

A Study to Assess the Effectiveness of Structure Teaching Program on Knowledge Regarding Prevention and Management of Varicose veins among School Teachers at Private Schools, Chennai

Savithri K. B¹, Raj Rani²

¹Research Scholar, Himalayan University, Itanagar, Arunachal Pradesh

²Research Supervisor, Himalayan University, Itanagar, Arunachal Pradesh

Corresponding Author: Savithri K. B

ABSTRACT

Introduction: Health is the level of functional or metabolic efficiency of a living being. Millions of people spend larger part of the working day on their feet and numerous hours in inactive positions. The schoolteachers are the most columns of a sound and progressive society. They bear the weight and obligation of the educating and separated from guardians, are the most sources of information and values for children. There is a part of issues confronted by the teachers standing most of the working day harm the joints, make muscles hurt and major condition influencing is 'varicose veins.

Material and Method: An evaluative research approach with pre-experimental design was used. The sampling technique used was non - probability convenient sampling. Data was collected from 60 teachers from 8-09-2019 to 24-09-2019 using self- structured questionnaire. Data was analyzed using descriptive and inferential statistics.

Results: Result of the study indicates that:

- The post-test knowledge score was in the range of (12-24) which was higher than the pre-test knowledge score range (07-19).
- The mean post-test knowledge score (19.14) also was higher than the mean pre-test knowledge score (09.14).

Interpretation and Conclusion: The study findings revealed that structured teaching program was highly effective in improving knowledge of schoolteachers regarding prevention and management of varicose veins.

Key Word: Knowledge, Structured teaching program, school teachers, varicose vein

INTRODUCTION

Health is the level of functional or metabolic efficiency of a living being. Wellbeing is profoundly identified with way of life. Perfect wellbeing will be that as it may, consistently stay a hallucination, since everything in our life is liable to change. Wellbeing might be portrayed as a probability or the capacity of an individual or a social gathering to alter himself or itself persistently, even with changing states of life not just, so as to work better in the present yet in addition to get ready for

what's to come. Also today expanding accentuation is put on wellbeing, wellbeing advancement, health and self consideration. (1)

Ailments are increasingly normal on the earth; the individual will discover the reason for infections furthermore, attempt to make quick move to forestall the illnesses. Prompt mindfulness is the most ideal approach to spare the life effectively. Varicose veins are one of the boss preventable maladies which are related with veins. It is a genuine infection, which

presents risk to life of patient when compelling also, proficient measures are not taken. ⁽²⁾

Varicose veins are regular in the shallow veins of the legs which are dependent upon high pressure when standing. Amassing of increasingly more venous blood in the shallow venous framework makes the shallow veins enlarged and convoluted. This state of expanded and convoluted veins in the leg because of harmed an incentive between the profound and shallow venous framework is called varicose veins. ⁽³⁾

Varicose veins have been perceived as constant issue since antiquated occasions. Hippocrates talked about them 2500 years prior. With expanding populace, expanded life expectancy and changes in way of life and occupation it includes in any event 1 out of 5 in the world. It is in evolved nations where clothing uncovers more than it disguises; patients turn up for treatment in view of restorative records. However, in our Indian situation it is difficulties not beautifiers reasons carry patient to specialist that is motivation behind why, however normal, varicose veins remain ice sheet phenomenon. ⁽⁴⁾

A cross sectional investigation was directed among educators in 12 schools in Ahmedabad which uncovered that 77% of the 138 instructors experienced varicosity or expansion of the veins of legs. Among these 107 almost 84 individuals experienced bug veins, the principal phase of varicose veins. While 23 had seriously settled varicose veins which implies they experienced serious throbs, expanding and weight in the legs. This examination inferred that varicose veins is a condition that makes strolling furthermore, standing incredibly troublesome and excruciating and whenever treated right on time at the phase of creepy crawly veins they are preventable. ⁽⁵⁾

BACKGROUND OF THE STUDY

A cross sectional study was done on 100 teachers in Thiruvananthapuram to survey the commonness, hazard factors and

the difficulties of varicose veins. The examination indicated the pervasiveness of varicose vein was 19% among the teachers. Among those influenced with varicose veins, 89.5% had history of representing long term. Proportion of 26.3% had confusions from this illness. In this way end was made that representing extended periods of time was a significant hazard factor as looked at to other realized hazard factors. Thus it is particularly fundamental to forestall the event of these hazard factors. ⁽⁶⁾

