

Vocabulary used by young children to express pain: An exploration

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Aim



- Literature review of research studies focusing on **children's pain-vocabulary**.
- Focus on physical pain.
- To **develop suitable instruments** to find common pain-vocabulary children use to express their discomfort.



Problem statement

- **All children experience pain almost on a daily basis** (Fearon, McGrath, & Achat, 1996; Von Baeyer, Baskerville, & McGrath, 1998).



- **Children with disabilities**
 - same as typically developing peers?
 -  **procedures, etc.?**



(Dubois, Capdevila, Bringuier, & Pry, 2010; Huguet, Stinson, & McGrath, 2010; Stallard, Williams, Lenton, & Velleman, 2001)

Candidates

Who can use a pain-related communication board?

Children and adults who need it for:

- **A temporary period:**
 - ICU
 - Patients who are intubated
 - Children and adults with burn injuries and post-surgery

/...

Candidates

Who can use a pain-related communication board?

Children and adults who need it for:

- **More permanent period:**

- Children and adults who use AAC – medical procedures

Describing pain

Pain is difficult to describe and measure (Ely, 1992; Jerret & Evans, 1986; Kortessluoma, Punämäki, & Nikkonen, 2008)

**Subjective
nature**

Crying

**Verbalisations/
words**

**Different
experiences**

Children CCN

**– do not try to draw
attention of others
(Dubois et al. (2010))**

Too much effort

unrecognised

untreated

(Stanford, Chambers, Craig, McGrath, & Cassidy, 2005).

(Davies, 2010; Gilbert-MacLeod, Craig, Rocha, & Mathias, 2000; Stallard et al., 2001).



Expressing pain

- **Inability to express pain in traditional manner** (Ely, 1992; Jerret & Evans, 1986; Kortessluoma, Punämäki, & Nikkonen, 2008)

**Safety
implications**

Fear or anxiety

Distress

Frustration

Overall deterioration of individual's well-being

**Insufficient pain-
relieving treatment**



(Costello, 2000; IASP, 2011; Patak, Gawlinski, Fung, Doering, Berg, & Henneman, 2006; Price, 2002; Stähle-Öberg & Fjellman-Wiklund, 2009; Stallard et al., 2001).



Definition of pain

- **“An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage (Association for the Study of Pain – IASP, 1979, p.250).**

subjective

individual

- **This definition takes both the sensory and affective dimensions of pain into account (Nilsson, 2010). Pain may cause physical and emotional distress and anxiety in children experiencing medical or surgical procedures.**

(IASP, 2011; Nilsson, 2010).



Definition of pain

“One of the most common adverse stimuli experienced by children, occurring as a result of injury, illness and necessary medical procedures.” (American Academy of Pediatrics – AAP, 2002)

(Azize, Humphreys, Cattani, 2011).



- **United Nations Convention on the Rights (UNCRC) of a Child recognizes “the right of the child to the enjoyment of the highest attainable standard of health and to facilities for treatment of illness”** (UN, 1989)
- **Support through AAC to children who experience communication breakdowns due to their illness (or with LNFS)** (Sherlock, 2008) .

ICU Other medical settings i.e. clinics

Natural settings i.e. home, school, play

(Blackstone, 2007; Costello, 2008; Mesko, Eliades, Libertin & Shelestak, 2011; Sherlock, 2008; UN, 1989;).



Literature review

- **Self-report?**
- **Healthcare staff and parents estimate children's pain –(bodily signs e.g. FLACC – Face, Legs, Activity, Cry and Consolability)**
(Kortesuoma & Nikkonen, 2004; Nilsson, 2010; Stähle-Öberg & Fjellman-Wiklund, 2009).
- **Hay et al. (2009) discrepancies – reports of parents and children; Stähle-Öberg and Fjellman-Wiklund (2009) – difficult to diagnose children with disabilities; underestimate pain**

