Mr. Piyush Jain, Mr. Kamalesh Menaria (2025): Conducted a study at Udaipur Dist. to evaluate the effectiveness of a planned teaching program on the prevention of varicose veins among nurses with 69 samples study result shows that the pretest mean score (41.43%) include significantly to 79.27% in the post test. [17]

Janvi Bhadarka, Suneesh P.M., Jeenath Justin Dossk (2023): Conducted a study at selected hospital at Rajkot. A study to evaluate the effectiveness of video assisted teaching program on knowledge regarding prevention and management of varicose veins among staff nurses working in critical care unit. Sample size 40 staff nurses. The pre-test report 02 (0.5%) adequate knowledge 04 (10%) moderately adequate and 34 (85%) inadequate knowledge. It also revealed that the mean

pre-test score is 13.225 and the mean post-test score is 24.52. The mean difference between pre-test and post-test score is 13.80. [18]

Savitri K.B., Raj Rani (2019): Conducted a study at private school, Chennai, A study to assess the effectiveness of structure teaching program on knowledge regarding prevention and management of varicose veins among school teachers sample size 60 teachers. The posttest knowledge score was in the range of (12 – 24) which was higher than the pre-test knowledge score (19.14) also was higher than the mean pre-test knowledge score (09.14). [19]

METHODOLOGY

This chapter includes the strategies to be used to collect and analyze the data accomplish the research objectives and to test the research hypothesis. It deals with the brief description of methodology adopted for the present study which includes the research approach, research design, variables, research setting, population, sample and sample technique as well as data collection tools and procedure, development and description of tools, pilot study and plan for analysis for the present study. Research methodology is a way to solve the research problem systematically. The purpose of this section is to communicate to the research what the investigation did to solve the research problem or to answer questions.

Research approach

A research approach is a plan and procedure for collecting, analyzing, and interpreting data. It is based on the nature of the research problem. Quasi experimental research approach is adopted to collect data from traffic police for this study.

Research design

Research design is the overall blue print of the study under investigation. It provides the framework for the study. Pre-test post-test research design is adopted for this present study.

Research design

O1 → X → O2

Figure 1: Symbolic representation of research design
O1 - pre-test on knowledge regarding preventive management of varicose vein. X - Planned teaching program on preventive management of varicose vein.
O2 - post-test on knowledge of preventive management of varicose vein.

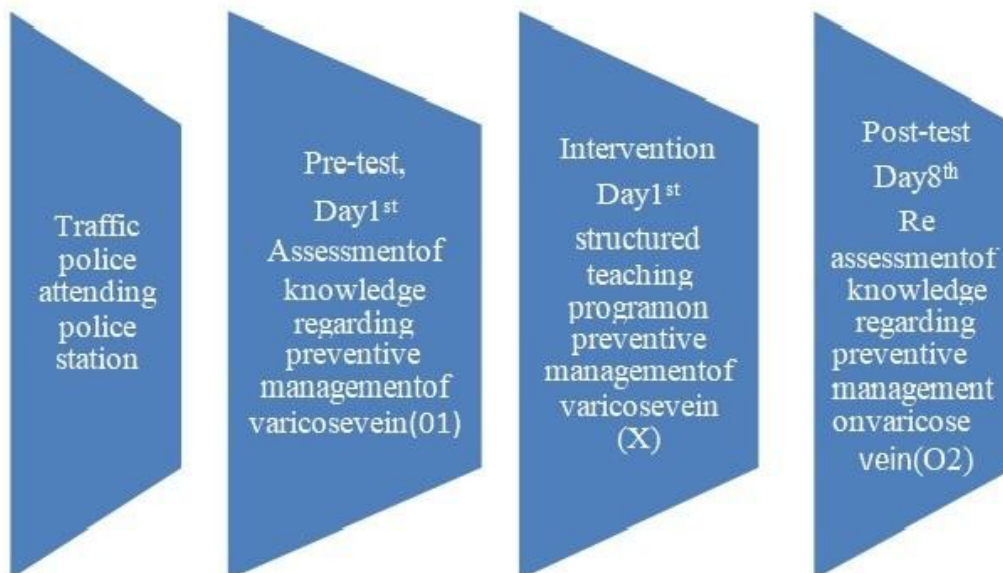


Figure 2: Schematic diagram of research design

Settings of the study

The setting is the location in which a study is conducted. Pilot study was conducted at Eco park sub traffic guard, police station of Kolkata West Bengal and the final study was conducted at Chakpachuria police station of Newtown, Kolkata.

