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Research Article

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING VARICOSE VEIN AND ITS MANAGEMENT AMONG ICU NURSES IN SELECTED HOSPITAL OF INDORE CITY

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A B S T R A C T

This study determines the level of knowledge regarding varicose vein and its management among ICU Nurses through multiple choice statements. The study aimed to assess the knowledge regarding varicose vein and its management among ICU Nurses and find out association of knowledge regarding varicose vein among ICU Nurses with selected socio demographic variables. A descriptive study was carried out with 30 ICU Nurses working in ICU of Medanta Hospital, Indore. Multiple choice statements were used to evaluate the knowledge regarding varicose vein. Socio-demographic data was analyzed with descriptive statistics that is frequency and percentage and inferential statistics chi square was used to find out the association between knowledge regarding varicose vein and its management with selected socio demographic variables. The result showed that the mean knowledge score of ICU Nurses was 8.6 and computed standard deviation was 3.817. There was no significant association between knowledge and selected socio demographic variables (age, gender, marital status, education, area of previous working, total working experience, and working hours) at 0.05 level of significance. Thus for this study one can conclude that ICU Nurses working in ICU of Medanta Hospital, Indore have adequate knowledge regarding Varicose vein and there was no significant association between knowledge and selected socio demographic variables(age, gender, marital status, education, area of previous working, total working experience, and working hours).

INTRODUCTION

The term varicose derives from the Latin word 'varix', which means twisted. A varicose vein is usually tortuous and dilated. Under normal circumstances, blood collected from superficial venous capillaries is directed upward and inward via one-way valves into superficial veins[1]. These in turn drain via perforator veins, which pass through muscle fascia into deeper veins buried under the fascia. Leakage in a valve caused retrograde flow back into the vein. Unlike deep veins which are thick-walled and confined by fascia, superficial veins cannot withstand high pressure and eventually become dilated and tortuous. The failure of one valve puts pressure on its neighbors and may result in retrograde flow, and hence varicosity, of the entire local superficial venous network. The superficial veins in the legs are normally involved, as these are most likely to come under hydrostatic pressure due to gravity[2].

Varicose vein are known to be more common among profession such as police men, teachers, nurses, shopkeeper & bus conductors who has to stand for longer time during their duties[3].

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Even though the exact cause of varicose vein is unknown there are some contributory factors responsible for varicose vein. Some of the major risk factors are age, gender, pregnancy, family history and prolonged standing Among these risk factors nurses have the two important risk factors gender & prolonged standing during duty hours[3]. They are at higher risk of developing varicose vein because of their nature of job which requires prolonged standing at patient bedside & this increase their risk of getting varicose vein later in their life. With regards to the gender majority of the nurses are female nationwide & internationally. In UK male to female ratio among nurse is 1 : 10 in Canada it is 1 : 19 while in India it is around 1 : 5. The only way to avoid the varicose vein among nurses is to follow the preventive measures[4].

Varicose vein is the most common chronic condition in north America and western Europe, less common in the Mediterranean, south America and India and even less so in the far East & Africa. According to international statistics 25 percent of women & 18 percent of men in general population are affected by varicose vein. Framingham study reported that 27 percent of the Americans had some form of varicose disease in their legs. It is estimated that 20 to 25 million Americans have varicose vein. In India 10 to 20 percent of the general population eventually develop varicose vein in due course of their life[5].

As a researcher I am selecting ICU Nurses as ICU Nurses spend most of time standing during work hours. So they are prone to get lower limb symptoms like itchiness, cramps, burning sensation, and pain specially when standing. They result superficial swollen veins, which later develop varicose vein so there is a need to gain the knowledge regarding varicose vein3.

Objectives

1. To assess the knowledge regarding varicose vein and its management among ICU Nurses in selected hospital of Indore city.
2. To find out the association of knowledge regarding varicose vein and its management with socio demographic variables among ICU Nurses in selected hospital of Indore city.

METHODOLOGY

Study Approach

In this study Descriptive approach was used.

Research Design

In this study Exploratory survey research design was used.

Setting

The study was conducted at Medanta Hospital, Indore.

Population

The population for this study was ICU Nurses working in Medanta Hospital, Indore.

