e - ISSN – 2349-0691

AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH

Journal homepage: www.mcmed.us/journal/ajanr

"EFFECTIVENESS OF LAUGHTER THERAPY ON BLOOD PRESSURE AMONG PATIENTS WITH HYPERTENSION AT SELECTED HOSPITAL IN KRISHNAGIRI DISTRICT"

Veerakumar R

Department of Community Health Nursing, Jeeva College of Nursing, Krishnagiri, Tamilnadu, India.

Article Info

Received 29/06/2023
Revised 08/07/2023
Accepted 14/07/2023

Key word:
Hypertension, laughter therapy, Blood pressure.

ABSTRACT

A quantitative approach of pre-experimental one group pre and posttest design was chosen for this study. A total of 50 samples were included in the study by using purposive sampling technique. Pre-test was done by using structured instrument and laughter therapy was implemented following which posttest was done for all the study group participants. Both descriptive and inferential statistics were used for analysis. The result revealed that there was a statistically significant difference between pre and posttest in systolic and diastolic blood pressure at level p < 0.001 within study group. Their study findings implied that laughter therapy was effective to sustain the blood pressure within the optimal level among patients with hypertension.

INTRODUCTION

"Laughter is a natural part of life and is the best medicine. Laughter is a powerful antidote to stress, pain, and conflict. Laughter lightens the burden, inspires hopes, connects someone to others, and keeps the individual, focused, and alert. With so much power to heal and renew, the ability to laugh easily and frequently is a tremendous resource for surmounting problems, enhancing relationships, and supporting both physical and emotional health. Laughter is defined as a psychological response to either humour or any other stimuli with the following characteristics: Powerful contractions of the diaphragm together with repetitive vocal sounds produced by the action of the resonating chambers of pharynx, mouth and nasal cavities; Typical facial expression (motion of about 50 facial muscles, mainly around the mouth), which may include the release of tears; Motion of several groups of muscles of the body (more than 300 may be distinct) and A sequence of associated neurophysiological process (cardiovascular and respiratory changes, activation of neuroendocrine and immune circuits)

Corresponding Author
Veerakumar R

Email: -

OBJECTIVES:

- To identify the effectiveness of laughter therapy on blood pressure among patients with hypertension.
- To associate the demographic, health and clinical variables with the level of blood pressure in the posttest among patients with hypertension.

HYPOTHESES:

H1: There is a significant difference in the systolic and diastolic blood pressure between pre and posttest among patients with hypertension who had been subjected to laughter therapy.

H2: There is a significant association of selected demographic, health and clinical variables with the blood pressure in posttest among patients with hypertension.

ASSUMPTIONS:

- Laughter therapy improves the standards of wellbeing among patients with hypertension.
- Maintenance of optimum level of blood pressure reduces complications among patients with hypertension.

LIMITATION:

- The period of 6 weeks.
- Patients who were aged between 35- 45 years and diagnosed to have primary hypertension.
- Patients who were able to understand Tamil or English.
- Patients who visited the Outpatient department at Jeeva Hospital during the period of study.
- Sample size of 50

METHODOLOGY:

Research approach: Quantitative

Design: Pre-experimental one group pre and post-test

Setting of the study: Jeeva hospital**,** Krishnagiri

Target population:

Patients diagnosed to have hypertension

Accessible population:

Patients diagnosed to have hypertension and attending OPD at Jeeva hospital**,** Krishnagiri

Sampling technique and sample size: Purposive sampling technique Sample size-50

INCLUSION CRITERIA:

- Patients of both male and female diagnosed to have primary hypertension with the blood pressure ranging from 140-180/ 90-110 mm of Hg.
- Patients aged between 35 to 45 years.
- Patients who were able to talk and understand Tamil or English.

EXCLUSION CRITERIA:

- Patients with mental illness.
- Patients with either visual or hearing impairment.
- Patients with disorientation, unable to follow the instructions.
- Patients diagnosed to have Ischemic heart disease, aneurysm, Cerebrovascular accident and tuberculosis.
- Patients with history of recent pelvic or abdominal surgery, who experience acute orthopaedic distress such as rib or shoulder fracture.
- Patients not willing to participate in the study

DESCRIPTION OF THE TOOL:

PART- I: DEMOGRAPHIC VARIABLES

It included age, sex, marital status, religion, educational status, occupational status and income.

PART-II: HEALTH VARIABLES

It encompassed height, body weight, BMI, sleeping pattern, dietary pattern, history of smoking, history of alcoholism and history of chewing tobacco.

PART- III: CLINICAL VARIABLES

It included co-morbidity, time since diagnosis, use of anti-hypertensive medication and duration of treatment.

