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Study to assess the effectiveness of music therapy during the first stage of labor in reducing the level of pain among mothers in labor room at selected maternity hospitals in the city.

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ABSTRACT

Labor pain is considered one of the most intense forms of pain experienced by women. Effective non-pharmacological methods such as music therapy have been shown to help in relaxation, distraction, and pain reduction during the first stage of labor. To find out the effectiveness of music therapy by comparing level of labor pain in experimental and control group among mothers in labor room at selected maternity hospital in the city. True experimental design- posttest only design. The sample will consist of laboring mothers selected through Simple random sampling technique. The sample size consists of 60, in this 30-sample experimental group Sample, 30 sample Control group The intervention group will receive music therapy during the first stage of labor, while the control group will not receive music threapy. Pain levels will be measured using a standard Verbal rating scale. Data will be analyzed using descriptive and inferential statistics. It is expected that mothers who receive music therapy will report a significantly lower level of pain during the first stage of labor compared to those who has not receive intervention of music threapy. After the detailed analysis, this study leads to the following the labor pain of mothers is not reduced 100%. There was significant decrease in the level of labor pain of subjects after the introduction of music therapy. To find the effectiveness of music therapy paired „t" test was applied and t value was calculated, posttest score significantly higher at 0.05 level than that of pretest score. Thus, it was concluded that music therapy on reduce level of labor pain was found effective.

There is association of knowledge score in gravida, antenatal checkup, state you pain, nature of uterine contraction. And there is no association in the age, educational status, religion, occupation, residential area Hence, based on the above findings, it was concluded that the written prepared material by the investigator in the form of music therapy helped the mothers to reduce level of labor pain.

KEYWORDS: Music therapy, labor pain, first stage of labor, maternity hospital, childbirth.

INTRODUCTION

Pain in labor is a nearly universal experience. Pregnant women commonly worry about the pain they will experience during labor and child birth. The discomfort as experienced during labor has specific origins. During the first stage of labor uterine contractions cause cervical dilatation, effacement and uterine ischemia resulting from contraction of the arteries to the Myometrium. The discomfort from cervical changes and uterine ischemia is visceral pain.

As the women progress through childbirth, numerous physiologic responses occur to adapt to the laboring process.

Maternal physiological responses includes; heart rate increases by 10 to 20 bpm, cardiac output increases by 10% to 15% during the first stage of labor and by 30% to 50% during the second stage of labor, blood pressure increases by 10 -30 mm of hg during uterine contractions in all labor stages, the white blood cell count increases to 25,000 to 30,000 cells/ mm3 perhaps as a result of tissue trauma, respiratory rate increases and more oxygen is consumed related to the increase in metabolism, gastric motility and food absorption decrease, which may increase the risk of nausea and vomiting during the transition stage of labor , gastric emptying and gastric PH decrease, increasing the risk of vomiting with aspiration, body temperature rises slightly, possibly due to an increase in muscle activity, basal metabolic rate increases and blood glucose levels decrease because of the stress of labour.

A wide variety of child birth preparation methods can provide a way to help the women cope with the discomfort of labor and many numbers of nonpharmacological strategies are being followed to reduce the labor pain. The non- pharmacological strategies followed to encourage relaxation and to relieve pain are firstly, cognitive strategies, such as child birth education, music, breathing technique, Over the past few decades there has been a growing interest in the use of music, which has seen it used to achieve a diverse range of outcomes.

Music is the science or art of the composition of sounds that are comprehended by the human brain as enjoyable and expressive.
Throughout the history music has been used for its beneficial influence on people. The bible describes how the shepherd David calmed the mind of King Saul with his harp. The writings of confusions, Plato and Aristotle suggest that music has the ability to produce beneficial effects on people. Ancient Greeks and Romans believed that music had magical charm and power to aid the body and soul in healing.

A systematic review encompassing 28 studies with 2,835 participants further supports these findings, suggesting that music-based interventions can effectively reduce pain and anxiety during labor. The review noted that while the pain-relieving effects of music were significant during vaginal labor, their efficacy diminished as labor progressed.

Incorporating music therapy into maternity care offers a cost-effective, feasible, and non-invasive option to enhance maternal comfort during labor. Given its demonstrated benefits and lack of adverse effects, healthcare providers are encouraged to consider integrating music therapy into labor management protocols.

OBJECTIVES
1.To find out the effectiveness of music therapy by comparing level of labor pain in experimental and control group among mothers in labor room at selected maternity hospital in the city.
2.To find out association between post-test labour pain scale Score with their demographic variables.

SCOPE AND METHODOLOGY
SCOPE
1.This study was conducted to evaluate the effectiveness of music therapy to awaken the interest in non-pharmacological treatment approaches to labor pain, since it has no pharmacological side effects.
2.Finding of this study will help to plan and practice music therapy as a non-invasive nursing intervention in the clinical practice.
3.The study findings will indicate the effect of music therapy in process of reducing the labor pain.
4.The study will motivate the mothers and other health personal to use the music therapy for reducing the labor pain.
5.The study will get attention of hospital administrator towards need of music therapy

METHODOLOGY
Methodology is generally a guideline system for solving a problem, with specific components such as phases, tasks, methods, techniques and tools.
RESEARCH APPROACH: In this study Quantitative approach was used.
RESEARCH DESIGN: In this study the research design selected for the present study was true experimental post-

test-only control group design is used with the objective of effectiveness of music therapy by comparing level of labor pain in experimental and control group among mothers in labor room at selected maternity hospital in the city.

VARIABLES:
According to Polit and Hungler, variable is an attribute of a person or an object that varies, that it takes a different value. Two types of variables are identified in the study they are dependent variables and independent variables

DEPENDENT VARIABLE: -
It is the outcome or response due to the effect of the independent variable, which researcher wants to predict or explain.
In this study, dependent variable is Level of labor pain.

INDEPENDENT VARIABLE
It is a stimulus or activity that is manipulated or varied by the researcher to create the effect on the dependent variables.
Independent variable in this study is A Music therapy

POPULATION:
Population refers to the entire aggregation of cases of all the units in which research is interested
In this study the population is all the mothers in labor room.

