

A STUDY TO ASSESS THE EFFECTIVENESS OF FOOT MASSAGE ON CARDIAC PARAMETERS AMONG HYPERTENSIVE PATIENTS IN SVMCH&RC, PUDUCHERRY.

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ABSTRACT

Study was conducted to assess the effectiveness of foot massage on cardiac parameters among hypertensive patients in SVMCH&RC, Puducherry. Quantitative research approach with Quasi experimental pre test – post test control group design was used for this study. The sample of 40 hypertensive patients were selected through Non probability Purposive sampling technique. Demographic variables and clinical variables were collected by using structured questionnaire. The cardiac parameters (Blood Pressure monitored by Sphygmomanometer and heart rate monitored manually) then foot massage was given to experimental group. Result shown that mean and SD score, in experimental group for Heart rate was 73.50 ± 4.53 and in control group 87.60 ± 4.61 . The calculated 't' value for heart rate was 10.7 which was greater than the tabulated value $p < 0.05$. Hence the research hypothesis H_1 was accepted. It was evident that foot massage was effective in reducing blood pressure among the patients with hypertension.

KEY WORDS:

Foot massage , hypertensive patients, blood pressure , heart rate.

INTRODUCTION

Hypertension is a major public health problem in India and world, because of its high frequency and concomitant, risk of developing cardiovascular and kidney diseases. Hypertension is interesting disease entity of its own as it remains silent, being generally asymptomatic during its clinic, hence WHO named it as silent killer.

NEED FOR THE STUDY:

In India Dr.Sing MK etal.,(2016) stated that as per the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, the overall prevalence of hypertension in India by 2020 will be 159.46/1000population. Hypertension will be the major cause of death and disability by the end of 2020. The prevalence of hypertension is increasing in both rural and urban communities. Hypertension is responsible for 57% of stroke deaths and 24% of coronary heart disease deaths in India. A cross sectional study was conducted by the Department of community medicine in the rural field practice area of a Medical college of Nellore from October 2013 to September 2015. The socio demographic variables and risk factors were obtained by interviewing the subjects in the study and collected in a predesigned questionnaire sheet. The sample size was calculated by prevalence of Hypertension in previous studies and 1025 subjects were included.

STATEMENT OF PROBLEM:

A study to assess the effectiveness of foot massage on cardiac parameters among hypertensive patients in SVMCH&RC, Puducherry.

OBJECTIVES:

- To assess the cardiac parameters among hypertensive patients.
- To find out the effectiveness of foot massage on cardiac parameters among hypertensive patients.
- To associate the level of cardiac parameters among hypertensive patients with the selected demographic variables.

METHODOLOGY

Research Approach: Quantitative research

Research Design: Quasi experimental pre test – post test control group design

Independent variable: Foot massage therapy.

Dependent variable: Cardiac parameters among hypertensive patients.

Setting Of The Study: SVMCH&RC, Ariyur, and Puducherry.

Population: patients admitted in medical ward in SVMCH&RC.

Sample: patients with hypertension

Sample Size: 40 patients (20 patients - experimental group and 20 - control group).

Sampling Technique: Non probability Purposive sampling technique .

DEVELOPMENT AND DESCRIPTION OF THE TOOL:

Section A: Socio-demographic variables

Section B: Clinical variables

Section C: Assessment of cardiac parameters

SYSTOLIC BLOOD PRESSURE:

RANGE (mmHg)	Category
<120	Normal
120-139	Pre hypertension
140-159	Stage 1
160-179	Stage 2
>180	Stage 3

DIASTOLIC BLOOD PRESSURE:

RANGE (mmHg)	Category
80	Normal
80-89	Pre hypertension
90-99	Stage 1
100-109	Stage 2
>110	Stage 3

Sec D: Measurement of heart rate**Heart rate will be measured structured checklist**

Group	Pretest	Post test
Experimental Group		
Control Group		

Heart Rate:

Range (beats / min)	Category
70 – 80	I
80 – 90	II
> 90	III

RELIABILITY OF THE TOOL:

The method adopted for testing reliability of the tool was inter rater reliability method (with use of cohens' kappa Formula). The 'r' value obtained for blood pressure was 0.83

PLAN FOR DATA ANALYSIS: The data was organized, tabulated, summarized and analysed by using descriptive and inferential statistics. Effectiveness of foot massage on cardiac parameters found by 't' test. Association between cardiac parameters with demographic variables was tested by chi square test.

RESULTS & FINDINGS:

Major findings of the study were

Regarding age, in experimental group 10(50%) persons were aged between 41-45 years and in control group 9(45%) persons were aged between 46-50years.

