

POSTOPERATIVE PAIN MANAGEMENT IN CHILDREN: STILL A PAINFUL SUBJECT

Natalia Belîi^{1,3}, Andrei Donea²

¹“V. Ghereg” Chair of anaesthesiology and reanimatology No. 1, Nicolae Testemitanu SUMPh, Chisinau, Republic of Moldova;² The Institute of Mother and Child Health Care; ³The “Em. Cotaga” Clinic, the Institute of Mother and Child Health Care.

Introduction. Acute pain is a frequent complaint in paediatric surgical population, affecting not only physical state, but also with long term emotional impact. Despite understanding of the pain management importance, there still exist barriers leading to suboptimal treatment of pediatric algic syndrome.

Keywords: perioperative pain management, acute paediatric pain evaluation.

Purpose. Exploring the educational barrier (from the perspective of healthcare workers) to optimal pediatric postoperative pain management.

Material and methods. Prospective study. During 6 months (January – June, 2019), paediatric medical healthcare workers and medical students were random asked to fill in the elaborated questionnaire. The respondents were asked to indicate on the numerical rating scale (NRS) the value where the intense pain begins and to prescribe a treatment by ticking medication from WHO analgesia ladder. Also, they were asked at which value of pain intensity is it necessary to treat pain pharmacologically and how often pain should be assessed in a hospitalised patient. Descriptive statistic.

Results. Enrolment rate 52,3% (125/239), of whom 17 (13,6%) returned incomplete questionnaires. The final trial (n = 108) consisted of: students of the V-th year of the Faculty of General Medicine of N. Testemitanu SUMPh

(n = 51) (19.6% of students (10/51) work as nurses), pediatricians (n = 47), pediatric surgery medical residents (n = 5), nurses from pediatric wards (n = 5). Study included pediatric healthcare workers from 5 hospitals situated in 3 cities: Chisinau (3) , Cahul (1), Ungheni (1) with an average work experience of 21±15 years.

According to the answers, on the NRS “the intense pain starts at” : 1-2 (3/108) (2.8%), 3-4 (19/108) (17.6%), ≥ 5 (13/108) (12.0%), ≥ 6 (26/108) (24.1%), ≥ 7 (34/108) (31.5%), ≥ 8 (10/108) (9.3%), 9-10 (3/108) (2.8%) (Fig. 1).

