"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM REGARDING KNOWLEDGE ABOUT THE NON-PHARMACOLOGICAL MANAGEMENT OF HYPERTENSION AMONG 2ND-YEAR B.SC NURSING STUDENTS AT THE HILLSIDE COLLEGE OF NURSING, BANGALORE.''

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ABSTRACT

"A study to assess the effectiveness of structure teaching program regarding knowledge about hyper tension among 2nd year BSc nursing student at the hillside college of Nursing, Bangalore.

Objective of the study

- To assess the pre-test and post-test knowledge of nursing students on non-pharmacological management of hypertension.

- To assess the effectiveness of a structured teaching practice regarding knowledge about the non-pharmacological management of hypertension among 2nd yr B.Sc nursing students at the Hillside College of Nursing, Bangalore after post test.

- To find out the association between post-test knowledge of nursing students and their selected demographic variables.

Review of literature.

A review of the literature helped the investigator to collect appropriate relevant information to support the research methodology, development of tools, and analysis of data.

Research methodology.

The research adopted in the study is a self-instructed module. The sample of the study is 30 students studying at Hillside College of Nursing Bangalore. A convenient sampling method was chosen to select the samples. The instrument used for the study is structured questionnaires. The data gathered was analyzed and interpreted to the objectives of the study.

Tools

The tools consist of two parts: part 1 and part 2

Part I: Comprised of demographic data.

Part II: Comprised of a Structured Interview Schedule on hypertension, which had very relevant, needs modification, not relevant, and remarks of experts.

INTRODUCTION

Hypertension is also known as high blood pressure. Hypertension is when the pressure in your blood vessels is too high. It is common but can be serious if not treated. People with high blood pressure may not feel symptoms. The only way to know is to get the blood pressure checked regularly.

Hypertension, also known as high blood pressure is a long-term medical condition in which the blood pressure in the arteries is persistently elevated. The Systolic blood pressure would be-- =/>140mmHg & Diastolic BP will be >90mm

High blood pressure often has no symptoms. Over time, if untreated, it can cause health conditions, such as heart disease and stroke.

Classification of blood pressure for adults

Blood Pressure Classification	SBP mmHg	DBP mmHg
Normal	<120	and <80
Prehypertension	120–139	or 80–89
Stage 1 Hypertension	140–159	or 90–99
Stage 2 Hypertension	≥160	or ≥100

SBP, systolic blood pressure; DBP, diastolic blood pressure

High blood pressure is a common condition that affects the body's arteries. It's also called hypertension. If you have high blood pressure, the force of the blood pushing against the artery walls is consistently too high. The heart has to work harder to pump blood. Blood pressure is measured in millimeters of mercury (mm Hg). In general, hypertension is a blood pressure reading of 130/80 millimeters of mercury (mm Hg) or high. The American College of Cardiology and the American Heart Association divide blood pressure into four general categories. Ideal blood pressure is categorized as normal. Blood pressure higher than 180/120 mm Hg is considered a hypertensive emergency or crisis. Seek emergency medical help for anyone with these blood pressure numbers.

Untreated, high blood pressure increases the risk of heart attack, stroke and other serious health problems. It's important to have your blood pressure checked at least every two years starting at age 18. Some people need more-frequent check. Healthy lifestyle habits —such as not smoking, exercising and eating well — can help prevent and treat high blood pressure. Some people need medicine to treat high blood pressure. Blood pressure screening is an important part of general health care. How often you should get your blood pressure checked depends on your age and overall health. Ask your provider for a blood pressure reading at least every two years starting at age 18. If you're age 40 or older, or you're 18 to 39 with a high risk of high blood pressure, ask for a blood pressure check every year.

World Hypertension Day 17 May 2023

World Hypertension Day will be held on 17 May. In 2023, the theme for this important worldwide activity is *Measure Your Blood Pressure Accurately, Control It, Live Longer*, focusing on combatting low awareness rates worldwide, especially in low to middle income areas, and accurate blood pressure measurement methods. World Hypertension Day is a global healthcare event celebrated on the 17th of May every year, intending the communication of increased blood pressure significance to people in addition to explaining the impact of hypertension in the development of serious medical complications and providing a piece of knowledge on prevention, detection and treatment.