Population

Population is the set of the people or entities to which the results of a research are to be generalized. In the present study population comprises of traffic police of Newtown police station Kolkata, West Bengal.

Sample

Sample is a subset of the population that is selected for a particular study. In the present study samples comprised of the traffic police under age group of 25-60 years of Newtown Police Station, Kolkata, West Bengal.

Smple size

In the present study total 40 traffic polices were selected as sample.

Sampling Technique

The selection of sampling technique mostly depends on

the availability of the sample.

Therefore, the non-probability purposivesampling technique adopted for the present study.

Criteria for selection of sample

Inclusion criteria

1. Traffic Police in the age group of 25-60 years who are present during data collection.
2. Traffic Police who are medically fit.

Exclusion criteria:

1. Traffic police who are unwilling to participate in this study.

Description of data collection tools and techniques

Data collection is the precise, systematic gathering of information relevant to the research purpose, specific objectives, and questions of a study. Considering the objectives of the study the following tools and techniques is developed to collect data. The data collection tools and techniques are presented in table 1.

Table 1 Data collection tools and techniques

Data collection Tool	Variables Measured	Technique
Tool I		
Knowledge questionnaire on preventive management of varicose vein		
SECTION-A Semi structured questionnaire on demographic profile.	Demographic variables	Pen and paper
SECTION-B Structured questionnaire on knowledge regarding preventive management of varicose vein	Knowledge regarding preventive management of varicose veins.	Pen and paper

Development of the tools:

The following steps are adopted by the researcher for the development of the tools for the present study.

Based on the objectives of the study, a structured

questionnaire was developed to assess the demographic profile among traffic police and structured knowledge questionnaire was developed to assess the knowledge regarding preventive

management of varicose vein among traffic police, Newtown, Kolkata.

For the preparation of the tool, the following steps were followed:

1. A review of research and non-research literature on assessment of knowledge regarding preventive management of varicose vein among traffic police was done.
2. Guidance was taken from guide & co-guide.
3. Selection of the items was done, and a blueprint was prepared. Plan for scoring was done.
4. First draft of the tool was prepared and given to the guide for corrections.
5. All the tool was given for validation to seven experts from medical surgical fields.
6. After taking suggestions from the experts, final draft of the tools was prepared.
7. Validity of the tool was established.
8. Pretesting of the tool was done.
9. Reliability of the tool was computed by split half method. Reliability was 0.102.

Description of the tools:

The following tool was used for the collecting data:

Tool- I: Knowledge questionnaire on preventive management of varicose vein Section A Semi structured questionnaire on demographic profile.

The tool is developed to collect demographic data of traffic police. It comprises of demographic variables such as age, gender, marital status, education status, year of experience, duration of duty hours per day, family history of varicose vein, doing regular exercise, height, weight, BMI, previous information regarding preventive management of varicose vein.

Section B Structured questionnaire on knowledge regarding preventive management of varicose vein.

The tools were prepared to assess the knowledge regarding preventive management of varicose vein. The tool consists of 25 items. Each question has four choices, given in specific order, to the traffic police for research purpose. Each correct response carries one mark.

Validity of the tool

For establishing content validity, the demographic proforma and Structured questionnaire were given to seven experts from the field of medical – surgical and vascular specialist for their suggestions. The experts were requested to give their opinion on accuracy, relevancy and appropriateness of the items and corrections were done according to the expert suggestions.

The total percentage of agreement in Section A was 98% and the total percentage of agreement in Section B was 90%.

Pretesting of the tool

Semi structured questionnaire on demographic profile and Structured questionnaire on knowledge regarding

preventive management of varicose vein are tried out by administering those on 10 traffic police to identify the clarity ambiguity of statement, feasibility of the tool.

All items of the tools are clear and well understood by the subjects. The average time taken for teaching was 45 minutes. Ambiguity was not detected.

Reliability of the tool:

In the present study reliability testing has been done by split half method. The scores of reliability was 0.102 which indicates good internal consistency of concepts.

Ethical consideration

Permission was taken from

1. Principal of Sister Nivedita University Nursing Institute, Newtown, Kolkata
2. Officer In-charge of police station of Newtown.
3. Informed consent from sample.