A study was conducted to assess the adequacy of Self Instructional Module (SIM) on the knowledge in regards to anticipation and the executives of varicose veins among educators in schools of Udupi District. An evaluatory approach with pre-exploratory structure was utilized for the examination for 60 educators, chose by purposive testing strategy. Pre test was directed by overseeing a structures information survey followed SIM was organization and on the seventh day post test was led. The mean post test information score (17.82) was obviously higher than the mean pre test information score (13.9). Processed 't' value ($t_{59} = 12, p < 0.05$) indicated a noteworthy contrast proposing that the self instructional module was viable in expanding the information on instructors with respect to avoidance and the executives of varicose veins. ⁽⁷⁾

OBJECTIVES

1. To assess the pretest and post-test level of knowledge regarding prevention & management of varicose vein among schoolteachers
2. To evaluate the effectiveness of structured teaching programme on knowledge regarding prevention & management of varicose vein among schoolteachers
3. To associate of post test level of knowledge on varicose vein among schoolteachers with their selected demographic variables.

HYPOTHESIS

1. There will be significant difference between the pretest & posttest knowledge regarding prevention & management of varicose vein among schoolteachers
2. There will be significant association between the level of knowledge regarding prevention & management of varicose vein among schoolteachers with the selected demographic variables.

MATERIAL & METHODS

Evaluative research approach was used. Pre experimental research design (one

group pre-test post-test) was adopted at schools in Chennai. The study was confined to sixty schoolteachers who fulfilled the inclusion criteria. On the first day socio-demographic characteristics of the participants were collected and pre-test was done by using structured knowledge questionnaire through interview schedule and then administered structured teaching program for one hour in the form of intervention. After fifth day of intervention, the knowledge of participants was assessed by using same structured knowledge questionnaire.

Section A: Analysis of socio-demographic variables of participants

Table 1: Frequency and percentage distribution regarding prevention & management of varicose vein among schoolteachers N=60

S.No.	Demographic Variables	Frequency	Percentage
1	Age in Years		
	20-30	19	32%
	31-40	17	28%
	41-50	18	30%
	>51	6	10%
2	Gender		
	Male	22	37%
	Female	38	63%
3	Educational qualification		
	Graduate	44	73%
	Post-graduate	16	27%
4	Marital Status		
	Married	21	35%
	Unmarried	17	28%
	Widow/widower	14	23%
	Divorced	8	13%
5	Source of Information		
	Family/ Friends/ relatives	23	38%
	Mass Media	15	25%
	Health professional	18	30%
	No information	4	9%
6	Personal Habits		
	Alcohol	9	14%
	Smoking	2	3%
	Both	6	10%
	None	43	73%
7	Diet		
	Mixed	46	77%
	Vegetarian	24	23%
8	Body weight		
	Normal weight	20	33%
	Over weight	18	30%
	Obese	22	37%
9	Years of experience in teaching		
	<5	8	13%
	6-10	14	23%
	11-15	25	42%
	>15	13	22%
10	Position Used while taking Class		
	Sitting	22	37%
	Standing	18	30%
	Walking	20	33%

The above table shows the frequency and percentage distribution of the demographic variables of the respondents.

Based on their age, out of 60 teachers 19(32%) of them were 20-30years, 17(28%) of them were 31-40years, 18(30%) of them

were 41-50years and only 6(10%) of them were of >51years.

Regarding the gender, 22(37%) of them were males and 38(63%) of them were females. Considering the educational qualification,44(73%) of them were graduates, 8(13.33%) and 16(27%) of them were postgraduates.

Regarding the marital status 21(35%) of them were married, 17(28%) of them were unmarried, 14(23%) of them were widow/widower, and 8(13%) of them were divorced.

Considering the source of information, out of 60 cleints, 23(38%) of them had the information from family/friend/relatives, 15(25%)of them had the information from mass media, 18(30%) from health professional and only 4(9%) had no information

Considering the personal habits, 8(14%) of them were having the habit of consuming alcohol and2 (3%) of them were having habit of smoking,6 (10%) of them were having the habit of both alcoholism and smoking and43 (73%) of them were did not have any bad habits.

Considering the Diet 46(77%) were having Mixed diet, and 24(23%) were vegetarian. Regarding the body weight distribution, 20(33%) of them had normal weight, 18(30%) of them were over weight and 22(37%) of them were obesed based on body masse index.