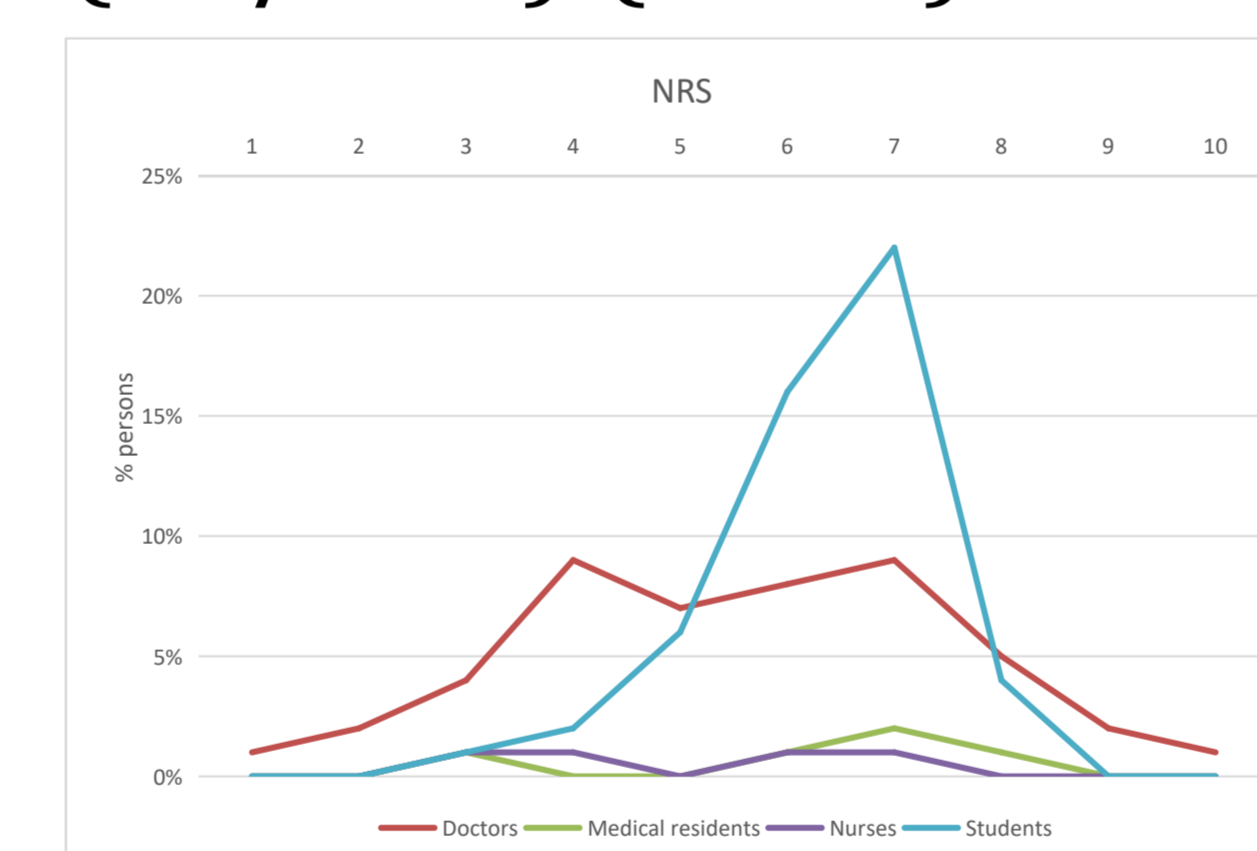


Fig. 1. Group distribution and % of answers to the question “Indicate on NRS the value where intense pain begins”.

*NSAIDs – nonsteroidal anti-inflammatory drugs, A – acetaminophen; M – metamizol, OMi – minor opioid, OM – major opioid.

Valid values were indicated mostly by students, extreme erroneous values were given by licensed physicians. More than half of the respondents (59.26%) chose for the term “intense pain”

medication from the first WHO ladder: monotherapy (41/108), the combination of NSAID with acetaminophen or metamizole (19/108) or a combination of all three (4/108). Moreover, 10 respondents would prescribe a major opioid as monotherapy (Fig. 2). Regarding the frequency of postoperative pain assessment, responses ranged from “every 20 minutes” (1/108) to “very rare” (2/108), at complaints of pain 6.5% (7/108). Every second answer 51% (55/108) being expressed by temporal generalizers like “permanently”, “always”, “systematic” indicating lack of regulation in this regard etc. Also, 24.07% (26/108) of the respondents (mostly students) would start treatment at pain intensity ≥ 4 (NRS),

whereas 28% (30/108), mostly specialists and residents, would start pain treatment at ≥ 5 (NRS) and only 15.74% (17/108) indicated the correct threshold of ≥ 3 (NRS) (Fig. 3).

Conclusions. The results of the study revealed the necessity to create education programs in perioperative management of pediatric pain for healthcare workers.

