

Thesis Title                      Children's Behavioral Responses to Painful  
   Stimuli Related to Cognitive Development  
Name                                  Rungtiwa Aswinanongh  
Degree                                Master of Science (Nursing)  
Thesis Supervisory committee  
   Jariya Vithayasuporn      Bc.S., M.S.  
   Emorn Dumronglert      Bc.S., M.S.  
   Panwadee Putawatana      Bc.S., M.S.  
Date of Graduation                15 November B.E. 2532 (1989)

#### ABSTRACT

The purpose of this study was to determine the behavioral responses of the children to a painful stimulus according to their cognitive development described by Piaget. Eightty-four children aged two to eleven who were prescribed venipuncture at out-patient department of Children's Hospital were purposively selected. The children were divided into three groups: two to four years old or Preconceptual phase of Preoperation stage, four to seven years old or Intuitive phase of Preoperation stage, and seven to eleven years old or Concrete Operation stage. During venipuncture the children were observed by using Hester's Behavioral Responses tool. Then subjective pain rating were asked by responding to Face Rating scale.

The results revealed that vocal, verbal and motor behavior response to pain among three groups were statistically significant difference ( $P < 0.001$ ) but facial expression was not. More over children in three groups rated their subjective pain significantly difference ( $P < 0.001$ ). The relationship between behavioral response and subjective pain rating in each groups was shown that vocal, motor and facial expression were positive correlated with pain rating in Preconceptual phase group and the predominant behaviors response in this group were

screaming, no verbal response, closed eyes, wrinkle of forehead and relaxed of jaw. There were positive correlation among vocal and verbal behaviors, and subjective pain rating in Intuitive phase and the predominant behavioral response were screaming or groaning, opened eyes, wrinkle of forehead, relaxed of jaw or clenching. Finally the study shown that vocal, verbal and facial expression were correlated with subjective pain rating in Concrete Operational stage and predominant behaviors were opened eyes, wrinkle of forehead, clenching, no vocal and no verbal response.

In conclusion the study seemed to support the conceptual framework that children's perception and behaviorally to their level of cognitive development. The limitation of this study; implication for practice and suggestion for further study were recommended.