



ORIGINAL RESEARCH ARTICLE

ASSESSMENT OF KNOWLEDGE ON NON-PHARMACOLOGICAL METHODS OF PAIN RELIEF DURING LABOUR AMONG NURSES WORKING IN MATERNITY AND CHILDREN HOSPITAL, NEPAL.

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ABSTRACT

Background: Labor pain is a universal phenomenon and it is associated with the contraction of uterus. Rather than making the pain disappear with pharmacotherapy, the nurses can assist the laboring women to cope up with, build their self-confidence and maintain a sense of mastery of well-being. Thus, nurses must have knowledge to assess pain to implement pain relief strategies. **Methods:** A descriptive cross-sectional study was carried out among 52 nurses of Siddhartha Women and Children Hospital, Butwal, Nepal to assess Knowledge about Non-pharmacological Methods of Pain Relief during Labor using structured self-administered questionnaire. The reliability of the tool after pretesting was 0.883. Descriptive statistics was used to analyze the data. **Results:** Among 52 nurses, 36.5% were 18-22 years of age, 46.2% of them had qualification of Proficiency certificate level Nursing, 40.4% had experience of 3 years- 6 years. In this study, 46.2% had satisfactory knowledge about non-pharmacological methods of pain relief during labor, 32.6% had fair knowledge and remaining 21.2% had poor knowledge. **Conclusion:** This study concluded that less than half of the nurses had satisfactory knowledge about non-pharmacological methods of pain relief during labor. Since, there is an increased risk of complications resulting from pain and anxiety during labor, management of pain is very essential thus nurse's knowledge on these methods is crucial. Hence, the nurses should be encouraged to enhance knowledge related to management of labor pain.

Key words: Knowledge, Labor, Non-pharmacological methods, Nurse, Pain

INTRODUCTION

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.¹ Labor Pain is a pain and discomfort associated with the contraction of uterus during labor. The extent of pain elimination depends upon how much the spinal cord is blocked.² The use of analgesics and anesthetic agents may not be the first choice for pain management for women in labor because of their potential side-effects.³

Some of the non-pharmacological techniques which are frequently used during labor are: Massage Therapy, Breathing and relaxation, hydrotherapy, Changing positions, hot and cold applications & music therapy.⁴ The benefits of using non-pharmacological

pain relief techniques in labor are their attributes of being non-invasive, low-cost, simple, effective, and without adverse effects.⁵

Each year around 3,03,000 women die because of complications related to pregnancy and childbirth and many more encounter serious problems.⁶ The Demographic Health Survey (DHS) 2006 showed Nepal's Maternal Mortality Ratio (MMR) was 281/100000 live births a decrease by almost 50 percent.⁷

A qualitative phenomenological study about Women Experience of pain during Childbirth among 288 Swedish women shows 28 percent of them evaluated labor pain as a positive condition and 41 percent of

them considered it as the worst experience that they have.⁸

A study conducted on nurse's knowledge and attitude about pain and findings indicated that there was a serious gap in nurse's knowledge and attitude about pain management.⁹ The ANA's scope and standards of practice (2004) indicates that nurses must be knowledgeable about and sensitive to a range of health practices so that holistic nursing care can be provided.¹⁰ The present study was conducted to assess nurse's knowledge regarding non-pharmacological methods of pain relief during labor.

MATERIALS AND METHODS:

A descriptive cross sectional study design was carried out among the nurses working in the Siddhartha Women & Children Hospital, Butwal. Total enumerative sampling technique was used. There were a total of 56 nurses in the hospital. Among them three were on maternity leave whereas One was on sick leave so, 52 nurses was taken for the study. The nurses who had clinical experience more

than six months and were willing to participate in the study were included in the study whereas nurses who were on long leave during the period of data collection were excluded from the study.

Data collection was done by self administered structured questionnaire consisting of single response multiple choice questions of 30 items. After pretesting of the tool was done, estimated reliability was found to be 0.883. The knowledge score was categorized as >75 %= Fair Knowledge, 60-75 % = Satisfactory Knowledge, < 60 % = Poor Knowledge.

Administrative approval was obtained from Siddhartha Women & Children Hospital, Butwal. Informed written consent was obtained from each respondent. Confidentiality of data was maintained. Descriptive (frequency, percentage) was used to analyze the data.

RESULTS:

As shown in Table 1, 36.5% of the nurses were 18-22 years of age, 46.2% of nurses had qualification of P.C.L Nursing, 40.4% of the nurses had professional experience of 3 years-6years.