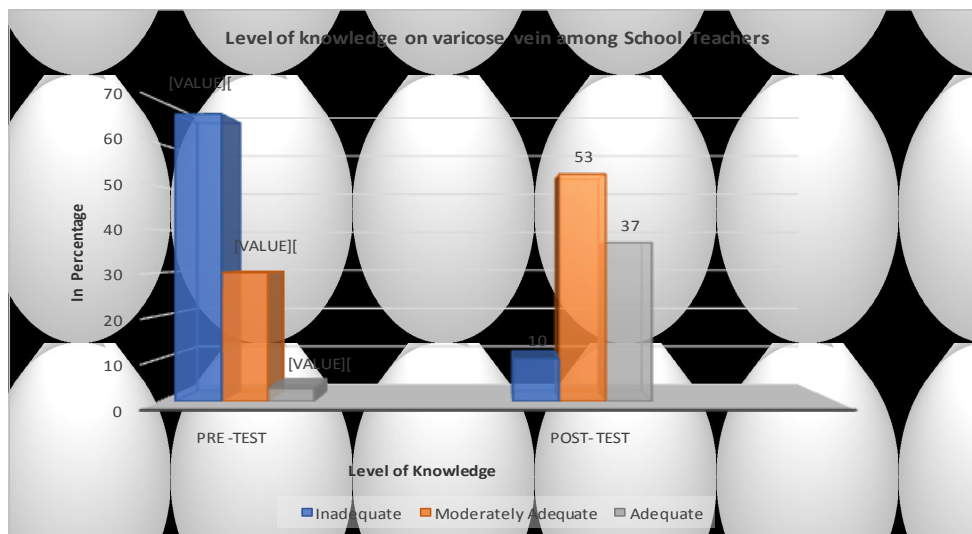
Considering the experience in teaching, 13(22%) of them had >15years, 14(23%) were had inbetween 6 and 10 years, 25(42%) of them had 11-15years of experience, and only 8(13%) were had <5years of experience. Regarding positions used while taking class 22(37%)were using sitting positons, 18(30%) were using standing position, and 20(33%) of them were using walking.

Section-B

Table 2: Frequency and percentage distribution of knowledge of schoolteachers regarding prevention and management of varicose veins N=60

Level of knowledge	Pre-test		Post-test	
	F	%	F	%
Inadequate (<50%)	40	67	6	10
Moderately Adequate(50-75%)	18	30	32	53
Adequate (>75%)	2	3	22	37

Data in Table 2 shows that prior to the administration of structured teaching programme, (67%) of the sample had inadequate knowledge (score: <50%) regarding prevention & management of varicose veins. while moderately adequate (score: 50-75%) was observed in 30% of the sample and 03% have adequate knowledge (score >75%).In the post-test there was marked improvement in the knowledge of the sample with majority (37%) gained adequate knowledge. And (53%) gained moderately adequate knowledge, and 10% had inadequate knowledge.



Bar diagram showing percentage distribution of the sample according to the pre-test and posttest level of knowledge.

TABLE-3 Range, mean, median and standard deviation of pre- and post-test knowledge scores of schoolteachers

	Obtained Range	Mean	S. D.
Pre-test	07-19	09.84	1.60
Post-test	12-24	19.14	2.00

The data presented in Table 3 shows that the post-test knowledge score was in the range of (12-24) which was higher than the pre-test knowledge score range (07-19). The data also depicts that the mean post-test knowledge score (19.14±2.00) was apparently higher than that of the mean pre-test (09.84±1.60) knowledge score.

SECTION -C

Effectiveness of Structured Teaching Programme on knowledge of school teachers regarding prevention and management of varicose veins

To find the significant difference between the mean pre-test and post-test knowledge score, paired 't' test was used. In order to test the statistical significance between the mean pre-test and post-test knowledge score.

TABLE – 4 Mean, Mean Difference, S.D and ‘t’ value of pre-test and post- test knowledge scores

