

The research has two main objectives; 1) to explore the behavioral and physical signs in newborns as a possible pain indicator, and 2) to collect pain management techniques by nurses in Northeast Thailand. Questionnaires were mailed out to nurses incharge of newborn unit of the 18 hospitals in the region. The questionnaire consists of two parts; the general information and newborn pain management. Sixty-seven percent of the questionnaires were completed and returned. Data analysis was carried out by using precentage and chi-square test

Results can be summarized as follows;

1. All respondents are female and the average age was 28.3 years-old. Fifty-three percent are registered nurse, sixty-three percent were single and seventy-two percent are married without children.

2. Behavioral and physical signs when a newborn is experiencng pain are summarized in the following table.

Signs	Percent
1. Crying	91.8
2. Fussy	91.1
3. Wiggling	85.6
4. Increase respiratory rate	79.6
5. Increase heart rate	76.3
6. Twisting of body	70.0
7. Restlessness	69.6
8. Irritability	68.8
9. Clenching of fist	68.0
10. Insomnia (Sleeplessness)	66.6

3. One-hundred percent of the returned questionnaires indicates that newborns perceive pain stimuli the most. Most of them claimed that they were able to assess pain in newborns at a "good" level (42.2%)

4. To treat newborns experiencing pain in the hospital, fifty-two percent indicates that no analgesic drugs are given, but they allow parents to stay with the newborns (20.15%)

5., Using Chi-square test, we found out that nurse's ability to assess pain in newborns is statistically related to their satisfaction to practice in the unit ( $\chi^2=10.9$ ,  $df = 4$ , and  $p<0.05$ ) and to their training, i.e. bachelor or higher ( $\chi^2=6.1$ ,  $df = 2$ , and  $p <0.05$ )

6. The Chi-square test suggested that nurses with children have more experiences to treat the under-stressed newborns. Common treatments were soothing and verbal supports

7. Unexpectedly, the relationships between pain assessment techniques and its treatments and length of nurse's practices were not statistically significant.