Effectiveness of Guided Imagery and Pranayama Techniques on Labour Pain, Coping and Anxiety among primigravid women in selected Hospital at Puducherry.

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Abstract: *Pregnancy is one among the most important stages in every woman's life. Labor is a physiologic process during which the fetus, membranes, umbilical cord, and placenta are expelled from the uterus.* *Background: Relaxations techniques enhanced blood circulation, provide more energy in the body, increase oxygen levels in blood and generate positive hormones in the body. Guided imagery and pranayama which has no side effects and have many potential benefits during pregnancy, labour and delivery like pain, duration of labour and mode of delivery.* *Methodology: A quantitative research approach and true experimental research (three groups post-test only) was used. Accessible population, who satisfied the inclusion criteria were selected by using Random Assignment Technique with lottery method(mothers attending Obstetrics and Gynecology OPD on every Monday and Thursday - Intervention Group I, Every Tuesday and Friday - Intervention Group II and Every Wednesday and Saturday - Routine Care Group – III were allotted The investigator were used various tools like labour pain by standardized Numeric Pain Rating Scale, labour pain coping by standardized Numeric Pain Coping Scale and anxiety by Hamilton anxiety scale are used by the investigator. The data were analyzed by using descriptive and inferential statistics like mean, median standard deviation, Kruskal-Wallis Test tests are used to evaluate the effectiveness of guided imagery and pranayama.* *Results and Conclusion: By used Kruskal-Wallis Test at p value < 0.001 it was highly statistically significant. Guided imagery and pranayama were the effective methods in reducing labour pain, improving labour coping, and reducing anxiety. Though Guided imagery and pranayama group had less labour pain, more coping, and less anxiety comparing with control group, pranayama had higher proportion in reducing labour pain, improving coping and reducing anxiety during labour and delivery of normal delivery comparing with other groups.*

Key Words: Pranayama, Guided Imagery, Labour pain, coping, anxiety and primigravid women.

1. INTRODUCTION:

Pregnancy is one among the most important stages in every woman's life. Women's mental and psychological wellbeing and comfort during pregnancy can guarantee their own health and their fetus's healthy growth and development. Childbirth is an important experience in the woman's life; and its quality has short- term and long-term effects on them.[1]

Dick Read found that fear of unknown phenomena such as childbirth caused muscle contraction and, consequently, increased the labor pain intensity. This in turn has complications for mother and fetus. Therefore, all maternity care units aim to alleviate this pain and make it as a pleasant experience with the minimal pain. To reduce these interventions, the anxiety of labor pain should be directed towards pleasant emotions and experiences. The applied methods for alleviating the labor pain are divided into pharmacological and non-pharmacological groups.[2]

Pain during labor is different for every woman. It varies widely from woman to woman and even from pregnancy to pregnancy. Women experience labor pain differently — for some, it resembles menstrual cramps; for others, severe pressure; and for others, extremely strong waves that feel like diarrheal cramps.[3]

Natural birth is a beautiful experience with many benefits and comforts. Every women dream is an interesting concept in the context of pain during childbirth. The feeling of comfort is an expression of having impending needs or desires in three domains namely body, mind and spirit. It provides a feeling of relief, ease, security, wellbeing, hope and expectations. Pain control during labour is a woman centered concept in which each women have an impact on how they express their pain by themselves and indeed of how they perceive during labour.[4]

Satisfaction in childbirth is an important indicator for the quality of maternity care given to women today. Labour pain is probably the most painful event in the lives of women, consequently majority of women today require pain control. Labour pain is more than a physiological process; it is an emotional and complex with feelings of fulfillment and achievement.[5]

Labor support includes ongoing attendance and psychological support such as mother reassurance, encouragement and guidance, physical comfort such as cooperation to perform touch, massage, cold, heat and hydrotherapy techniques, position change and movement, woman and wife information, facilitation of communication to help women to express their needs and demands.[6]

The use of non-pharmacological approaches has been considered due to adverse effects of medications such as hypoxia, hypotension and maternal cardiac arrhythmia and neonatal respiratory failure. Non-pharmacological practices are superior to pharmacological methods because of their cheapness, simplicity of implementation, non-invasiveness, creation of self esteem, clients' participation, non-interference with the way of undergoing, no adverse effects, and being pleasant for both mother and fetus.[7]