Pilot study

- After obtaining permission from Newtown Police Station pilot study was conducted on 10 traffic police of Eco traffic police station on 30.04.2025.
 - Approximately one hour required for collection data from each traffic police.
 - Introduction was made by the investigator to explain the need of the study. Informed consent was obtained from the subjects.
 - The subjects were selected by non-probable purposive sampling technique.
 - The data collection of the pilot study was done according to the plan of final study.
 - The data collection procedure was terminated by thanking each participant for the participation and cooperation
- Pilot study interpretation: Here the mean was 9.33 and SD was 2.62 and 't' was 4.764

Procedure for data collection for final study:

- The final study was conducted at Newtown Chalkpachuria Police Station from 20.05.2025 to 27.05.2025.
- Formal, administrative permission was taken from the Newtown police station.
- The final study was conducted at Newtown chalkpachuria police station in traffic police department.
- The samples were selected by non-Probability purposive sampling as per inclusion criteria.
- Self-introduction was given and rapport was established with the participants.
- The objectives and procedure of the study was described.
- Informed consent was taken from the participant. Confidentiality of their responses was ensured.
- The data was collected from the respondent by questionnaire through paper pencil method.

▪ The data collection procedure was terminated by thanking each participant for their participation and cooperation

Problem faced in data collection

Traffic polices were cooperative and eager to express their reaction regarding their measured and controlled lifestyle and gave appropriate time. Some problems were faced by the investigator during data collection period as the data collection period was so short, it was hectic for the investigators.

Plan for data analysis

The analysis of the data was based on objectives by using descriptive and inferential statistics.

Summary

This present chapter deals with the methodology adopted for the study and it includes the description of research approach, design, sample and sampling technique, data collection tools and techniques, development and description of the tools, validity and reliability of the tools, pilot study and its findings, data collection procedure for the data analysis.

ANALYSIS AND INTERPRETATION OF DATA

The research data needs to be proceeding and analyzed in some systematic manner. So, that trends and patterns of relationships can be detected and interpreted. This chapter dealt with the analysis and interpretation of data obtained through demographic proforma and Structured questionnaire on knowledge regarding preventive management of varicose vein.

In the present study, data were collected from 40 traffic polices. Both descriptive and inferential statistics were used to analyze, classify and tabulate the data. The analysis and interpretation of the data is done in accordance with the objectives of the study by using appropriate statistics.

Objectives of the study

i) To develop and validate structured teaching

programme regarding preventive management of varicose vein.

- ii) To assess the knowledge regarding preventive management of varicose vein before and after administration of planned teaching programme.
- iii) To identify the effect of structured teaching programme in knowledge regarding preventive management of varicose vein in terms of change of score.
- iv) To determine the association between pre-test knowledge score regarding preventive management of varicose vein among traffic police and selected demographic variables.

Organization of the study findings

Data were organized, tabulated and interpreted using descriptive and inferential statistics and presented in the following section:

Section I: Findings related to demographic characteristics of traffic police. This section deals with the socio demographic characteristics of 40 traffic police in terms of age, marital status, gender, educational status, year of experience, duration of duty hours per day, family history of varicose vein, doing regular exercise, BMI, information regarding varicose vein.

Section II: Findings related to the knowledge of the traffic police. This section deals with the findings related to the knowledge of traffic police regarding preventive management of varicose veins. The data were analysed using statistical methods, which are given below. –

- Frequency and percentage distribution of the prevention of varicose veins according to their knowledge score.
- Mean, median and standard deviation of knowledge score of preventive management of varicose vein.

Section III: Findings related to the association between knowledge score of the traffic police with selected demographic variables.

