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A STUDY TO ASSESS THE EFFECTIVENESS OF MUSIC THERAPY ON SELECTED PHYSIOLOGICAL PARAMETERS AMONG CLIENTS WITH PRIMARY HYPERTENSION IN SELECTED HOSPITAL AT GUNTUR, A.P.

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ABSTRACT

Background: High Blood Pressure is ranked as the third most important risk factor for attributable burden of diseases in South Asia. Research from several countries have consistently shown that the treatment of risk factors such as hypertension has a higher impact on CVD than the treatment of established CVD Studies have reported the benefits of music therapy on blood pressure in hypertensive patients. Methods: The present study is an evaluatory quasi experimental study to find out the effect of music therapy on hypertensive patients. Selected 80 primary hypertensive clients 40 for control and experimental group. Results: The findings imply that there is a significant difference in pretest and post-test – 1, 2, 3, 4, 5, 6 and 7 days between the experimental and control group which shows that music therapy helps to maintain the systolic blood pressure. The obtained "t" value on pretest 0.17 shows that homogeneity was maintained between the groups. The "t" values on posttest were 3.46, 5.02, 7.90, 11.98, 16.12, 21.93 and 22.24 significant at 0.01 level. The findings imply that there is a significant difference in pretest and posttest – 1, 2, 3, 4, 5, 6 and 7days between the experimental and control group which shows that music therapy helps to maintain the diastolic blood pressure. Conclusion: Music may improve systolic blood pressure and should be considered to be component of care of hypertensive patients.

INTRODUCTION

Music therapy is defined as the use of music or its elements (sound, rhythm, melody and harmony) by a qualified music therapist with a client or group, in a process to facilitate and promote communication, respect, learning, mobilization, expression, organization and other objectives of therapeutic relevance, in order to fulfill physical, emotional, mental, social and cognitive needs [1]. Blood pressure is defined as the pressure of the blood in the circulatory system [2]. Hypertension I defined as abnormally high blood pressure, it is a state of great psychological stress [3]. Hypertension is one of the most important modifiable risk factor for all cardio vascular and cerebrovascular disorders [4]. In developing countries, the mean prevalence, awareness, treatment, control of hypertension were 32.2, 40.6 and 9.8 percent among men and 30.5, 52.7, 40.5 and 16.2 percent among

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women, respectively. In developed countries, these percentages in men were 40.8, 49.2, 29.1 and 10.8 percent and in women they were 33.0, 61.7, 40.6, and 17.3 percent, respectively [5]. Hypertension exerts a substantial public health burden on cardio vascular health status and health care systems in India. HTN is directly responsible for 57 % of all stroke deaths in India. The WHO rates HTN as one of the most common important causes of premature death worldwide. The HTN is projected to 22.9 for men and 23.6 for women in India by the year 2025. In India some researches had shown the data related to HTN in rural and urban areas as 10% in and 25 % [6]. The effect of high blood pressure and cardio vascular disease is influenced by a number of risk factors such as tobacco use, excessive alcohol consumption, unhealthy diet, physical inactivity, overweight and obesity, elevated blood sugar and elevated blood lipids [7]. High blood pressure is ranked as third most important risk factor for attributable burden of disease in South Asia. It exerts a substantial public health burden on cardiovascular health status and healthcare systems in India [8]. An alarming rise in Hypertension projected by Global Burden of Hypertension 2005 study, the GBD 2010 study and WHO 2011 NCD India specific data portray a grim picture for the 17.8 % of the world's population who reside in India [9]. Many studies suggested that listening to a certain type of music reduces systolic and diastolic blood pressure drastically, music has been considered to be one of the alternatives for hypertension treatment. It is considered that the action of music therapist seeks the integral improvement of the individual, since it can cover bio psycho social aspects of the hypertensive individuals [10, 11 & 12].

METHODOLOGY

Research approach:

The Research approach adopted in the study was evaluatory approach [13].