Studies indicate that the progress of childbirth is facilitated in women who feel more secure and their pain is well controlled. The applied techniques for increasing the pain relief and tolerance, such as avoidance of generalization and catastrophizing, positive self-talk and imagery, distraction, use of alternative experience, desensitization and relaxation affects the self-efficacy and increase the ability to cope with labor pain. Studies indicate that relaxation and imagery affect the autonomic nervous system (ANS) and cause relaxation both in pregnancy and during labor.[8]

The strangeness of the present examination is to find the best technique for reducing pregnant women's fears by increasing their happiness. Accordingly, this investigation intended to assess the levels of satisfaction in pregnant women who were prepared by two methods of muscle relaxation and guided imagery contrasted with controls among primiparous women who were admitted to Zahedan health care centers in Sistan and Baluchistan province of Iran.[9]

The pathway from maternal stress to negative health outcomes is a multifaceted and complex process which represents the connection between mind and body. The perception of stress in the mind triggers biological changes in the body leading to physiologic reactions that can have Evidence-Based Complementary and Alternative Medicine detrimental effects on health outcomes. This connection is mediated by the hypothalamic-pituitary-adrenal (HPA) pathway with corticotrophin releasing hormone (CRH) playing a major role in the physiologic response to stress. Studies have demonstrated that stress and anxiety during pregnancy are associated with elevated levels of CRH.[10]

However, many of the CAM interventions are presented in groups or one-on-one, which requires participant's scheduled time, child care, transportation, health-care provider time, and cost—all of which present potential barriers to participation and implementation into clinical practice. Guided imagery (GI) is a powerful, mind-body CAM therapy that is an economic, simple, and easy to use intervention that can be easily delivered in a self-help format thus eliminating potential barriers inherent in other CAM interventions. Given these potential benefits and today's demands on the health care system.[10]

The non – pharmacological therapies which are commonly used during antenatal period are head massage, muscle relaxation therapy, breathing technique, music therapy, aroma therapy, herbal therapy, guided imagery, yoga, meditation and psychotherapy. Among these relaxations therapy, yoga can help to prevent complications and have proved to be better key in reducing the risks during pregnancy, pranayama is an effective mind diverse measures which helps to reduce complications with pregnancy induced hypertension.[11]

Guided imagery (GI) is a psycho physiological dynamic modality in which a person imagines and experiences an internal reality in the absence of external stimuli. The mechanism of action may be related to the power of GI to send messages and information from the brain to the central nervous system and thus connect with physiological processes. Imagery has shown significantly reduce the effects of stress on the body, thus encouraging circulation and oxygen to

the fetus. When imagery is used during the prenatal period all the way through the labour and delivery, gives the mom-to-be the opportunity to prepare her emotionally and physically.[10]

Pranayama breathing interacts the nervous system affecting metabolism and autonomic functions. Hyper polarization currents propagated through neural and non-neural tissue which synchronizes neural elements in the heart, lungs, limbic system and cortex. The use of relaxation techniques during pregnancy, labour and delivery process allows the mom to be, an opportunity to focus on the words of the imagery story to produce a deep sense of relaxation, purpose and peace. It is a well known fact that relaxed, confident women tolerate the effects of labour with more comfort, ease pain and complications.[12]

2. LITERATURE REVIEW:

(Childbirth is an important experience in the woman's life; and its quality has short- and long-term effects on them. The present study aimed to determine the effect of positive mental imagery on the labor pain tolerance in primiparous women referred to Atieh teaching-medical center in Hamadan. The research results indicated that the mean age of control and intervention groups was 25.98 ± 4.82 and 25.32 ± 4.85 respectively. The mean scores of Visual analogue scale (VAS) and the Behavioral Pain Scale significantly decreased compared to the control group (P <0.001). The mean scores of behavioral changes in the intervention group were 1.77 ± 0.68, 2.39 ± 0.54 and 3.09 ± 0.60 in 4-5 cm, 6-7 cm and 8-10 cm dilatations respectively. That was statistically significant decrease compared to the control group (P=0.005).[13]

