

Paediatric Pain

An Allied Health functional approach

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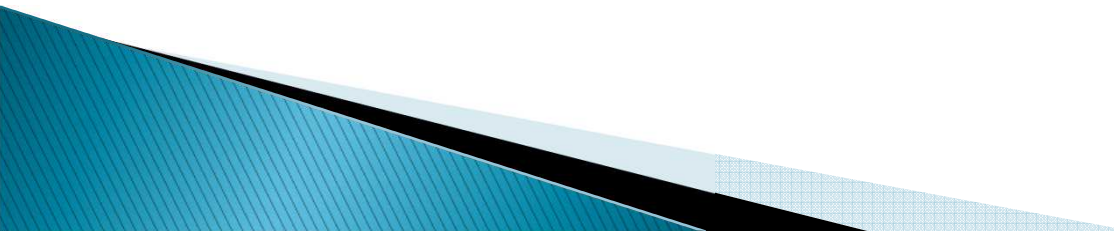
International Association for Study of Pain (IASP)

PAIN

An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

CENTRAL SENSITISATION

Increased responsiveness of nociceptive neurons in the central nervous system to their normal or sub threshold afferent input.



Chronic Regional Pain Syndrome (CRPS) Type 1

COMPLEX REGIONAL PAIN SYNDROME


Multifactorial disorder, neurogenic inflammation, nociceptive sensitisation, vasomotor dysfunction, and maladaptive neuroplasticity, generated by an aberrant response to tissue injury.

IASP definitions

Type I does not have demonstrable nerve lesions.

Type II has evidence of obvious nerve damage.

Response to threat

- ▶ ‘Pain is an unpleasant conscious experience that emerges from the brain when the sum of all the available information suggests that you need to protect a particular part of your body’ (Lorimer Moseley)
 - ▶ The important theme is regarding protection. Pain is a protective output mechanism of our brains, without it we would be unable to survive.
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Acute Pain vs Chronic