Section I: Findings related to the demographic data of the traffic police

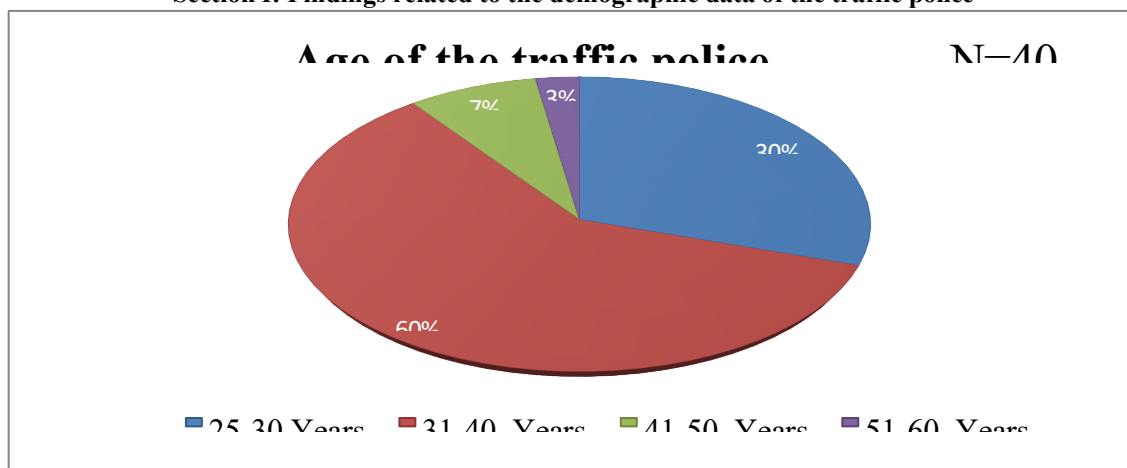


Figure no 3: Percentages distribution of age of traffic police

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Data presented in figure no 3 shows that majority 60% traffic police were belong to the age group of 31-40, and minority 3% from age group of 51-60 years.

TABLE NO 2: FREQUENCY AND PERCENTAGE DISTRIBUTION OF MARITAL STATUS OF TRAFFIC POLICE
N=40

MARITALSTATUS	FRIQUENCY	PERCENTAGE
MARRIED	34	85%
UNMARRIED	06	15%

Data presented in table no 2 indicates that 85% had married and 15% had unmarried.

TABLE NO 3: FREQUENCY AND PERCENTAGE DISTRIBUTION OF GENDER OF TRAFFIC POLICE
N =40

GENDER	FRIQUENCY	PERCENTAGE
MALE	39	97.5%
FEMALE	01	2.5%

Table No 3 indicated that frequency and percentage distribution according to gender of the traffic police

majority97.50% police were male. 02.50% were female.

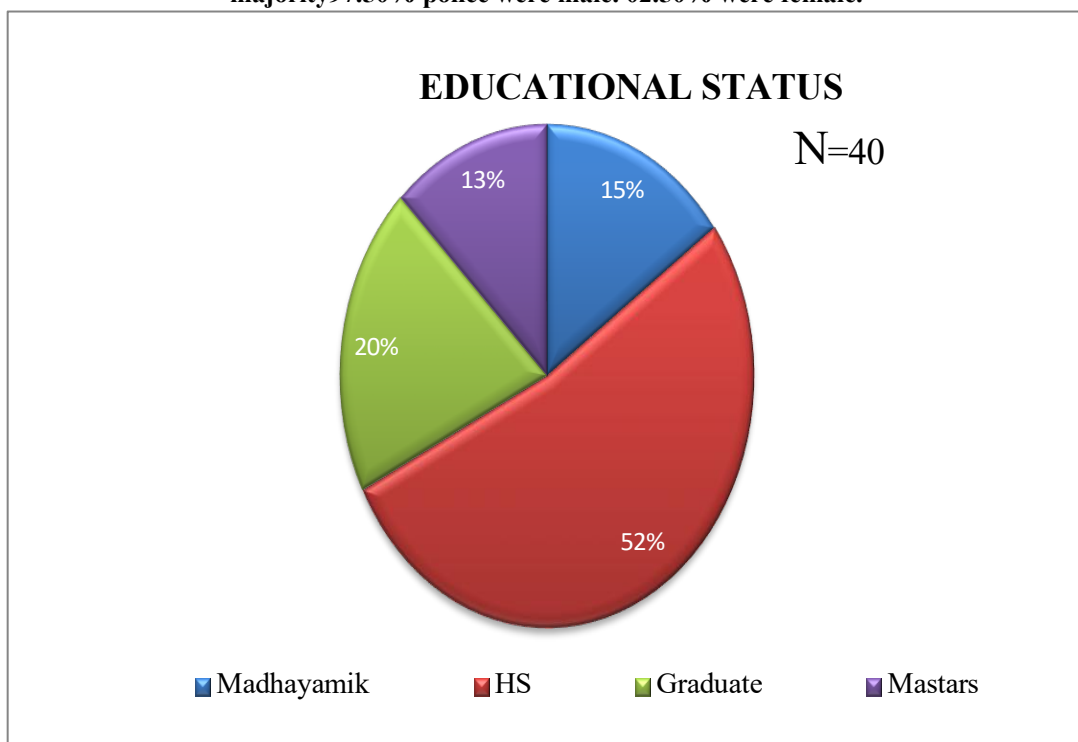


Figure No. 4: Percentage Distribution According To The Educational Qualification Of Traffic Police