Sample

ICU Nurses those who are willing to participate in the study

Sample Size

For this study sample size was 30

Reliability and validity of the tool

The reliability of tool was assessed by split half method and the tool was found to be highly reliable. Validity of tool was done by experts.

Data collection procedure

Data collection was done by using multiple choice statements on ICU Nurses. The tool Consists of two sections, first section consist of 7 socio-demographic variables and second section consist of 20 multiple choice statements related to knowledge regarding varicose vein and its management. Information was collected through multiple choice statements. Average time taken for filling statements were 15-20 minutes. The collected data was analyzed by using descriptive and inferential statistics.

RESULTS

Section I Description of socio demographic variables

This section deals with the description of socio demographic variables, assess the knowledge regarding varicose vein and its management among ICU Nurses with selected socio demographic variables.

The data shows that out of 30 ICU Nurses, 9 (30%) belonged to age group of 21-25 years while 12 (40%) belonged to age group of 26-30 years, 9 (30%) belonged to age group of 31 and above.

Out of 30 ICU Nurses 14 (46.66%) were male and 16 (53%) were female. Out of 30 ICU Nurses 16 (53%) were married, 13 (43%) unmarried, separate 1 (3.33%). According to professional qualification 13 (43%) of ICU Nurses were G.N.M, 7 (23%) were Post B.Sc Nursing, 10 (33%) were B.Sc Nursing. And area of previous working out of 30% nursing staff 16 (53%) in ICU, 12 (40%) in ward, 2(6.66%) in OT. On the basis of working experience it was obtained that out of 30 ICU Nurses 2(6.66%) had clinical experience of less than one year while 7 (23.33%) had clinical experience of 1-2 years and 11 (36.66%) had clinical experience of more than 2-3 years and 10(33.33%) had clinical experience 3 years or more. On the basis of and working hours Out of 30 ICU Nurses only 1 (3.33%) had working experience, of 12 hours, 18 (60%) had working hours 6 hours, 11(36.66%) had working hours of 8 hours.

Table 1 Frequency and percentage of socio demographic variables

N=30

Demographic variables	Particular	Frequency	Percentage
Age (in years)	21-25	9	30%
	26-30	12	40%
	31 and above	9	30%
Gender	Male	14	47%
	Female	16	53%
Marital status	Married	16	53%
	Unmarried	13	43%
	Widow	0	0%
	Separate	1	3.33%
Education	G.N.M	13	43%
	Post B.Sc Nursing	7	23%
	B.Sc Nursing	10	33%
	M.Sc Nursing	0	0%
Area of Previous working	ICU	16	53%
	Ward	12	40%
	OT	2	6.66%
Total working experience	Less than 1year	2	6.66%
	1-2Years	7	23.33%
	2-3 years	11	36.66%
	3 years or more	10	33.33%
Working hours	12 hours	1	3.33%
	6 hours	18	60%
	8 hours	11	36.66%

Section II Assessment of knowledge scores of ICU Nurses regarding varicose vein and its management

$H0_1$- There will be no adequate knowledge regarding varicose vein and its management.

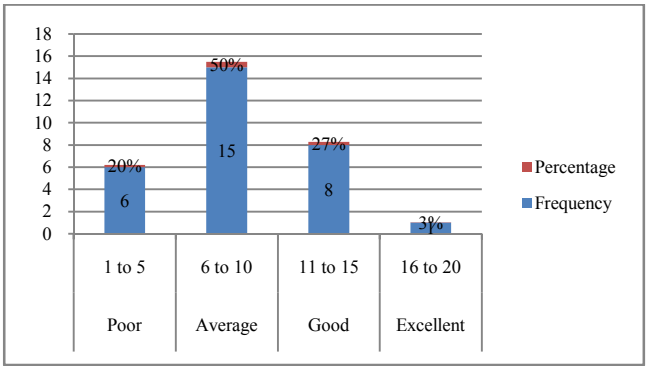

Figure 1 Sub divided bar diagram showing the frequency of percentage of the varicose vein and its management

Table 2 Frequency and percentage of knowledge score of ICU Nurses regarding varicose vein and its management

N=30

Knowledge Score	Frequency	Percentage	Mean	Standard deviation
Poor (1-5)	6	20%	8.6	3.817
Average (6-10)	15	50%		
Good (11-15)	8	27%		
Excellent (16-20)	1	3%		

Majority 20% of the ICU Nurses had poor knowledge, 50% had average knowledge, 27% of ICU Nurses had good knowledge, 3% of ICU Nurses had excellent knowledge regarding varicose vein and its management. Thus the $H0_1$ hypothesis is accepted.