PART- IV: ASSESSMENT OF BLOOD PRESSURE

1**.** Blood pressure (mm of hg)

2. CLASSIFICATION OF BLOOD PRESSURE

Table 1: Classification of blood pressure

Classification of Blood pressure	Systolic (mmHg)	Diastolic (mmHg)
Normal	<120	and <80
Pre hypertension	120-139	or 80-89
Stage1 hypertension	140-159	or 90-99
Stage2 hypertension	≥160	or ≥ 100

***National institute of health, Seventh report of the national committee (2008), American Heart Association (AHA).**

Table:2 Distribution of demographic variables among study group (n=50).

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
	Age		
	35 – 38	16	32
	39 - 42	17	34
	43 - 45	17	34
	Gender		
	Male	25	50

	Female	25	50
	Marital Status		
	Unmarried	2	4
	Married	35	70
	Widow / widower	8	16
	Separated	5	10
	Religion		
	Hindu	39	78
	Muslim	6	12
	Christian	5	10
	Educational Status		
	Primary school	14	28
	High school	12	24
	Higher secondary school	10	20
	Graduate	7	14
	Post graduate	5	10
	Vocational training	2	4
	Occupational status		
	Labour	12	24
	Former	17	34
	Government employee	5	10
	Private employee	14	28
	business	2	4
	Income per month (Rs)		
	Below 5000	17	34
	5001 - 7500	12	24
	Above 7500	21	42

Table:3 Distribution of level of blood pressure in pre and posttest among study group (n=50)

S.NO	Level of blood pressure (mm of Hg)	Study Group							
		Pre-test				Post test			
		Systolic		diastolic		Systolic		diastolic	
		No	%	No	%	No	%	No	%
1.	**Normal**	-	-	-	-	-	-	-	-
2.	**Pre-hypertension**	-	-	-	-	**45**	**90**	**45**	**90**
3.	**Stage – I Hypertension**	**50**	**100**	**50**	**100**	**5**	**10**	**5**	**10**
4.	**Stage – II Hypertension**	-	-	-	-	-	-	-	-

Table:4 Comparison of pre and posttest level of blood pressure among study group (n=50)

S.NO	Observation	Study Group		
		Mean	SD	Paired 't' value & P value
1.	**Pretest - Systolic (mm of Hg)**	**144.52**	**5.37**	17.785***
2.	**Posttest - Systolic (mm of Hg)**	**126.80**	**5.17**	**P = 0.000** **SS**
3.	**Pretest - diastolic (mm of Hg)**	**94.52**	**2.93**	17.956***
4.	**Posttest - diastolic (mm of Hg)**	**82.88**	**3.13**	**P = 0.000** **SS**

***** Significant of p < 0.001**

SS – Statistically Significant

RESULTS AND DISCUSSION:

The above table illustrates that all the 50(100%) study group participants had stage – I systolic and diastolic hypertension in the pretest whereas in posttest 45(90%), had pre hypertension systolic and diastolic only 5(10%) had stage I hypertension systolic and diastolic in the post test..

The above table discloses that there was a statistically significant difference between pre and posttest systolic and diastolic blood pressure within study group participants at $p < 0.001$.

CONCLUSION:

Laughter therapy is an effective intervention to reduce the blood pressure among patients with hypertension. Since hypertension is a chronic disease, the regular practice of laughter therapy helps the patients with hypertension to sustain the blood pressure within normal limit throughout their survivorship. This will reduce the complications related to hypertension and cost of health care.

NURSING RESEARCH:

The clinical research finding paves the basement for nursing practice. The innovative nursing strategies have to be devised and subjected to research at different care settings. Since patients with hypertension live longer, many new strategies has to be identified and tested, which will help them to promote their standard of living. The non-pharmacological measures like laughter therapy, yoga, acupressure, meditation, different kinds of exercises can be tested among patients with hypertension according to their ability to practice. This will create the scientific based knowledge for the nursing profession.

REFRENCES

1. Kozier and Erb's "Fundamentals of Nursing concepts, process and practice" 9th edition, place of publication in New Jersey, published by Pearson Education Inc.
2. Brunner and suddarth's "Medical Surgical Nursing" 12th edition, place of publication in New Delhi, published by wolterskluwevell Lippincott and William.
3. Lewis "Medical Surgical Nursing" 7th edition, place of publication in New Delhi. Published by Lewis Dirksen.
4. Lippincott "Medical Surgical Nursing" place of publication in New Delhi, published by William and Wilkins.
5. CIMS drug book- 2012.
6. S.P.Sharma (2005), Laughter the secret of good health, place of publication in Delhi. Published by Pustak Mahal.
7. Burns (2009), Practice of Nursing Research, place of publication in Delhi. Published by Elsevier.
8. Robert R. Provine (2001), Laughter:A scientific investigation, place of publication in New York. Published by Penguin books.
9. Suzanne Herschenhorn (1994), The Impact of Focused Laughter Therapy on Chronic Pain in Young Women with Rheumatoid Arthritis, place of publication in Los Angeles, Published by California School of Professional Psychology.