Pain relief is an important issue for women in labour. The level of pain experienced and the effectiveness of pain relief may influence a woman's satisfaction with labour and delivery and may have immediate and long-term emotional and psychological effects. The type of pain relief used in labour may have an impact on breast feeding and mother-infant interaction. Women experience varying degrees of pain in labour and exhibit an equally varying range of responses to it. It is estimated that 7.3 million perinatal deaths occur annually in the world and most of these in the developing countries, especially in Asia, for every 1000 births, the perinatal mortality in India is about 37.7. Worldwide, an estimated 140 million births take place every year.[14] Most of these occur without complications for women and their babies. Among laboring women, the labour pain was 30-70% who experiences extreme level of pain. It is also found that about 31.7%   have experienced back pain along with labour pain. Guided imagery has found to be an effective therapy to decrease pain, anxiety, stress and a depressed mood during labour.[9]

Utilizing the guided imagery technique, primiparous women are encouraged to take a profound abdominal or diaphragmatic breathing in order to relax their muscles, envision the view (e.g., backwoods, seashore, and zone in the journey), and center around can encompass sounds and scents for about 10 -15 minutes. Further, muscle relaxation and guided imagery are frequently utilized together on the grounds that guided imagery can improve the procedure of muscle relaxation and prompt an expansion in its impact.[15]

During pregnancy, growing fetus is dependent on mother's body for the supply of oxygen and nutrients. Through conscious inhaling during pregnancy along with mindful exhaling during pregnancy, one can strengthen the supply of oxygen and decreases carbon dioxide in the blood. This purifies the blood, rids it of toxins, and supplies the foetus with fresh oxygen and nutrients as well. Supplying the baby with adequate oxygen contributes to its development in the womb, both cognitive and physical. By practicing pranayama, one can reduce their own anxiety by fuelling their body with oxygen. Enhanced blood circulation, provide more energy in the body, increase oxygen levels in blood, eliminates wastes and toxins from the body, Pranayama generates positive hormones in the body and removes negative thoughts and calms the mind.[16]

Mehl used guided imagery with 100 women whose babies were in breech position at37 to 40 weeks' of gestation. He compared them with a matched comparison group. In the hypnosis group, 81% of the babies spontaneously "turned" to the proper position, compared with 48% in the comparison group[17]. Ellise D Adams reported that 99% of nurses attending the labouring women's in Huntsville experienced that, guided imagery have a positive effect on comfort and progression of labour and a great role in reduction of pain during labour.[18]

As a researcher, interested in different relaxation techniques such as guided imagery and pranayama which has no side-effects and have many potential benefits during pregnancy, labour and delivery like pain, coping and anxiety. Hence, the study was undertaken to evaluate the Effectiveness of Guided Imagery and Pranayama Techniques on labour pain, coping and anxiety among primigravid women in selected Hospital at Puducherry.

3. STATEMENT OF THE STUDY:

Effectiveness of Guided Imagery and Pranayama Techniques on Labour Pain, Coping and Anxiety among primigravid women in selected Hospital at Puducherry.

4. OBJECTIVES :

- To evaluate the effectiveness of guided imagery and pranayama techniques on labour pain, coping and anxiety among primigravid women.
- To compare the effectiveness of guided imagery and pranayama techniques on Labour pain, coping and anxiety among primigravid women.
- To correlate the relationship between labour pain, coping and anxiety among primigravid women.
- To find the association between the labour Pain, Coping and anxiety among primigravid women with the selected demographic and reproductive variables.

5. MATERIALS AND METHODS:

A quantitative research approach and true experimental research (three groups post-test only) design was used. The study was conducted in the Antenatal OPD, Labour and Postnatal wards of Mahatma Gandhi Medical College and Research Institute which is accredited with NABH certification, situated in Pillaiyarkuppam, Puducherry. Accessible population, who satisfied the inclusion criteria were selected by using Random Assignment Technique with lottery method (mothers attending Obstetrics and Gynecology OPD on every Monday and Thursday - Intervention Group I, Every Tuesday and Friday - Intervention Group II and Every Wednesday and Saturday - Routine Care Group – III were allotted). The investigator were used various tools like labour pain by standardized Numeric Pain Rating Scale, labour pain coping by standardized Numeric Pain Coping Scale and anxiety by Hamilton anxiety scale are used by the investigator. The data were analyzed by using descriptive and inferential statistics like mean, median standard deviation, Kruskal-Wallis Test and ANOVA tests are used to evaluate the effectiveness of guided imagery and pranayama.

