

Effectiveness Of Music Therapy On Physiological Parameters Of Antenatal Mothers With Pregnancy Induced Hypertension In Obstetric Ward At Pbmh, Kims, Bhubaneswar Odisha

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Abstract- “Effectiveness of music therapy on physiological parameters of antenatal mothers with pregnancy induced hypertension in obstetric department at PBMH, KIMS, Bhubaneswar Odisha”.

A total of 60 antenatal mothers with pregnancy induced hypertension will be selected based on inclusion criteria through purposive sampling technique. The group is divided in to experimental and control group. After obtaining written consent from mothers, structured baseline variables are elicited.

A quantitative quasi experimental research design has been adopted for the present study to measure the immediate effects of music therapy on blood pressure, Pulse rate and respiratory rate. Purposive sampling technique is being used the data found that there is significant decrease in the blood pressure of PIH diagnosed antenatal mothers who are been given music therapy for 15 min. Consecutively for 3 days.

The study was concluded with limitation, implication and recommendations for descriptive study on large sample.

Index Terms- BP : Blood Pressure, RR : Respiratory rate, PR : Pulse rate, PIH : Pregnancy Induced Hypertension, SD : Standard Deviation, %: Percentage, Freq. : frequency

I. INTRODUCTION

A “women is the full circle. Within her is the power to create, nurture and transform.”

- Diane marie child

Every minute, each day somewhere in the world, a woman dies as result of complications related to pregnancy and childbirth. Gestational hypertension and preeclampsia are common disorders during pregnancy with the majority of cases developing at or near term. Pregnancy Induced hypertension (PIH) affects about 5 % of Pregnant women and is a significant cause of maternal, fetal, and

neonatal mortality and morbidity. In India the incidence of pre-eclampsia is reported to be 8-10% of the pregnancies.

Though no perfect remedy is available at present, it is possible to minimize these hazards on mother and developing fetus by early detection and prompt action. Non pharmacological measures like progressive relaxation, acupressure music therapy, etc are used to treat the mothers with P.I.H. Among these, music therapy is found to be very effective in the recent years. Listening to soothing music for half an hour a day while breathing deeply can significantly reduce your blood pressure without drugs.

Music therapy can bring variety of experiences such as promoting muscular relaxation, relieving anxiety and depression. It also helps in altering perception of pain, reinforce identity and self concept, providing a means of expressing spiritual feelings and feeling comforted and reassured.

II. MATERIALS AND METHODS

OBJECTIVES OF THE STUDY:

-To assess the level of physiological parameters of antenatal mothers with PIH in experimental and control group before and after music therapy.

-To compare the level of physiological parameters of antenatal mothers with PIH after music therapy in both the group.

RESEARCH APPROACH :-Research approach is a systematic , controlled , empirical and critical evaluation of natural phenomenon guided by theory and hypothesis about the presumed relation among the phenomena.

RESEARCH DESIGN

A quantitative quasi experimental research design has been adopted for the present study to measure the immediate effects of music therapy on blood pressure, Pulse rate and respiratory rate.

GROUP	PRE-ASSESSMENT	INTERVENTION	POST ASSESSMENT
EXPERIMENTAL	O1	X	O2
CONTROL	O1	-	O2

O 1:- Observation 1 and O 2: Observation 2, of both experimental and control group.

X :- intervention [music therapy]

No intervention only the normal daily nursing care.

RESEARCH SETTING

A study will be conducted in Obstetric department, PBMH, KIMS.

POPULATION

antenatal mothers in Obstetric department, PBMH KIMS.

SAMPLE AND SAMPLE SIZE

60 antenatal hypertensive Mothers, divided into experimental group(30) and control group(30) .

SAMPLING TECHNIQUE:-

Purposive sampling technique

Criteria for selection of sample:-

Inclusion criteria: Antenatal Mothers

- willing to participate.
- diagnosed for PIH with BP above 130/90 mm hg.
- available during data collection.

Exclusion criteria: Antenatal mothers

- having blood pressure less than 130/80 mm hg.

DESCRIPTION OF THE TOOL

The tool consisted of 2 sections.

Section-A

DEMOGRAPHIC DATA

Age, Religion, Education, Occupation, Gravida/ Para/ Abortion/ Live Birth, Gestational Age, Type Of Family, Family Monthly Income.

Section-B

PHISIOLOGICAL ASSESSMENT

Blood Pressure, Pulse, Respiration.

Section - C

A compact disc (CD) having the music of 15 minutes.

