Assess the Knowledge Regarding Selected Non-Pharmacological Interventions among Pregnant Women

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Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

During labour and childbirth, comfort techniques that give natural pain relief can be quite beneficial. The purpose of this study was to analyse pregnant women's awareness about non-pharmacological therapies in Bhopal's designated hospitals. This study was conducted using a descriptive research approach. The study's target population was pregnant women, and the sample method was purposive sampling. A total of 50 people were included in the study. The knowledge of pregnant women on non-pharmacological therapies was assessed using a self-structured questionnaire, and the study findings indicated that their understanding was insufficient.

Keywords: Non pharmacological interventions; knowledge; pregnant women.

1. INTRODUCTION

Non-pharmacological therapies have the potential to reduce labour pain while causing little or no harm to the mother, foetus, or labour progress. They are also easy and cost-effective. [1].

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For the treatment of labour pain, a variety of pharmacological and non-pharmacological methods are available [2]. Hydrotherapy, hypnobirthing, rhythmic breathing, relaxation, and visualization are all birthing techniques that enhance the generation of endogenous endorphins, which attach to pain receptors in the brain and provide pain relief [3].

Non-pharmacological therapies have the potential to reduce labour pain while causing little or no harm to the mother, foetus, or labour progress, and are straightforward and cost-effective [4]. 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 [5]. 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 taken precedence over the comfort of the mother [6]. 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.

1.1 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. 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.

1.2 Problem Statement

Assess the knowledge regarding selected non-pharmacological interventions among pregnant women in selected hospitals at Bhopal, (M.P.).

1.3 Objectives of the Study

To assess the knowledge of pregnant women regarding selected non-pharmacological interventions.

To associate their knowledge with selected demographic variables.

1.4 Hypothesis

There will be a significant association between knowledge of pregnant women regarding selected non-pharmacological interventions with their selected demographic variables.

1.5 Operational Definition

Knowledge: - Knowledge refers to the verbal responses of the pregnant women regarding selected non-pharmacological interventions as assessed by a structured questionnaire.

Pregnant women: - Women under the period from conception to birth.
Non-pharmacological interventions: - Any type of health intervention which is not primarily based on medication.

1.6 Assumptions
1. Pregnant women will have some knowledge regarding breathing exercises.
2. Demographic variables may or may not influence the knowledge of pregnant women.

2. MATERIAL AND METHOD

This study was conducted using a descriptive research design.

2.1 Setting
RKDF Medical College Hospital & Research Center, Bhopal, (M.P.).

2.2 Population
Pregnant women who were attending antenatal OPD’s of the hospital at the time data collection.

2.3 Sampling
Purposive sampling was used to collect data.

2.4 Sample Size
The sample size was 50.

2.5 Criteria for Sample Selection

2.5.1 Inclusion criteria
- The pregnant women who were willing to participate
- The pregnant women who were present at the time of data collection.

2.5.2 Exclusion criteria
- The pregnant women who were not willing to participate.

2.6 Description of the Instrument
A self-structured questionnaire was used to conduct the study. The tool consisted of:

Part I- Demographic variables such as age, education, occupation, area.

Part II- Consisted of a self structured questionnaire to assess the knowledge on selected non-pharmacological interventions which consisted of 30 multiple choice questions.

2.7 Scoring
Each question had four options from which the sample had to choose one correct answer. The right answer was scored as one and the wrong option was scored as zero.

The scoring was interpreted as below:
- Adequate knowledge 76% - 100%
- Moderate knowledge 51% - 75%
- Inadequate knowledge 0% - 50%

Over the course of a week, the data was gathered. Prior to the start of the trial, the Hospital administration gave their approval. Before collecting data, the investigator established rapport with the research participants by describing the purpose of the interview and gaining informed consent.

Descriptive measures were used to investigate women’s knowledge and demographic characteristics. The link between knowledge and selected demographic characteristics of pregnant women was explored using inferential approaches. The significance threshold utilised was 0.05 percent.