ETHICAL APPROVAL: The study protocol was approved by Institutional Human Ethical Committee (IHEC). Informed consent has been obtained from all the samples. The confidentiality of samples data was strongly assured.

DATA COLLECTION PROCEDURE AND METHOD

Demographic variables were collected in the Antenatal Out Patient Department (OPD) using interview schedule for all three groups sample. The mother was seated comfortably. Explanation of the intervention to the mother has been done. Asked the women to practice breathing deeply and slowly, imagining relaxing all of the muscles in body. The investigator introduced guided imagery for group I and pranayama for group II. Asked the women to practice guided imagery and pranayama from 34 weeks of gestation to till delivery, everyday for 15 – 20 minutes for 2 times (morning at 7.30am and evening at 6.30pm).The mother was asked to maintain diary. The investigator has followed the study participants' every day, through phone call and also during follow up visit in the OPD (every two weeks) and encouraged the mother to continue daily. Group III were followed with routine care. Post test was conducted at 8cm cervical dilatation.

6. RESULTS:

A total of 30 primigrvid women 5(50%) in group I, 5(50%) in group II had moderate pain, 5(50%) in group I, 5(50%) in group II had severe pain and 5(50%) in group III had severe pain 3(30%) had worst pain and 2(20%) had moderate pain during labour.
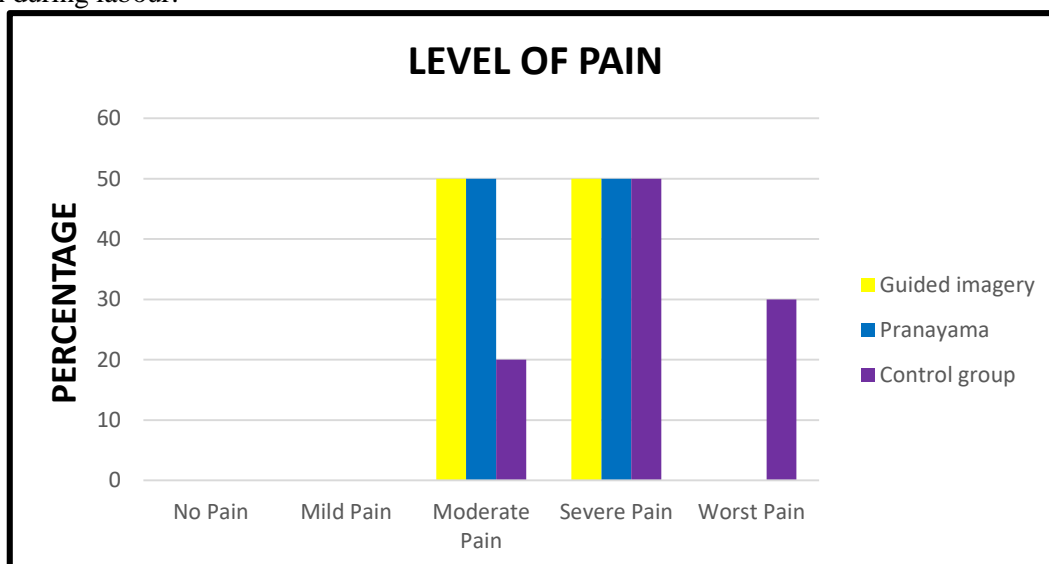

Figure – 1: shows that the distribution of frequency and percentage of pain among primipara mothers