- ▶ Stop
- ▶ Withdraw
- ▶ Rest
- ▶ Avoid repeating/learned response

Natural response, not helpful if out of proportion to threat

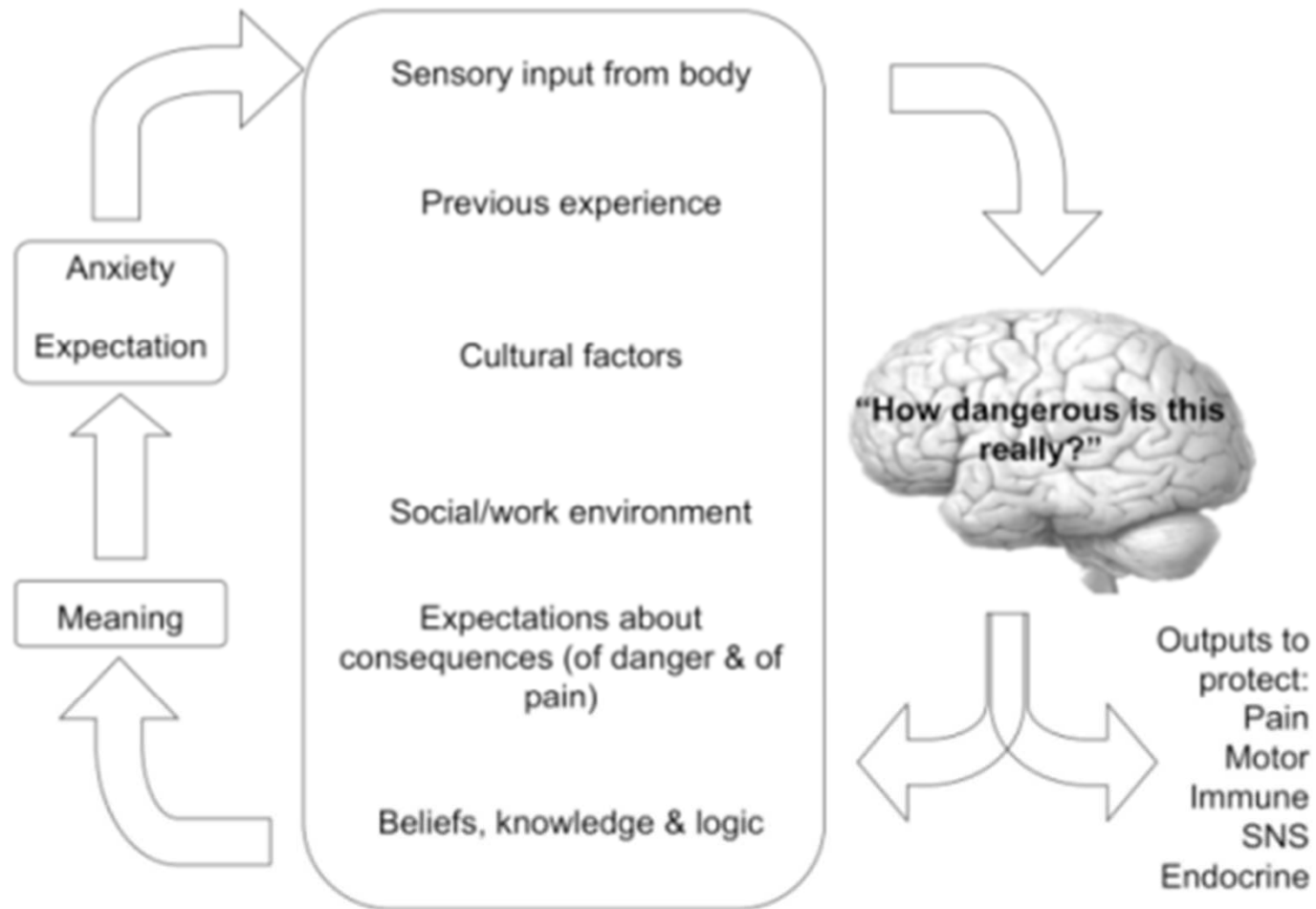



Fig. 1. Many inputs affect the implicit perception of threat to body tissues, labelled here as 'How dangerous is this really?' Those inputs have wider meaning effects, which in turn seems to affect anxiety, attention and expectation. The implicit perception of threat to body tissues determines pain and in turn influences other inputs.


Some of the Primary Diagnoses in our service for 10–17 yr olds

- ▶ Musculoskeletal trauma “trivial”
 - ▶ Musculoskeletal trauma significant e.g. #
 - ▶ CRPS
 - ▶ Abdominal no pathology


 - ▶ Generalised body pain
 - ▶ Post surgical
 - ▶ Oncology
 - ▶ Headache

 - ▶ Chrons
 - ▶ Fowlers Syndrome
 - ▶ Multiple recurrent renal calculi
 - ▶ Fatigue
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Minimal or no pathology

- ▶ Anecdotally a certain group has been noticed.....
 - ▶ 10 –13yrs, predominantly girls
 - ▶ High achievers with “speed wobbles”
 - ▶ Caregivers/parents high expectations, very protective, strong advocates, medical focus
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Concepts underpin approach

- ▶ GPs asked to diagnose and fix (expectations around medication)
 - ▶ Child immersed in and influenced by parents understanding of pain and context
 - ▶ Analogies and stories useful e.g. Painful Yarns (Lorimer and Mosely)
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Concepts underpin approach


- ▶ Is there a threat?
 - ▶ Is there presence of hypervigilant system, catastrophic thought?
 - ▶ What can be influenced in terms of context (family, school, peers)
 - ▶ Graded exposure, cognitive over ride (“self talk”)
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Disentangling the complex relations among caregiver and adolescent responses to adolescent chronic pain
Vowles et al 2010


- ▶ Parents /caregivers can be key influence on adolescent social and physical activity
- ▶ In general greater adolescent difficulties are seen to be related to greater caregiver difficulties

Disentangling the complex relations among caregiver and adolescent responses to adolescent chronic pain
Vowles et al 2010

“it seems self evident that caregivers whose psychological functioning is addressed in treatment, and who are offered adequate skills training with regard to responses to adolescent pain, will be of better assistance to their children”



The Bath Adolescent Pain – Parental Impact Questionnaire (BAP–PIQ):
Development and preliminary psychometric evaluation of an instrument
to assess the impact of parenting an adolescent with chronic pain
Jordan et al 2007

- ▶ Impact on parents, including emotional and social functioning, often neglected
 - ▶ Qualitative research on parents
 - ▶ Parental stress, mood, parenting behaviour, marital adjustment, general functioning
 - ▶ Convergent validity
 - ▶ Reliable and valid assessment of impacts on parents (for clinical and research)
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A review of the evidence linking adult attachment theory with chronic pain: Presenting a conceptual model
Meredith et al 2008


- ▶ Review of evidence linking adult attachment theory with chronic pain
- ▶ Proposes Attachment–Diathesis Model of Chronic Pain (ADMoCP)

Insecure adult attachment pattern

- risk factor for development of chronic pain
- vulnerability factor for poor outcome in the face of chronic pain

Insecure Attachment

Associated with maladaptive psychosocial variables


- ▶ Perceptions of pain more threatening
 - ▶ More negative perceptions of availability and adequacy of support
 - ▶ Lower pain self efficacy
 - ▶ Less support seeking
 - ▶ More stress, depression, anxiety
 - ▶ Increased tendency to catastrophise
 - ▶ Less adaptive coping strategies
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Somatising in children and adolescents. 1. Clinical presentations and aetiological factors. D. Mary Eminson (2001)

SOMATISING DISORDERS, characterised by complaints of unexplained physical symptoms, are common presentations in children and adolescents, both in primary and secondary care settings.

Somatising in children and adolescents. 2. Management and outcomes. D. Mary Eminson (2001)

The presentations are likely to be of children in middle childhood or early adolescence with single or multiple physical symptoms (abdominal and joint pains, headaches, pains), fatigue associated with obvious stresses of any kind, recent-onset losses of function and unexplained symptoms after a clear physical illness.



SOMATISATION DISORDER – 2 years of multiple, variable symptoms

PERSISTENT SOMATOFORM PAIN DISORDER –
persistent, severe, distressing pain that is more persistent and dominant than the multiple aches and pains of other categories

Risk/ Vulnerability Factors

- ▶ Insecure adult attachment pattern
 - ▶ Young victims of domestic violence and or sexual abuse
 - ▶ The children of chronic pain adults who struggle to cope
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