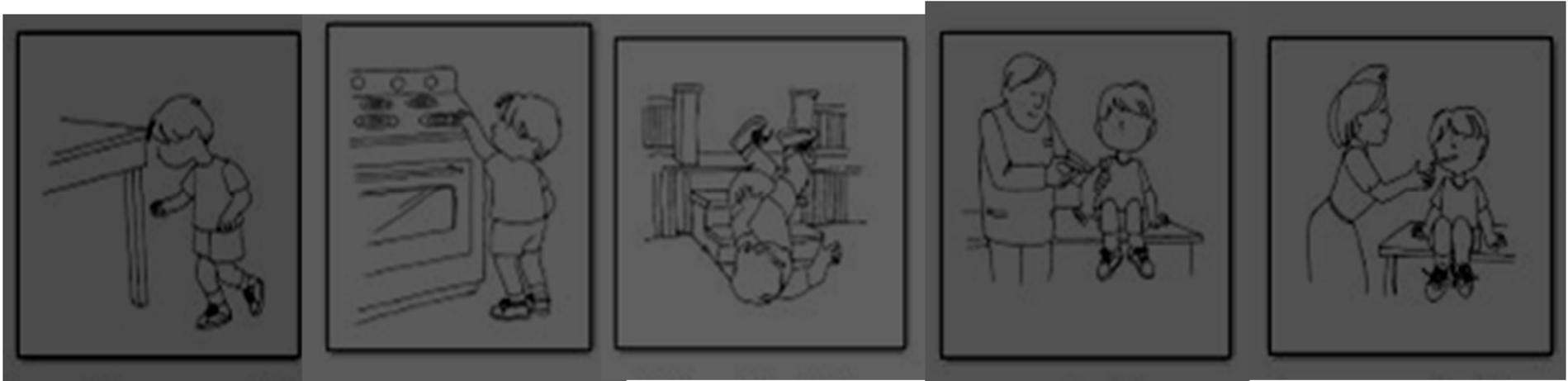


Children give clear self-report – ASK them!



Literature review

- Hypothetical pain scenarios (Belter et al., 1988)
- *Charleston Pediatric Pain Pictures (CPPP)*



Head-bump
- table

Burn stove

Fall from
stairs

Needle

Thermometer

- **Possible other scenarios?**

(Adesman & Walco, 1992; Belter et al., 1988; Von Baeyer et al., 2009)

Literature review

- Hypothetical pain scenarios



**Burn open
fire**

**Injury in sport –
cricket ball**

Fall from a tree

Literature review

Four landmark articles

Focus: Children's pain(-related) vocabulary

1986 – current:

[Jerret & Evans, 1986;](#)

[Ely, 1992;](#)

[Stanford, Chambers & Craig, 2005;](#)

[Franck, Noble, & Liossi, 2010](#)



Literature review

Journal of Advanced Nursing, 1986, **11**, 403–408

Children's pain vocabulary

Mary Jerrett RN MS and Kathleen Evans RN BNSC *Queen's University, School of Nursing,
90 Barrie Street, Kingston, Ontario K7L 3N6, Canada*

Accepted for publication 26 August 1985

JERRETT M. & EVANS K. (1986) *Journal of Advanced Nursing* **11**, 403–408
Children's pain vocabulary



Literature review

*TABLE 2 Pain descriptors used by children aged 5 years to 6 years
11 months, not found on the McGill Pain Questionnaire word list*

Sensory	Affective	Evaluative
Painful	Sad	Bad
Fall off	Scared	Awful
Snow	Drive nuts	Ugly
Ouch	Unhappy	Terrible
Cymbals clapping	Upset	Not nice
Warm	No strength	Yucky
Bullet		
Tickled		
Buzzing		
Sounds funny		
Mosquitoes buzzing		

Note: above categorization was done subjectively by these researchers.