A total of 30 primigrvid women 9(90%) in group I, 8(80%) in group II had coping, 1(910%) in group I, 2(20%) in group II had Struggled and 6(60%) in group III had Struggled and 4(40%) had not coped during labour.
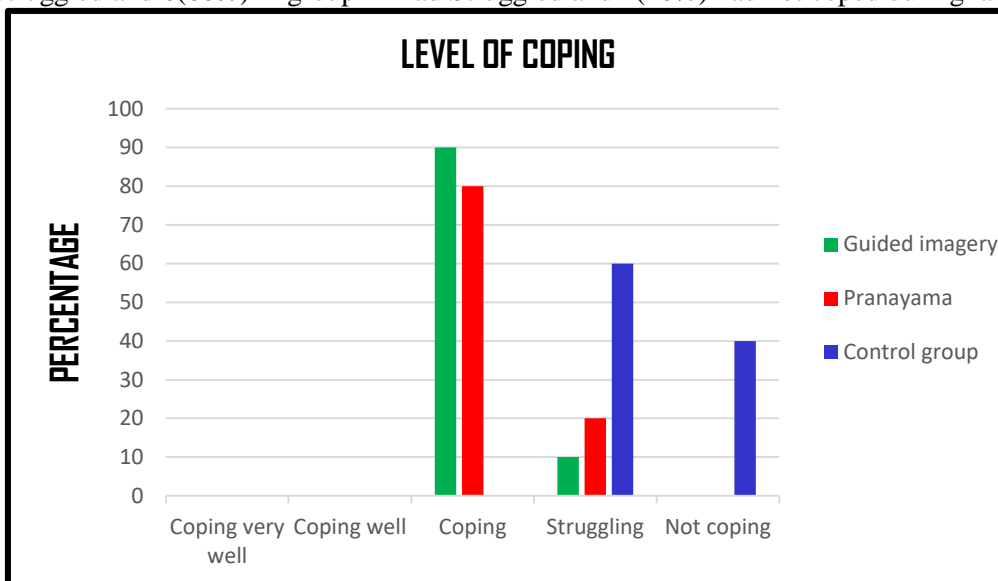

Figure – 2: shows that the distribution of frequency and percentage of coping among primipara mothers.

A total of 30 primigrvid women 6(60%) in group I and group II had moderate anxiety, 4(40%) in group I and group II had mild anxiety, and 10(100%) in group III had moderate anxiety during labour.
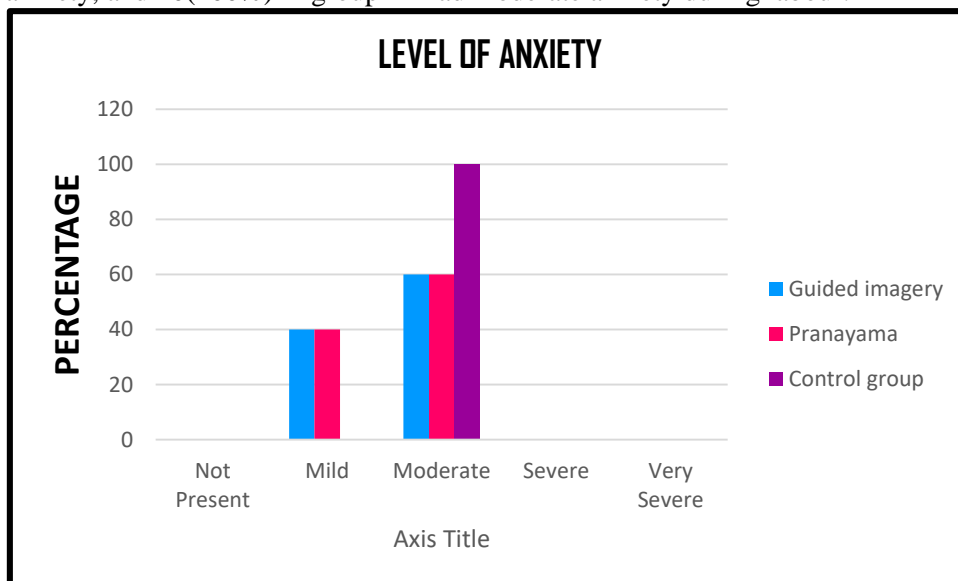

Figure – 3: shows that the distribution of frequency and percentage of anxiety among primipara mothers.

The mean value of labour pain level during cervical dilatation at 8cm was 6.2, 6.3 and 7.8 in group I, II and III respectively and the obtained Kruskal-Wallis Test value was 6.214 at p value < 0.045. The mean value of labour coping level during cervical dilatation at 8cm was 5.6, 6.2 and 8.1 in group I, II and III respectively and the obtained Kruskal-Wallis Test value was 17.639 at p value < 0.000. The mean value of labour anxiety level during cervical dilatation at 8cm was 18.8, 19 and 25.9 in group I, II and III respectively and the obtained Kruskal-Wallis Test value was 19.325at p value < 0.000. It was highly statistically significant at p<0.01 level.

