Volume-3, Issue-9, Sept-2014 • ISSN No 2277 - 8160

Research Paper | Medical Science

Study of the Morbidity Pattern in Traffic Police in Ahmedabad City

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ABSTRACT

Purpose: Occupational environment too plays a major role on the health of the exposed. Prolonged standing is the major cause to increase the number of varicose vein in traffic police . The purpose of the study is to create awareness and improve the knowledge regarding prevention of varicose vein.

Methodology: This cross sectional study was conducted from May 2012 to August 2012. The list of Traffic police officers was obtained from Higher authority. The visit was scheduled to various traffic junction. All the available police personnel on the day of visit were examined and the data recorded. Subjects, who gave their consent, were interviewed. Blood pressure was recorded [hypertension was considered to be at Systolic BP (SBP) >140mm Hg or Diastolic B.P (DBP)>90 mm Hg] and varicose veins were checked as they are occupational risks of the police personnel. Height and weight of subjects were measured to calculate the body mass index.

Results: Mean age was 40.22 year with SD 8.1year. Mean working hours were 7.9 hr with SD 0.6 hour. 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 problem (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)

Conclusion & Recommendation : The traffic police personnel should be periodically examined for their health status. Regular education session regarding preventive measure should be conducted. Respiratory problem were more prevalent in Traffic police so Personal protective like mask should be provided.

KEYWORDS : Hypertension, Varicose vein, Traffic Police

Introduction:

The work environment constitutes an important part of man's total environment, so health to a large extent is affected by work conditions. Occupational environment too plays a major role on the health of the exposed. The health hazards get more severe when the duration of exposure increases.[1]

Traffic police have to undergo physical strain in an environment polluted by fumes, exhaust of vehicles, use of blowing horns, blow of dust in the air by a speeding vehicle, etc. Varicose vein is most common in women and in people whose occupations require prolonged standing, teachers, traffic police, bus conductors, machine workers, pregnancy and construction workers.[2] Swelling was the most specific marker for prevalent visible and functional disease.[3] In India varicose vein affect one out of 2 people over age of 50. Varicose veins are more common in women than men.[4] Prolonged standing is the major cause to increase the number of varicose vein in traffic police .[5]

Aims & Objectives:

1) To Study the morbidity patterns of traffic police in Ahmedabad city. 2) To assess their health status and find relative risk for various conditions. 3) To promote healthy behavior among these traffic personnel.

Methodology:

This cross sectional study was conducted from May 2012 to August 2012. The list of Traffic police officers was obtained from Higher authority. The visit was scheduled to various traffic junction. All the available police personnel on the day of visit were examined and the data recorded. Subjects, who gave their consent, were interviewed. Total 100 traffic polices were included in the study. Blood pressure was recorded [hypertension was considered to be at Systolic BP (SBP) >140mm Hg or Diastolic B.P (DBP)>90 mm Hg] and varicose veins were checked as they are occupational risks of the police personnel. Height and weight of subjects were measured to calculate the body mass index.

Analysis:

The data were analysed using SPSS (Version 20.0). Differences in means whereas proportions were compared by the use of Chi-square test. A p value of 0.05 was selected to denote statistical significance.

Results:

Total 100 Traffic polices were interviewed with predesigned questionnaire at their working place. Mean age was 40.22 year with SD 8.1year. Mean working hours were 7.9 hr with SD 0.6 hour. Mean of working experience was 13.47 year with SD 7.6 year. One third of subjects were obese according Body Mass Index. 13% of subjects were hypertensive.

Table 1: Distribution of Traffic police according to addiction

Addiction	Percentage
Tobbaco chewing	28
Smoking	23
Alcohol	12
No addiction	43

Table 2: Health problem statement among Traffic Polices*

Disease	Percentage(%)
Respiratory problem	21
Varicose vein	20
Hypertension	13
Diabetes	7
Coronary heart disease	2
Dryness of skin	2
Abdominal pain	2

Backache	1
Earache	1
Emphysema	1

***Multiple health problems found**

Most of Subjects (82%) had normal blood pressure. 13% of subjects were hypertensive and 5% had high blood pressure stage 1. Subjects above 45 year were more prone to develop HBP (p value 0.003).

Table 3: Distribution of Varicosities among traffic polices

Grade of varicosities	Percentage (%)
Gross varicose vein in both limb	6
Mild varicose vein in Both limb	6
Mild varicose vein in left limb	3
Mild varicose vein in right limb	5
No varicosity	80

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)

Discussion:

In our study, Respiratory problem was the most common self reported systemic condition followed by varicose vein in traffic Polices. Same finding was obsevered in study conducted by CJ Evans.6 Tobbaco chewing was most common form of addiction followed by smoking. Traffic polices above 45 year were prone to develop hypertension.

Varicosities of veins were present in 20% of study subjects. This may be due to prolonged standing hours of police personnel. The severity of the varicose vein increased with the duration of exposure. (p value = 0.003)

Conclusion & Recommendations:

The traffic police personnel should be periodically examined for their health status. Regular education session regarding preventive measure should be conducted. Respiratory problem were more prevalent in Traffic police so Personal protective like mask should be provided.

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