Literature review

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CHC, SUMMER 1992, VOL 21, NO 3

The Experience of Pain for School-Age Children: Blood, Band-Aids, and Feelings

Elizabeth A Ely

A qualitative descriptive study was conducted to examine words and their meaning when used by children describing their experiences with pain. Eight children (6–8 years) participated. A semistructured interview was conducted in

Next, the research question and design will be discussed. Entree and sampling issues will be presented followed by a description of methods used to collect data. The final section will be an



Literature review

TABLE 1

DATA ANALYSIS THEMES, CATEGORIES, AND CODES*

PAIN FEELS LIKE	INSIDE HURT	OUTSIDE PAIN	MAKE IT BETTER
↑ Picturdescrip	↑ Hurt/Feel	↑ Pain/Phy	↑ Fixit
Colors			Medicine
Descriptr			Hospital
↑	↑	↑	↑
blood	talk weird	blood	love
strange	friends	crying	go home
weird	make fun	maddening	forget
feeling	crying	not fun	avoid
words	feeling		friends
maddening	other pain		cope
not fun	confuse		distract
	tease		
	sad		
	embar		

* THEMES, Categories, and codes



Literature review



Pain 114 (2005) 278–284

PAIN

www.elsevier.com/locate/pain

A normative analysis of the development of pain-related vocabulary in children

Elizabeth A. Stanford^{a,b,*}, Christine T. Chambers^{b,c}, Kenneth D. Craig^a

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^c*Department of Pediatrics, University of British Columbia, Vancouver, BC, Canada*

Received 22 July 2004; received in revised form 29 November 2004; accepted 20 December 2004



