A Comparative Study on Knowledge Regarding Labour Pain and Cultural Beliefs on Labour Pain Relief Measures among Rural and Urban Antenatal Women at Civil Hospitals Mohali, Punjab, India

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ABSTRACT

Pain is a universal experience. Pain thresholds cause the amount of pain experienced to be unique to each individual. Pregnancy is a special event. The labor and birth process is an exciting situation to the women and her family. The time of labor and birth though short in comparison with the length of pregnancy but it is most dramatic and significant period of pregnancy for expectant mothers. The aim of the study is to compare the knowledge regarding labour pain and cultural beliefs on labour pain relief measures among rural and urban antenatal women. A quantitative approach with comparative research design was adopted. By Purposive sampling technique 400 women; 200 rural and 200 urban women, were selected. Data was collected by structured knowledge questionnaire for labour pain and structured interview schedule for cultural beliefs were used in the study. Analysis of data was done using descriptive and inferential statistics. Study findings shows that rural antenatal women majority had fair knowledge 121(60.5%) followed by 66(33%) who had poor knowledge 11(5.5%) had good knowledge and very least only 1% had excellent knowledge. Among urban antenatal women majority had good knowledge 107(53.5%), followed by 79(39.5%) had excellent knowledge, 11(5.5%) had fair knowledge, and very least 3(1.5%) had poor knowledge. It shows that urban antenatal women had more knowledge as compare to rural antenatal women. Rural antenatal women had more cultural beliefs then urban antenatal women.

Keywords
Labour pain, cultural beliefs, rural and urban antenatal women, knowledge and pamphlet.

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Introduction

Background of the Study

Pain is a universal experience. Pain thresholds cause the amount of pain experienced to be unique to each individual. Pain is said to be a feeling of distress, suffering or agony caused by stimulation of specialized nerve ending. However, a definition more suited to midwifery would be that pain is a complex, personal, subjective, multifactorial phenomena which is influenced by psychological, biological, sociocultural and economic factor (Jacob, 2008).

Childbirth is one of the most memorable and rewarding events of a couple’s life. No matter how often a woman gives birth, each experience is an intimate and unique celebration of life. Though labour and delivery are not without pain and some
degree of anxiety, if the mother remains confident, well informed and fully confident she is likely to have no problem handling the awesome task of bringing a child into the world. For initiation of this process labour pain has great role (Diane).

Culture plays a significant role in attitudes toward childbirth pain, the meaning of childbirth pain, perceptions of pain, and coping mechanisms used to manage the pain of childbirth. Labour a safe and private environment, reassurance, information and guidance, strengthening of coping resources through encouragement, emotional support, and human presence, able to transcend their pain experience with a sense of strength and profound psychological and spiritual comfort during labor. Pain does not have to be eliminated for women to be comforted, and diminishes pain. Understanding that there are broad cultural, as well as individual differences in a woman's pain experience can lead to more effective and sensitive nursing care for laboring women and their family members (Simkin, 2008).

The main objectives of this study include, assessing the knowledge regarding labour pain among rural and urban women. To assess the cultural beliefs on labour pain relief measures among rural and urban women. To compare the knowledge score of labour pain and cultural belief on labour pain relief measures among rural and urban women. To determine the association between the knowledge score regarding labour pain and cultural belief on labour pain relief measures with selected socio demographic variables. And also to prepare pamphlet on labour pain and labour pain relief measures.

**Materials and Methods**

In present study, a quantitative approach with comparative research design was adopted. By Purposive sampling technique 400 antenatal women (200 rural 200 urban antenatal women) were selected. Data was collected by semi-structured knowledge questionnaire and structured interview schedule for cultural believe were used in the study. Analysis of data was done using descriptive and inferential statistics. A study was conducted in the month of March 2016 Formal written permission was obtained from the SMO of civil hospitals of Mohali and Kharar after discussing the purpose and objectives of the study. Analysis and interpretation of data was done according to objectives of the study by using descriptive and inferential statistics.