Research design: Research design adopted for present study is quasi experimental time series design with pretest and posttest with control group, which includes manipulation, control and no randomization**.**

$E - O_0 \; X \; O_1 \; X \; O_2 \; X \; O_3 \; X \; O_4 \; X \; O_5 \; X \; O_6 \; X \; O_7$

$C - O_0 \quad O_1 \quad O_2 \quad O_3 \quad O_4 \quad O_5 \quad O_6 \quad O_7$

E - Experimental group

C - Control group

X - Intervention (Music therapy)

O_0 - Pretest observation of physiological parameters.

O_1 to O_7 - Post-test-1 – 7 observation of physiological parameters on day 1 to day 7.

Settings of the study:

Setting is the general location and condition in which data collection takes place in the study. The present study was conducted in medical wards in Lalitha Super Specialties Hospital Pvt., Ltd., Guntur, A.P.

Population: Population is the total number of people who met the criteria that the researcher has established for a study from whom the subjects will be selected and to whom the findings will be generalized.

Target Population: The target population for the study includes all clients with primary hypertension.

Accessible Population : It includes 80 clients who have primary hypertension admitted in medical wards and who fulfill the inclusion criteria.

Sample and sampling technique: In this present study the sample consist of 80 primary hypertensive clients with 40 in experimental group and 40 in control group from the Lalitha Super Specialties Hospital Pvt., Ltd., Guntur, A.P.

Sampling Technique: The sample for the study was drawn from selected hospital by Non-probability purposive sampling technique [14 &15].

Criteria for selection of sample:

Inclusion Criteria: The study includes clients who are

- admitted in medical unit of selected hospital
- diagnosed only with primary hypertension
- able to communicate in English and Kannada
- possessing good hearing ability
- willing to participate

Exclusion Criteria: The study excludes the clients who have undergone any other therapies for hypertension

- have secondary hypertension
- Are not available at the time of data collection.

Development and description of the tool:

Description of the tool:

The developed tool was organized in to three parts, they are as follows:

Section-A: Demographic variables.
Section-B: Clinical Variables.
Section-C: Observation tool for physiological parameters.

Section-A: Demographic variables of the subjects : Demographic variables include age, sex, educational level, occupational status, socio-economic back ground, and habits of the clients and the BMI status of the client.

Section-B: Clinical variables of the subjects : Clinical variables of the clients include duration of illness, medications, family history, dietary pattern and exercise.

Section-C: Observational tool for physiological

parameters : It includes the assessment of blood pressure (SBP, DBP) using the sphygmomanometer, and pulse rate of clients for 7 days.

***Development of music cassette*:** The music cassette has been prepared and presented to the expert doctors in the concerned department of general medicine.

***Raga selection*:** Two music experts recommended the ragas of Todi and Anandhabhiravi which were used in the study

Method of data collection:

The data collection was scheduled from 15th July to 12th August 2018. Permission was taken from the hospital authorities of Lalitha Super Specilaities Hospital Pvt., Ltd., Guntur, A.P. and approval was obtained for conducting the study. Informed consent was taken from the clients. Subjects were selected based on the inclusion criteria. The technique used for sampling selection was non-probability purposive sampling technique. Subjects of the study were undergone pre assessment of physiological parameters. The experimental group receives music therapy for 30 minutes daily for 7 consecutive days. The music was instrumental; the ragas used for the music were Todi and Anandhabhiravi. The control group receives no intervention. Posttest assessment of the physiological parameters was done among both experimental and control group from the 1st to 7th day.

Organization and presentation of data:

The collected data were edited, tabulated, analyzed, interpreted and findings obtained were presented in the form of tables and diagrams represent under following sections.

Section - I: Description of demographic characteristics of the subjects.

Section II: Description of the clinical variables about the subjects.

Section III: Comparison between the pretest and posttest physiological parameters among experimental and control group.

Section IV: Association of physiological parameters with demographic and clinical variables [16 & 17].