TARGET POPULATION:
Polit and Hungler state that the target population is the entire aggregate generalization or which represent the entire group that meets the criteria for inclusion in the study.
In this study the target population includes the mothers in labor room at selected maternity hospitals.

ACCESSIBLE POPULATION:
Accessible population refers to the portion of target population which the researcher has reasonable access.
In the present study the accessible population includes mothers in labor room at maternity selected hospitals available at the time of data collection.

SAMPLE:
Pilot and Hungler define the term sample as the subset of a population selected to participate in a study.
In this study the sample consist of mothers in labor room at selected maternity hospital who were available during the period of data collection.

SAMPLING TECHNIQUE.
In this study probability simple random sampling technique was used in which a sample is choice of investigator with regard to the characteristic required under investigation. SAMPLE SIZE:
Sample consists of 60, in this 30-sample experimental group were available during the period of data collection were the sample for this study as mentioned in inclusion criteria

SAMPLE SELECTION CRITERIA:
The sample was selected with the following set criteria:

INCLUSION CRITERIA:
It is the criteria that specify characteristics that a population does have. In this study, Mothers at labor room.
- Mothers those who are willing to participate in the study.
- Mothers available during the time of data collection.
- Primi and multi mothers

EXCLUSION CRITERIA:

It is the criteria that involves people who does not possess the population characteristics. In this study the exclusive criteria were:

- Mothers who are already participated in study.
- Mothers who are not in situation to answer during the time of data collection.
- LSCS
- Exclude 2nd&3rd Stage.
- Mothers' deafness.

TOOLS PREPARATION: -

- **DEVELOPMENT OF TOOL: -**

LITERATURE REVIEW: Previous research studies from books, journals and internet were referred

EXPERTS OPINION: It was discussed with 13 experts from various fields and their valuable suggestions were incorporated in tools

TECHNIQUE

Data collection technique are based on objectives and described systematically.

Verbal rating scale was used as the research tool

- **DESCRIPTION OF TOOLS:**

Section A- Demographic Variables.

The investigator constructed this tool to collect the background data of the study subjects and to identify the influence of sample characteristics with the knowledge in them. It included variables like Age, residence, gravida of mothers, and Education, Religion, Residence, Antenatal checkup, state your usual pain tolerance level, Gestational Age, Nature of uterine contraction, Source of information, If yes means source of previous knowledge about pain relief therapy

Section B- Standard Verbal rating scale:

The mothers how to rate and give front statement according to their experience labor pain. The items in the tool were organized under section. None, mild pain moderate pain, severe pain, Extreme pain, worst possible pain unmanageable pain.

Section C- Intervention playing pre-recorded Soft instrumental Music

RESPONSE MODE

The researcher will observe the labor pain as posttest and note her observation according to the modified standardized scale to check the level of severity of labor pain. Maximum and minimum score percentage possible for labor pain will be

SCORING

CATEGORY OF SEVERITY OF PAIN	CODING NUMBER
Mild pain	0-1
Moderate pain	2-3
Severe pain	4-5
TOTAL	**05**

FEASIBILITY OF THE STUDY: -

According to polit and Beck, feasibility helps the investigator to determine, if the subjects understand the items and directions given are clear. The purpose is to reveal the problem selected to answering and point out the weakness in administration, organization and distribution of instrument. Feasibility of the study was assessed by conducting a pilot study on subjects by paper pencil test in selected hospital. There was no difficulty in conducting the pilot study because the permission was taken to conduct the study from the respective authority of subjects were available for the pilot study investigator established rapport with them easily, they were very cooperative and ready to participate in the study, so the study was feasible from investigators point of view. Tool was tested on 6 subjects that were eligible for the study and the investigator found that tool was feasible. These subjects were excluded in the main study.

PILOT STUDY:

A pilot study, pilot project or pilot experiment is a small-scale preliminary study conducted in order to evaluate feasibility, time, cost, adverse event, & size (statistical variability) in an attempt to predict an appropriate subject size upon the study design prior to performance of a full-scale investigator project.

Permission from the concerned authorities was sought. The pilot study was conducted from 06/11/2024 as per laid down criteria. 6 subjects were selected for the pilot study by simple random sampling technique. The purpose and the usefulness of the study were explained to the hospital matron before taking permission. The investigator carried out the pilot study with the subject is randomly selected. The simple random sampling technique method was use for the selection of the sample. There are 3 subjects in the experimental group and 3 were in the control group those experienced moderate and severe labor pain were taken by simple random sampling technique.The findings of the study were analyzed. The pilot study helped the investigator to improve the tool and provided better insight and clarity regarding the different aspects of the study. This study was found to be feasible, practical and convenient. The subjects that included in the pilot study were excluded in the main study.

RELIABILITY: -

The reliability of the tool was computed the split half method was used to found reliability the correlation coefficient was (r) =0.86and the reliability of tool was here the reliability is more than 0.7 conclude that tool is reliable.

VALIDITY

The tool was sent for validation to 20experts of fields of various specialty which include obstetrics and gynecology nursing, medical surgical nursing, clinical psychology, statistician, gynecology doctor. Out of which I received 14 tools after validation. The valuable suggestions of all the experts were considered and the necessary changes were made.

DATA COLLECTION METHOD: -

The investigator will plan to obtain the necessary permission from the consent authority for the study. The investigator will introduce self and informed samples about the nature of the study to insure better cooperation during the data collection. The investigator starts data collection on 13/12/2024from selected maternity hospital. The investigator will approach the mothers and prepare a sampling frame of those, who made the inclusion criteria and explain them the purpose of the study and how it will beneficial for them investigator will enquire their willingness to participate in the study and will obtain written consent from them. The investigator selects 60 sample mothers;30 is undergone music therapy to reduce labor pain. The pain is assessed by investigator with use of standard verbal rating scale.