Table - 1: COMPARISON OF MEAN, STANDARD DEVIATION OF PAIN, COPING AND ANXIETY LEVEL AMONG PRIMIPARA MOTHERS
N = 30

Variable		Mean ± Standard Deviation	Median (IQR)	Mean Rank	Kruskal-Wallis Test	P Value
Pain Level	Guided Imagery	6.2 ± 1.14	6.5 (5,7)	12.3	6.214	0.045

	Pranayama	6.3 ± 1.34	6.5 (5,7)	13.2		
	Control Group	7.8 ± 1.62	8 (7,9)	21		
Coping Level	Guided Imagery	5.6 ± 0.7	5.5 (5,6)	8.95	17.639	0
	Pranayama	6.2 ± 1.03	6 (6,6)	13.1		
	Control Group	8.1 ± 0.88	8 (7,9)	24.45		
Anxiety Level	Guided Imagery	18.8 ± 1.81	19 (17,20)	10.5	19.325	0
	Pranayama	19 ± 2.4	19 (17,21)	10.55		
	Control Group	25.9 ± 2.02	25.5 (24,28)	25.45		

The obtained mann whitney test value for labour pain between guided imagery and pranayama group was 47 with p value 0.853 , guided imagery and control group was 21 with p value 0.029 and between pranayama and control group was 24 with p value 0.052. It shows that pranayama group had less pain during labour comparing with guided imagery and control groups.

The obtained mann whitney test value for coping level between guided imagery and pranayama group was 33 with p value 0.218, guided imagery and control group was 1.5 with p value 0.000 and between pranayama and control group was 9 with p value 0.001. It shows that guided imagery group had more coping comparing with control group and pranayama group had more coping comparing with guided imagery and control groups.

The obtained mann whitney test value for anxiety level between guided imagery and pranayama group was 50 with p value 1.000, guided imagery and control group was 0 with p value 0.000 and between pranayama and control group was 0.5 with p value 0.000. It shows that guided imagery group had less anxiety comparing with control group and pranayama group had less anxiety comparing with guided imagery and control groups.

Table - 2: COMPARSION OF LEVEL OF PAIN, COPING AND ANXIETY BETWEEN THE GROUPS OF GUIDED IMAGERY, PRANAYAMA AND CONTROL GROUP
N = 30

VARIABLE	GROUPS		MANN WHITNEY VALUE	P VALUE
Pain Level	Guided Imagery	Pranayama	47	0.853
		Control Group	21	0.029
	Pranayama	Control Group	24	0.052
Coping Level	Guided Imagery	Pranayama	33	0.218
		Control Group	1.5	0.000
	Pranayama	Control Group	9	0.001
Anxiety Level	Guided Imagery	Pranayama	50	1.000
		Control Group	0	0.000
	Pranayama	Control Group	0.5	0.000

Correlation between pain level, coping and anxiety level among primigravid mothers in guided imagery pranayama and control groups during labour. By using spearman's rank correlation coefficient Guided imagery and pranayama groups had positive correlation in coping and anxiety at 0.008 levels. Control group had negative correlation in coping and anxiety at 0.005.

Table - 3: CORRELATION BETWEEN PAIN LEVEL, COPING AND ANXIETY LEVEL AMONG PRIMIGRAVID MOTHERS IN GUIDED IMAGERY, PRANAYAMA AND CONTROL GROUPS.
N = 30

Group	COMPONENT		CORRELATION		
			Pain level	Coping level	Anxiety level
Guided Imagery	**Pain level**	Correlation Coefficient p-value	1 .		
	Coping level	Correlation Coefficient t test	-0.259 0.392	1 .	
	Anxiety level	Correlation Coefficient t test	-0.193 0.491	0.147 0.610	1 .

Pranayama	Pain level	Correlation Coefficient t test	1 .		
	Coping level	Correlation Coefficient t test	0.333 0.247	1 .	
	Anxiety level	Correlation Coefficient t test	0.3 0.261	0.236 0.403	1 .
Control	Pain level	Correlation Coefficient t test	1 .		
	Coping level	Correlation Coefficient t test	0.358 0.204	1 .	
	Anxiety level	Correlation Coefficient t test	-0.024 0.926	-0.765 0.008	1 .