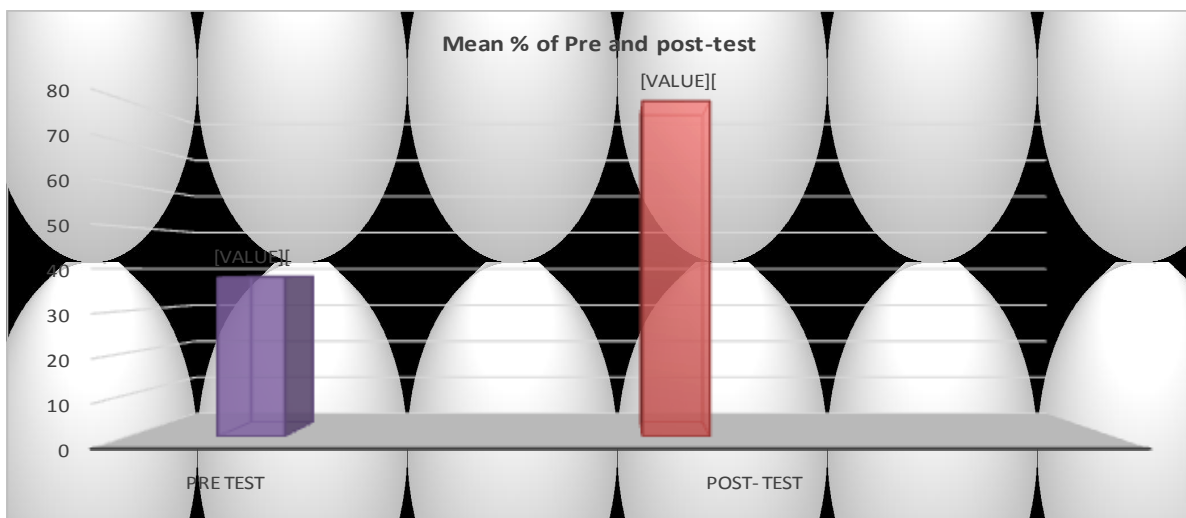
Parameter	Mean	SD	Mean Difference	't' Value
Pre-test	09.11	1.60	10.03	28.84
Post-test	19.14	2.00		

The data presented in Table 4 shows that the mean post-test knowledge score (19.14±2.00) was higher than the mean pre-test knowledge score (09.11±1.60). The calculated 't' value (28.84) was greater than the table value (t = 3.5) at 0.001 level of significance. Hypothesis H1 was accepted. Hence it can be inferred that the structured teaching programme was effective in increasing the knowledge of school teachers regarding prevention and management of varicose veins.

TABLE – 5 Comparison Of Mean Percentage Of Pretest And Post-Test Knowledge Score. N = 60

TYPE OF TEST	KNOWLEDGE REGARDIN PREVENTION AND MANAGEMENT VARICOSE VEINS	
	MEAN	MEAN%
Pre-test	09.11	37.95
Post-test	19.14	79.75
Mean difference percentage	10.03	34.33

Bar Diagram showing the effectiveness of structured teaching program on knowledge percentage



SECTION D:

This section deals with the findings related to the association between post-test knowledge score and selected demographic variables. The chi-square test was used to determine the association between the post-test knowledge score and selected demographic variables. N = 60

TABLE -6 Association between the Post-Test Knowledge Score and Selected Demographic Variables.

S.no	Demographic variables	Level of knowledge						Chi square χ^2 distribution
		Inadequate		Moderate		Adequate		
		No	%	No	%	no	%	
1.	Age in years a)20-30 b)31-40 c)41-50 d)>51	1 - 1 4	2% - 2% 7%	10 11 3 8	17% 18% 5% 13%	9 5 2 6	15% 8% 3% 1%	$\chi^2=4.536$ df=6 (NS)
2.	Education a)Graduate b) Postgraduate	4 2	7% 3%	21 11	35% 18%	17 5	28% 8%	$\chi^2=7.958$ df=2 (S)
3.	Marital Status a)Married b)Unmarried c)Widow/widower d) Divorced	6 - - -	10% - - -	21 2 7 1	35% 3% 12% 2%	16% - 7% -	27% - 12% -	$\chi^2=20.618$ df=6 (S)
4.	Source of information a)Family/friends b) Mass Media c)Health professional d) No information	2 2 1 1	3% 3% 2% 2%	5 8 12 6	8% 13% 20% 10%	1 5 13 4	2% 8% 22% 7%	$\chi^2=5.689$ df=6 (NS)
5.	Personal Habits a) Alcoholism b)Smoking c)Both a & b d)None	- - 6 -	- - 10% -	1 5 21 3	2% 8% 35% 5%	1 3 15 5	2% 5% 25% 8%	$\chi^2=15.792$ df=6 (S)
6.	Diet a) Vegetarian b) Mixed	3 3	5% 5%	20 11	33% 18%	14 9	23% 15%	$\chi^2=7.148$ df=2 (S)
7.	BMI a)Normal b)over weight c)Obese	5 1 -	85% 2% -	23 5 3	38% 85% 5%	17 4 2	28% 7% 3%	$\chi^2=25.86$ df=4 (S)
8.	Years of experience a) <5 b)6-10 c)11-15	2 2 2	3% 3% 3%	11 13 7	18% 22% 12%	14 3 6	23% 5% 10%	$\chi^2=8.21$ df=4 (NS)