Table 1: Socio-demographic characteristics of nurses

n=52			
Characteristics	Categories	Frequency	Percentage (%)
Age (in years)	18-22	19	36.5
	23-27	12	23.1
	28-32	11	21.2
	33 and above	10	19.2
Qualification level	Proficiency Certificate Level Nursing (P.C.L Nursing)	24	46.2
	Bachelor of Science in Nursing (B.Sc. Nursing)	6	11.5
	Bachelor of Nursing (B.N)	6	11.5
	Auxiliary Nurse Midwife (ANM)	16	30.8
Professional experience	6 months-3years	16	30.8
	3years - 6years	21	40.4
	>6 years	15	28.8

Table 2: Distribution of Nurses According to the Knowledge Score

n=52

Knowledge level	Category	Frequency	Percentage (%)
Poor	<60%	11	21.1
Satisfactory	60-75%	24	46.2
Fair	>75%	17	32.7

According to Table 2, Knowledge score was categorized as >75 % = Fair Knowledge, 60-75 % = Satisfactory Knowledge, < 60 % = Poor Knowledge. Most of the nurses (46.2%) had satisfactory knowledge 32.7 % of nurses had fair knowledge and remaining 21.1% of nurses had poor knowledge.

Discussion

Most of the nurses (36.5%) were 18-22 years of age and 40.4% of the nurses had professional experience of 3 years – 6 years. The study result showed less than half (46.2%) nurses had qualification of P.C.L. Nursing and 30.8% had qualification of Auxiliary Nurse Midwife. While the study carried out by Ali & Mohammad (2013) revealed more than half (52.5%) had Bachelor degree in Nursing.¹¹ Similarly, study of Bicek (2004) reported similar result(55.3%).¹² The result of present study may be due, in context of Nepal, more preference are given to PCL Nursing and ANM in maternity units whereas Bachelor degrees in Nursing are more involved in academic areas.

Among 52 nurses, most of the nurses 46.2% had satisfactory knowledge whereas, 32.7% of nurses had fair knowledge and only 21.1% had poor knowledge about non-pharmacological methods of pain relief during labor. Similar result was reported by the study conducted by Ali & Mohammad in which more than half (52.5%) had satisfactory knowledge.¹¹ The present study showed that there was no association between knowledge score and age, qualification level and professional experience. While the study of Ali (2013) revealed there was a positive relationship between knowledge score and age, educational level and years of experience.¹¹ The result of present study may be due to small sample size.

REFERENCES:

1. Gebhart GF. *Definition of pain and distress and reporting requirements for Laboratory animals proceedings of the workshop, USA, june 22, 2000*. Washington, D.C: National Academy Press; 2000
2. Pilliteri A. *Maternal & Child Health Nursing: Care of Childbearing and Childrearing Family*. 6th edition. Philadelphia: Wolters Kluwer, Lippincott William & Wilkins; 2010
3. CM Sampsel, Hines S. Spontaneous pushing during birth relationship to perineal outcomes. *J Nurse Midwifer*. 1999 Jan-Feb; 44(1): 36-9
4. Marshall J, Raynor M. *Myles Textbook of Midwives*. 14th Edition. Churchill Living Stone; Elsevier Pvt.Ltd: 2014
5. Burns E, Blamey C. Using aromatherapy in child- her in coping with pain and mastering the experience of birth. *Nursing Times*. 1994; 90(9): 54-60.
6. *Trends in maternal mortality: 1990 to 2015. Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division*. Publication of WHO: 2015
7. Ministry of Health and Population (MOHP) [Nepal], New ERA, and Macro International Inc. 2007. Nepal Demographic and Health Survey 2006. Kathmandu, Nepal: Ministry of Health and Population, New ERA, and Macro International Inc. : 2006
8. Yerby M. *Pain in childbearing: key issues in management*. 6th edition. London; Elsevier Health Sciences: 2000
9. Brunier G, Carson G, Harrison D. What do nurses know and belief about patients with pain? Results of a hospital survey. *Journal of Pain and symptom management*. 1995; 10: 49-55
10. American Nurses Association. *Nursing: scope and standards of practice*. 2nd Edition. USA; Silver

Spring, Md: American Nurse Association: 2010

11. Ali HS, Ibrahim Y, Mohammad E. *Non-pharmacological Pain Management: Nurses' Knowledge, Attitudes and Practices in selected Hospitals at Makkah El-Mukarramah*. Life Science Journal; 2013:10(2)
12. Bicek,E .*Nurse's Knowledge,Attitude and Use of Nonpharmacological Pain Management Techniques and Therapies* .Honors Projects: 2004