**Ethical Consideration**

With the view of ethical consideration the researcher has taken permission from Principal of Mata Sahib Kaur college of nursing Mohali. After that the researcher has discussed the type and purpose of the study with the SMO of civil hospitals of Mohali and Kharar and written permission were obtained. Also the antenatal mothers were explained about the purpose of the study and verbal consent was taken from them for their participation in study. They were explained about the right to refuse from participating in the study. The antenatal mothers were assured that the information given by them will be kept as confidential and will be purely used for research purpose.

**Results and Discussion**

Table 1 show frequency and percentage distribution of rural and urban antenatal women based on demographic variables such as age, education, religion, occupation, children.
With regard to age, majority of rural antenatal women 90(45%) were in age group of 22-25 years, followed by 56(28%) in age group of 18-21 and 46(23%) in age group of 26-29 years and very least 8(4.0%) in age group of >30 years. Whereas among urban antenatal women majority i.e. 91(45.5%) in age group of 22-25 years, followed by 60(30%) in age group of 18-21, 43(21.5) in the age group of 26-29 and very least 6(3) % in age group of ≥30 years.

With regard to education, majority of rural antenatal women the maximum level were primary educated i.e. 106(53%) were followed by 47(23.5%) who had no formal education, 41(20.5%) had secondary education and only 6(3%) were senior secondary or above. Among the urban antenatal women the maximum level of education was primary educated 91(45.5%) followed by 62(30%) had no formal education. 40(20%) had secondary education whereas only 7(3.5%) were senior secondary or above.

With regard to religion, majority rural antenatal women 74(37%), were Hindu followed by 57(28.5%) were Muslim, 64(32%) were Sikh and only 5(2.5%) were Christian. In urban antenatal women 81(40.5%) were Hindu, followed by 49(24.5%) were Muslim, 58(29%) were Sikh and only 12(6%) were Christian.

With regard to occupation, majority of rural antenatal women were homemaker 111(55.5%) followed by 37(18.5%) had private job, 9(4.5%) had Govt. Job and very least 9(4.5%) were government employee. Among the urban antenatal women the 102(51%) were homemaker followed by 36(18%) were self, 42(21%) had private and very least 20(10%) were government employee.

With regard to children, majority of rural antenatal women were 102(51%) had 2 children followed by 83(41.5%) had 3 children, 12(6%) had >3 children and very least 3(1.5%) had only one child. Among the urban antenatal women the majority were 136(68%) had 2 children followed by 56(28%) had 3 children, 7(3.5%) had >3 children very least only one (1%) had one child.

Table 1.2 reveals that among rural antenatal women majority had fair knowledge i.e 121(60.5%), followed by 66(33.%) who had poor knowledge, 11(5.5%) had good knowledge and very least only 1% had excellent knowledge. Among urban antenatal women majority had good knowledge 107(53.5%), followed by 79(39.5%) had excellent knowledge, 11(5.5%) had fair knowledge, and very least 3(1.5%) had poor knowledge Table-3 depicts that in rural antenatal women majority 132(66%) believed that black tea reduce the labour pain,129(64.5%) believed that if mother open the lock during labour that will also reduce the labour pain,129(64.5%) oil massage on abdomen during labour will reduce the labour pain and very least i.e.60(30%) believed that water of vermicelli will reduce the labour pain. Whereas in urban antenatal women majority 68(34%) believed that keeping the photo of religious guru under the pillow will reduce the labour pain, 68(34%) oil massage on abdomen during labour will reduce the labour pain and very least i.e.60(30%) believed that water of vermicelli will reduce the labour pain. Whereas in urban antenatal women majority 68(34%) believed that keeping the photo of religious guru under the pillow will reduce the labour pain, 68(34%) also believed that tie onion peal on wrist and mid arm reduce the labour pain and very least 40(20%) believed that vermicelli water will reduce the labour pain.