Note: S- Significant, NS- Non significant

The above table 6 shows that association of post test level of knowledge on varicose veins among schoolteachers with the selected demographic variables was done using chi square test, It was found that there is a significant association between the post test level of knowledge and demographic variables such education, marital status, personal habits, diet and BMI, at 5% significance and does not shown any significant with other demographic variables. Hence the research hypothesis H2 states that there is a significant association between the level of knowledge and demographic variables is partially accepted

Summary

This chapter has dealt with the analysis and interpretation of the data Collected from 60 schoolteachers. Inferential statistics were used to analyze

the data. The analysis has been organized and presented under various sections like description of demographic variables, description of pre-test and post-test knowledge score, comparison of pre-test and post-test knowledge score, and association between the post-test knowledge score and selected demographic variables.

CONCLUSION

The study was conducted to evaluate the effectiveness of Structured Teaching Program (STP) on knowledge regarding prevention & management of varicose veins among schoolteachers in Chennai. In the present study 60 schoolteachers were selected using non- probability convenient sampling method. The post-test knowledge score was in the range of (12-24) which was higher than the pre-test knowledge score range (07-19). The mean post-test knowledge score (19.14) also was higher

than the mean pre-test knowledge score (09.14).

The comparison of pre-test and post-test knowledge score showed that there was a significant gain in knowledge scores of schoolteachers after STP at <0.5 level of significance. This shows that structured teaching program was effective.

Recommendation

The Present study was conduct on a more extensive study on large sample is recommended for wider generalization. .

1. A experimental study can be conducted with control group for comparison
2. A similar study can be conducted for other workers requires long standing.

Limitation

1. The following points were beyond the control of the investigator

While collecting data some of them were on vacation.

ACKNOWLEDGEMENT

I express my gratitude and thanks towards all who have directly or indirectly helped me to complete this study and their support in each major step of the study. Source of funding: The authors did not receive any financial support from any third party related to the submitted work.

Conflict of interest: The authors had no relationship/condition/ circumstances that present a potential conflict of interest.

Ethical Standards

This study was conducted after getting approval from the Institutional Ethics Committee and after obtaining written consents from all subjects

REFERENCES

1. Wright, K, Frey R. Varicose veins: The Gale Encyclopedia of Alternate Medicine. [online]. [updated 2006 Feb 2; cited 2012]. Available from: URL: <http://www.ecyclopedia.com>.
2. Brunner and Suddarth's (2014). Text book of Medical Surgical Nursing. Volume I. 13th edition. Philadelphia: Wolter Kluwer publications
3. Lewis, Heitkemper, Medical Surgical Nursing, 7th edition, Mosby, Elsevier, page number: 917-919.

4. Mukunda NK. Clinical evaluation and management of lower limb varicose veins: a study at KIMS. Unpublished doctoral dissertation submitted to Rajiv Gandhi University of Health Sciences; 2006.
5. Sharma R. New worry for teachers: varicose veins. The Times of India. [Internet]. 2010 Nov 29 [cited 2011 Oct 24]; Available from: URL:<http://epaper.timesofindiacom/repository/ml>.
6. Jacob DA, Shruthy M. Prevalence of varicosities among people whose work demands standing for long hours; paper presented at: The National conference on student's medical research, Thiruvanthapuram, India; 2008 Apr 11-12.
7. Ann Barnes, BT Sachina, P Rajju - Effectiveness of Self Instructional Module (SIM) on knowledge regarding the prevention and management of varicose veins among teachers in selected schools of Udupi district. International Journal of Nursing, 2014 - ijneronline.com
8. Morality statistics- varicose vein of lower extremity [online]. 2004 Jan 1 [updated 2005 Jan 1; cited 2011 Oct 24]. Available from: URL:<http://www.nationmaster.com/index>.
9. Black JM, Hawks JH. Medical surgical nursing: Clinical management for positive outcomes. 7th ed. New Delhi: Saunders; 2005
10. Polit DF, Beck CA. Nursing research: generating and assessing evidence for nursing practice; 8th ed. Wolters Kluwer. Lippincott Williams and Wilkins: New Delhi; 2008. Pg no: 140
11. Marrinee TA. Nursing theorists and their work. 3rd ed. Mosby publishers: USA; 1994. Pg no 507
12. Burns N. The practice of nursing research, Philadelphia, WB Saunders Company; 1998.

How to cite this article: Savithri KB, Rani R. A study to assess the effectiveness of structure teaching program on knowledge regarding prevention and management of varicose veins among school teachers at private schools, Chennai. Int J Health Sci Res. 2020; 10(6):116-122.