Section-I

Description of Demographic characteristics of the subjects in experimental and control group

The table- 1 represents the demographic profile of the samples in the experimental and control group. Among the 40 clients in the experimental group 29(72.5%) were Hindus, 5(12.5%) were Christians and 6(15%) were Muslims whereas 30(75%) were Hindus, 4(10%) were Christians and 7(17.5%) were Muslims in control group. In regard with the family income 18(45%) in experimental group and 19(47.5%) in control group had the family income between Rs.5, 000- 10,000. Nearly 36(90%) in experimental group and 34(85%) in control group live in nuclear family. Among 40 patients in the experimental group, 4(10%) were in the age group of 35-40 years and 7(17.5%) were in the age group of 41-45 years and 13(32.5%) were in the age 46-50years and 16(40%) were in the age 51-55 years and in control group 6(15%) were in the age group of 35-40 years and 15(37.5%) were in the age group of 51-55 years. In both the groups the majority of the samples were men. In experimental group 21(52.5%) were male and 19(47.5%) were female. In control group 23(57.5%) were male and 17(42.5%) were female. In both the groups' majority of the samples were literate as 12.5% in control group and 7.5% in experimental group were illiterate. With regards of their occupation most of the samples, 20 (50%) were professionals in experimental group and 22(55%) were in control group. Next to the professionals the farmers ranks second in the majority. 9(22.5%) in experimental group and 7(17.5%) in control group were farmers. The samples who have their own business were of 7(17.5%) in experimental group and 8(20%) in control group. On considering the habits in experimental group, about 21(52.5%) were having the habit of smoking and in control group 23(57.5%) were smokers. Next to smoking the habit of alcohol was high among the samples. Nearly 10(25%) in experimental group and 9(22.5%) in control group were alcoholics.

Section-II

Description of the clinical variables in experimental and control group

The table-2 represents the clinical profile of the subjects in the experimental and control group. Among 40 patients in the experimental group, 34 (85%) and in control group 33 (82.5%) were having the knowledge of hypertension. All the clients have regular treatment. Nearly 7(17.5%) of samples were on treatment for 7-9 years in experimental group and 21(52.5%) were on treatment for 1-3 years in control group. In the experimental group 36(90%) and in control group 39(97.5%) have family history of hypertension. In regard to the dietary pattern in the experimental group 26(65%) and in control group 28(70%) belongs to non-vegetarian. Majority of the client's 34 (85%) in experimental group and 30(75%) in control group do regular exercise. About their BMI status more number of study participants belongs to overweight 14 (35%) in experimental group, in control group 15 (37.5%). 13 (32.5%) in experimental group and 12 (30%) in control group poses normal weight. Nearly 6 (15%) in experimental group and 7

(17.5%) in control group were under weight. More than 50% of samples from both groups suffer with hypertension from 1-3 years. 6 (15%) in experimental group and 8(20%) in control group were having hypertension for 4-6 years. 3 (7.5%) in experimental group and 2 (5%) in control group were having hypertension for above 10 years.

Section-III

Comparison between the pretest and posttest Systolic Blood pressure among experimental group.

The obtained "t" values were 6.74, 4.21, 11.07, 7.25 3.16 and 1.26. The findings imply that there is a significant difference in pretest and post-test – 1,2,3,4,5 scores of Blood pressure which shows That music maintains systolic blood pressure and Post-test – 6 and 7 the "t" value was 1.26 which Was not significant which implies that music maintains the systolic blood pressure after 5th day.

Comparison between the pretest and posttest score of Systolic Blood Pressure among control group

The obtained "t" values were 0.03, 0.94, 1.14, and 1.38, 1.36 and 1.33 which elicits that there is a no significant effect of Systolic blood pressure.

Comparison of pretest and posttest score of Diastolic Blood pressure among experimental group

The obtained "t" values were 6.74, 4.21, 11.07, 7.25 3.16, 1.26 and 1.18. The findings imply that there is a significant difference in pretest and posttest – 1,2,3,4,5 scores of Blood pressure which shows that music maintains diastolic blood pressure and Posttest – 6 and 7 the "t" value was 1.26 which was not significant which implies that music maintains the diastolic blood pressure after 5th day.

Comparison of pretest and posttest score of Diastolic Blood pressure among Control group.

The obtained "t" values were 0.03, 0.94, 1.14, and 1.38, 1.36 and 1.33 which elicits that there is a no significant effect of Diastolic Blood Pressure.

The obtained "t" value on pretest 0.17 shows that homogeneity was maintained between the groups. The "t" values on post-test were 3.30, 4.83, 11.93, 17.42 and 22.93 significant at 0.01 level. The findings imply that there is a significant difference in pretest and post-test – 1, 2, 3, 4, 5, 6 and 7days between the experimental and control group which shows that music therapy helps to maintain the systolic blood pressure.