PLAN FOR DATA ANALYSIS: -

The data was decided to be analyzed, by both descriptive and inferential statistics on the basis of objectives and hypothesis of the study. To computer the data, a master data sheet was prepared by the investigator including: -

Demographic variable containing sample characteristics like Age, gravida, and Education, Religion, Residence, Antenatal checkup, state your usual pain tolerance level, Gestational Age, Nature of uterine contraction, Source of information, if yes means source of previous knowledge about pain relief therapy, is there any previous knowledge experience about pain relief therapy would be analyzed using frequency and percentage.

The investigator planned to analyze the data on the basis of the objectives and hypothesis of the study.

- organize data in master data sheet.
- Demographic variables will be analyzed using frequency and percentage.
- To correlate the level of labor pain between primi mothers and doula midwife will be analyzed by using paired and unpaired “t” test.
- Chi square test will be used to find out the association between the levels of pain with their demographic variables.

REVIEW OF LITERATURE

According to Polit and Hungler (1978), reviewing the literature is important to gain better understanding and insight necessary to develop broad conceptual frame work within which problem can be examined. Review of literature is the vital steps in research process.

Literature helps to get an idea regarding study which has to be counties. This chapter deals with the literature to this study. The primary purpose of reviewing is to gives board ground knowledge of the information that is available related to research problem of interest. A literature review to the present study to develop deeper insight in the problem area. The talk of review of researcher literature involves the identification selection critical analysis and writing description of existing information on the topic.

In the present study, the literature review has been organized in categories under following headings:

1. Literature and studies related to music therapy
2. Literature and studies related to effectiveness of music therapy during the first stageof labor in reducing the level of pain

1. LITERATURE AND STUDIES RELATED TO MUSIC THERAPY

Nining Sulistyowati's (2024) Study explores the impact of classical music therapy on reducing labor pain during the first stage of labor. Labor pain, a natural physiological process, can cause significant emotional and physical stress for the mother, manifesting as fatigue, fear, and anxiety. Music therapy, a non-pharmacological intervention, is suggested as an effective method to alleviate this pain. This quantitative research utilized a quasi- experimental design with a One Group Pretest-Posttest approach, involving 30 laboring mothers as participants. The study aimed to evaluate whether classical music could reduce the intensity of labor pain. Data were collected between March and April 2023, with the total sample size determined through total sampling. Results showed that the average pain intensity before the music intervention was 3.20, with a standard deviation of 0.610, while after the intervention, the pain intensity decreased to an average of 2.47, with a standard deviation of 0.507. Statistical analysis using the Wilcoxon test revealed a significant reduction in pain intensity (p-value = 0.000, <0.05),

indicating that classical music therapy is effective in reducing labor pain during the first stage of labor. This study highlights the potential benefits of using music therapy as a supportive care strategy for laboring mothers.

Gal Cohen (2024) Assessed the effectiveness of music therapy in reducing anxiety among women undergoing induction of labor (IOL) using PGE2 vaginal pessary. Participants were assigned to a music group, receiving a 45-minute session, or a control group. Anxiety was measured using the STAI questionnaire, VAS scores, and salivary cortisol levels. Results showed that before the intervention, situational anxiety (STAI-S) was higher in the music group. After music therapy, significant reductions in salivary cortisol, anxiety scores, and VAS scores were observed in the music group compared to the control group ($p<0.05$). Music therapy effectively reduced anxiety, offering a non-invasive approach to improve the birthing experience.

Preethi.D (2024) Conducted a study to evaluate the effectiveness of sacral massage and music therapy on pain perception and birth satisfaction in women during labor at a hospital in Dindigul. The quasi-experimental design with a non-equivalent control group post-test was used. The sample consisted of 60 mothers, with 30 in the experimental group and 30 in

the control group. Tools used included the numerical pain rating scale and birth satisfaction scale. Results showed the experimental group had a significantly lower mean post-test pain score (6) compared to the control group (8.13), with a mean difference of 2.13, indicating effectiveness at $p<0.05$.

2. LITERATURE AND STUDY RELATED TO EFFECTIVENESS OF MUSIC THERAPY DURING THE FIRST STAGE OF LABORIN REDUCING THE LEVEL OF PAIN

Razhan Chehreh et.al (2023) the effect of music therapy on labor pain: Systematic review and meta-analysis. control group were8 and 8.28 before and after the intervention respectively showing a pain increment by 0.18%. Based on the visual analog scale,labor pain was mild (i.e., score 2–4), moderate (i.e., score 5–7), and severe (i.e., score8–10) in 24.8%, 36.5%, and 23.5% of the studied women. Conclusion was Music therapy can be considered as a non-pharmacological approach to reduce labor pain and improve the quality of maternity care. It is suggested that music therapy to be included in the protocols of maternity cares to increase their quality and efficiency

Samjhana Gautam et.al (2023) Childbirth is a most welcomed and positive life experience for the majority of women, despite the pain. Most of them manage it wellwith minimal assistance while few of them require some intervention to reduce the pain. The objective of this study was to find out the effect of music therapy on intensity of labor pain among primigravid women. Methods: A quasi-experimental pre-test post-test non-equivalent control group design was used. Sample consisted of42 primigravid women admitted in labor room of a teaching hospital in Kathmandu. Results: The mean difference of total pain between experimental and control groups. The mean difference of total pain between experimental and control groups during active phase was 1.00 during pre-test and 6.95 during post-test. Conclusions: Music therapy tends to reduce labor pain both during the latent and active phase of labor.

Huimin Guo et.al (2022) Effect of Music Therapy Combined with Free Position Delivery on Labor Pain and Birth Outcomes At present, the clinical effect of music therapy combined with free position to assist delivery is rarely reported. Results. The combination group had better results of the Chinese PLPQ score, postpartum hemorrhage, and perineum condition. There was no significant difference in 1 minute Apgar score between the two groups. Music therapy combined with free position delivery, an intervention based on evidence-based nursing, can effectively reduce maternal labor pain, postpartum hemorrhage, soft birth canal injury, and medical intervention during labor. It is, therefore, a safe intervention to assist delivery.