Fig. 4: Showing percentage distribution of traffic police according to their educational status. Data presented in figure 4 showed that majority 52% of the traffic police had completed education up to higher secondary level, 20% had completed graduate level, 15% had completed up to secondary and 13% had completed their post-graduation.



FIGURE NO 5: PERCENTAGE DISTRIBUTION ACCORDING TO THE TIME OF JOB EXPERIENCE OF TRAFFIC POLICE

Data presented in figure 5 indicate that the majority of 57.50% traffic police have more years of job experience while 2.50% have less years of experience.

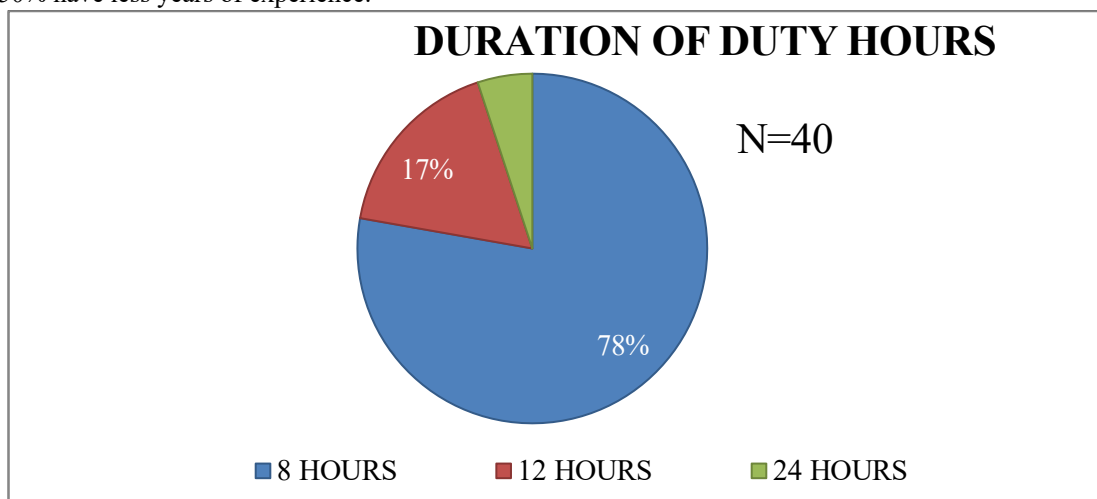


FIGURE NO 6: FREQUENCY AND PERCENTAGE DISTRIBUTION ACCORDING TO THE DURATION OF DUTY HOURS OF TRAFFIC POLICE

Data presented in figure 6 indicates that 78% have performed 8hrs. duty, 17% have performed 12hrs. duty and 5% have performed 24 hrs. duty.

TABLE NO 4: FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE FAMILY HISTORY OF VARICOSE VEIN AMONG TRAFFIC POLICE.

N = 40

Family history	Frequency	Percentage
Yes	03	7.5%

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No

37

92.5%

Data presented here indicates that majority of 92.5% traffic police have no family history and only 7.5% traffic police have the family history of varicose veins.