The obtained "t" value on pretest 0.17 shows that homogeneity was maintained between the groups. The "t" values on posttest were 3.46, 5.02, 7.90, 11.98, 16.12, 21.93 and 22.24 significant at 0.01 level. The findings imply that there is a significant difference in pretest and post-test – 1, 2, 3, 4, 5, 6 and 7days between the experimental and control group which shows that music therapy helps to maintain the diastolic blood pressure.

Section-IV

Association of physiological parameters with the demographic and clinical variables

The table-9 shows the demographic variables such as age, sex, occupation, habits, which are significantly, associated with the calculated $\chi 2=0.09$, $\chi 2=0.04$, $\chi 2=0.66$, $\chi 2=0.66$ at 0.01 level. Hence there is significant association between the demographic variables and the rise in blood pressure among the experimental group.

The table 10 shows the clinical variables like duration of illness, dietary patterns and the medication for hypertension are significantly associated with blood pressure among the experimental group.

The above table shows the demographic variables such as age, sex, occupation, habits, Body Mass Index are significantly associated with the rise in blood pressure among the control group.

The table 12 shows the clinical variables like duration of illness, dietary patterns and the medication for hypertension are significantly associated with blood pressure among the control group.

Table 1. Distribution of the subjects according to their demographic profile

Demographic Characteristics	Experimental group		Control group	
	f	%	f	%
Religion				
Hindu	29	72.5	30	75
Christian	5	12.5	4	10
Muslim	6	15	6	15
Others	0	0	0	0
Family income				

	Rs.1, 000-5,000	14	35	13	32.5
	Rs. 5,000-10,000	18	45	19	47.5
	Above Rs.10, 000	8	20	8	20
Type of family					
	Nuclear	36	90	34	85
	Joint	4	10	6	15
Age					
	35-40 years	4	10	6	15
	41-45 years	7	17.50	5	12.50
	46-50 years	13	32.50	14	35
	51-55 years	16	40	15	37.50
Sex Distribution					
	Male	21	52.50	23	57.50
	Female	19	47.50	17	42.50
Educational Distribution					
	Literate Illiterate	37 3	92.50 7.50	35 5	87.50 12.50
Occupational Distribution					
	Doing Business	20	50	22	55
	Job Holders	11	27.50	15	37.50
	House wives /No Occupation	9	22.50	3	7.50
Habits					
	Smoking	21	52.50	23	57.50
	Alcohol	10	25	9	22.50
	None	9	22.50	8	20

Table 2. Distribution of the subjects according to their clinical profile

Clinical Characteristics	**Experimental group**		**Control group**	
	f	**%**	**f**	**%**
Knowledge on hypertension				
Yes	34	85	33	82.5
No	6	15	7	17.5
On regular medications				
Yes	40	100	40	100
No	-	-	-	-
Treatment started before				
1-3 yrs	24	60	21	52.5
4-6 yrs	6	15	8	20
7-9 yrs	7	17.5	9	22.5
Above 10 yrs	3	7.5	2	5
Any previous history of Hospitalization with HTN				
Yes	12	30	16	40
No	28	70	24	60

Family History of Hypertension				
Yes	36	90	39	97.5
No	4	10	1	2.5
Dietary Habits				
Vegetarian	14	35	12	30
Non-vegetarian	26	65	28	70
On diet of Hypertension				
Yes	38	95	37	92.5
No	2	5	3	7.5
Exercises				
Yes	29	72.5	30	75
No	11	27.5	10	25
Body Mass Index				
Under weight	6	15	7	17.50
Normal weight	13	32.50	12	30
Over weight	14	35	15	37.50
Obese	7	17.50	6	15
Duration of Illness				
1-3 years	24	60	21	52.50
4-6 years	6	15	8	20
7-9 years	7	17.50	9	22.50
Above 10 years	3	7.50	2	5

Table 3. Association of physiological parameters with the demographic variables in experimental group