DATA COLLECTION PROCEDURE

Formal permission was obtained from the concerned authorities. A total of 60 antenatal mothers with pregnancy induced hypertension will be selected based on inclusion criteria through purposive sampling technique. The group is divided in to experimental and control group. After obtaining written consent from mothers, structured baseline variables are elicited. Then assess the physiological parameters in both experimental and control group. Then Music Therapy will be given to experimental group for 15 minutes along with routine care. The control group will be given routine nursing care alone. After the therapy the BP, Pulse and respirations will be assessed on both control and experimental group. Music therapy will be given twice a day with two hours interval during daytime for three successive days. After every music therapy B.P, Pulse respirations are checked and recorded. The collected data are tabulated for comparative analysis.

III. RESULTS AND DISCUSSION:

Finding related to effectiveness of music therapy on physiological parameters of antenatal mother diagnosed with PIH.

N = 30

- a) frequency, percentage distribution, mean and SD of the BP of experimental and control group

SL.NO	BP	EXP. GRP.		MEAN	CON. GRP.		MEAN
		Freq.	%		Freq.	%	
1	SP= 120 -129 DP= 71 - 80	14	46.66%	SP=132 DP=82	0	0%	SP=138 DP=90
2	SP= 130 -139 DP= 81 - 90	10	33.33%	SD	18	60%	SD

3	SP= 130 -149 DP= 91 - 100	6	20%	7.7	12	40%	4.8
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The above table shows that after the post assessment in the experimental group mean of the BP is 132/82 and SD is 7.7 whereas in the control group mean of BP is 138/90 and SD is 4.8. Thus it shows that there is significant reduction in the BP after music therapy in the samples of experimental group and there is no change in the control group.

a) frequency, percentage distribution, mean and SD of the PR of experimental and control group.

TABLE NO-9.2

SL.NO	PR	EXP. GRP.		MEAN	CON. GRP.		MEAN
		Freq.	%		Freq.	%	
1	80 - 86	20	66.66%	86	0	0%	98
2	88 - 94	3	10%	SD	6	20%	SD
3	96 - 102	7	23.33%	5.2	24	80%	3.2

The above table shows that after the post assessment in the experimental group mean of the PR is 86 and SD is 5.2 whereas in the control group mean of PR is 98 and SD is 3.2.

Thus it shows that there is significant reduction in the after music therapy in the samples of experimental group and there is no change in the control group.

a) frequency, percentage distribution, mean and SD of the RR of experimental and control group.

TABLE NO-9.3

SL.NO	RR	EXP. GRP.		MEAN	CON. GRP.		MEAN
		Freq.	%		Freq.	%	
1	16 - 20	8	6.66%	20	0	0%	24
2	21 - 25	18	60%	SD	18	60%	SD
3	25 - 30	4	13.33%	5.3	12	40%	2.2

The above table shows that after the post assessment in the experimental group mean of the RR is 20 and SD is 5.3 whereas in the control group mean of RR is 24 and SD is 2.2.

Thus it shows that there is significant reduction in the RR after music therapy in the samples of experimental group and there is no change in the control group.

- a) mean, sd of the post test level of physiological parameters of the experimental and control group.

TABLE NO-9.4

GROUP	EXPERIMENTAL GROUP			CONTROL GROUP		
	POST ASSESSMENT			POST ASSESSMENT		
	BP	PR	RR	BP	PR	RR
MEAN	132/82	86	20	138/90	98	24
SD	7.8	5.2	5.3	4.8	3.2	2.3

In the experimental group, the overall post assessment mean BP was 132/82, SD was 7.8, mean PR was 86, SD was 5.2, mean RR was 20, SD was 5.3 whereas in the control group, the overall post test mean BP was 138/90, SD was 4.8, mean PR was PR 98, SD was 3.2, mean RR was 24, SD was 2.3 respectively. It was inferred that the post assessment level physiological parameters was lower (BP, PR) and RR in the experimental group than the control group. Hence the Music therapy was found to be effective in improving the Physiological parameters of the antenatal mothers with PIH.

IV. SUMMARY AND CONCLUSION:

After the detailed analysis of the research study we came to the point that, In the experimental group, the overall post assessment mean BP was 132/82, SD was 7.8, mean PR was 86, SD was 5.2, mean RR was 20, SD was 5.3 whereas in the control group, the overall post test mean BP was 138/90, SD was 4.8, mean PR was PR 98, SD was 3.2, mean RR was 24, SD was 2.3 respectively. It was inferred that the post assessment level physiological parameters was lower (BP, PR) and RR in the experimental group than the control group. Hence the Music therapy was found to be effective in improving the Physiological parameters of the antenatal mothers with PIH.

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