Literature review

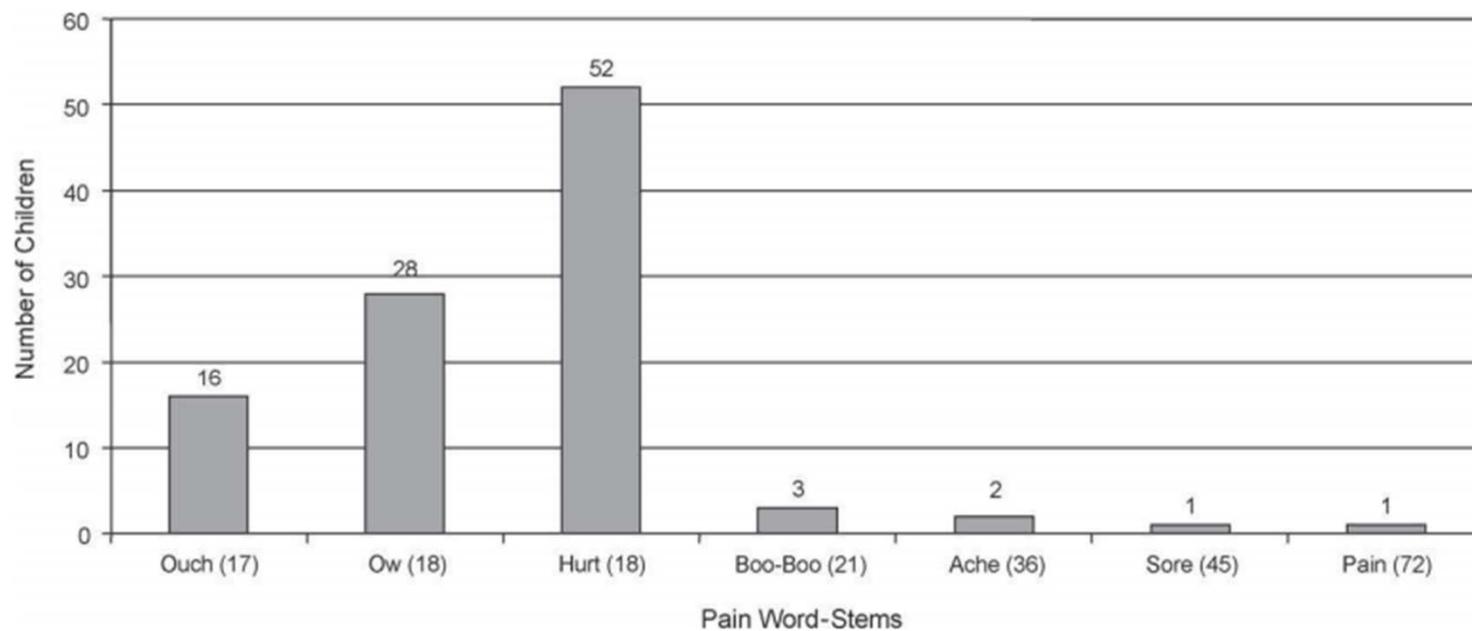


Fig. 1. Study 1: Frequency of children's use of pain word-stems and age of emergence. Numbers above the bar indicate the specific frequency (i.e. raw number of children who had used each word in the database transcripts) represented by the bar. Numbers in parentheses below indicate the earliest age of emergence (in months) for each pain word-stem.