Characteristics		**Blood Pressure**			**Chi square test**
		SBP	**DBP**		
	f	**%**	**f**	**%**	
Age in Years					
35-40	4	10	4	10	
41-45	7	17.5	7	17.5	$\chi 2=0.09$
46-50	13	32.5	13	32.5	P<0.75
51-55	16	40	16	40	
Sex					
Male	21	52.5	21	52.5	$\chi 2=0.04$
Female	19	47.5	19	47.5	P<0.84
Education					
Literate	37	92.5	37	92.5	$\chi 2=0.04$
Illiterate	3	7.5	3	7.5	P<1.00
Occupation					
Professional	20	50	20	50	
Business	7	17.5	7	17.5	$\chi 2=0.66$
Farmer	9	22.5	9	22.5	P<0.88
Nil	4	10	4	10	

Family Income					
Rs.1000-5000	14	35	14	35	$\chi 2=0.66$
Rs.5000-10,000	18	45	18	45	P<0.88
Above Rs.10, 000	8	20	8	20	
Type of Family					
Nuclear family	36	90	36	90	$\chi 2=0.66$
Joint family	4	10	4	10	P<0.88
Habits					
Smoking	21	52.5	21	52.5	$\chi 2=0.66$
Alcohol	10	25	10	25	P<0.88
Betel chewing	7	17.5	7	17.5	
None	16	40	16	40	

Table 4. Association of physiological parameters with clinical variables in experimental group

Characteristics	**Blood Pressure**				**Chi square test**
	SBP		**DBP**		
	f	**%**	**f**	**%**	
Duration of illness					
1-3 years	24	60	24	60	
4-6 years	6	15	6	15	$\chi 2=0.05$
7-9 years	7	17.5	7	17.5	P<0.02
Above 10 years	3	7.5	3	7.5	
BMI					
Under weight	6	15	6	15	$\chi 2=0.66$
Normal weight	13	32.5	13	32.5	P<0.88
Over-weight	14	35	14	35	
Obese	7	17.5	7	17.5	
Medications					
Beta blockers	17	42.5	17	42.5	
Calcium channel					$\chi 2=0.08$
blockers	14	35	14	35	P<0.05
ACE inhibitors	4	10	4	10	
Combination of					
Drugs	5	12.5	5	12.5	
Having HT in family					
Yes	36	90	36	90	$\chi 2=0.04$
No	4	10	4	10	P<0.66
Dietary pattern					
Vegetarian	14	35	14	35	$\chi 2=0.66$
Non vegetarian	26	65	26	65	P<0.88

Table 5. Association of physiological parameters with demographic variables in control group

Characteristics		Blood Pressure		Chi square test	
		SBP		DBP	
	f	%	f	%	
Age in Years					
35-40	6	15	6	15	
41-45	5	12.5	5	12.5	$\chi 2=0.19$
46-50	14	35	14	35	P<0.75
51-55	15	37.5	15	37.5	
Sex					
Male	23	57.5	23	57.5	$\chi 2=0.44$
Female	17	42.5	17	42.5	P<0.55
Education					
Literate	35	87.5	35	87.5	$\chi 2=0.04$
Illiterate	5	12.5	5	12.5	P<1.00
Occupation					
Professional	22	55	22	55	
Business	8	20	8	20	$\chi 2=0.03$
Farmer	7	17.5	7	17.5	P<0.88
Nil	3	7.5	3	7.5	
Family Income					
Rs.1000-5000	13	32.5	13	32.5	$\chi 2=0.66$
Rs.5000-10,000	19	47.5	19	47.5	P<0.88
Above Rs.10, 000	8	20	8	20	
Type of Family					
Nuclear family	34	85	34	85	$\chi 2=0.66$
Joint family	6	15	6	15	P<0.88
Habits					
Smoking	23	57.5	23	57.5	$\chi 2=0.52$
Alcohol	9	22.5	9	22.5	P<0.71
Betel chewing	8	20	8	20	
None	15	37.5	15	37.5	

Table 6. Association of physiological parameters with clinical variables in control group

Characteristics		Blood Pressure		Chi square test	
		SBP		DBP	
	f	%	f	%	
Duration of illness					
1-3 years	21	52.5	21	52.5	
4-6 years	8	20	8	20	$\chi 2=0.58$
7-9 years	9	22.5	9	22.5	P<0.45
Above 10 years	2	5	2	5	
BMI					
Underweight	7	17.5	7	17.5	$\chi 2=0.08$