RESULTS, DISCUSSION AND FINDINGS

- **SECTION -I**

Deals with analysis of data demographic of mothers at selected city in terms of frequency and percentage

This section deals with distribution of mothers in selected maternity hospitals of the city with regards to selected demographic variables. A simple random sample of 30 experimental and 30 control group subjects was drawn from the study population. The data obtained to describe the sample characteristics included Age, residence,

gravida of mothers
and Education, Religion, Residence, Antenatal checkup, state your usual pain tolerance level, Gestational Age, Nature of uterine contraction, Source of information, if yes means source of previous knowledge about pain relief therapy

TABLE: 1.1 Percentage wise distribution of mothers according to their selected demographic variables.

N=30/30

Demographic variable	Control		Experimental	
	Frequency	Percentage	Frequency	percentage
Age				
a. 18yrs	0	0%	0	0%
b. 19-24yrs	15	50%	20	66.66%
c. 25-29yrs	15	50%	10	33.33%
d. 30yrs above	0	0%	0	0%
Gravida				
a. Primi	26	86.66%	25	83.33%
b. multigravida	4	13.33%	5	16.66%
Educational				
a. illiterate	0	0%	0	0%
b. secondary	17	56.66.%	20	66.66%
c. higher	13	43.33%	10	33.33 %
d. graduate and above	0	0%	0	0%
Religion				
a. Christian	1	3.33%	2	6.66%
b. Hindu	14	46.66%	20	66.66%
c. Muslim	5	16.66%	4	13.33%
d. Others	10	33.33%	4	13.33%
Occupation				
a. Home maker	7	23.33%	5	16.66%
b. Business	3	10%	5	16.66%

TABLE: 1.2 Percentage wise distribution of mothers according to their selected demographic variables.

N=30/30

Demographic variable	Control		Experimental	
	Frequency	Percentage	Frequency	percentage
c. private sector	10	33.33%	10	33.33%
e. farmer	10	33.33%	10	33.33%
Residential area				
a. urban	15	50%	20	66.66%
b. suburban	6	20%	7	23.33%
c. rural	9	30%	3	10%
Antenatal check up				
a. regular	20	66.66%	25	83.33%
b. irregular	10	33.33%	5	16.66%
c. nil	0	0%	0	0%
State your usual pain tolerance				
a. low	0	0%	0	0%
b. moderate	20	66.66.%	22	73.33%
c. higher	10	33.33%	8	26.66 %
Nature of uterine contraction				
a. mild	0	0%	0	0%
b. moderate	25	83.66%	26	86.66%
c. severe	5	16.33%	4	13.33%
Is there any Previous Knowledge experience about pain relief therapy				
a. **yes**	0	0%	0	0%
b. no	30	100%	30	100%

Source of pregnancy information				

a) Family and friends	0	0	0	0
b) Healthcare provider (doctor, nurse, midwife	0	0	0	0
c) Books or magazines	0	0	0	0
d) Online resources	0	0	0	0
e) Antenatal classes f) Other (please specify):	0	0	0	0

Table IV.II Percentage wise distribution of mother according to their age
N=30/30

Age	Control		Experimental	
a. 18yrs	0	0%	0	0%
b. 19-24yrs	15	50%	20	66.66%
c. 25-29yrs	15	50%	10	33.33%
d. 30yrs above	0	0%	0	0%

TABLE: -V1-3 Percentage wise distribution of mothers according to their gravida N=30/30

GRAVIDA	CONTROL		EXPERIMENT	
a. Primi	26	86.66%	25	83.33%
b. multigravida	4	13.33%	5	16.66%

TABLE: - V1-4 Percentage wise distribution of mothers according to their educational
N=30/30

EDUCATIONAL	CONTROL		EXPERIMENT	
a. Illiterate	0	0%	0	0%
b. Secondary	17	56.66.%	20	66.66%
c. Higher	13	43.33%	10	33.33 %
d. Graduate and above	0	0%	0	0%

TABLE: - V1- 5 Percentage wise distribution of mothers according to their religion

N=30/30

RELIGION	CONTROL		EXPERIMENT	
a. Christian	1	3.33%	2	6.66%
b. Hindu	14	46.66%	20	66.66%
c. Muslim	5	16.66%	4	13.33%
d. Others	10	33.33%	4	13.33%

TABLE: - V1- 6 Percentage wise distribution of mothers according to their occupation

N=30/30

OCCUPATION	CONTROL		EXPERIMENT	
a. Home maker	7	23.33%	5	16.66%
b. business	3	10%	5	16.66%
c. PRIVATE SECTOR	10	33.33%	10	33.33%
d. Farmer	10	33.33%	10	33.33%

TABLE: - V1-7 Percentage wise distribution of mothers according to their area

N=30/30

RESIDENTIAL AREA	CONTROL		EXPERIMENT	
a. urban	15	50%	20	66.66%
b. suburban	6	20%	7	23.33%
c. rural	9	30%	3	10%

.TABLE: - V1-8 Percentage wise distribution of mothers according to their antenatal check up

N=30/30

ANTENATAL CHECK UP	CONTROL		EXPERIMENT	
d. regular	20	66.66%	25	83.33%
e. irregular	10	33.33%	5	16.66%
f. nil	0	0%	0	0%

TABLE: - V1- 9 Percentage wise distribution of mothers according to their pain tolerance
N=30/30

STATE YOUR USUAL PAIN TOLERANCE	CONTROL		EXPERIMENT	
d. low	0	0%	0	0%
e. moderate	20	66.66.%	22	73.33%
f. higher	10	33.33%	8	26.66 %

TABLE: - V1- 10 Percentage wise distribution of mothers according to their nature of uterine contraction
N=30/30

NATURE OF UTERINE CONTRACTION	CONTROL		EXPERIMENT	
a. mild	0	0%	0	0%
b. moderate	25	83.66%	26	86.66%
c. severe	5	16.33%	4	13.33%

TABLE: - V1-11 Percentage wise distribution of mothers according to their previous knowledge experiences
N=30/30

Is there any Previous Knowledge experience about pain relief therapy	CONTROL		EXPERIMENT	
a. **yes**	0	0%	0	0%
b. no	30	100%	30	100%

• Distribution of mothers according to their age in years shows that maximum 15(50%) were of 19-24years and 15 (50%) were 25-29years in experimental group and 20(66.66%) were 19-29 yrs in control group and None of the samples were found in the age 18 and30 yrs above.