N=40

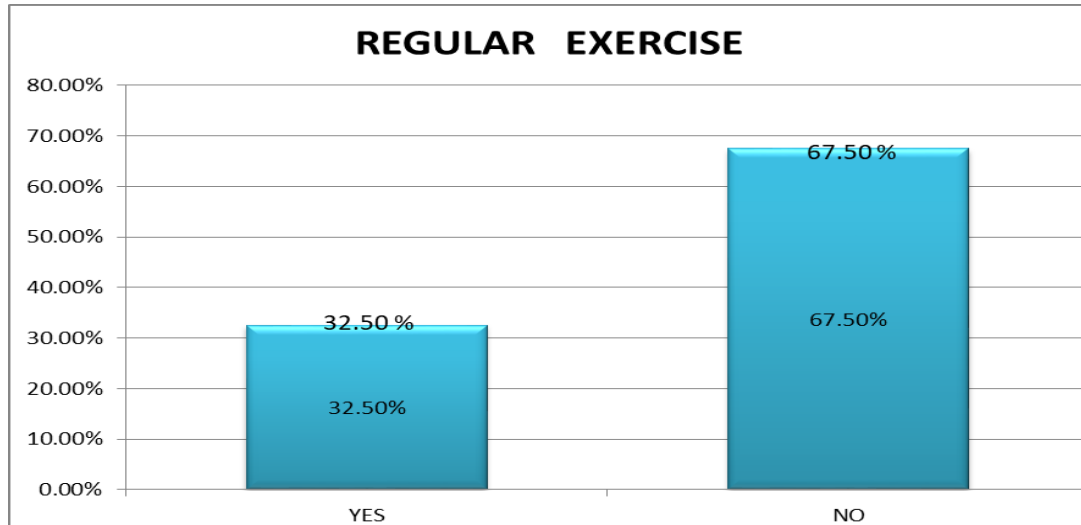


FIGURE: 7 PERCENTAGE DISTRIBUTION ON THE DOING REGULAR EXERCISE AMONG TRAFFIC POLICE

FIGURE 7: Percentage distribution according to the regular exercise of the traffic police. Data in figure no 8 indicated that majority of 67.5% traffic police not doing exercise and 32.5% doing exercise.

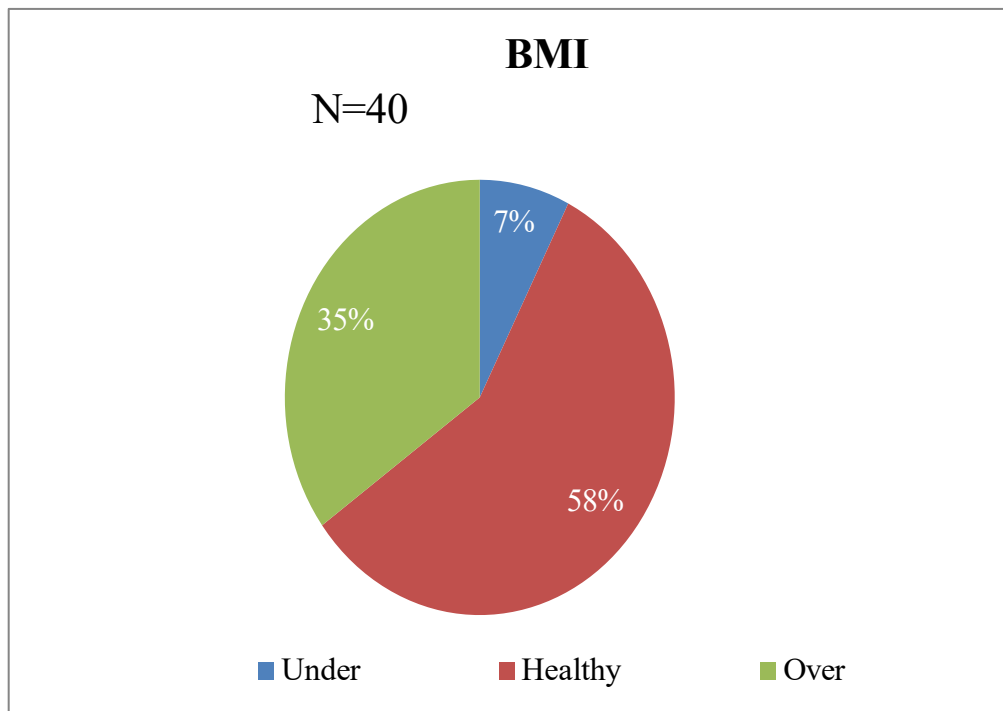


FIGURE 8: PERCENTAGE DISTRIBUTION ACCORDING TO BMI OF TRAFFIC POLICE.

Data presented in figure 8 indicates that 58% traffic police have healthy BMI, 7% traffic police have under BMI and 35% traffic police have over BMI.