Normal weight	12	30	12	30	P<0.45
Over-weight	15	37.5	15	37.5	
Obese	6	15	6	15	
Medications					
Beta blockers	16	40	16	40	
Calcium channel					$\chi 2$=0.35
blockers	16	40	16	40	P<0.58
ACE inhibitors	5	12.5	5	12.5	
Combination of					
Drugs	3	7.5	3	7.5	
Having HT in family					
Yes	39	97.5	39	97.5	$\chi 2$=0.23
No	1	2.5	1	2.5	P<0.88
Dietary pattern					
Vegetarian	12	30	12	30	$\chi 2$=0.55
Non vegetarian	28	70	28	70	P<0.65

Fig No: 1. Comparison of posttest systolic blood pressure scores of experimental group and control group.

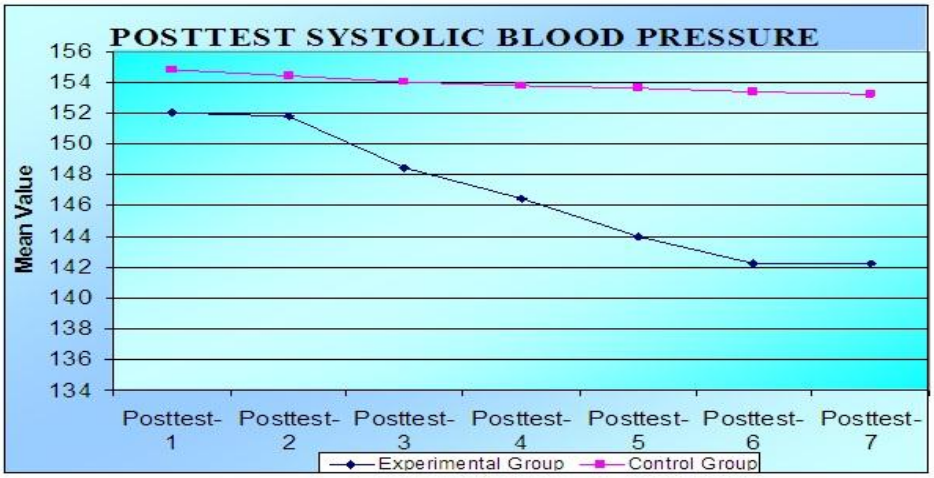
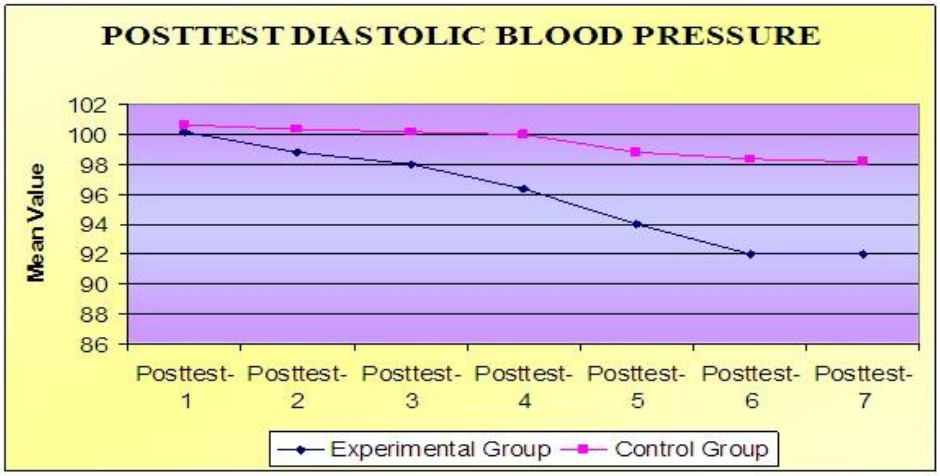


Fig No: 2. Comparison of posttest diastolic blood pressure scores of experimental group and control group.



DISCUSSIONS

The first objective is to assess the effectiveness of music therapy on physiological parameters in experimental group.

