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## Pediatric Chronic Pain Management: Steps Toward a Neglected Area

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Pain means an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage. Acute pain signals a specific nociceptive event and is self-limited. Chronic pain has been defined as pain that lasts longer than 6 months and continues beyond the normal time expected for resolution of the problem or recurs for other reasons. Chronic pain has a significant adverse impact on the health-related quality of life of children, resulting in significantly worse physical, psychological and social functioning and leads to lower life satisfaction in childhood (1).

An increasing amount of investigations has been focused on the epidemiology of pediatric chronic pain (2). However, until first decade of 2000, very little was known in the world about the prevalence of pain in children (3-5). Tools such as pain experience interview have been designed to compensate this deficiency and applied to provide the lifetime and prevalence estimation of various types of pain in children. It also helps to collect data about the intensity, effect, duration, and frequency of patient's pain experiences.

On a study which was performed as a comparable crosssectional population study on 561 school children 8-16 years, a 37% prevalence of chronic pain problems during the previous 3 months was reported; however, only 5.1% of the children had experienced moderate or severe chronic pain. Results of this study showed that the most frequently reported pain locations were the lower limb (47%), the head (43%), and the abdomen (34%). In girls headache and abdominal pain were more frequently reported, whereas in boys lower limb pain was more frequently reported. These complaints had caused a chronic pain condition in children, which was lead to a decline in their quality of life, a medical care seeking behavior and more sick leaves days from school. Generally they had unpleasant sensation about their condition with more depressive mood (6).

The first step in the management of chronic pain is conducting a comprehensive pain history. Pain has biopsycho-social aspects so performing a multi-modal approach is likely to be most effective (7, 8). Treatment should also be focused on pain-related disability with the goal of child function and comfort enhancement and improvement of quality of life. This approach includes specific treatment targeting possible underlying pain mechanisms, as well as symptom-oriented management addressing pain, sleep disturbance, anxiety, or depressive feelings (9).

Children with chronic pain and disability benefit the

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Pediatric chronic pain management is a risky field for a pain physician so multidimensional and multidisciplinary approach should be made on it.

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most from interdisciplinary programs that incorporate cognitive behavioral therapy (identifying links between behavior, thoughts, and feelings) into rehabilitation programs of functional restoration through physical and occupational therapies and standard medical care. Back to school again and addressing significant sleep disturbances are important treatment targets.

Recently with over increasing the amount of metaanalysis and systematic reviews, lots of findings support the usage of different modalities according to evidencebased medicine. Evidence-based treatments should be used in the care of children with chronic pain. Nowadays, the strongest evidence base exists for the efficacy of psychological interventions (e.g., relaxation strategies, parent interventions, cognitive strategies) for pain reduction in children, and this should be routinely recommended to children with chronic pain.

Parents are an important part of treatment of children with chronic pain, and strategies to teach parents adaptive responses to their child's pain can increase rehabilitation efforts (7, 9).

It is essential that healthcare professionals provide children with the opportunity to communicate their unique perspective and assist them to understand their pain experience.

Although pain clinicians, patient families and organizations are playing an important role in supporting policy makers toward improving access to chronic pain management, children continue to fight for accessing and receiving appropriate and specialized pain care (10). Advocacy efforts are needed to ensure that chronic pain is considered in healthcare initiatives for children. Children with chronic pain are best cared for with interdisciplinary assessment and management, which requires a combination of medicine, psychology, and rehabilitation services. For all pediatric patients referred for assessment and management of chronic pain between these investigations psychological aspect is far more valuable than the others and more attention should be focused on it in pediatric setting.

There is a large and widening gap between the increasingly sophisticated knowledge of pain and its treatment as well as the effective application of that knowledge. Although the incidence of pain in developing countries is

higher and cost-effective methods for pain care are available, acute and chronic pain is undertreated, and timely access to care is a growing problem in nations with access to the best health care (11).

To sum up, one comes to this understanding that pediatric chronic pain management is a risky field for a pain physician and multidimensional and disciplinary approach should be made on it.

#### **Financial Disclosure**

None declared.

### **Authors' Contribution**

None declared.

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