

A Study to Assess the Prevalence and Risk Factors of Varicose Vein among Staff Nurses Working in Selected Hospitals at Kanyakumari District

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Abstract: *The aim of the study was to identify the prevalence and risk factors of varicose vein among staff nurses working in selected hospitals at Kanyakumari district. The research design was descriptive design and the total of 30 samples were used for the study by random sampling technique. Data collection was done by using Phleboscoring questionnaire and demographic variables. Findings revealed that majority of staff nurses (16.8) were not affected with varicose vein. 86.6% of samples were having class 1 risk factors of varicose vein. There was no significant association between the selected demographic variables and risk factors of varicose vein.*

Keywords: Assess, prevalence, Risk factors, Varicose vein, Staff Nurses

1. Introduction

Varicose vein prevalence varies significantly across populations and studies, with rates ranging from 2% to over 60%. Western populations often show higher prevalence, affecting up to 30% of the general population, while India's prevalence is lower but rising. Factors influencing prevalence include gender (more common in women), age (increases with age), genetics, obesity, and lifestyle factors like prolonged standing or pregnancy. (1)

A descriptive prospective study was conducted among 210 nurses with more than 1 year of experience, using purposive sampling. Demographic information and varicose vein symptoms were collected through a self-designed questionnaire. Descriptive statistics were employed for data analysis. 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. A lower prevalence of varicose veins among nurses was identified, possibly due to demographic factors of the study population. (2)

2. Review of Literature

Varicose vein has disturbed humans since ancient days as a chronic disorder. According to the current statistics given by the Express health care, approximately 2.7 million people worldwide suffer with varicose veins. If left untreated and undiagnosed, varicose veins can end up with pooling of blood in the venous system and further complications. (1). A meta-analysis comprising 9 studies revealed that the global prevalence of varicose veins among healthcare workers is 25% (95% CI, 18–31%). Subgroup analyses indicated that the highest prevalence, at 28% (95% CI, 9–47%), was in Middle East and North Africa. Compared with other methods, detection methods that include Doppler ultrasound examination and physical examination using the CEAP classification, along with questionnaire surveys, have both

reported a higher prevalence rate of 28%. Additionally, the prevalence in developing countries, at 29% (95% CI, 19–38%), exceeds that in developed countries. The identified risk factor associated with the development of varicose veins among healthcare workers include female (OR = 3.29, 95%CI, 1.77–6.13), family history (OR = 1.86, 95%CI, 1.53–2.58) and being parous (OR = 1.75, 95%CI, 1.21–2.53). (4)

3. Research Statement

A study to assess the prevalence and risk factors of varicose vein among staff nurses working in selected hospitals at Kanyakumari district.

4. Objectives

- To assess the prevalence of varicose vein among staff nurses.
- To identify the risk factors of varicose vein among staff nurses
- To find out the association between the selected demographic variables and the risk factors of varicose vein among staff nurses

5. Hypothesis

- There was a significant association between the level of varicose vein and risk factors among staff nurses.
- There was a significant association between the risk factors of varicose vein with their selected demographic variables.

6. Research Methodology

Research Approach	Quantitative Approach
Research Design	Descriptive Design
Research Setting	G H Kuzhithurai
Population	Staff nurses, G H Hospital
Target population	BSC (N) & DGNM
Accessible Population	20-60 YRS, fulfills the Inclusion Criteria
Sample Size	30
Sample Technique	Simple Random Sampling

7. Development and Description of Tool

Table 1: The above table represents the frequency and percentage distribution of selected demographic variables among staff nurses (N= 250)

S. No	Socio-Demographic Variables	Frequency	Percentage
1	Age In Years		
	20-30	7	23.3
	31-40	15	50
	41-50	7	23.3
2	51-60	1	3.3
	Sex		
	Male	6	20
3	Female	26	80
	Religion		
	Hindu	8	26.6
	Muslim	0	0
4	Christian	22	73.3
	Type of Family		
	Nuclear Family	20	66.6
5	Joint Family	10	33.3
	Dietary Pattern		
6	Vegetarian	0	0
	Non-Vegetarian	30	100
7	Working Experience		
	< 5 years	9	10
	5-10 years	7	25.3
	11-15 years	9	30
	≥ 15 years	5	16.6
7,	Family H/O Venous Disorders		
	Yes	7	23.3
	No	23	76.6

Table 2: Prevalence of Varicose Vein Among Staff Nurses (N = 250)

Staff Nurses	Prevalence	
250	f	%
	42	16.8

Table 2 Depicts the prevalence of varicose vein among staff nurses

Table 3: Frequency and Percentage Distribution of Samples according to Risk Factors of Varicose Vein among Staff Nurses (N = 30)

Varicose Vein	Risk Factors	
	f	%
Class I	26	86.6
Class II	4	13.3
Class III	0	0

Table 3: Depicts the frequency and percentage distribution of samples according to risk factors of varicose vein.

8. Discussion

1) Prevalence of varicose vein among nurses

(16.8%) showed positive signs in screening tool test, indicates that they were affected with varicose vein.

2) Frequency and percentage distribution of staff nurses with regard to selected demographic variables

With regard to age 7(23.3%) were belongs to 20-30 years, 26(80%) were females and 22(73.3%) were Christians,

20(66.6%) were from nuclear family and 30(100%) were non-vegetarian.

9. Conclusion

Varicose vein is a major problem faced by the nurses. 16.8%(n = 42) staff nurses were found to have signs and symptoms of varicose vein due to prolong sitting and longer duration of working hours.

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