

# A STUDY TO ASSESS THE KNOWLEDGE REGARDING NON-PHARMACOLOGICAL MANAGEMENT OF LABOUR PAIN AMONG FINAL YEAR GNM STUDENTS AT SELECTED INSTITUTIONS IN BANGALORE WITH A VIEW TO DEVELOP A SELF INSTRUCTIONAL MODULE

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**ABSTRACT:** Approximately 4 million women and families annually in the United States alone are undergoing this problem. National data is unavailable to describe both childbearing women's access to and use of drug free pain relief measures in the United States which appears to be quite limited and far from commensurate with this universal relevance<sup>4</sup>. A systematic review of Non-Pharmacologic relief of pain during labour, the authors suggested for research and recommendations to help hospitals and caregivers make the non-pharmacologic method more widely available<sup>5</sup>. Objectives: the present study was conducted with the objectives to assess the existing knowledge regarding non-pharmacological management of labour pain among final year GNM students at selected institutions in Bangalore with a view to develop a self instructional module". **MATERIAL & METHODS:** Descriptive survey approach was adopted to collect data With 100 sample. Purposive sampling technique was employed for the sample selection. **RESULTS:** The overall mean knowledge score found to be 44.3% and S.D 2.36, majority of 53.4% respondents had knowledge in breathing technique, followed by 49.3%. with knowledge of music therapy, while 47.0% had knowledge on general information and 42.4% of respondents had knowledge on acupressure, and 39.5% in warm compress. Less mean knowledge score was found in massage therapy 37.4%. There was a significant association between knowledge regarding non-pharmacological management of labour pain with their Age, sex, education and marital status. **Conclusion:** The findings of the study revealed that educating the students would be effective in updating the knowledge and skills regarding non-pharmacological management of labour pain.

**Keywords:** -knowledge, final year GNM students, nursing institution, Non-pharmacological management, labour pain.

## INTRODUCTION

Pain in labour is a nearly universal experience for child bearing women and it can be intense with tension, anxiety and fear making it worse. It is however experienced differently by mothers giving birth. The majority of women though need some sort of pain relief drugs during childbirth, but safety of the child takes the first priority<sup>2</sup>. The alleviation of pain is important commonly it is not the amount of pain a woman experiences, but whether she meets her goals for herself in coping with the pain that influences her perception of the birth experience as "good" or "bad". The observant nurse looks for cues to identify the women's desired level of control in the management of pain and goes into the development method of pain control that brings effective relief for the mother without harm to the child. The perfect solution is yet to be found therefore at times the safety of the child must take precedence over the comfort of the mother<sup>3</sup>. Many women would like to have labour without using drugs and find alternative methods to manage the pain. These methods include acupressure, breathing technique, massage therapy, music, and warm compress. Labour pain and methods to relieve it are concerns of childbearing women and families. Approximately 4 million women and families annually in the United States alone are undergoing this problem. The subject of labour pain is relatively neglected in the health and medical literature. National data is unavailable to describe both childbearing women's access to and use of drug free pain relief measures in the United States which appears to be quite limited and far from commensurate with this universal relevance<sup>4</sup>.

A systematic review of Non-Pharmacologic relief of pain during labour, the authors suggested for research and recommendations to help hospitals and caregivers make the non-pharmacologic method more widely available<sup>5</sup>.

### Need of the Study:

Natural child birth is a beautiful experience with many safe options and benefits. Women usually dream of a perfect birth. One unique aspect of childbirth is the association of physiologic process with pain and discomforts requiring appropriate pain management. Intervention of pain and discomfort during labour and childbirth is a major part of modern obstetric care of labouring women<sup>6</sup>. Many women would like to avoid pharmacological or invasive method of pain management in labour and this may contribute towards the popularity of complementary methods of pain management. One of such complimentary approach is the non-pharmacological method used in labour.