• Distribution of mothers according to their gravida of mothers reveal that maximum in control 26(86.66%) were primi mothers, 4(13.33%) were of multigravida. And in experiment group 25(83.33%) were primi mothers, 5(16.66%) were of multigravida.

- Distribution of mothers according to their educational status reveal that maximum in control group 17(56.66%) were secondary and in experimental group 20(66.66%) were secondary and none were graduate and above and found in the illiterate
- Distribution of mothers according to their religion reveal that maximum in control group 14(46.66%) were of Hindu and 1(3.33%) were Christian, in experiment group20(66.66%) were of hindu, 2(6.66%) were Christian.
- Distribution of mothers according to their occupation reveal that maximum in control 10 (33.33%) were private and 10(33.33%) were farmer, 3(10%) were of business and in experiment group10(33.33%) were private and 10(33.33%) were farmer, 5(16.66%) were home maker, 5(16.66%) were of business
- Distribution of mothers according to their residential area shows that maximum in control 15(50%) were urban, 6(20%) were of suburban and in experiment group 20(66.66%) were urban, 3(10%) were rural.
- Distribution of mothers according to their antenatal checkup shows that maximum in control 20(66.66%) were regular, and 0 (0%) were nil. and in experiment group 25(83.33%) were regular, and 0(0%) were nil.
- Distribution of mothers according to their State your usual pain tolerance shows that maximum in control 20(66.66%) were of moderate ,0(0%) was low and in experiment group 22(73.33%) were moderateand0(0%) were low.
- Distribution of mothers according to their nature of uterine contraction shows that maximum in control 25(83.66%) were of moderate, 0(0%) were mild and in experiment group 26(86.66%) were moderate, and 0(0%) were mil.
- Distribution of mothers according to there Is there any Previous Knowledge experience about pain relief therapy in control 0(0%) were YES, 30(100%) were of NO And in experiment group 0(0%) were YES, 30(100%) were NO.

SECTION-II

- In this section assessment of the Post-test knowledge level of pain among mothers in labor room at selected city in terms of frequency and percentage in control group.
- In this section assessment of the Post-test knowledge level of pain among mothers in labor room at selected city in terms of frequency and percentage in experimental group by giving music therapy.
- In this section assessment of the Post-test knowledge level of pain among mothers in labor room at selected city in terms of frequency and percentage in control group.

TABLE IV-12: Post test frequency and percentage distribution of level of pain among mother in labor room in control group

N=30

LEVEL	FREQUENCY	PERCENTAGE
Mild pain 0-1	0	0%
Moderate pain 2-3	8	26.66%
Severe pain 4-5	22	73.33%

TABLE IV- 13: In this section assessment of the Post-test knowledge level of pain among mothers in labor room at selected city in terms of frequency and percentage in experimental group by giving music therapy.

N=30

LEVEL	FREQUENCY	PERCENTAGE
Mild pain 0-1	9	30%

Moderate pain 2-3	21	70%
Severe pain 4-5	0	0%

TABLE – iv-14 In this section assessment of the test knowledge level of pain among mothers in labor room at selected city in terms of frequency and percentage N= 30/30

	CONTROLPOST TEST			EXPERIMENT POST TEST			T= TEST
	No. of subjects	MEAN	S. D	No. of subjects	MEAN	S. D	
Overal 1 score	30	4	0.023	30	1.8	0.68	T TEST T= 16.79

Distribution of knowledge of the mothers in labor room before intervention in control group and experimental group reveals that (0%,30%) had mild pain ,(26.66%,70%) had moderate pain and (73.33%,0%) had severe pain. Hence ,it is interpreted that the knowledge score of mothers in labor room pain score is less than in experimental group as compared to control group so music threapy is effective in experimental group.The data presented in the table shows that for control overall mean score for posttest is 4 and standard deviation is 0.023 whereas in experiment group mean post test score is 1.8 with standard deviation of 0.68. The paired 't' test obtained score is 16.79 is statistically significant. Therefore, the research hypothesis H1 was accepted.

SECTION III
TO FIND OUT THE ASSOCIATION OF MOTHERS WITH SELECTED DEMOGRAPHIC VARIABLE

This section deals with the association of posttest knowledge scores with demographic variables of the study population. One way ANOVA and unpaired "t" test was used for within groups comparison categories. For variables having more than two categories one way ANOVA was used and for variables having two categories unpaired "t" test was used

 To associate posttest regarding level of pain with selected demographic variable TABLE 1V-15 To associate p o s t test regarding level of pain with selected demographic variable
N=30/30

SR NO	DEMOGRAPHIC VARIABLES	CONTROL			
		X2	SIGNIFICANCE	DEGREE OF FREEDOM	TABLE VALUE
1	AGE	1.72	NS	1	3.84
2	GRAVIDA	10.9	S	1	3.84
3	EDUCATIONAL STATUS	2.77	NS	1	3.84
4	RELIGION	3.88	NS	3	7.82

	DEMOGRAPHIC VARIABLES	CONTROL			
		X2	SIGNIFICANCE	DEGREE OF FREEDOM	TABLE VALUE
5	Occupation	7.2	NS	3	7.82
6	Residential area	1.58	NS	2	5.99
7	Antenatal check up	4.83	S	1	3.84
8	State your usual pain tolerance	4.6	S	1	3.84
9	Nature of uterine contraction	9.6	S	1	3.84

significant at P<0.05 level NS- Non-Significant

It is evident from the Table that level of scores is not significantly associating in age, educational status, religion, occupation, residential area, and association in gravida, antenatal checkup, state you pain, nature of uterine contraction.