3. RESULT AND DISCUSSION

Table 1 shows the demographic characteristics of women, such as age, education, employment, income, and geographic location. After that, the samples were separated into the following age groups: 20-30 years old: 56%, 31-40 years old: 40%, and more than 41 years old: 4%. In terms of education, 24% had completed tenth grade, 42% had passed twelveth grade, 18% had completed graduate school, 14 percent had completed postgraduate school, and 2% were illiterate. In terms of occupation, 36 percent were employed in the private sector, 14 percent in government, 10% in self-government, and 40% were housewives. They come from a rural location 64 percent of the time and an urban area 36 percent of the time.

3.1 Distribution of Pregnant Women by Knowledge Level

Table 2 shows that there was no significant relationship between knowledge and some demographic characteristics including age, education, occupation, or location. There was a strong link between knowledge and age and educational attainment.
Table 1. Distribution of samples by demographic variable N=50

| Demographic data         | Frequency | Percentage |
|--------------------------|-----------|------------|
| **Age (In Years)**       |           |            |
| 20-30 years              | 28        | 56         |
| 31-40 years              | 20        | 40         |
| More than 41 years       | 02        | 04         |
| **Educational Qualification** |           |            |
| 10th                     | 12        | 24         |
| 12th                     | 21        | 42         |
| Graduate                 | 09        | 18         |
| Post Graduate            | 07        | 14         |
| Illiterate               | 01        | 02         |
| **Occupational Status**  |           |            |
| Private Sector           | 18        | 36         |
| Government Sector        | 07        | 14         |
| Self-Government Sector   | 05        | 10         |
| Housewife                | 20        | 40         |
| **Area of Living**       |           |            |
| Rural                    | 32        | 64         |
| Urban                    | 18        | 36         |

Table 2. Distribution of Pregnant women by knowledge score N=50

| Knowledge level          | Number | Percentage |
|--------------------------|--------|------------|
| Adequate (76-100%)       | 05     | 10         |
| Moderate (51-75%)        | 25     | 50         |
| Inadequate (0-5%)        | 20     | 40         |

Fig. 1. Pie diagram showing distribution of pregnant women by knowledge score

Knowledge level of pregnant women
- Adequate (76-100%)
- Moderate (51-75%)
- Inadequate (0-5%)

4. CONCLUSION

The number of pregnant women who were aware of non-pharmacological therapy was minimal. Organizing community-based events to educate pregnant women about non-pharmacological therapies is critical.

5. IMPLICATIONS

5.1 Nursing Practice

The findings of the study will assist pregnant women with non-pharmacological therapies, which they can use during labour to improve mother and foetal outcomes.
5.2 Nursing Education

The student nurses may be inspired to teach the women about non-pharmacological interventions.

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline participant consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Bennet RV, Brown KL. Myles text book for midwives New York Churchill livingslone 1996:13.
2. Lena Leino what you should know about pain management in child birth July 4, 2008;14(1):61 – 62.
3. Bobak WI, Jensono MD. Maternity & Gynecological care. The nurse &the family St. Louis, Mosky year book; 1993.
4. Smith CA, Collins CT, Cyna AM, Crowther CA. Complementary and alternative therapies for pain management in labour; 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 NK. The nature of labour pain. AMJ. Cbslet, Gynecology. 2002;186(5):16 – 24.
8. Larimore W & Petrie K. "Management of Labour" family practice obstetrics 2001, 2nd edition Hanley &Belfurs, Philaddphia; 359 – 419.
9. Crea MC, Wright BH, Murphy ME. Black T. "Differences in midwives approaches to pain relief in labour midwifery 1998;14(3):174 – 80.
10. Sylvia T, Brown EdD, Carol Douglas RN. Women's Evaluation of intrapartum Non pharmacological pain relief methods used during labour. A Lamaze international publication, J. Perinat Educ. 2001;10(3): 1–8.
11. Hugh C. Louis B. the effects of music on labour analogue pain masters theses. The university of Arizona University Micrafilm International Ann Arbor MI; 1985.
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.

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