The **world health organization** lists non-invasive, non-pharmacological treatments as a category. A classification. "Practices that are demonstrably useful and should be encouraged." Specifically, the **WHO** classifies massage and relaxation techniques as category A. Although music therapy is not expressly listed in the WHO classification of practices in normal birth, it certainly serves as a noninvasive and often relaxing treatment during labor. Other non-pharmacological interventions such as herbs, immersion in water, and nerve stimulation are practices for which insufficient evidence exists to support a clear recommendation<sup>8</sup>.

**Objectives of the study:**

1. To assess the existing knowledge regarding non-pharmacological management of labor pain among final year GNM students.
2. To find the association between the existing knowledge and the selected demographic variables.
3. To develop a self instructional module regarding non pharmacological management of labour pain.

**Operational Definitions**

**Assess:** The procedure of judging the level of knowledge of students regarding non pharmacological management of labour pain.

**Knowledge:** Refers to response of subjects for the items of knowledge questionnaire regarding non-pharmacological management of labor pain.

**Non-pharmacological management of labor pain:** Refers to the measure of noninvasive painless selection method of reducing labor pain. These methods are acupressure, breathing techniques, massage, music therapy and warm compress.

**Selected Nursing Students:** In this study it refers to 3<sup>rd</sup> year GNM students of selected nursing institution.

**Selected Nursing Institution:** Refers to setting or place where the research is conducted.

**Self Instructional Module:** Which is self explanatory based on the findings of the study.

**Assumption:**

The study was based on the following assumption:

1. Final year GNM students may have minimum knowledge about non-pharmacological management of labour pain.
2. Finally a GNM student will willingly participate and give reliable information needed for the study.