The findings imply that there is a significant difference in pretest and posttest – 1,2,3,4,5 scores of Blood pressure which shows that music maintains systolic blood pressure and posttest – 6 and 7 the "t" value was 1.26 which was not significant which implies that music maintains the systolic and diastolic blood pressure after 5th day.

The post test scores of pulse rate of clients among experimental group was also significant on 5th day of post therapy. These findings proved the hypothesis. The hypothesis formulated for this study is there is a significant difference between the pretest and post-test values of physiological parameters among clients in experimental group.

These findings are supported by the study done by Daleen Aragon on Effects of Harp Music and blood pressure reduction at University of Central Florida, Orlando in 2002 [16,17 & 18]. A prospective, quasi experimental, repeated measures design was used with a convenience sampling with 18 samples selected. A single 20 minute live harp playing session was used for 10 days. The results indicate that listening to live harp music has produced significant differences in physiological measures of systolic blood pressure (P=0.046) and diastolic blood pressure (P=0.011).

The second objective is to compare the physiological parameters among experimental and control group.

The result indicates that there is a significant difference in pretest and posttest – 1, 2,3,4,5 scores of Blood pressure among the experimental group, which shows that music, maintains systolic and diastolic blood pressure. But the results of the control group showed that the obtained "t" values that there is a no significant effect of systolic and diastolic blood pressure. On Day 5 the posttest values differ between the experimental and control group at the (P<0.001). This shows the reduction of blood pressure among experimental group those who received the music therapy.

Similar study was conducted in Swedish Heart and Vascular Institute in Washington to examine the audio relaxation program which lowers blood pressure in a group of elderly patients (N=40) [19]. The study reveals the patients in the experimental group had lowered blood pressure from 141\73 mm Hg o 132\70 mm Hg and heart rates from 73 to 70 beats per minute.[54]

The third objective is to associate the selected demographic variables and clinical variable in experimental and control group.

The statistical analysis was done for association between demographic and clinical variables by using Pearson chi square test. Significance was made at the P<0.5 and P<0.001 level. The result indicates that the association between demographic variables, out of 8 demographic variables smoking at P<0.03 and age at P<0.001 status are significantly associated with their blood pressure in experimental and control group.

These findings were associated with the similar study done to find out prevalence of hypertension in rural area in Rural Health Training Centre Paithan, field practice area of Govt. Medical College, Aurangabad, and Maharashtra [20]. The results showed that overall prevalence of hypertension in the study subjects was 7.24%. Multiple logistic regression analysis identified various factors significantly associated with hypertension were age, sex, BMI, additional salt intake, smoking, DM, alcohol consumption, and higher socioeconomic status.

Implications for nursing practice:

- The nursing personnel should include music therapy as part of their treatment modalities for clients with primary hypertension.
- They can encourage the clients to listen to music regularly.
- With medications, dietary restrictions, regular exercise, music therapy should be encouraged for the hypertensive clients for maintaining their blood pressure.

Implications to community health practice:

- In community, the primary health centers and even in home setup the nurses can give music therapy for the clients with primary hypertension, not only in terms of maintaining the physiological parameters of the clients but also in reducing the distress and overall maintenance of social and mental well-being.

Implications for nursing research:

- ❖ The study helps the investigator to develop insight regarding the importance and effectiveness of music therapy.
- ❖ This study will serve as a valuable reference material for future investigators
- ❖ Large scale studies can be conducted.
- ❖ Research should be continued on need of the practices and effectiveness of music therapy among various medical conditions and other set up as well.

Recommendations:

- A similar study can be done to assess the knowledge, attitude and practice of student nurses in relation to provision of music therapy for clients.
- A similar study can be conducted at home settings in a large scale.

Limitations:

- Assessment of effect of music therapy on primary hypertension.
- The selected music therapy will be administered only for 30 minutes per day for continuous 7 days.
- The data collection period will be limited to 4 weeks.

CONCLUSION

This showed that music therapy was effective in maintaining blood pressure and hence research hypothesis was accepted. On the basis of the findings, the investigator concluded that the music therapy which was administered was effective. Hence, the nurses working among the clients with primary hypertension can utilize music therapy as a non-pharmacological (or) relaxation technique for the maintenance of blood pressure in their part of nursing care.

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