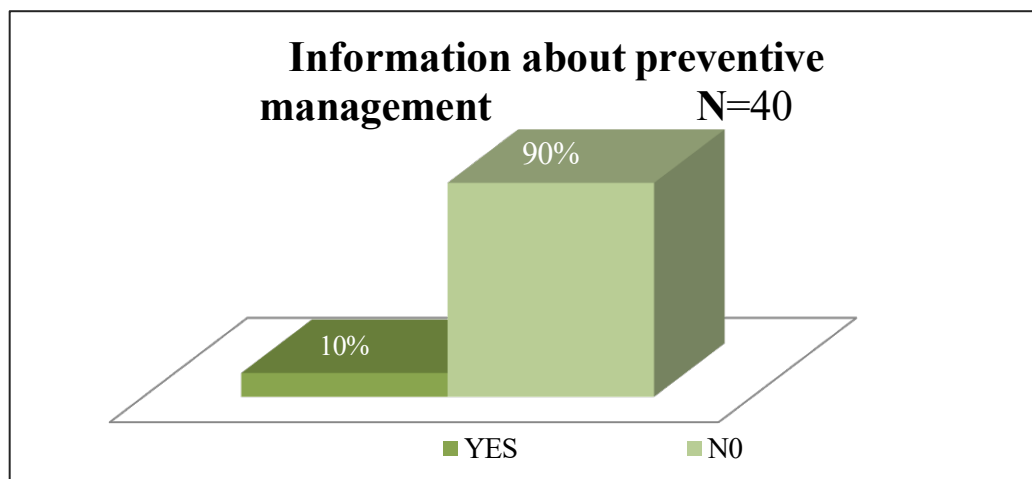


FIG 9: PERCENTAGE DISTRIBUTION ACCORDING TO HAVING INFORMATION OF PREVENTIVE MANAGEMENT OF VARICOSE VEIN

Data presented in figure 9 indicates that 90% traffic police have no information of preventive management of varicose vein.

Section II: Findings related to the knowledge of traffic police regarding preventive management of varicose veins.

Table 5: Mean median and standard deviation and ‘t’ value of pre-test and post- test knowledge scores of traffic police

n = 40

Variable	Mean	Mean Difference	Median	SD	“t” value
Pretest Knowledge	10.225	6.4	10	3	3.186*
Posttest knowledge	16.625	6.4	16.5	3.671	3.186*

df 39,1685,p<0.05

Data presented in table 4 shows that obtained mean difference(6.4) in pre-test and post-test knowledge score among traffic police after structured teaching program is the true difference and not by chance as evidence from their ‘t’ value (3.186)which is greater than the value of ‘t’ at 0.05 level of significance Hence the null hypothesis(H0)is rejected and research hypothesis (H1)is accepted. So it could be concluded that structure teaching program is effective among traffic police regarding varicose vein.

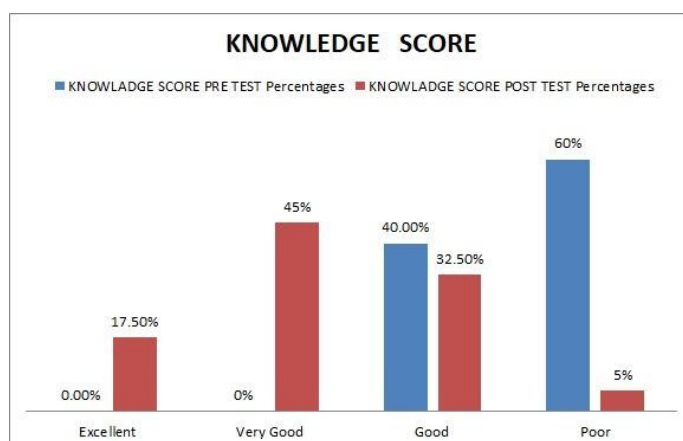


FIGURE10 PERCENTAGE DISTRIBUTION ACCORDING TO KNOWLEDGE SCORE REGARDING PREVENTIVE MANAGEMENT OF VERICOSE VEIN

Above figure no 10 depict that majority of 45% traffic police have very good knowledge, 32.5% have good

knowledge, 17.5% have Excellent knowledge, 5% have poor knowledge.