To achieve the above goals, various local and global healthcare organizations, media, healthcare professionals and volunteer organizations come together to provide resources for spreading awareness. Currently, hypertension is defined as systolic blood pressure of 130 mmHg or more and/or diastolic blood pressure of more than 80 mmHg as per American College of Cardiology (ACC).

Things that increase the risk of having high blood pressure include:

- older age
- genetics
- being overweight or obese
- not being physically active
- high-salt diet
- drinking too much alcohol

Lifestyle changes like eating a healthier diet, quitting tobacco and being more active can help lower blood pressure. Some people may still need to take medicines. Blood pressure is written as two numbers. The first (systolic) number represents the pressure in blood vessels when the heart contracts or beats. The second (diastolic) number represent the pressure in vessels. Hypertension is diagnosed if, when it is measured on two different days, the systolic blood pressure readings on both days is ≥140 mmHg and/or the diastolic blood pressure readings on both days is ≥90 mmHg.

The nurse can help the patient achieve blood pressure control through education about managing blood pressure. Assist the patient in setting goal blood pressure. Provide assistance with social support. Encourage the involvement of family members in the education program to support the patient's efforts to control hypertension. Provide written information about expected effects and side effects. Encourage and teach patients to measure their blood pressure at home. Emphasize strict compliance of follow-up check- up.

MATERIALS AND METHODS

An evaluative research approach with a Pre-experimental One group pre-test post-test design was adopted in this study. The sample size of 30, students was taken by convenient sampling technique. The tool consists of items like Socio-Demographic variables, and a structured knowledge questionnaire regarding . The reliability of the tool was tested by using the inter-rater method. The Karl Pearson coefficient of correlation (r) for nutritional assessment was 0.86. Hence the tool was found reliable. The framework of the study is based on King's goal attainment theory (1960).

The structured interview schedule consisted of 20 multiple choice questions under 5 aspects as the meaning of Hypertension, the purpose of hypertension, risk factors due to poor hypertension, hyper tension practice. Each question has 4 responses with 1 correct answer. Score I was given for each correct response in a single question and a score 0 was given for wrong answer. It consists of structured teaching program to assess the knowledge on hyper tension among the age group of 30 nursing students. The structured teaching program consists of 30 items and is divided into area wise like.

RESULTS

TABLE 1

TABLE 1 : FREQUANCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC VARIABLES

(n=30)

| SL NO.	DEMOGRAPHIC VARIABLES	FREQUANCY	PERCENTAGE
1	a) 16-20 YEAR	18	60 %
	b) 21-25 YEAR	8	26.66 %
	c) 26-30 YEAR	4	13.33 %
2	**Educational status**		
	a) 1st year Bsc	01	3.33 %
	b) 2nd year Bsc	20	66.66 %
	c) 2nd year GNM	9	30 %
3	**Religion**		
	a) Hindu	10	33.33 %
	b) Christian	15	50 %
	c) Muslim	5	16.66 %
4	**Residence belongs to**		
	a) Urban	10	33.33 %
	b) Semi urban	5	16.66 %
	c) Rural	15	50 %
5	**Types of family**		
	a) Nuclear family	20	60 %
	b) Joint family	10	40 %
6	**Source of information**		
	a) Friend	15	50 %
	b) Teacher	10	33.33 %
	c) Others	5	16.66 %
7	**Family income /month in rupees**		
	a) Below 6000	14	46.66 %
	b) 6001-9000	14	46.66 %
	c) 9001-12000	2	6.66 %
8	**Occupation of sample**		
	a) Lecture	2	6.66 %
	b) Tutor	1	3.33 %
	c) Student	27	90 %
9	**Gender**		
	a) Male	15	50 %
	b) Female	15	50 %