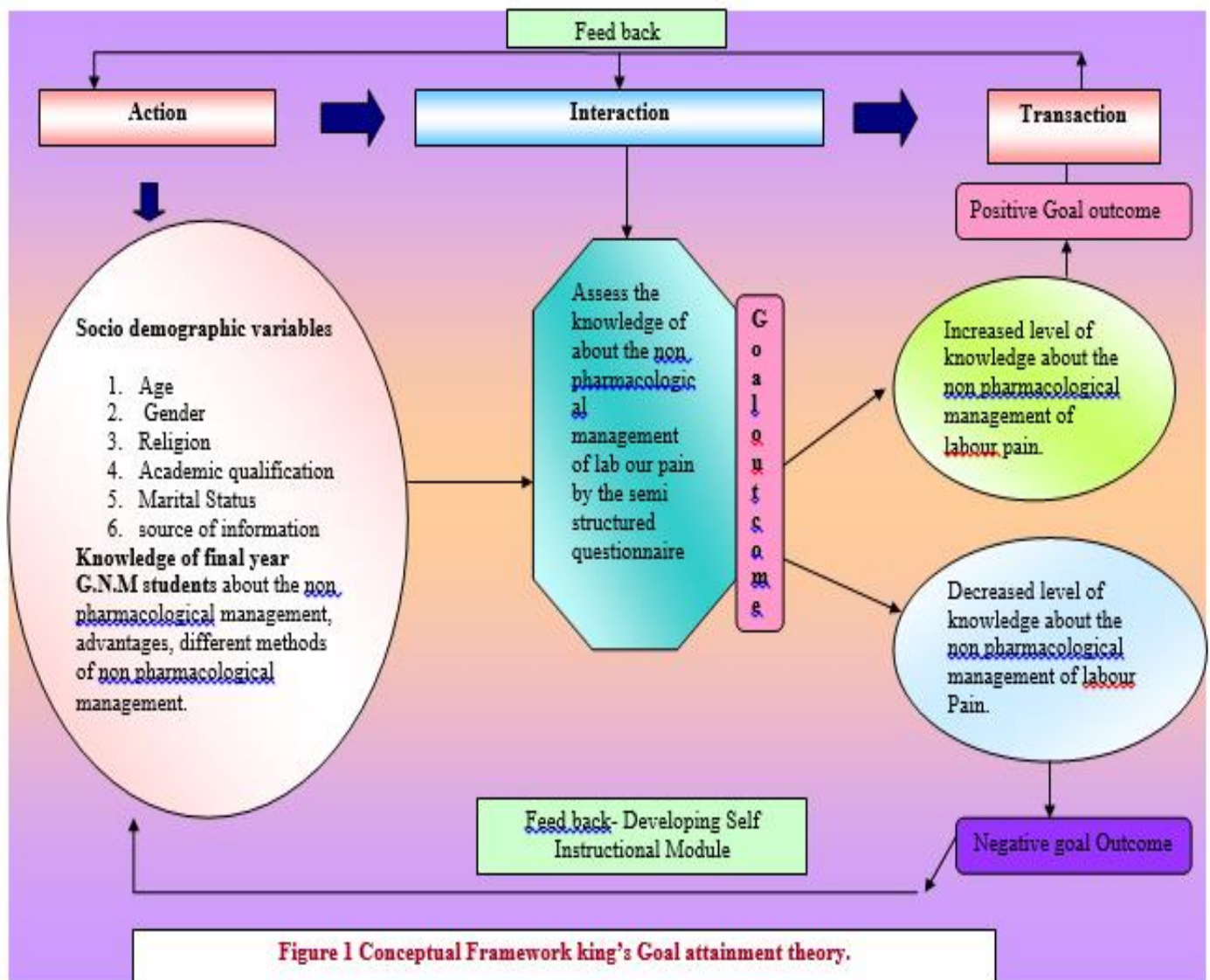
**Delimitation of the study:**

The study is limited to the GNM students who are:

- Studying final year GNM at school of nursing.
- Have completed midwifery postings
- Are willing to participate in the study
- Are present at the time of data collection

**Conceptual framework:**

In this study the investigator has applied Imogene .M. King Goal attainment theory model<sup>15</sup>. It shows goal attainment of the personal system in the environment when interacting with other systems and particular problems.



## MATERIAL & METHODS:

**Research approach-** Survey approach was adopted to collect data.

**Research design – descriptive research desing**

**Setting –selected nursing school bangalore**

**Sampling-**

**Sample size-**The sample for the present study includes 100 final year GNM students.

**Sample technique-**Purposive sampling technique was employed for the sample section.

### 8.3. Description of the tool:

A structured knowledge questionnaire is constructed into two sections.

**Section A.** Demographic profile consist a set of questions related to age, gender, religion, academic qualification, marital status and sources of previous knowledge regarding non pharmacological management of labor pain.

**Section B.** Consists of 32 items / statements penetrating to the knowledge aspect regarding non-pharmacological management of labour pain, it has 6 aspects which is mentioned below. Each statement provided with multiple option questions all of which were scored, each correct answer was given a score of one and wrong answers a score of zero. The total score was 32. The knowledge of the respondents was arbitrarily characterized as follows.

Inadequate : Below 50%  
 Moderate : 51-75%  
 Adequate : Above 75%

## RESULTS

### Classification of Respondents by Knowledge level on Non-Pharmacological management of labour pain

N = 100

Knowledge Level	Respondents	
	Number	Percent
Inadequate (< 50%)	83	83.0
Moderate (51-75%)	17	17.0
Adequate (>75%)	0	0.0
Total	100	100.0

**Section B:** (a) Aspect wise and overall mean knowledge score and level of respondents.

Classification of respondents by knowledge level on non-pharmacological management of labour pain shows in table 5.

The results indicate that 83 per cent of the respondents noticed with inadequate knowledge Level as compared to 17.0 per cent of respondents found to be moderate knowledge level on non-pharmacological management of labour pain.

### Aspect wise Mean Knowledge of Respondents on Non-Pharmacological management of labour pain.

N=100

No.	Knowledge Aspects	Statements	Max. Score	Respondents Knowledge		
				Mean	SD	Mean(%)
I	General Information	5	0-5	2.35	1.02	47.0
II	Acupressure	7	0-5	2.97	1.25	42.4
III	Breathing Technique	5	1-4	2.67	0.94	53.4
IV	Massage Therapy	7	0-5	2.62	0.96	37.4
V	Music Therapy	4	0-4	1.97	1.13	49.3
VI	Warm Compress	4	0-3	1.58	0.82	39.5
	Combined	32	10-20	14.16	2.36	44.3

**Section B:** (b) Establish the aspect wise mean knowledge score of respondents on non-pharmacological management of labour pain.