SR NO	DEMOGRAPHIC VARIABLES	EXPERIMENTAL			
		X2	SIGNIFICANCE	DEGREE OF FREEDOM	TABLE VALUE
1	AGE	4.7	S	1	3.84

2	GRAVIDA	8.6	S	1	3.84
3	EDUCATIONAL STATUS	4.6	S	1	3.84
4	RELIGION	1.29	NS	3	7.82
5	OCCUPATION	0.31	NS	3	7.82
6	RESIDENTIAL AREA	5.2	NS	2	5.99
7	ANTENATAL CHECK UP	8.4	S	1	3.84
8	STATE YOUR USUAL PAIN TOLERANCE	5.6	S	1	3.84
9	NATURE OF UTERINE CONTRACTION	9.8	S	1	3.84

significant at P<0.05 level NS- Non-Significant

It is evident from the Table that level of scores is not significantly associating in occupation, religion, residential area, and association in age, educational status gravida, antenatal checkup, state you pain, nature of uterine contraction.

LIMITATIONS OF THE STUDY

The study is limited to the

- The study is limited primi mother with above 37 weeks of gestation.
- Measuring the level of pain perception only with standard verbal rating scale
- Assessment of the level of pain perception is limited to first stage of labour only from the client.
- Mothers who are willing to participate in the study.
- Mothers who are present at the time of data collection.
- Mothers who are not participate in same study.

- Mothers who can understand Marathi/English.
- Small sample size.

RECOMMENDATIONS

On the basis of the findings of the study, it is recommended that the following studies can be conducted

1. Similar study can be conducted with large in size of population.
2. The effect for music therapy can be assessed in combinations with other relaxation procedures like meditation, paced breathing and touching to reduce the level of labor pain perception.
3. Similar study can be conducted with other types of music.
4. Comparative study can be conducted with primi and multi gravida mother.
5. A comparative study can be done music therapy and meditation.

CONCLUSION OF THE FINDINGS

After the detailed analysis, this study leads to the following conclusion

The labor pain of mothers is not reduced 100%. There was significant decrease in the level of labor pain of subjects after the introduction of music therapy. To find the effectiveness of music therapy paired „t" test was applied and t value was calculated, posttest score significantly higher at 0.05 level than that of pretest score. Thus, it was concluded that music therapy on reduce level of labor pain was found effective.

There is association of knowledge score in gravida, antenatal checkup, state you pain, nature of uterine contraction. And there is no association in the age, educational status, religion, occupation, residential area.

Hence, based on the above findings, it was concluded that the written prepared material by the investigator in the form of music therapy helped the mothers to reduce level of labor pain

BIBLIOGRAPHY

1. Carol. Machee, nursing Lippincott Williams and Wilkins, Ed 2, 2003, 41- 47,101-207.
2. Ricci SS. Maternity, Newborn and health nursing (second). Lippincott Williams and Wilkins 2009.
3. International journal of practices, feb 2007, vol 13(1),14-15.
4. Sudha Bharathi, A (2012) A study to evaluate the effectiveness of music therapy in reducing pain perception during first stage of labour among primi mothers in Sivakasi maternity center at Madurai. Master's thesis, C.S.I Jeyaraj Annapackiam College of Nursing, Madurai.
5. Malathi D et.al. Effect of music therapy on pain during first stage of labour among Primi parturient mothers in Kasturba Gandhi hospital for women and children, Chennai. International Journal of Obstetrics and Gynaecological Nursing 2021; 3(1): 09-12.
6. Florence nightingale. Notes on nursing, D. Appleton and Company New York, 1860First American Ed ition page 37- 44
7. Podolsky E, Buck Walter K. Maternity Nursing. (6th edition). Elsevier Publications 2006.
8. Kavitha, T (2010) A Study to Assess the Effectiveness of Music Therapy on Pain Perception and Anxiety level on Primigravida Mothers in First Stage of Labor in a Selected Hospital at Coimbatore. Master's thesis, R.V.S. College of Nursing, Coimbatore.
9. Kamioka H., Tsutani K., Yamada M., Park H., Okuizumi H., Tsuruoka K., Honda T., Okada S., Park S.-J., Kitayuguchi J., et al. Effectiveness of music therapy: A summary of systematic reviews based on randomized controlled trials of music interventions. Patient Prefer. Adherence. 2014; 8:727–754. doi: 10.2147/PPA.S6134.
10. Kavitha, T (2010) A Study to Assess the Effectiveness of Music Therapy on Pain Perception and Anxiety level on Primigravida Mothers in First Stage of Labor in a Selected Hospital at Coimbatore. Master's thesis, R.V.S. College of Nursing, Coimbatore.
11. Daftary, Chakravati, "Manual of obstetrics ", ed 2, Elsiver India Pvt. Ltd, Delhi ,2005,295-297.
12. Clark, M.E, (1981) "Music threapy assisted labor and delivery, Journal threapy, of Music, Vol.No.06.
13. Angel Fajkumari, (2008)," Effectiveness of music threapy in terms of level of pain perception among

