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Assess Effectiveness of Jacobson's Progressive Muscle Relaxation Therapy to Reduce Blood Pressure Among Hypertensive Patient

Ms. Mansi Tejashkumar Patel

Lecturer, Medical Surgical Nursing, T. & T.V. Institute Of Nursing,Surat

ABSTRACT:

Hypertension is a common disorder of major clinical and public health importance. It is a powerful independent predictor of premature death and disability. Hypertension is called as silent killer disease because people who have it are often symptom free. Hypertension is a major chronic life style disease and an important public health problem worldwide.The aim of investigator is To assess the blood pressure level among experimental and control group with application of Jacobson's progressive muscles relaxation therapy to reduce hypertension in experimental group. Quantitative Quasi experimental (one-group post test research design) was used to conduct the study. Non probability purposive sampling technique used to select the 60 hypertensive patient from Venus Hospital,Surat. The data collection technique used for present study was structure questionnaire for demographic variables and clinical variables and sphygmomanometer used to measure blood pressure. The study result shows that mean post-test systolic blood pressure was lower(5.33) compared to mean pretest systolic blood pressure score. It shows that mean post-test diastolic blood pressure was lower(3.33) compared to mean pretest diastolic blood pressure in experimental group. which means that level of blood pressure is reduce after providing intervention. Above data shows that calculated't' value (2.64, df -29) is greater than the table value (2.76) at 0.05 level of significance. So, research hypothesis is accepted. There is a significant difference between prê-test and post-test level of blood pressure. It concluded that Jacobson's progressive muscles relaxation technique was effective on the reduce level of blood pressure.

INTRODUCTION:

A certain blue enters your soul. A certain red has an effect on your blood-pressure.

– Henri Matisse

The secret to managing blood pressure is a healthy lifestyle that includes a balanced diet, regular exercise, and stress reduction.

– Dr. Andrew Hall

Hypertension is a common disorder of major clinical and public health importance. It is a powerful independent predictor of premature death and disability. Hypertension is called as silent killer disease because people who have it are often symptom free. Hypertension is a major chronic life style disease and an important public health problem worldwide.

A condition in which the force of the blood against the artery walls is too high. Usually hypertension is defined as blood pressure above 140/90, and is considered severe if the pressure is above 180/120.High blood pressure is a common condition that affects the body's arteries. It's also called hypertension. If

person 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 mm Hg or higher.

- **Normal blood pressure.** Blood pressure is 120/80 mm Hg or lower.
- **Elevated blood pressure.** The top number ranges from 120 to 129 mm Hg and the bottom number is below, not above, 80 mm Hg.
- **Pre-Hypertension:** Normal blood pressure is below 120/80mmHg; blood pressure between 120/80mmHg and 139/89mmHg is called "pre-hypertension"
- **Stage 1 hypertension.** The top number ranges from 130 to 139 mm Hg or the bottom number is between 80 and 89 mm Hg.
- **Stage 2 hypertension.** The top number is 140 mm Hg or higher or the bottom number is 90 mm Hg or higher.
- **Hypertensive Crisis :** Blood pressure higher than 180/120 mm Hg is considered a hypertensive emergency or crisis.1

PROBLEM STATEMENT:

"A Study To Assess Effectiveness Of Jacobson's Progressive Muscle
Relaxation Therapy To Reduce Blood Pressure Among
Hypertensive Patient In Selected
Hospital Of Surat City."

OBJECTIVES:

1. To assess the level of blood pressure in both experimental and control group.
2. To provide Jacobson's progressive muscle relaxation technique to experimental group.
3. To reassess the level of blood pressure in both experimental and control group.
4. To compare the level of blood pressure in both experimental and control group.
5. To assess the effectiveness of Jacobson's muscle relaxation technique in experimental group.
6. To associate the findings of pre test blood pressure with the selected demographic variables of experimental group.

HYPOTHESIS:

H0: There is no significance difference between pretest blood pressure and selected demographic variables.

H1: There is a significant difference between pretest and post test level of blood pressure after Jacobson's progressive muscle relaxation technique in experimental group.

H2: There will be significance difference in level of blood pressure between experimental group and control group patients after Jacobson's progressive muscle relaxation technique apply in experimental group.

METHEDOLOGY:

Research Approach:

The research approach adopted for this study is Quantitative approach.. Quantitative approach is used to evaluate the effectiveness of jacobson's progressive muscles relaxation therapy in a reduction of hyperte

nsion among hypertensive patient.

Research Design :

E	O1	x	O_2
C	O1	-	O_2

The research design used in present study is non randomized control group design (quasi experimental design) .

The design can be diagrammatically represented as follow:

Variable:

- **DEPENDED VARIABLE:** In the present study, dependent variable is Blood Pressure .
- **INDEPENDED VARIABLE:** In the present study, independent variables is Jacobson's progressive Muscles Relaxation Therapy .
- **DEMOGRAPHIC VARIABLE:**. In the present study, demographic variables are Age, Education, Sex, Marital status, Occupation, Income, Diet Pattern, types of family ,place of residence , How Long Hypertension present, Exercise .
- **CLINICAL VARIABLES:** A quantity in a clinical trial that can have a range of possible values.

POPULATION:

- **TARGET POPULATION:** The target population for the study includes patient with hypertension of selected hospital of surat city.
- **ACCESSIBLE POPULATION:** Accessible population for the study includes all patient with hypertension of Venus Hospital.

SAMPLE:

Sample size: For the present study sample size will be 60 hypertensive patient of selected hospital of Surat city.

SAMPLING TECHNIQUE: Non Probability Purposive Sampling Technique was adopted for the study, in those hypertensive patient who are admitted in Venus Hospital .

DATA COLLECTION TOOLS AND TECHNIQUES:

The data collection tool used for the study will be:

1. Demographic variables
2. Clinical Variables
3. Blood pressure measurement tool.

METHOD OF DATA ANALYSIS:

Data analysis was done by using the following statistical method. Descriptive statistical method like percentage, mean and standard deviation were used to assess hypertension level. Inferential statistical methods like "t" test and chi – square test to find out the association between variables.The effectiveness of Jacobson's progressive muscles relaxation therapy was analyzed by using t test test.

RESULT:

Systolic blood pressure in experimental group, 2(6.66%) clients had stage-1hypertension, 26(86.66%) clients had stage 2 hypertension and 2(6.66%) client had hypertension crisis in pretest. Where as in post test 1(3.33%) clients had elevated level of systolic blood pressure, 4(13.33%) clients had stage-1 level of systolic blood pressure and 24(80%) clients had stage-2 hypertension, 1(3.33%)client had hypertension crisis.

Among control group, 29(96.66%) clients had stage-2 hypertension,1(3.33%) clients had hypertension crisis in pretest. Where as in post test 1(3.33%) client had stage -1 level of systolic blood pressure, 28(9.33%) clients had stage-2 hypertension and 1(3.33%) clients had hypertension crisis.

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