

**TOPIC: IN SUPPORT OF IMPROVED EVIDENCE BASED PRACTICE  
EDUCATION AND FURTHER RESEACH REGARDING THE  
EFFECTS OF PAIN IN THE NEONATE POPULATION**

**SUBMITTED BY: The Chapter of California Nursing Students' Association at  
Saddleback College**

**AUTHORS: Michelle Bourette and Danielle Lawson**

**Abstract**

Neonates in the Neonatal Intensive Care Units (NICU) are subjected to several painful procedures everyday. Studies have revealed that these neonates are not receiving adequate analgesia and sometimes none at all for procedures that the adult population standards demand. Other researchers have displayed that neonates have a hypertensive pain response when compared to children and adults under the same circumstances. Repeated exposure to pain in the neonate may be linked to morbidity, post traumatic disorder, cognitive problems as well as behavioral and social disorders. For the safety and well being of our neonate patients it should be supported that further research and education be conducted.

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1       WHEREAS, Repeated exposure to procedural pain experienced by neonates in  
2                   the NICU is of particular concern because the natural environment  
3                   for the infant was meant to be the protective intrauterine environment  
4                   (Kanwaljeet, 2006); and  
5  
6       WHEREAS, Multiple lines of evidence suggest that early repeated and prolonged  
7                   pain exposure may contribute to altered development of pain systems,  
8                   behavior, cognition, and learning in former preterm infants later in  
9                   childhood (Grunau, 2004); and  
10       WHEREAS, “analgesics are used inconsistently during moderate to severely painful  
11                   procedures in the newborn period. Studies have documented the vast  
12                   number of invasive procedures that are performed in newborn infants,  
13                   often without analgesia. A 2003 study found that analgesics were used  
14                   in <35% of the nearly 20,000 procedures performed on 151 neonates”  
15                   (Kanwaljeet, 2006, p.10); and  
16       WHEREAS, in a recent study conducted in a tertiary NICU the number of procedures  
17                   of which each infant was exposed ranged from 0 to 53 per day. On a  
18                   scale of 0 to 10, the average pain score in these infants ranged from 1.7  
19                   for a diaper change to 8.9 for endotracheal intubation. The investigators  
20                   indicated also that ~40% of all neonates did not receive any analgesia at  
21                   all during the intensive care stay. These findings point to the continuous

22                   need to educate the medical community regarding the long-term  
23                   outcomes of pain management in neonates (McClain, 2005); and  
24    WHEREAS,    numerous trials have concluded that analgesics are efficacious for the  
25                   management of procedural pain in the neonate. However, it has been  
26                   difficult to adopt these interventions in clinical practice because of the  
27                   numerous limitations of previous research (Kanwaljeet, 2006); and  
28    WHEREAS,    in contrast to the incidence of painful procedures we show the limited  
29                   use of analgesic treatment, despite the awareness of nurses and  
30                   physicians that most procedures are indeed painful (Simmons, 2003); and  
31    WHEREAS,    there are consistent data that preterm infants have a lower threshold  
32                   to tactile stimulation and appear to be hypersensitive to pain (Buskila,  
33                   2003); and  
34                   “the human preterm or even term neonate may have a heightened  
35                   physiochemical response to noxious stimuli, because the existing  
36                   endogenous opioids seem incapable of participating in descending  
37                   inhibitory modulation to diminish the pain response” (McClain, 2005,  
38                   p. 1074); therefore be it  
39    RESOLVED,   that California Nursing Students’ Association (CNSA) encourage  
40                   its constituents to collaborate with professional nursing and health care  
41                   organizations to increase evidence based research and education  
42                   regarding neonatal pain; and be it further  
43    RESOLVED,   that CNSA send a letter to the Deans and Directors of California’s  
44                   Schools of Nursing that have a CNSA chapter encouraging the  
45                   incorporation of pain education and research in the neonate population  
46                   into their student curriculum at the undergraduate and graduate levels if  
47                   applicable; and be it further

48 RESOLVED, that the CNSA promote awareness about the physiology, treatment  
49 of pain in the neonate, as well as signs and symptoms through *Range of*  
50 *Motion*, workshops during convention, community health projects, and  
51 all other methods deemed appropriate by the CNSA Board of Directors,  
52 if feasible; and be it further  
53 RESOLVED, that CNSA send a copy of this resolution to the following:  
54 American Association of Colleges of Nursing, American Nurses  
55 Association, National Association of Neonatal Nurses, National  
56 Association of Pediatric Nurse Associates and Nurse Practitioners,  
57 National League of Nursing, National Organization for Associate Degree  
58 Nursing, Society of Pediatric Nurses and any others deemed  
59 appropriate by the CNSA Board of Directors.