The association between the post-test level of pain, coping and anxiety during labour delivery with the selected demographic variables among primi gravid women. By using Mann Whitney / Kruskal Wallis test it was evidenced that there was no significant association between age in years, education, occupation, religion, dietary pattern, family type residence and source of health information among primi gravid women at p value<0.01 level. There is no significant difference between the association of post -test level of pain, coping and anxiety during labour delivery with the selected demographic variables among primi gravid women.

6. DISCUSSION:
The first objective was to evaluate the effectiveness of guided imagery and pranayama on labour pain, coping and anxiety among primigravid women.

The mean value of labour pain level during cervical dilatation at 8cm was 6.2, 6.3 and 7.8 in group I, II and III respectively and the obtained Kruskal-Wallis Test value was 6.214 at p value < 0.045. The mean value of labour coping level during cervical dilatation at 8cm was 5.6, 6.2 and 8.1 in group I, II and III respectively and the obtained Kruskal-Wallis Test value was 17.639 at p value < 0.000. The mean value of labour anxiety level during cervical dilatation at 8cm was 18.8, 19 and 25.9 in group I, II and III respectively and the obtained Kruskal-Wallis Test value was 19.325at p value < 0.000. It was highly statistically significant at p<0.01 level.

The second objective was to compare the effectiveness of guided imagery and pranayama techniques on Labour pain, coping and anxiety among primigravid women.

The obtained mann whitney test value for labour pain between guided imagery and pranayama group was 47 with p value 0.853 , guided imagery and control group was 21 with p value 0.029 and between pranayama and control group was 24 with p value 0.052. It shows that pranayama group had less pain during labour comparing with guided imagery and control groups.

The obtained mann whitney test value for coping level between guided imagery and pranayama group was 33 with p value 0.218, guided imagery and control group was 1.5 with p value 0.000 and between pranayama and control group was 9 with p value 0.001. It shows that guided imagery group had more coping comparing with control group and pranayama group had more coping comparing with guided imagery and control groups.

The obtained mann whitney test value for anxiety level between guided imagery and pranayama group was 50 with p value 1.000, guided imagery and control group was 0 with p value 0.000 and between pranayama and control group was 0.5 with p value 0.000. It shows that guided imagery group had less anxiety comparing with control group and pranayama group had less anxiety comparing with guided imagery and control groups.

The result showed that pranayama group had less pain level, more coping level and less anxiety level comparing with guided imagery and control groups. Pranayama is more effective for reducing labor pain level, improving labour coping and reducing anxiety during labour.

The third objective was to correlate the relationship between labour pain, coping and anxiety among primigravid women.

By using spearman's rank correlation coefficient Guided imagery and pranayama groups had positive correlation in coping and anxiety. Control group had negative correlation in coping and anxiety at 0.008.

The fourth objective was to find the association between the labour Pain, Coping and anxiety among primigravid women with the selected demographic and reproductive variables.

The association between the post-test level of pain, coping and anxiety during labour delivery with the selected demographic variables among primi gravid women. By using Mann Whitney / Kruskal Wallis test it was evidenced that there was no significant association between age in years, education, occupation, religion, dietary pattern, family type

residence and source of health information among primi gravid women at p value<0.01 level. There is no significant difference between the association of post -test level of pain, coping and anxiety during labour delivery with the selected demographic variables among primi gravid women.

7. IMPLICATION OF THE STUDY :
NURSING PRACTICE
- ➢ Giving birth is a beautiful experience for every woman. Nurses can administer guided imagery and pranayama during antenatal period provide support, allowing them to follow psycho prophylactic techniques.
- ➢ Education on labour and delivery outcomes to antenatal women should become part of daily nursing care.
- ➢ Care to be taken to avoid unnecessary operative delivery due to anxiety and fear of labour pain.
- ➢ Special efforts need to be taken to use standardized assessment tool to assess the progress of labour.

NURSING EDUCATION
- ➢ Nurses with higher education and up to date knowledge with provide cost effective and quality client care.
- ➢ Special courses on CAM methods can be started for nurses, so as to enable them to function independently.
- ➢ Organize periodical short sessions to educate and train the nursing persons.
- ➢ Seminars, workshops and symposium can be arranged on CAM methods to make nursing professional competent enough to meet the ever changing needs of the society.