Table 4 shows that the mean knowledge score among rural antenatal women was 6.78 with SD 2.769 lesser as compared to mean knowledge score of urban antenatal women that was 14.80 with SD 3.194.
Table 1: Frequency and percentage distribution of rural and urban antenatal mothers according to their socio-demographic variables

| Socio demographic variables | Rural (n₁ = 200) | Urban (n₂ = 200) | df | χ² |
|-----------------------------|-----------------|-----------------|----|----|
| Age (in years)              |                 |                 |    |    |
| 18-21                       | 56, 28.0        | 60, 30.0        | 3, | .530<sup>NS</sup> |
| 22-25                       | 90, 45.0        | 91, 45.5        |    |    |
| 26-29                       | 46, 23.0        | 43, 21.5        |    |    |
| ≥30                         | 08, 4.0         | 06, 3.0         |    |    |
| Education level             |                 |                 |    |    |
| No formal education         | 47, 23.5        | 62, 31.0        | 3, | 3.296<sup>NS</sup> |
| Primary education           | 106, 53.0       | 91, 45.5        |    |    |
| Secondary education         | 41, 20.5        | 40, 20.0        |    |    |
| Senior secondary or above   | 06, 3.0         | 07, 3.5         |    |    |
| Religion                    |                 |                 |    |    |
| Hindu                       | 74, 37.0        | 81, 40.5        | 3, | 4.097<sup>NS</sup> |
| Muslim                      | 57, 28.5        | 49, 24.5        |    |    |
| Sikh                        | 64, 32.0        | 58, 29.0        |    |    |
| Christian                   | 05, 2.5         | 12, 6.0         |    |    |
| Occupation                  |                 |                 |    |    |
| Home maker                  | 111, 55.5       | 102, 51.0       | 3, | 5.489<sup>NS</sup> |
| Private job                 | 37, 18.5        | 42, 21.0        |    |    |
| Government job              | 09, 4.5         | 20, 10.0        |    |    |
| Self employed               | 43, 21.5        | 36, 18.0        |    |    |
| Number of children          |                 |                 |    |    |
| 1                           | 03, 1.5         | 01, 0.5         |    |    |
| 2                           | 102, 51.0       | 136, 68.0       | 3,12.418<sup>NS</sup> |
| 3                           | 83, 41.5        | 56, 28.0        |    |    |
| >3                          | 12, 6.0         | 07, 3.5         |    |    |

N = 400; NS-non significant; *significant at the level of p<0.05 level
### Table 2: Frequency and percentage distribution of rural and urban antenatal mothers according to their knowledge

| Level of knowledge | Percentage | Rural \(n_1=200\) | Urban \(n_2=200\) |
|-------------------|------------|------------------|------------------|
| Poor (0-5)         | \((0-25\%)\) | \(f_1\) 66 | \(f_2\) 03 |
| Fair (6-10)        | \((26-50\%)\) | \(f_1\) 121 | \(f_2\) 11 |
| Good (11-15)       | \((51-75\%)\) | \(f_1\) 11 | \(f_2\) 107 |
| Excellent (16-20)  | \((≥76\%)\)  | \(f_1\) 2 | \(f_2\) 79 |

\(N=400;\) Maximum score=20 Minimum score=0

### Table 3: Frequency and percentage distribution of rural and urban antenatal mothers according to their cultural beliefs