Considering gender, in experimental group 13 (65%) were males 15(75%) were females, in control group 9(45%) were males, 11(55%) were females.

Regarding the religion, in experimental group 17 (85%) were hindus, 3 (15%) were muslims and in control group 17(85%) were hindus, 1 (5%) was muslim, 2 (10%) were Christians.

Regarding the educational status, in experimental group 7(35%) had completed the high school education, and 7(35%) had completed higher secondary education, 3(15%) were illiterate and 2(10%) were degree holdresIn control group 9(45%) had completed the high school education.

In regards to occupation, in experimental group majority of them were home maker 8(40%), in control group 10(50%) of them were coolie

Regarding type of family in experimental group 1(55%) were in control group 10 (50%) were. In regards to religion in experimental group majority of them 13(65%) were belongs to Hindus religion and in control group 11(55%)were belongs to Hindus religion and others from Muslim.

In respect to place of living in experimental group 17 (85%) were from rural area and others from urban area and in control group 15 (75%) were from rural. In considering the source of information in experimental group most of them 13(65%) were getting their information by the physicians and in control group 5 (25%)

Considering the duration of illness in experimental group 8 (40%) were them in less than 1 year of duration period and in control group 3(15%) were them in 1-2 years of duration period. 7(35%) .1to2 years in control group 12(60%) of them were hypertension in patients above 3 years. Regarding No. of hypertension patients, majority of them in control group 12(60%)

Regarding type of treatment day in experimental group 7(85%) were control group 14(70%)

Regarding non-pharmacological management in experimental group most of them 2(10%) were in control group 3 (15%)

Regarding adherence to the medication in experimental group 18(90%) in control group 17 (85%) were hypertensive patients. While considering the previous history of getting treatment for any systemic disease in experimental and control group majority of them 18(90%) were getting medication.

Mean, standard deviation and 't' value according to the post test level of heart rate of samples in experimental and control group. (n-40)

Groups	Mean	Standard Deviation	t- test
Experimental Group	73.50	4.53	10.7
Control Group	87.60	4.61	

The above table represents that mean and SD score, in experimental group for Heart rate was 73.50 ± 4.53 and in control group 87.60 ± 4.61 . The calculated 't' value for heart rate was 10.7 which was greater than the tabulated value $p < 0.05$. Hence the research hypothesis H_1 was accepted. It was evident that foot massage was effective in reducing blood pressure among the patients with hypertension.

CONCLUSION:

A study to assess the effectiveness of foot massage on cardiac parameters among hypertensive patients in SVMCH&RC, Puducherry. The calculated 't' value which was greater than the tabulated value $P < 0.001$. Hence the research hypothesis H_1 was accepted. The result of this study concluded that foot massage was effective on cardiac parameters among the patients with hypertension. There was no significant association found between the cardiac parameters and the selected demographic and clinical practices.

IMPLICATIONS:

NURSING PRACTICE:

1. Nurse working in medical ward can identify the risk factors earlier and prevent the hypertension patients.
2. Nurses working in medical ward should have enough knowledge and special skills to identify the level of blood pressure among patient with hypertension as early as possible and to take immediate action on overcoming such symptoms.
3. Nurses as a counsellor and educator should provide adequate guidance and knowledge to the patients and their family member about the care needed hypertension risk.
4. Nurses have a vital role to teach about foot massage therapy as a routine care to reduce cardiac parameters among patients with hypertension. It has to establish as evidence based Nursing practice.

NURSING ADMINISTRATION:

1. Nurse Administrator can make necessary policies to implement the nursing care services for patients.
2. Nurse Administrator can organize in service education program and adequate staffing in medical unit for an effective care to reduce the level blood pressure.
3. Nurse Administrators should give attention on proper selection, placement and effective utilization of the nurses in all area with their ability to take care of patients with hypertension symptoms.
4. The nursing administrator should supervise the intervention done for the patients by the nurses and also monitor the standards of practice to promote excellence in nursing care.

NURSING EDUCATION:

1. Efforts should be made to improve and expand nursing curriculum and include the geriatric care especially the prevention of disability and management of adults patients problems can be included to provide to more content in the area of nursing care like to effect of foot massage reduce the level of cardiac parameters.
2. Conference, workshop, seminars can be arrange for nurses to impact education towards foot massage therapy.
3. Nurse Educator should provide opportunities to the student in developing skills in handling such clients and how to identify their difficulties and help them to promote comfort and wellbeing.
4. As nursing educator, need to strengthen the evidence based nursing practices among the UG and PG nursing students.
5. This study enhances the student to think comprehensively in planning the intervention in preventing complication of hypertension .

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