Literature review

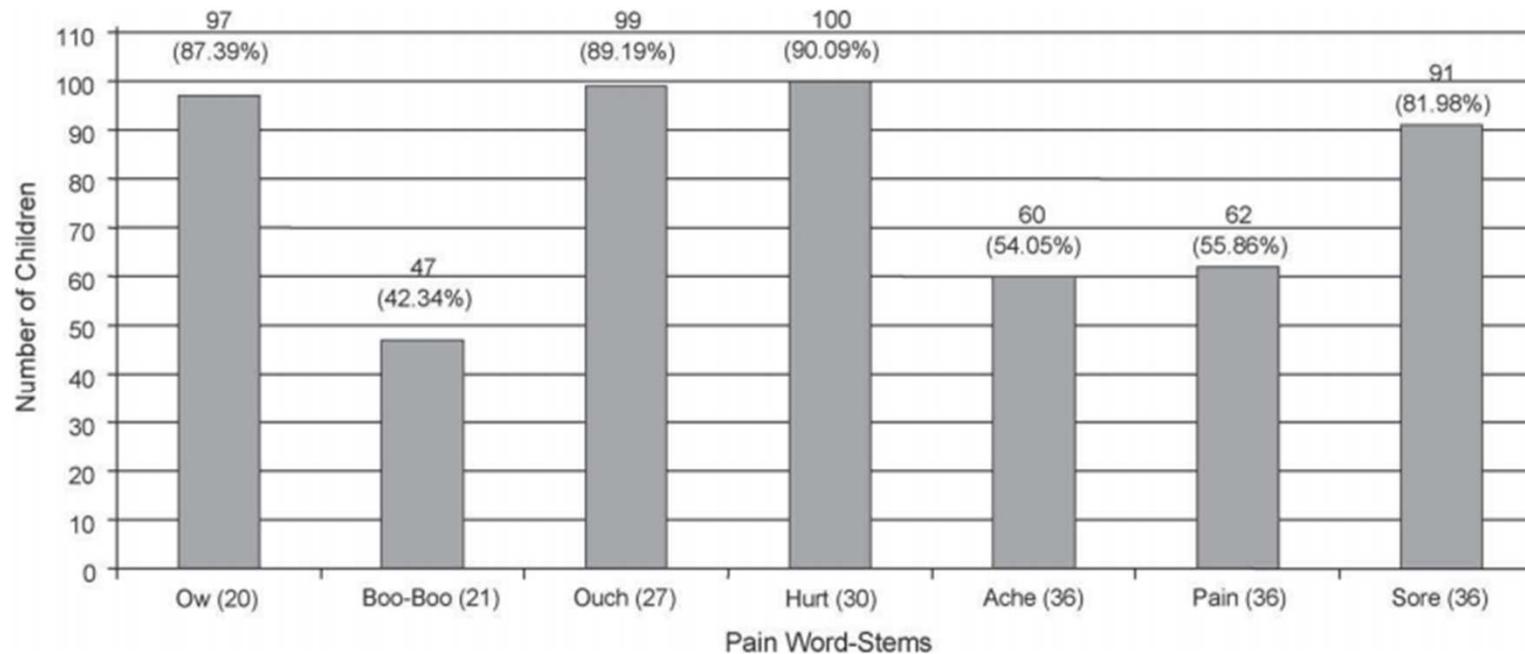


Fig. 2. Study 2: Frequency of parent reported children's use of pain word-stems and age of emergence. Values on the y-axis refer to the number of parents who reported that their children had ever used word-stems. Numbers above the bar indicate the specific frequency (and percentage) represented by the bar. Numbers in parentheses beside the word-stem indicate the earliest age of emergence (in months) for each pain word-stem.

Literature review

Child: care, health and development

Original Article

doi:10.1111/j.1365-2214.2010.01084.x

From tears to words: the development of language to express pain in young children with everyday minor illnesses and injuries

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†University of Southampton, Southampton, UK

Accepted for publication 19 January 2010

Abstract

Background Little is known about the development of language to express pain in the young or how children and parents verbally communicate when young children have everyday minor illnesses and injuries.



Literature review

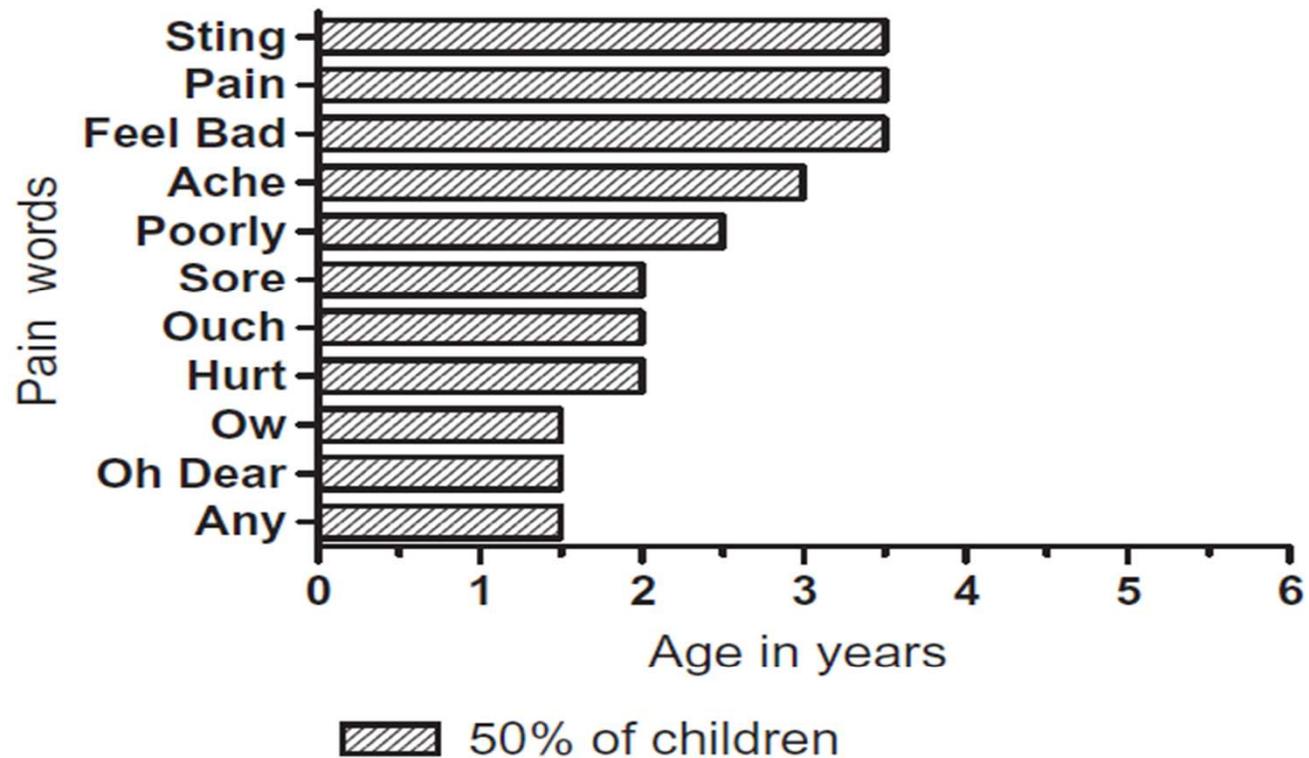


Figure 1. Most common pain words by age of use.