FREQUANCY DISTRIBUTION OF SUBJECT AGE
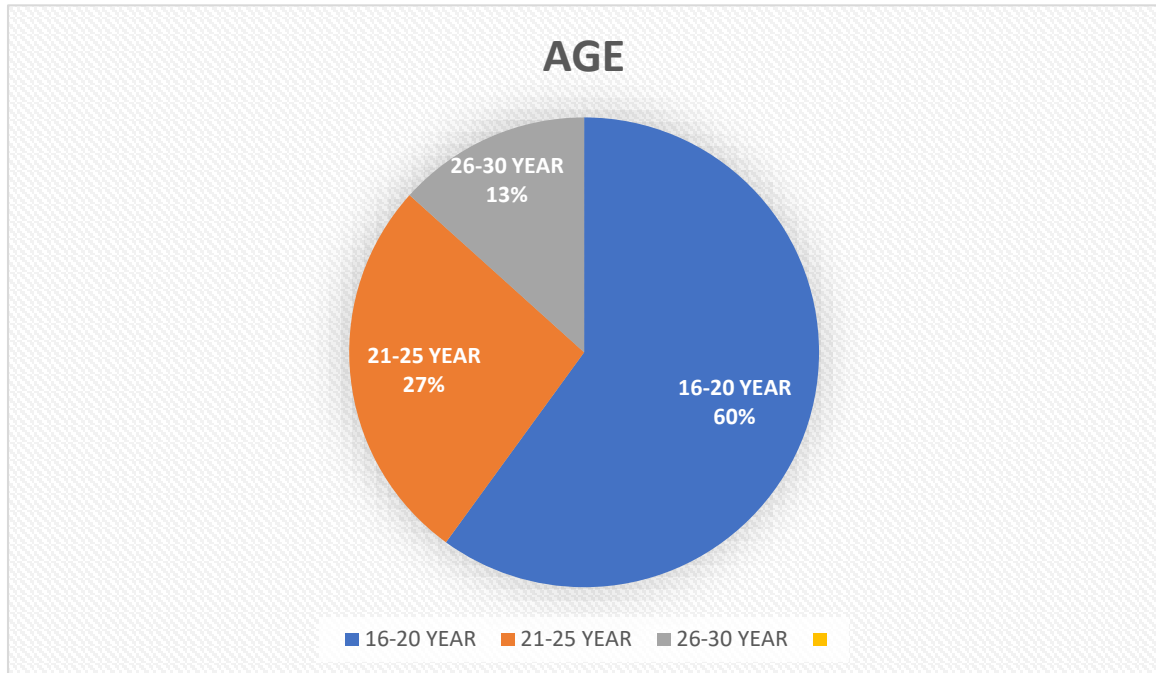
The above figure shows the 60% belongs to age group of 16-20 years, 26.66% of the subjects in the age group of 21-25 years, 13.33% of subjects in the age group of 26-30 years

Frequency distribution subject by religion
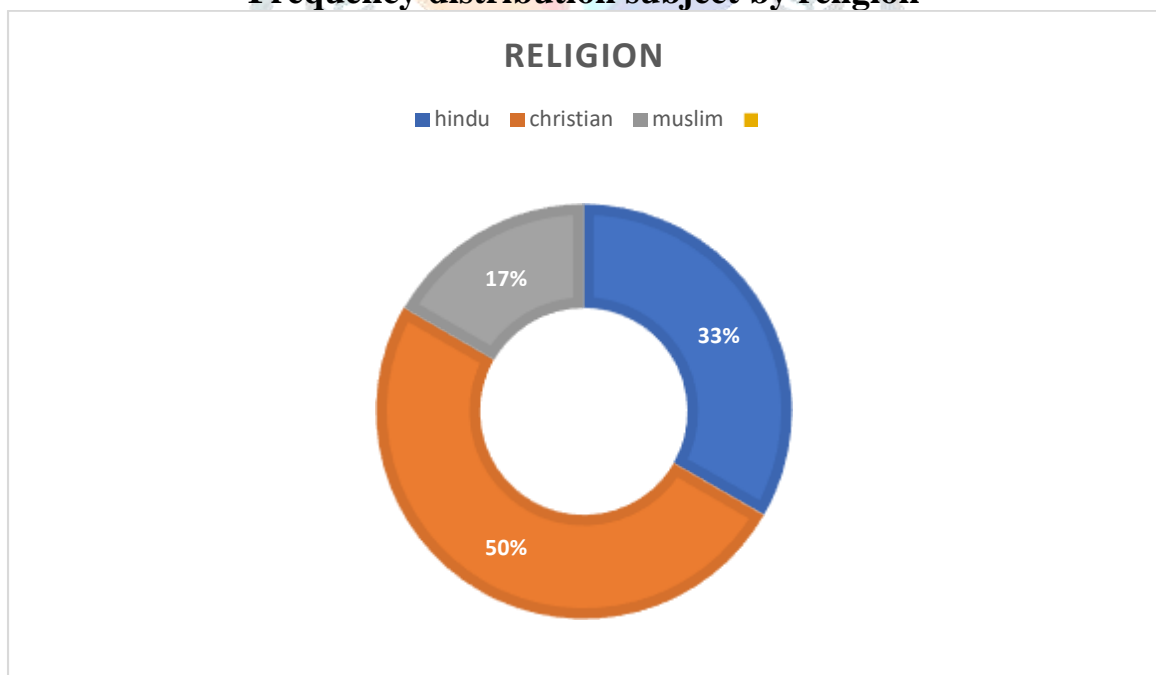
The above figure shows the 33.33% were hindus, 50% were Christian and 16.66% were muslims.

