S280
NON-PHARMACOLOGICAL INTERVENTIONS IN PAIN MANAGEMENT IN NEONATAL INTENSIVE CARE

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Background and Aims: Although it has been recognized that most of the pain experienced by the newborn can be prevented or substantially relieved.
This study aimed to determine the prevalence and severity of the pain experienced by newborns receiving intensive care, as well as the effectiveness of the non-pharmacological therapeutic measures.
Methods: At a Neonatal Intensive Care Unit, 170 newborns were studied during one year, resulting in 844 observations. Data were collected based on newborn observation, an interview with parents and nurses who provide care, and a retrospective analysis of the clinical records. Pain intensity was measured using the Echelle Douleur et d'Inconfort du Nouveau-Né.
Results: During 8 hours of observation, 94.8% of the 844 observations showed a high prevalence of pain, mostly mild pain (72.7%). Non-pharmacological interventions were applied to 88.7% of the observations, especially related to positioning, massage and comfort techniques. The prevalence of the daily assessment of pain intensity was 21.7%, and the intensity of the pain experienced by the newborn was not influenced by the frequency of pain assessment or its treatment.
Conclusions: Despite the high prevalence of pain, about $^{3}/_{4}$ of the observations show that newborns experience mild pain or no pain at all. The assessment of pain intensity should be promoted and considered when deciding on the treatment. Nurses use non-pharmacological measures of comfort, massage and positioning often and effectively, but other techniques should also be promoted, such as the use of sucrose, glucose or maternal breastfeeding.

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S281
SEVERE NEONATAL PAIN SYNDROME AFTER ABDOMINAL SURGERY CORRELATES WITH RAISED LEVEL OF CORTISOL, INTERLEUKIN 6, IL8 AND C-REACTIVE PROTEIN

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Background and Aims: The mechanisms contributing to severe neonatal pain syndrome (SNPS) in infants are multifactorial.
Methods: To examine the relationship between serum concentrations of inflammatory mediators, cortisol (hydrocortisone) and SNPS after surgical procedure.
Prospective observational study involving term neonates with SNP after abdominal surgery and normal controls. All patients after operation received adequate analgesic therapy (continuous infusion opioid analgesics). Blood samples were taken at birth from mixed cord blood, at 8 h, 24 h and 42 h for cytokines, cortisol and CRP after surgical procedure. Data were analyses using analysis of variance and 2 analyses.
Results: 26 neonates with SNPS and 20 controls were enrolled. 14/26 (53.8%) neonates with SNPS required mechanical ventilation, 9/26 (34.6%) required high-frequency ventilation; 2/26 (7.7%) died. Neonates with SNPS had more than threefold higher cord levels of interleukin 8 (IL8) than the controls ($p < 0.05$). At 8 h, 24 h and 42 h, serum IL6 and CRP were 2.87-fold higher in neonates than the controls group ($p < 0.003$). All patients with SNPS had significantly ($p < 0.001$) higher plasma cortisol levels over control group (mean ± SD, 456.58±48.81 vs. 281.22±43.39 micromol/l on 8 h; 756.12±108.4 vs. 381.20±100.2 micromol/l on 24 h; 552.02±40.3 vs. 330.0±60.2 micromol/l on 42 h).
Conclusions: This study demonstrated that severe neonatal pain syndrome is associated with raised blood levels of proinflammatory mediators and cortisol, suggesting that inflammation contributes to the severe neonatal pain syndrome.

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S282
THE EXPERIENCE OF CHILD IN PAIN WITH JUVENILE IDIOPATHIC ARTHRITIS

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Background and Aims: This work aimed atunderstanding the daily routine of the family having a child experiencing pain due to Juvenile Idiopathic Arthritis.
Methods: Grounded Theory and Symbolic Interactionism were used as methodological framework and theoretical framework, respectively. Data were collected by means of semi-structured interviews to 12 families.
Results: The experience emerging from data revealed an uncertain trajectory as the most important daily component for the families having to provide care for a child that is living in pain with the possibility of death.
Conclusions: To attend the families of children in pain due to JIA, helping them to understand the start of the disease, managing to overcome the impact of the diagnosis more rapidly, accommodating the disease in the family, permitting the maintenance of family structure and coping with the children's chronic pain.

Disclosure: None declared

S283
EFFECTIVENESS OF AN INTEGRATED PAIN MANAGEMENT PROGRAM ON OLDER PERSONS AND STAFF IN NURSING HOMES

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Background and Aims: We examined the effects of an 8-week integrated pain management program (IPMP) for staff on their knowledge and attitude toward pain management and improving pain, quality of life, physical and psychosocial function, and the use of non-drug therapies for the elderly in nursing homes.
Methods: Nursing home staff (n = 147) and residents (n = 535) were recruited from ten nursing homes. The staff received the IPMP pain education. Residents were randomly assigned into an experimental group with IPMP (n = 296) or a control group with regular care (n = 239). The IPMP for residents comprised physical exercise and multisensory stimulation art and craft therapy. Data were collected before and after the program.
Results: The staff demonstrated significant improvement in their knowledge and attitude to pain management, with the survey score increasing from 8.46±3.74 to 19.43±4.07 ($p < 0.001$). Among the residents, 74% had experienced pain within the previous 6 months. Their baseline pain intensity was 4.10±2.20. The experimental group showed a significantly greater reduction in pain scores than the control group, from 4.19±2.25 to 2.67±2.08 ($p < 0.001$). Group differences were also found in psychological well-being in regard to happiness, loneliness, life satisfaction and depression ($p < 0.05$), and the use of non-drug methods ($p < 0.05$).
Conclusions: These results suggested that the IPMP is beneficial to staff, as well as being effective in reducing geriatric pain and negative impacts. Management support and staff involvement are important for carrying out a long-term program.

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