primigravida mothers"., Nightangle Times, Nov .pg No.48,49
14. Phumdoung, S. and Good, M. (2003) Music Reduces Sensation and Distress of Labor Pain. Pain Management Nursing, 4, 54-61. 13. Melzack R, Taenzer P, Feldman P, Kinch RA. Labour is still painful after prepared childbirth training. Can Med Assoc J. 2010 Aug 15;125(4):357 363.
15. Hosseini SE, Bagheri M, Honarparvaran N. Investigating the effect of music on labor pain and progress in the active stage of first labor. Eur Rev Med Pharmacol Sci. 2013 Jun 1;17(11):1479-87.
16. Santosh kumarilohar et.al "An Experimental Study to Assess Effectiveness of Music Therapy in Labor Pain Reduction among Primigravida Mothers in First Stage of Labor in Selected Hospitals at Udaipur, Rajasthan" IOSR Journal of Nursing and Health Science (IOSR-JNHS) e- ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 7, Issue 4 Ver. V (Jul.- Aug. 2018), PP 28-32
17. urucu SG, Ozturk M, Vurgec BA, Alan S, Akbas M. The effect of music on pain and anxiety of women duringlabor on first time pregnancy: A study from Turkey. Complementary therapies in clinical practice. 2018 Feb 1; 30:96-102.
18. Phumdoung, S. and Good, M. (2003) Music Reduces Sensation and Distress of Labor Pain. Pain Management Nursing, 4, 54-6
19. Curzik, D. and N. Jokic-Begic, Anxiety sensitivity and anxiety as correlate of expected, experienced and recalled labor pain. Journal of Psychosomatic Obstetrics & Gynecology, 2011. 32(4): p. 198-203.
20. Tournaire, M. and A. Theau-Yonneau, Complementary and alternative aproaches to pain relief during labor. Evidence-based Complementary and Alternative Medicine, 2007. 4(4): p. 409-417.
21. Simavli S, Gumus I, Kaygusuz I, Yildirim M, Usluogullari B, Kafali H. Effect of music on labor pain relief, anxiety level and postpartum analgesic requirement: a randomized controlled clinical trial. Gynecologic and obstetric investigation. 2014;78(4):244-50
22. Melzack R, Taenzer P, Feldman P, Kinch RA. Labour is still painful after prepared childbirth training. Can Med Assoc J. 2010 Aug 15;125(4):357 363.
23. Callahan E.C., Lee W., Aleshi P., George R.B. Modern Labor Epidural Analgesia: Implications for Labor Outcomes and Maternal-Fetal Health. Am. J. Obstet. Gynecol. 2023;228: S1260 S1269. doi: 10.1016/j.ajog.2022.06.017.
24. Munro and Mount. Meta-analysis evaluating music interventions for anxiety and pain in surgery. Br J Surg. 2018; 105:773 83.
25 Razhan Chehra et.al "The effects of music threapy on labor pain: Systematic review and meta- Volume 24, Issue 3, June 2023, Pages 110-117.
26. Siedlecki, et.al. Unforgettable film music: the role of emotion in episodic long-term memory for music. BMC Neurosis. 2008; 9:48. doi: 10.1186/1471-2202-9-48.
27 Tintu Xavier, Lekha Viswanth "effect of music threapy on Labor pain among Women in Active Labor admitted in Tertiary Care Hospital, Kochi April 2017, Journal on Recent Advances in Pain 3(1):3-6.
28. Chlan, L., & Tracy, M. F. (1999). Music therapy in critical care: indications and guidelines for intervention. Critical care nurse, 19(3), 35-41.
29. Chang ET, Lau EC, Van Landingham C, Crump KS, McClellan RO, Moolgavkar Sham J Epidemiol. 2019 Feb 1;188(2):485-486. doi: 10.1093/aje/kwy167.
30. A. Agnes et al. Knowledge and willingness of prenatal women in Enugu Southeastern Nigeria to use in labour non-pharmacological pain reliefs Afr Health Sci Volume 24, Issue 3, June 2023, Pages 110-117.
31. Polit DE and Beck CT Nursing Research, Generating and assessing evidence for nursing pg 765,768,761,764.
32. SK Sharama Nursing Research and Statistics Haryana Elsevier Publication Page NO,81,82,30,31,32,216,177,178.
33. Sulistyowati's N. Music Therapy Reduces Pain In Labor. Jurnal Edu health 2023; 14:940–3.
34. . Cohen G, Farladansky Gershnabel S, Larson S, Kuchuk Y, Moran R, Key Segal C, et al. 418 Effectiveness of music therapy in reducing anxiety levels among women undergoing induction of labor. American Journal of Obstetrics and Gynecology 2024.
35. Preethi. D, Heppsi SujathaR et.al A study to assess the effectiveness of sacral massage and music threapy on pain perception and birth satisfaction among women in

labor at selected hospital at Dindigul International journal of advanvces in nursing management ,2024 vol 3 page no 501-508.
36. Malak Bleibel The effect of music therapy on cognitive functions in patient with Alzheimer's diseases: a systematic review of randomized controlled trials Alzheimer's Research& Threapy Volume 15, Article Number: 65(2023).
37. Lee E, Kim DY, Kim J. The effects of music therapy on labor pain, childbirth experience, and self-esteem during epidural labor analgesia in primiparas: a non-randomized experimental study. Korean Journal of Women Health Nursing 2023; 29:137–45.
38. Hunter AR, Heiderscheit A, Galbally M, Gravina D, Mutwalli H, Himmerich H. The Effects of Music-Based Interventions for Pain and Anxiety Management during Vaginal Labour and Caesarean Delivery: A Systematic Review and Narrative Synthesis of Randomised Controlled Trials. International Journal of Environmental Research and Public Health 2023;20.
39. Gönenç İM, Dikmen HA. Effects of Dance and Music on Pain and Fear During Childbirth. Journal of Obstetric, Gynecologic, & Neonatal Nursing 2020;49:144–53.
40. Gaiki SP. Effectiveness of Music Therapy on the Level of Anxiety during First Stage of Labour among Pregnant Woman in Selected Hospitals. International journal of science and research 2023.
41. Paoin P, Prasongvej P, Chanthasenanont A, Niumpradit T, Pongrojpaw D, Suwannarurk,K. Efficacy of Music Therapy and Zingiber officinale Roscoe Aromatherapy for Reducing Pain during the First Stage of Labor: A Randomized Controlled Trial. Deleted Journal 2023; 75:707–12.
42. Damanik I, Tridiyawati F. Music Therapy and Effective Communication Reduces Anxiety Levels in Welcoming Childbirth. International Journal of Health and Pharmaceutical 2023.
43. Jaakko Erkkilä et.al (2021) Music Therapy for Depression Enhanced with Listening Homework and Slow-Paced Breathing: A Randomised Controlled Trial Psychol., 16 February 2021 Sec. Health Psychology Volume 12 – 2021.
44. De Chen, Yingchun Zeng,Haoke Tang,Liping Chen,Ning Yang Effects of Music Interventions on Maternal and Child Outcomes in Obstetric Settings: An Updated Systematic Review and Meta-Analysis - Vol. 8, Iss: 1, pp 45-59 1.
45 Robinson A. Music therapy and the effects on laboring women. Kentucky nurse 2020; 50:7.
46. Fidler H, Miksza P. Music interventions and pain: An integrative review and analysis of recent literature. 2020;12.
47. Erhan Gökçek et.al The effects of music therapy in patients undergoing septorhinoplasty surgery under general anesthesia Brazilian Journal of Otorhinolaryngology Volume 86, Issue 4, July August 2020, Pages 419-426.
48. Seyed Ebrahim Hosseini et.al. Report of Health Care Review Article Volume 4, Issue4,2018p.1-13Hosseinihttps://www.researchgate.net/publication/332934020
49. Krauss, Zachary J. (2019) "The Effects of Music Therapy on Individuals Suffering from Psychiatric Disorders: A Literature Review and Look into Future Prospects," Musical Offerings: Vol. 10: No. 2, Article 2. DOI:10.15385/jmo.2019.10.2.2.
50. Lillypushpam S. To assess the effectiveness of music therapy on pain perception and anxiety level in first stage of labour in labour ward at government Rajaji hospital, Madurai.
51. Barbieri JM. Addressing Perceived Pain in Childbirth: A Music Therapy Voicework Intervention Design.
52. Park HJ, Sung MH. Effects of Music Therapy on Stress of Preterm Labor and Uterine Contraction in Pregnant Women with Preterm Labor. Korean Journal of Women Health Nursing Vol. 23, Iss: 2, pp 109-116.
53. Chehreh R, Tavan H. The effect of music therapy on labor pain: Systematic review and meta-analysis. Douleurs: Evaluation - Diagnostic - Traitement 2023; 24:110–7.
54. Samjhana Gautam et.al Effect of Music Therapy on Intensity of Labor Pain among Primigravid Mothers admitted in a Tertiary Level Hospital Journal of Nepal Health Research Council 21(58):92-8 September 2023 DOI:10.33314/jnhrc. v21i1.4429.
55. Huimin Guo et.al Effect of Music Therapy Combined with Free Position Delivery on Labor Pain and Birth Outcomes. 2022 May 11:2022:8963656. doi: 10.1155/2022/8963656. E Collection 2022.