The findings indicate that the overall mean knowledge of respondents found to be 44.3% & standard deviation as 2.36% (fig. no. 7).

The data implies that the highest mean knowledge score found in the aspect of breathing technique (53.4%) followed by music therapy (49.3%), general information (47%) and acupressure (42.4%)

However the least mean knowledge score among the respondents found in the aspect of warm compress (39.5%) and message therapy (37.4%)



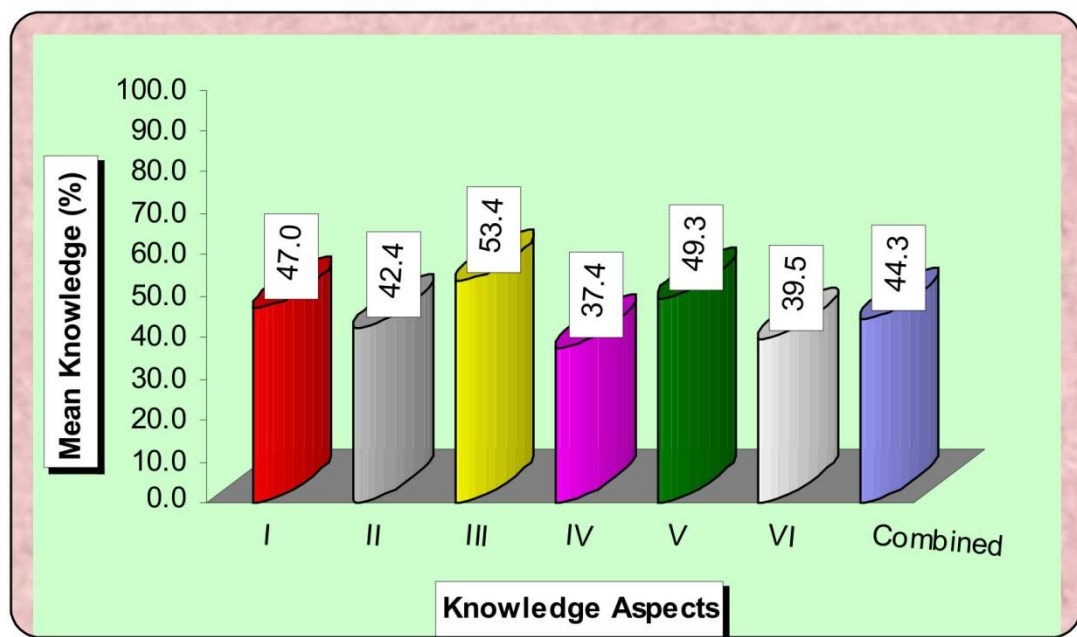


Figure 7: Aspect wise Mean Knowledge of Respondents on Non-Pharmacological management of labour pain

### CONCLUSION:

The following conclusion were drawn on the basis of the findings of the study were as follow

- Most (53%) of respondents were females.
- Most (51%) of the respondents were in the age group of 21-25 years.
- Majority (66%) of the respondents were Christian.
- Majority (79%) of the respondents had completed PUC.
- Majority (91%) of respondents were single.
- Most (44%) of the respondents had obtained information from health professional on non-pharmacological management of labour pain.
- The sample criteria reveal that the overall mean knowledge score was found to be 44.3% and S.D 2.36%.
- Highest mean knowledge in aspect of breathing technique is 53.4%. The range in knowledge was found between 37.4% to 53.4% among different aspects of knowledge.
- Significant association was found between the knowledge of final year GNM students regarding non pharmacological management of labour pain with their age, sex, education and material status.
- Significant association was not found between the knowledge of final year GNM students regarding non pharmacological management of labour pain with their regional and source of information.
- Overall findings reveal that the knowledge regarding non-pharmacological management of labour pain among final year GNM students was inadequate.

### Nursing implications:

- Today more then ever, health care reforms calls nursing to provide cost effective care. Nurses are responsible for clinical judgments (nursing diagnosis) based on individuals responses to actual or potential health problem.
- Being a non-invasive method it does not require additional equipment, articles, place or extra precautions, with one non-invasive intervention nurse can achieve many positive outcome during labour. Such as initiation of labour progression, reduction of pain and duration of labour time.