Data on relationship between comparison of pre-test and post test knowledge score

Maximum score : 20 marks   **Table value t=2.76, p<0.05**

Category	Mean	SD	't' value	Inference
Pre test	13.2	2.32	6.13	Non significant
Post test	16.6	1.95		

CHI SQUARE VALUES SHOWING THE ASSOCIATION BETWEEN THE LEVEL OF KNOWLEDGE AMONG THE STUDENTS AND SELECTED DEMOGRAPHIC VARIABLE

Sl no.	Demographic variable	Average	Good	Excellent	SD	Level of significant
1	**Age in years**					
	16-20 YEAR	5	5	8		
	21-25 YEAR	1	5	2	4.10	NS
	26-30 YEAR	2	1	1		
2	**Educational status**					
	1st year Bsc	0	0	1		
	2nd year Bsc	7	7	6	22.60	S
	2nd year GNM	3	4	2		
3	**Religion**					
	Hindu	2	2	6		
	Christian	5	5	5	6.93	NS
	Muslim	0	0	5		
4	**Residence belongs to**					
	Urban	1	9	0		
	Semi urban	1	2	2	20.81	S
	Rural	7	7	1		
5	**Types of family**					
	Nuclear family	4	7	9		
	Joint family	1	5	4	0.79	NS
6	**Source of information**					
	Friend	5	5	5		
	Teacher	2	2	6	6.91	NS
	others	0	0	5		
7	**Family income /month in rupees**					
	Below 6000	7	6	1		
	6001-9000	6	6	2	3.52	NS
	9001-12000	0	1	1		
8	**Occupation of sample**					
	Lecture	0	1	1		
	Tutor	0	1	0	14.41	S
	student	20	1	6		
9	**Gender**					
	Male	1	7	7		
	Female	2	5	8	0.7	NS

DISCUSSION:

The values on the table shows 9(30%) of respondents having inadequate knowledge, 18(60%) are having moderate knowledge, 3(10%) of them are having adequate knowledge. The findings also shows that there is no association found between knowledge score of sample with selected demographic variables such as age (x^2-0.4437, p<7.82), educational status(x-185.72, po7.82).

CONCLUSION

"A study to assess the effectiveness of structure teaching program regarding knowledge about hyper tension among 2nd year BSc nursing student at the hillside college of nursing, Bangalore.

NURSING IMPLICATION

Nurses implication of the study could be discussed under nursing practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE

Students studying in hillside college of nursing have ultimate responsibility of providing co- ordinate education, and nursing care related to hyper tension among students.

NURSING EDUCATION

Nursing education emphasis that health care system pay more attention on training nursing students that will be knowledgeable and can be of health their patients and others as well by imparting health education various method of education technology.

The concept of evidence based nursing practice can included in their curriculum and there by achieving a body of knowledge and clinical expertise through practice.

NURSING ADMINISTRATION

The nurse administrator should plan and organize educational program for nursing personal in order to prepare them to provide quality care and also they should develop policies guidelines for hyper tension.
The nurse administrator can organize a planned program for the student nurse.

The administrator should be monitor the existing program and timely evaluation should be made for further development.