| Sr.no | Cultural beliefs                                                                 | Rural \(n_1=200\) | Urban \(n_2=200\) |
|-------|----------------------------------------------------------------------------------|------------------|------------------|
| 1     | Moping help to reduce labour pain                                                | \(f_1\) 121     | \(f_2\) 63       |
| 2     | Black tea reduce the labour pain                                                 | \(f_1\) 132     | \(f_2\) 64       |
| 3     | Black thread tie on leg and abdomen reduce labour pain                            | \(f_1\) 123     | \(f_2\) 49       |
| 4     | Hot water with carom seeds (ajwain) reduce labour pain                           | \(f_1\) 129     | \(f_2\) 59       |
| 5     | During labour pain the mother open the lock it will reduce labour pain           | \(f_1\) 130     | \(f_2\) 63       |
| 6     | Open hair of mothers reduce labour pain                                          | \(f_1\) 129     | \(f_2\) 58       |
| 7     | Oil massage on abdomen reduce labour pain                                        | \(f_1\) 129     | \(f_2\) 49       |
| 8     | Listening to prayer songs help to reduce labour pain                             | \(f_1\) 125     | \(f_2\) 61       |
| 9     | Keeping the photo of religious guru under the pillow reduce labour pain           | \(f_1\) 117     | \(f_2\) 68       |
| 10    | Chanting of religious MANTRA will reduce labour pain                             | \(f_1\) 118     | \(f_2\) 54       |
| 11    | Excessive ghee intake in the last time of pregnancy will reduce labour pain      | \(f_1\) 110     | \(f_2\) 63       |
| 12    | Applying religious ash on Forehead will reduce labour pain                       | \(f_1\) 121     | \(f_2\) 67       |
| 13    | Placing peacock Feather under the pillow will reduce labour pain                 | \(f_1\) 119     | \(f_2\) 57       |
| 14    | Drinking tulsi leaves and tulsi seeds boiled water will reduce labour pain        | \(f_1\) 113     | \(f_2\) 55       |
| 15    | Tie onion peal on wrist and mid arm will reduce labour pain                      | \(f_1\) 104     | \(f_2\) 68       |
| 16    | Placing green grass under the pillow will reduce labour pain                     | \(f_1\) 61      | \(f_2\) 42       |
| 17    | Any others then specify....                                                       | \(f_1\) 60      | \(f_2\) 40       |

\(N=400\)
Table 4: Compare the mean knowledge score of rural and urban antenatal women.

| Group | N  | Mean | SD  | t-value | p-value |
|-------|----|------|-----|---------|---------|
| Rural | 200| 6.78 | 2.769| -26.830 | .000*   |
| Urban | 200| 14.80| 3.194|         |         |

N= 400, NS=non significant *significant at the level of p<0.05 level

Table 5: Compare the mean cultural beliefs of rural and urban antenatal women.

| Group | N  | Mean | SD  | t-value | P-value |
|-------|----|------|-----|---------|---------|
| Rural | 200| 9.70 | 3.050| 15.718  | .000*   |
| Urban | 200| 4.90 | 3.064|         |         |

N=400; NS=non significant *significant at the level of p<0.05 level

Table-5 shows that the mean score of cultural beliefs among rural antenatal women was 9.70 with SD 3.050 more as compared to mean score of cultural beliefs among urban antenatal women that was 4.90 with SD 3.064.

Association of knowledge score with selected socio demographic variables

There was statistically significant association with age, education occupation, religion and number of children.

Association of cultural beliefs with selected socio demographic variables

There was statically significant association of cultural beliefs hot water with carom seeds (ajwain) reduce the labour pain with number of children of urban antenatal women.

There was statically significant association of cultural beliefs-10 (chanting of religious Mantra will reduce labour) with education and religion of urban antenatal women

Others cultural beliefs had no association with socio-demographic variables.

In present study, rural antenatal women had fair knowledge and urban antenatal women had good knowledge 107(53.5%) regarding labour pain. The rural antenatal women had more cultural beliefs 132(66.0%) on labour pain relief measures than urban antenatal women.

Baloch (2007) Results showed that an acceptable birth experience in 136 cases, while 264 mothers found it an exhausting painful experience. Common factors which favour good experience included lower socioeconomic class 67%, rural population 54%, multiparous women 68.08%, prior knowledge of labour pains 69.31%, spontaneous labour 86.89%, use of pharmacological agents 76.04% and co-operative staff attitude 89.27%. Those who found labour pains an acceptable process, 87.5%, had a positive attitude for future childbearing. This can be concluded that Childbirth can be a good experience with effective antenatal counseling (Baloch, 2010).

In conclusion, findings of the study revealed that urban antenatal women had more knowledge than rural antenatal women, rural antenatal women had more
cultural beliefs than urban antenatal women.

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