### Nursing education:

- Alternative and complementary medicine are increasing in popularity (British medical association 1993) women are seeking alternatives to relieve pain and morbidity during pregnancy, childbirth, and post-natal period.

### Nursing Administration:

- The findings of the study could be made use of by health personnel (both nursing and non nursing) holding administrative position to formulate policies and make necessary changes in educative and health delivery systems.

- More awareness programmes could be organized and information could be disseminated through media, like news paper, magazines, televisions and internet, nursing administration could arrange in-services education to health professionals on non-pharmacologic management and encourage them to use it in their daily practice.

### Recommendations:

- A similar study may be conducted on nurses in large samples for wider generalization.
- A study can be done to assess the knowledge, practice and attitude of nurses regarding non pharmacological management of labour pain.
- A follow up study may be conducted to evaluate the effectiveness of self instructional module on non pharmacological management of labour pain.
- A comparative study may be conducted to compare the findings of rural and urban nurses regarding non pharmacological management of labour pain.
- A study can be done to evaluate the planned teaching program on non pharmacological management of labour pain.
- A study can be conducted for comparison between staff nurses of two hospitals.

### References

- [1] Bennet R. V., Brown K. L., Myles text book for midwives New York Churchill livingstone 1996 page no. 13.
- [2] Lena Leino what you should know about pain management in child birth July 4, 2008 14 (1) 61 – 62.
- [3] Bobak W. I. Jenson M. D maternity & Gynecological care. The nurse & the family St. Louis, Mosby year book, 1993.
- [4] Smith. C. A, Collins C. T, Cyna A. M, Crowther C. A. “Complementary and alternative therapies for pain management in labour June 26 2006.
- [5] Simkin PP, O’Hara M, Non – Pharmacological relief of pain during labour systematic review of five methods.
- [6] Joseph. S. effectiveness of warm compress on selected area to women in labour pain during the first stage of labour is selected hospital at Mangalore (Unpublished master to Nursing theses, Rajiv Gandhi University, Karnataka 2003).
- [7] Lowe. N. K, The nature of labour pain. A. M. J. Cbslet, Gynecology 2002; 186 (5) 16 – 24.
- [8] Larimore, W & Petrie, K “Management of Labour” family practice obstetrics 2001, 2<sup>nd</sup> edition Hanley & Belfurs, Philadelphia; page No. 359 – 419.
- [9] M. C. Crea B. H, Wright M. E, Murphy – Black T. “Differences in midwives approaches to pain relief in labour midwifery 1998 Sep: 14(3): 174 – 80.
- [10] Sylvia. T. Brown, EdD, R. N, Carol Douglas, MSN, RV 2001 Women’s Evaluation of intrapartum Non pharmacological pain relief methods used during labour. A Lamaze international publication, J. Perinat Educ. 10(3): 1 – 8.
- [11] Hugh. C. Louis, B. 1985. the effects of music on labour analogue pain masters theses. The university of Arizona University Microfilm International Ann Arbor MI.
- [12] Durham. L. Collins. M the effect of music as a conditioning and in prepared child birth education, journal of obstetric, Gynecologic & Neonatal Nursing 1986; 15: 268 – 270.
- [13] Field. T. Hernandez. Reif. M. Taylors, Quintino. O, Burman. I. Labour pain is reduced by manager therapy journal of psychosomatic obstetrics & Gynecology 1997, 18 (4): 256 – 291 (Pubmed).
- [14] Simkin P, Nichols. F. H, Humenick. S. S, 200 child birth education. Practice, research, and theory (2<sup>nd</sup> Edition) (Eds) Philadelphia W. B. Saunders company.
- [15] George, Julia B, Nursing theories. The base for professional nursing practice. Connecticut: Appleton & Lange; vol 22, No. 4, 1999.
- [16] Polit & Hungler 2006 Nursing Research principles and methods, Philadelphia, J. P. Lippincott community Publishers.