NURSING RESEARCH

-The study will motivate the initial research to conduct the same study on large scale and the study will reference for the extensive and intensive nursing research in the areas of improving the knowledge of student regarding hyper tension.
-The research activity should initially be focused on descriptive projects to define basic health parameter.
-Development of adequate numbers of proficient researcher in each country is the best way of improving disseminating health care method.

REFERENCES

- Aaberge, R. (1999). UMP unbiased tests for multiparameter testing problems with restricted alternatives. Metrika, 50, 179-193.

- Abel, U. (1986). A nonparametric test against ordered alternatives for data defined by intervals. Statistica Neerlandica, 40, 87-91.

- Abelson, R. B. and Tukey, J. W. (1963). Efficient utilization of non-numerical information in quantitative analysis: General theory and the case of simple order. Annals of Mathematical Statistics, 34, 1347-1369.

- Adegboye, O, S. and Gupta, A. K. (1989). On testing against restricted alternatives for the variances of Gaussian models. The Australian Journal of Statistics, 31, 409-415.

- Agresti, A. (1990). Categorical Data Analysis. John Wiley and Sons, New York.

- Agresti, A. (1999), Modelling ordered categorical data: Recent advances and future challenges. Statistics in Medicine, 18, 2191-2207.

- Agresti, A. (2002). Categorical Data Analysis. John Wiley and Sons, N w York.

- Agresti, A. and Chuang, C. (1986). Bayesian and maximum likelihood approaches to order restricted inference for models from categorical data. In Dykstra et al., editor. Advances in order restricted statistical inference, pages 6-27. Springer-Verlag, New York.

- Agresti, A. and Coull, B. A. (1996). Onder-restricted tests for stratified comparisons of binomial proportions. Biometrics, 52, 1103-1111.

- S. Asmussen, Applied Probability and Queues, Wiley, New York, 1987.

- K. L. Chung, A Course in Probability Theory, 2nd edition, Academic Press, New York, 2000.

- B. Clarke and R. L. Disney, Probability and Random Processes for Engineers and Scientists, Wiley, New York, 1970 (introductory).

- W. Feller, An Introduction to Probability Theory and Its Applications 2 vols., Wiley, New York, 1968 (introductory and advanced).

- V. Gedenko aNd I. A. Ushakov, Theory of Probability, 6th ed., G& B Science Publishers, 1997.

- R. Nelson, Probability, Stochastic Processes, and Queuing Theory: The Mathematics of Computer Performance Modelling, Springer-Verlag New York, 1995.

- E. Parzen, Modern Probability Theory. Wiley, New York, 1960.

- S. M. Ross, Applied Probability Models with Optimization Applications. Holden-Day, San Francisco, 1970.

- Allen, Arnold O. Probability, Statistics, and Queueing Theory, 2nd Ed... Academic Press, San Diego, CA, 1990.

- Anderson, T. W. An Introduction to Multivariate Statistics, John Wiley & Sons, New York, 1958.

- Applebaum, David. Probability and Information, Cambridge University Press, Cambridge, 1996.

- Banks, Jerry; Carson, John S. Discrete-Event System Simulation, Pren- tice Hall, Upper Saddle River, NJ, 1984.

- Bell, E. T. Men of Mathematics, Simon & Schuster, New York, 1937.

- Best, Michael J.; Ritter, Klaus. Linear Programming, Prentice Hall, Up- per Saddle River, NJ, 1985.

- Box, Joan Fisher. R. A. Fisher: The Life of a Scientist, John Wiley & Sons, New York, 1978.

- Boyer, Carl B. A History of Mathematics, John Wiley & Sons, New York, 1968.

- Brassard, Gilles, Bratley, Paul Fundamentals of Algorithmics, Prentice

- Hall, Upper Saddle River, NJ, 1996.

- Carlson, William; Thorne, Betty. Applied Statistical Methods for Business, Economics, and the Social Sciences, Prentice Hall, Upper Saddle River, NJ, 1997.

- Cohen, Daniel I. A. Basic Techniques of Combinatorial Theory, John Wiley & Sons, New York, 1978

- Constantine, Gregory M. Combinatorial Theory and Statistical Design, John Wiley & Sons, New York, 1987.

- Corman, Thomas H.; Leiserson, Charles E.; Rivest, Ronald L. Introduction to Algorithms, MIT Press and McGraw-Hill, New York, 1990.