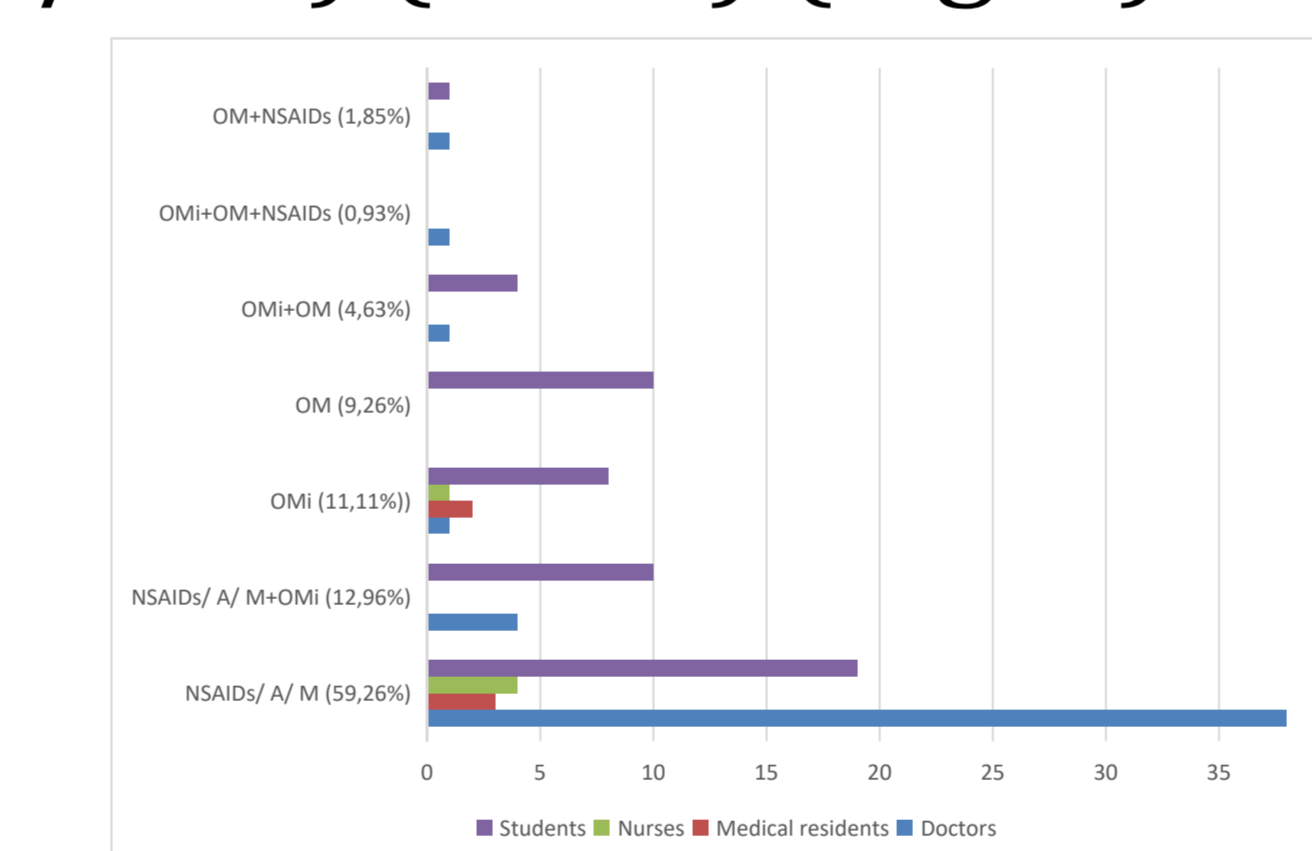


Fig. 2. Analgesic medication prescribed for intense pain*.

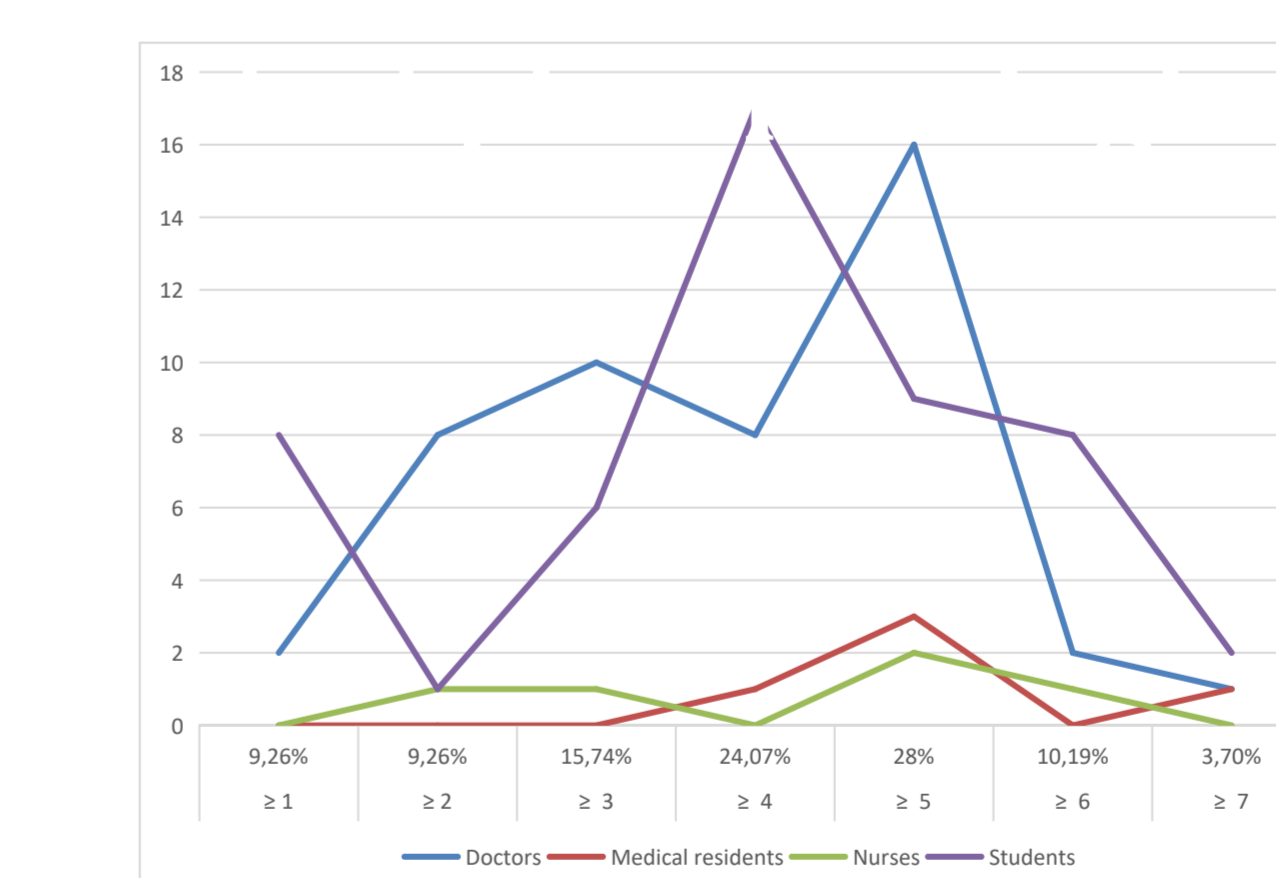


Fig. 3. Answers “at which value of pain intensity is necessary to treat pain pharmacologically?”