

IDEA (Impact Douleur Enfant Adolescent): quantitative and qualitative description of children and adolescents referred to 14 French outpatient pediatric pain clinics, first results.

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INTRODUCTION: Less is known about children and adolescents referred to outpatient pediatric pain clinics, especially in France (King, 2011). IASP French chapter, SFETD, and its pediatric committee therefore organized with APICIL foundation support IDEA study (Impact Douleur Enfant Adolescent).

PURPOSE: The aim of this study was to describe characteristics and impact of chronic pain in children from 8 to 18 years referred to French outpatient pediatric pain clinics.

METHODS:

Design: IDEA study was prospective and multicenter. 14 French pediatric pain clinics (PPC) participated and proposed the study to their new patients during 12 weeks.

Population:

Inclusion criteria were:

- Pediatric pain clinic's new patient,
- Aged 8 to 18 years old,
- With pain persisting for at least 1 month or present at least 15 days a month.

Exclusion criteria were:

- Intellectual deficiency
- Cancer (progressive or during treatment)
- Insufficient reading level

Parents or legal guardians and children's consents were required.

The study was approved by French Pediatric Society's ethical committee.

Conduct of the study :

- Physicians completed a questionnaire about personal and familial history, characteristics of pain, sleep, treatments and diagnosis.
- Parents completed a form about healthcare use, school/work functioning, Strengths and Difficulties Questionnaire-parent version (SDQp) and Family Assessment Device -12 questionnaire (FAD12).
- Children completed Functional Disability Inventory (FDI), Strengths and Difficulties Questionnaire-child version (SDQc) and "Vie et Santé Perçue de l'adolescent" questionnaire (VSP-A12, French speaking quality of life questionnaire, Sapin et al. 2004).

Data management: data were anonymised, entered and checked before analysis in CIC-IT 1403, Lille.

Statistical analysis: 4 groups were determined for statistical analysis: Headaches, Musculo-skeletal pain, Neuropathic pain/CRPS and Abdominal pain. Analysis of variance and Chi-squared tests were performed.

Data presentation: numeric variables are presented as mean (Standard Deviations) or numbers (percent).

RESULTS:

• **Population:** 263 patients were included, 234 inclusions with complete data were analyzed.

• **Demographic data:** 176 patients (75.5%) included were girls (sex ratio 0,32), mean age was 12.9 (2.58).

• **Localization of pain:** figure 1.

• **Duration of pain:** for 167 patients (71.4%) pain lasted for more than one year. Pain was permanent for 114 (48.7%), permanent pain was more frequent in Neuropathic pain/CRPS group (73.2% of this group, $p = 0.001$).

• **Pain Intensity:** mean VAS was 6.65 (1.6), there was no difference between groups.

• **Chronic diseases:** 64 patients (27.5%) had a chronic disease, this characteristic is more frequent in Musculo-skeletal pain (37.5%) and Abdominal pain (33.3%) ($p=0.002$).

• **Family history of chronic pain:** 85 patients (36.6%) had a familial history of chronic pain, no difference between groups.

• **Medications:** mean number of medications received was 2.79 (1.85). 91 patients (39.2%) had received opioids but only 8

(15.4%) in Headaches group ($p=0.001$).

• **Diagnosis:** figure 2.

• **School / work impact :** 91 patients (39.4%) were absent from school more than 10 days during the last 3 months.

• **Healthcare use :** 186 patients (81.2%) had never been hospitalized because of their pain. Mean number of physician appointments was 14.23 (18.81) and is more important in the Musculo-skeletal pain group [18.25 (24.42), $p=0.02$]. 220 patients (95.7%) had at least one paraclinic test. Mean number of exam was 7.18 (7.09), no difference between groups.

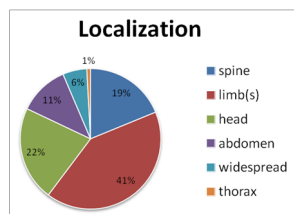


Figure 1: localization of pain in IDEA population.

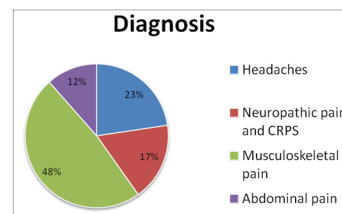


Figure 2: medical diagnosis in IDEA population.

CONCLUSION: IDEA is the first prospective multicenter descriptive study about children and adolescents referred to PPC in France. The first results show that patients has moderate to severe pain which is permanent in almost half the cases. Referral to PPC is late, pain is present since more than one year at referral for most patients. Chronic pain generate school absence and important health care use in our population, suggesting important direct and indirect costs, as previously described (Groenewald, 2015). Further analyses of IDEA results will describe more comprehensively our population and the impact of pain on children and parents functioning and quality of life.

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