Section–III Findings related to association between knowledge regarding preventive management of varicose vein with selected demographical variable among traffic police

TABLE NO 6: Association of knowledge score with education, year of experience & BMI of traffic police

SL NO	Demographic variables	>=median	<median	Table Value	Chisquare (χ^2)	df	Significant	
	Age			7.815	9.146	3	Significant**	
	25– 30 Years	5	7					
	31– 40 Years	13	12					
	41– 50 Years	3	0					
	51– 60 Years	0	1					
	Education	1	5	7.815	6.730	3	Not Significant	
	Madhyamika	10	11					
	HS Graduate Master	4	4					
		5	0					
	BMI				5.991	8.006	2	Significant**
	Underweight	2	1					
	Healthy	12	11					
	Over weight	6	8					
	Years of experience			7.815	8.006	2	Significant**	
	1– 10Years	6	9					
	11– 20Years	12	11					
	21– 30 Years	1	0					
	Above 30Years	1	0					

The findings in Table shows that 5 traffic police are age group 25-30 scored median and above median equally 7 traffic police of same group scored below median. Similarly 13 traffic police age group 31-40 scored median and more than median and 11 traffic police of the same group scored below median. And 3 traffic police of age group 41-50 scored median and above median and no one fall same group scored below median. And there is only 1 traffic police age group 51-60 scored below median.

The findings in Table also shows that 1 traffic police who have secondary education scored median and above median equally 5 traffic police of same group scored below median. Similarly 10 traffic police who have higher secondary qualification scored median and above median equally 11 traffic police of same groups scored below median. And 4 traffic police who had graduated agree scored median and above median equally 4 traffic police of same group scored below median. Lastly 5 traffic police who have master degree qualification scored median and above median.

The findings presented in Table shows that 2 (two) traffic police scored median and above median who are under weight, equally 1 traffic police scored below median of same. Similarly 12 traffic police scored median and above median who have healthy BMI, 11 traffic police scored below median of the same group. And 6 traffic police scored median and above median who are overweight and 8 traffic police scored below median of the same group.

The findings presented in Table shows that 6 traffic police scored median and above median who have 1-10 years working experience, 9 traffic police scored below median of the same group. Similarly 12 traffic police

scored median above median who have 11-20 years working experience, 11 traffic police scored below median of same group. And there is only 1 traffic police who scored median and above median who have 21- 30 years of working experience. Equally 1 traffic police scored median and above median who have above 30 years working experience.

Summary

This chapter dealt with the analysis and interpretation of data collected from the traffic police. Descriptive and inferential statistics were computed for the analysis. Chi square test was carried out at 0.05 level of significance for finding the association of knowledge regarding preventive management of varicose vein with demographic variables.

MAJOR FINDINGS OF THE STUDY, DISCUSSION, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter deals with the major findings of the study, discussion in relation to the other studies, conclusion drawn and implications of the study in the field of nursing practice, nursing education, nursing administration and nursing research. The researcher also tries to list certain limitations of the present study and recommendation for future studies.

Major findings of the study

Findings related to demographic characteristics of the traffic police

- 60% of traffic police are from 31 to 40 years of age.
- 52.5% of traffic police are having higher

secondary education.

- 57.5% of traffic police are having healthy BMI.
- 10% are having information regarding the varicose vein.
- 57.5% are having 11 to 20 years of working experience.
- 97.5% of traffic police are female.
- 77.5% are having 8 hours duty schedule in a day.

Findings related to effectiveness of structured teaching program

- According to pre-test and post-test knowledge score, 45% traffic police are having very good knowledge and 32.5% are having good knowledge.
- The total mean knowledge score is 16.625 with SD 3.671.
- Mean pre-test and post-test knowledge score are 10.225 and 16.625 respectively with the mean difference 6.4
- Median of pre-test and post-test knowledge score are 10 and 16.5 respectively
- S.D of pre-test and post-test knowledge score are 3 and 3.671 respectively
- A mean difference 6.4 is a true difference because it is found to be statistically significant, as evidence from "t" value (3.186) much greater than value of t at 0.05 level of significance and suggested the

Findings related to the association between knowledge regarding preventive management of varicose vein and selected variables

- Chi square value showed that there is significant association between knowledge regarding preventive management of varicose vein and age, BMI and years of job experience at the 0.05 level of significance.
- Chi square value (7.47) showed that there is no significant association between knowledge regarding preventive management of varicose vein and education at the 0.05 level of significance.

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