Literature review

Table 3. Examples of children's pain words (and variants) by communicative intent theme*

Unpleasant sensations†	Assistance/treatment requests‡	Exclamations§*	Pain location/visible sign of injury§*	Actions/causes of pain§*	Reassurances§*
I feel bad	Vocatives (calls for parent by name)	Awww	External	I've banged myself	All better
I've got a <i>lurrie</i>	Mummy I hurt myself	Iya'ya'ya	I've got a baddie	Bite you	I'm alright
I have hurt my boo boo	Daddy my (body part) hurts	Oooh	It's bleeding	Bumped it	I'm brave
I'm not right	Calls for assistance	Ah oh	It's cracked	Had bump	I'm fine
I feel ill	Fix it	Eh oh	I've got a scab	I cut my (body part)	It's ok
I have bees running around in my legs	Help Help	Oh dear	Internal	Fall down	Sorry
Not feeling too good	I want my mummy	Oh no	I feel funny in my head	I fell over	
It's not nice	I need something	Oh oh	I've got nose ache	Injured myself	
Got needles and pins	Make it feel better	Ut oh	Throat's all croaky	I tripped over	
It pains	Need to see a doctor	Ow ow ow	Mummy I have butterflies in my tummy	(Person) hit me	
I got a pain	Protests	I got an ow		Stubbed	
Poor baby	Don't touch it	Ooch		Scratching me	
I feel poorly	I don't want to	Youch			
It's poorly	Naughty + object	Oops			
Feel a bit sick	Stop it	Whoopsie daisy			
Got sick	Specific item requests	Shoo shoo			
I've got a sick in my tummy	Cream on	Waaaaa/wahh			
Sick sore head	Magic cream				
Mummy it's sore	I need medicine				
Don't feel well	Plaster on it				
I'm not very well	Physical comfort				
Yucky	Kiss better				
	Need a kiss				
	Rub (bodypart)				
	Need a cuddle				
	Want huggles				

*Full lexicon of children's pain words by communicative intent theme available on request.

†Classified as 'sensory' words of APPT (Savédra et al. 1993) or MPQ (Melzack 1975).

‡Classified as 'directives and responses' of the INCA-A (Ninio et al. 1994).

§Classified as 'markings and responses' of the INCA-A (Ninio et al. 1994) with subcategories: *exclaim in distress, †mark occurrence of event and ‡commiserate, express sympathy for hearer's distress. APPT, Adolescent Pediatric Pain Tool; INCA-A; Inventory of Communicative Acts-Abridge & MPQ, McGill Pain Questionnaire.



Literature review

Summary findings

Author, year Aim Methodology	Results	Implications
Jerret & Evans (1986) How children view their pain - children drew pictures that show pain.	Words were categorised into 3 classes of pain: sensory, affective and evaluative	<ul style="list-style-type: none">• Methodology (Single group design)• Categorise pain-related words for communication board
Ely (1992) Examine pain-words and their meaning - children drew pictures that show pain; semi-structured interview	4 Categories: Pain feels like; Inside hurt; Outside hurt; Make it better	<ul style="list-style-type: none">• Methodology (Qualitative descriptive design) – questions for structured interview; videotape and transcribe• Categories