NURSING ADMINISTRATION
- ➢ Nursing administrators need to facilitate the utilization of research base nursing care.
- ➢ Nursing administrators must ensure that no operative delivery be encountered for non indication.
- ➢ Nursing administrators should ensure periodical conduction of refresher courses for health care workers.
- ➢ Nursing administration must make sure that the educational and informational materials should have consistent information and these are to be displayed in antenatal outpatient department.

NURSING RESEARCH
- ➢ This study can be effectively utilized by the emerging researchers for their reference purpose.

8. RECOMMENDATIONS :
- ➢ This similar study can be replicated on large sample in various hospitals, there by findings can be generalized in large population.
- ➢ This similar study can be replicated with another CAM.
- ➢ Nursing researchers should be aware about the new trends and existing health care system.

9. LIMITATION :
- ➢ It was time consuming for the investigator, as it took 30 minutes – 1 hour to interview and educate the mother.

10. CONCLUSION:
Guided imagery and pranayama were the effective methods in reducing labour pain, improving labour coping, and reducing anxiety. Though Guided imagery and pranayama group had less labour pain, more coping, and less anxiety comparing with control group, pranayama had higher proportion in reducing labour pain, improving coping and reducing anxiety during labour and delivery of normal delivery comparing with other groups.

REFERENCES:
1. https://www.pregnancybirthbaby.org.au/mental-wellbeing-during-pregnancy
2. Whitburn L.Y, Jones L.E, Davey MA. The meaning of labour pain: how the social environment and other contextual factors shape women's experiences. BMC Pregnancy Childbirth. 2017; 17: 157
3. https://kidshealth.org/en/parents/childbirth-pain.html
4. Iravani M, Zarean E, Janghorbani M, & Bahrami M. Women's needs and expectations during normal labor and delivery. Journal of education and health promotion. 2015; 4: 6.
5. Longinus N. Ebirim, Omiepirisa Yvonne Buowari. Physical and Psychological Aspects of Pain in Obstetrics. 2012
6. Penny Simkin. Update on Nonpharmacologic Approaches to Relieve Labor Pain and Prevent Suffering. Journal of Midwifery & Women's Health. 2004; 49: 489-504
7. Kattah AG, Garovic VD. The management of hypertension in pregnancy. Advances Chronic Kidney Disease. 2013; 20(3):229-39.

8. Curtis K, Weinrib A, Katz J. Systematic review of yoga for pregnant women: current status and future directions. Evidence Based Complementary and Alternative Medicine. 2012; 715942.

9. Tahereh Boryri. Comparison of the Effect of Muscle Relaxation and Guided Imagery on Happiness and Fear of Childbirth in Primiparous Women Admitted to Health Care Centers . International Journal of Women's Health and Reproduction Sciences. 2019; 7: 490-495

10. Nancy Jallo. Guided Imagery for Stress and Symptom Management in Pregnant African American Women. Evidence Based Complementary and Alternative Medicine. 2014; 840923

11. Smith CA. Levett KM. Relaxation techniques for pain management in labour. The Cochrane database of systematic reviews. 2018; 3(3)

12. Jerath R, Edry JW. Barnes VA, Jerath V. Physiology of long pranayamic breathing: neural respiratory elements may provide a mechanism that explains how slow deep breathing shifts the autonomic nervous system. Med Hypotheses. 2006; 67(3):566-71.

13. Yavari, Caroline; Masoumi, Seyedeh Z. The Effect of Positive Mental Imagery on Labor Pain Tolerance in Primiparous Women Referred to Atieh Hospital of Hamadan, Iran, 2018: A Randomized Controlled Clinical Trial Study. Current Women's Health Reviews. 2021; 17: 357-364

14. https://www.who.int/reproductivehealth/intrapartum-care/en

15. Mrunal. How to Do Pranayama During Pregnancy. 2018:6

16. http://acadgi.com/about_sitemap/imageryresearch/procedures/childbirth/

17. Soumya A S. A Study to assess the effectiveness of Guided Imagery in reducing the pain during labour among the mothers admitted in a selected hospital at mangalore.