56. Mujiyani SA, Latifah L. Pain management in the first stage of labour using sensory stimulation. The British Journal of Midwifery 2022; 30:396–404.
57. Amerry Y, Trias Novita RV, Susilo WH. The effectiveness of Nusantara Instrumental as Music Therapy for Decreasing Pain in the First Stage of Labor. Media Keperawatan Indone 2022; 5:22.
58. Varsha Rawat et.al Management of Labour Pain by using non- pharmacological Measure October 2021 International Journal for Innovation Education and Research 9(10):380-391 DOI: 10.31686/ijier.vol9.iss10.3461.
59. D M, M G, Geethalakshmi A. Effect of music therapy on pain during first stage of labour among Primi parturient mothers in Kasturba Gandhi hospital for women and children, Chennai. 2021; 3:09–12.
60. Buglione A, Saccone G, Mas M, Raffone A, Di Meglio L, Di Meglio L, et al. Effect of music on labor and delivery in nulliparous singleton pregnancies: a randomized clinical trial. Archives of Gynecology and Obstetrics Vol 301 page no- 32-35.
61. Kiliç C. The effect of music therapy during vaginal delivery on postpartum pain relief and mental health. 2020. Vol. 3, Iss: 2, pp 64-66.
62. Rocio Santiváñez-Acosta. et.al Music Therapy in Pain and Anxiety Management during Labor: A Systematic Review and Meta-Analysis Medicina (Kaunas) 2020 Oct 10;56(10):526. doi: 10.3390/medicina56100526.
63. Paulander A, Eulau L. PCMusic – Support during Pain Management, Part 1. Universal journal of public health 2020; 8:127–34.
64. Santosh kumarilohar et.al Effectiveness of Music Therapy in Labor Pain Reduction among Primigravida Mothers in First Stage of Labor in Selected Hospitals at - JNHS) e- ISSN: 2320 1959.p- ISSN: 2320 1940 Volume 7, Issue 4 Ver. V (Jul.-Aug. 2018), PP 28-32 .
65. Shweta Kishor Naik. Quasi Experimental Study to determine the Effectiveness of Music Therapy on Pain Level of Primigravida Mothers during First Stage of Labour in selected Maternity Hospitals at Metropolitan City. Int. J. Nur. Edu. and Research. 2018; 6(2): 161- 163. doi: 10.5958/2454-2660.2018.00038.8.
66. karkal, kharade, Dhumale Effectiveness of music therapy in reducing pain active phase of first stage of labor international journal of nursing education volume 9 page no 57-60
67. Wijayanti I, Wahyuni S, Mikaningtyas E, Pratiwi T. Differences in labor pain intensity after the provision of music therapy to primigravida mothers inpartu kala. 2017;240–50 .
68. Tintu Xavier. Effect of Music therapy on Labor Pain among Women in Active Labor Admitted in Tertiary Care Hospital Kochi Article · November 2016 DOI: 10.16965/ijims.2016.145.
69. Debajani Nayak et.al Effectiveness of music therapy on anxiety level, and pain perception in primipara mothers during first stage of labor in selected hospitals of Odisha, IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320 1959.p- ISSN: 2320 1940 Volume 3, Issue 2 Ver. V (Mar-Apr. 2014), PP 07-14.
70. Serap Simavli et.al Effect of music therapy during vaginal delivery on postpartum pain relief health J Affect 10.1016/j.jad.2013.12.027. Epub 2013 D. Disord. 2014 Mar: 156:194-9. doi:
71. Taginejal.H.et.al, Music listening as a nursing intervention a symphony of practices" , Holistic nursing practices" Nursing Journal ,2010 vol.(3), 70-72 .
72 Cambelle et.al," Descriptive study to evaluate the intensity of the labor pain at the two stages of cervical dilatation, at east cardina university, school of nursing, Greeille, Journal of nurse midwifery ,2000 vol 6(3), 143-14.
73. Malini et.al Rahmanini v, Ansari A Taghipour, The effects of Irananin traditional music on cervical dilation and labor progress in the active stage of term pregnancy A randomized controlled trial Health science reports 2021: -7.
74. Sudha Bharathi , Effectiveness of Music threapy on labour pain among women in active labor journals 10046-0058 pg 12-13.