Literature review

Summary findings

Author, year Aim Methodology	Results	Implications
Stanford, Chambers, & Craig (2005) Document pain-words and age of onset	Pain-word stems <i>hurt, ow, ouch</i> and <i>sore</i> were most frequently used. Pain-word stems gradually increased in frequency from 3 to 6 years.	<ul style="list-style-type: none">• Methodology – (parent-survey)
Franck, Noble, & Lioffi (2010) Pain words during minor injury or illnesses	6 Categories: (a) describe unpleasant sensations; (b) request for help or treatment; (c) exclamations; (d) pain locations/visible sign of injury; (e) words used to describe causes of pain and (f) words to comfort the	<ul style="list-style-type: none">• Methodology – (questionnaire structure);• Categories

Development

- **Children's way of communicating about pain is affected by the development of:**

Cognitive skills

- Piaget - developmental stages

Language skills

- Previous experiences
- Family i.e siblings, parents
- Culture

Social skills

- Previous experiences
- Gender
- Family
- Culture

(Craig et al., 2006; Dubois, Bringuier, Capdevila, & Pry, 2008; Kortessluoma & Nikkonen, 2004).



Cognitive development

Children's cognitive abilities affect how they perceive, understand, remember and report pain.

Cries, start to use verbalizations such as "ow", or words e.g., "ouch".

sensori-motor
(0-24 months)

Develops expressive pain-related language e.g., – "Mommy, it is sore."

pre-operational
(2 - 7 years)

Describes pain abstractly and in sentences e.g., "My throat is croaky."

concrete operational
(7 - 11 years)

(Versloot, Veerkamp, Hoogstraten, 2006)



Language development

12 – 17 months old
one word or involved repetitive
sounds
(e.g. “ow ow”)



18 – 24 months old
Use more difficult and pain-
related words (e.g. “bruise” and
“graze”); start to **join words** (e.g.
“fall down”); begin to **describe the
location of the pain** (e.g. “bump
head”) and **request support or
treatment** e.g., “kiss it, mommy”
or “I want plaster”.



(Franck, et al., 2010;
Stanford, et al., 2005)



Language development

Older than 36 months

Begin to **describe different types of painful experiences** with words such as “*pain*”, “*hurt*” and “*sick*”.

Start **distinguish** between the experience of “*hurt/ouch*” to describe a hurtful event

Use **self comforting words**



(Franck, et al., 2010;
Stanford, et al., 2005)



Social development

Factors that influence language development are:

Interpersonal interaction Experiences over time

- ***Gender;***
- ***Families: culture, parents, siblings***
- ***Previous exposure (pain is experience together with a painful incident);***
- ***Previous hospitalisations;***
- ***Age.***

(Franck, et al., 2010; Harman, Lindsay, Adewami & Smith, 2005; Von Bayer et al., 2004; Jerret & Evans, 1986; Merskey & Bogduk, 1994)



Social development

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" Stop crying or Mom will think we're not having fun ! "





Conclusion

Self-report: aim – child “talk” about pain to be able to report and move on (disclose)

NOT catastrophe

NB: Pain-related Communication board should include all categories

Vocabulary selection

Pain categories

- (a) vocabulary to describe **unpleasant sensations**;
- (b) vocabulary to **request help** or assistance;
- (c) **exclamations** to indicate pain;
- (d) words to **describe the causes** of the pain;
- (e) vocabulary to **comfort** the distressed child.

(Costello, 2000; Dubois et al., 2010; Ely, 1992; Franck et al., 2010; Jerret & Evans, 1986; Stähle-Öberg & Fjellman-Wiklund, 2009; Stallard et al., 2001)

**“Not being able to communicate
does not mean that I have
nothing to communicate.”**

Felix Visagie (AAC user)

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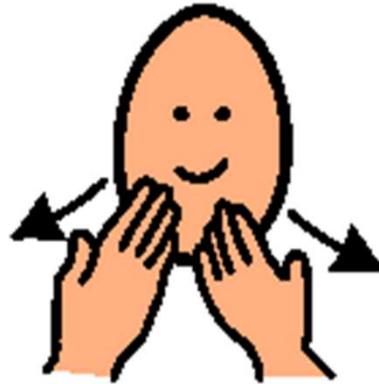


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Thank you

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