Section III: - Association of knowledge regarding varicose vein and its management selected socio demographic variables.

***$H0_2$*:-** There will be no significant association of the knowledge regarding varicose vein with selected socio demographic variables among ICU Nurses.

N=30

S. No.	Socio-Demographic Variables	X^2 calculated value	Level of significance at 0.05
1.	Age (in years)	6.45	NS
2.	Gender	3.05	NS
3.	Marital status	5.58	NS
4.	Education qualification	6.53	NS
5.	Area of previous working	3.05	NS
6.	Total working Experience	12.7	NS
7.	Working hours	5.06	NS

S*=Significant NS= Not significant

The calculated Chi-square values were more than table value at 0.05 level of significance of selected socio demographic variables. So the null hypothesis ($H0_2$) is accepted which shows that there is no significant association between knowledge scores and selected socio demographic variables (age, gender, marital status, education, area of previous working, total working experience, working hours).

DISCUSSION

The data shows that out of 30 ICU Nurses, 9 (30%) belonged to age group of 21-25 years while 12 (40%) belonged to age group of 26-30 years, 9 (30%) belonged to age group of 31 and above.

Out of 30 ICU Nurses 14 (46.66%) were male and 16 (53%) were female. Out of 30 ICU Nurses 16 (53%) were married, 13 (43%) unmarried, separate 1 (3.33%). According to professional qualification 13 (43%) of ICU Nurses were G.N.M, 7 (23%) were Post B.Sc Nursing, 10 (33%) were B.Sc Nursing. And area of previous working out of 30% nursing staff 16 (53%) in ICU, 12 (40%) in ward, 2(6.66%) in OT. On the basis of working experience it was obtained that out of 30 ICU Nurses 2(6.66%) had clinical experience of less than one year while 7 (23.33%) had clinical experience of 1-2 years and 11 (36.66%) had clinical experience of more than 2-3 years and 10(33.33%) had clinical experience 3 years or more. On the basis of and working hours Out of 30 ICU Nurses only 1 (3.33%) had working experience, of 12 hours, 18 (60%) had working hours 6 hours, 11(36.66%) had working hours of 8 hours.

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Implications

Nursing Practice: - ICU Nurses can use their knowledge regarding varicose vein its prevention and its management.
Nursing Education: - ICU Nurses should be educated about varicose vein as it will be beneficial for ICU Nurses in clinical setting and the varicose vein associated complications can be prevented.
Nursing Research: - It will help the ICU Nurses to expand the scope in practice.

Recommendations

1. A similar study can be done on large sample so that the findings can be generalized.
2. A similar study can be done on nursing students.
3. A study can be conducted to assess the effectiveness of self instructional module on knowledge regarding varicose vein.
4. A study can be conducted to identify occurrence of complications to varicose vein.

CONCLUSION

Nurses are the main pillars of a health care delivery system. They bear the weight and responsibility of the providing care to the clients. There are a lot of problems faced by nurses since they stand most of the working day and it has a great effect on the lower limbs. It can damage the joints, make muscles ache and more over cause a disorder referred as 'varicose veins. According to international statistics 25 percent of women & 18 percent of men in general population are affected by varicose vein. Framingham study reported that 27 percent of the Americans had some form of varicose disease in their legs. It is estimated that 20 to 25 million Americans have varicose vein. In India 10 to 20 percent of the general population eventually develop varicose vein in due course of their life[7.] As a researcher I am selecting ICU Nurses as they ICU Nurses spend most of time standing during work hours. So they are prone to get lower limb symptoms like itchiness, cramps, burning sensation, and pain specially when standing. They result superficial swollen veins, which later develop varicose vein so there is a need to gain the knowledge regarding varicose vein. From this study, I can conclude that ICU Nurses working at Medanta hospital, Indore have adequate knowledge regarding varicose vein and its management.

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