

# Supplementary

Which non-pharmacological measures are used in the department?	Total doctors
Distraction	16 (44%)
Soap bubbles	2 (6%)
Teddy bears	7 (19%)
Toys	9 (25%)
iPads	10 (28%)
VR glasses	3 (8%)
Parents	7 (19%)
Coping strategies	4 (11%)
Positioning	7 (19%)
Sucrose	4 (11%)
Cold compress	5 (14%)
Colleagues (nurses, other doctors, hospital clown)	3 (8%)
Calm and trustworthy demeanour	4 (11%)

Table 1: List of non-pharmacological methods that doctors mentioned they used in the EDs.

Question: Who do you call for help?	Total
Anaesthetist	6 (17%)
Paediatrician	17 (47%)
ED senior doctor	8 (22%)
Orthopaedic surgeon	1 (3%)

Table 2: List of who the doctors contact when they need help treating children in pain.

Questions	Junior doctors				Total
	To great extent	To some extent	To lesser extent	Not at all	
Are you using guidelines to treat children?	3 (19%) (95% CI [6:47])	3 (19%) (95% CI [6:47])	4 (25%) (95% CI [9:53])	6 (38%) (95% CI [17:64])	16 (94%)
Is the guideline sufficient?	5 (63%) (95% CI [23:90])	3 (38%) (95% CI [10:77])	0 (0%)	0 (0%)	8 (47%)
Do you use pain assessment?	3 (18%) (95% CI [5:45])	6 (35%) (95% CI [16:62])	3 (18%) (95% CI [5:45])	5 (29%) (95% CI [12:56])	17 (100%)
Inclination to use opioids on children compared to adults?	5 (31%) (95% CI [13:59])	3 (19%) (95% CI [6:47])	6 (38%) (95% CI [17:64])	2 (13%) (95% CI [3:42])	16 (94%)
Competence to treat children in pain?	2 (12%) (95% CI [3:40])	13 (76%) (95% CI [49:92])	2 (12%) (95% CI [3:40])	0 (0%)	17 (100%)

Table 3: The junior doctors' replies to questions regarding usage of guidelines and the management of children in pain in the EDs. The result is presented as an actual number, percentage distribution, and a confidence interval.

Questions	Senior doctors				Total	P-value
	To great extent	To some extent	To lesser extent	Not at all		
Are you using guidelines to treat children?	5 (28%) (95% CI [11:54])	7 (39%) (95% CI [19:64])	4 (22%) (95% CI [8:49])	2 (11%) (95% CI [3:38])	18 (95%)	0.262
Is the guideline sufficient?	7 (47%) (95% CI [22:73])	3 (20%) (95% CI [6:50])	4 (27%) (95% CI [9:56])	1 (7%) (95% CI [1:40])	15 (80%)	0.317
Do you use pain assessment?	1 (6%) (95% CI [6:47])	2 (11%) (95% CI [3:38])	11 (61%) (95% CI [36:81])	4 (22%) (95% CI [8:49])	17 (95%)	0.054
Inclination to use opioids on children compared to adults?	1 (5%) (95% CI [1:32])	4 (21%) (95% CI [8:47])	3 (16%) (95% CI [5:41])	11 (58%) (95% CI [34:78])	19 (100%)	0.020
Competence to treat children in pain?	7 (37%) (95% CI [18:61])	10 (53%) (95% CI [30:74])	2 (11%) (95% CI [2:36])	0 (0%)	19 (100%)	0.216

Table 4: The senior doctors' replies to questions regarding usage of guidelines and the management of children in pain in the EDs. The result is presented as an actual number, percentage distribution, and with a confidence interval.

# Questionnaire

The questionnaire was developed by a group experienced in pain treatment of children. The questionnaire was pilot tested by three doctors with varying levels of expertise all working in an ED were asked whether the questions were understandable, if they had anything to add to the content or phrasing, and whether they had any comments at all. All inputs were discussed in the group, and where relevant, the structured questionnaire was rephrased.

After permission from the executive consultant for each ED, the attending ED doctors were contacted by phone at random geography and shifts.

## Questionnaire first version

First section - introduction

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time \_\_\_\_ : \_\_\_\_ Interviewer: \_\_\_\_\_

Hospital: \_\_\_\_\_ Department: \_\_\_\_\_

Verbal consent that the answers can be used anonymously in this investigation

Position: \_\_\_\_\_

Second section - children

1. Are children being treated in the emergency department (ED)?

Yes

No

2. Have you treated children in the ED?

Yes

No

3. Have you been educated in pain treatment for children?

Yes

No

4. Have you been introduced to a guideline for pain treatment for children?

Yes

No

Third section – guidelines

5. Are you familiar with the local guideline for acute pain treatment of children?

Yes

No

6. Can you locate the guideline?

Yes

No

7. Do you use a guideline when treating pain in children?

To a great extent

To some extent

To a lesser extent

Not at all

8. What is the name of the guideline you are using?

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9. Is the guideline good enough to provide you with the precautions to handle pain treatment for children?

To a great extent

To some extent

To a lesser extent

Not at all

Fourth section –pain treatment

10. Do you use pain assessment for children?

Every time

Usually

Sometimes

Never

11. Are you less inclined to give opioids to children with a dislocated fracture?

To a great extent

To some extent

To a lesser extent

Not at all

12. Do you know any non-pharmacological methods used in the department?

Yes

No

13. Which are used?

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14. Do you often experience that parents demand painkillers for their child?

Every time

Usually

Sometimes

Never

15. Do you include the parents in the pain treatment?

Ex. Through distraction, positioning, or to help inform the child of the pain treatment?

Every time

Usually

Sometimes

Never

16. Who do you call when you need help treating children's pain?

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17. Are you, in general, satisfied with the pain treatment of children in the department?

To a great extent

To some extent

To a lesser extent

Not at all

18. Are you competent to handle treating pain in children?

To a great extent

To some extent

To a lesser extent

Not at all

Other comments

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# Questionnaire final version

## First section - introduction

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time \_\_\_\_: \_\_\_\_ Interviewer: \_\_\_\_\_

Hospital: \_\_\_\_\_ Department: \_\_\_\_\_

Verbal consent that the answers can be used anonymously in this investigation

Position: \_\_\_\_\_

## Second section - children

1. Are children being treated in the emergency department (ED)?

Yes

No

2. Have you treated children in the ED?

Yes

No

3. Have you received any education **from your department** in pain treatment for children?

Yes

No

4. Have you been introduced to a guideline **in your department** regarding pain treatment for children?

Yes

No

## Third section – guidelines

5. Are you familiar with the local guideline for acute pain treatment for children?

Yes

No

6. Can you locate the guideline?

Yes

No

7. Do you use a guideline when treating pain in children?

To a great extent	To some extent	To a lesser extent	Not at all
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. What is the name of the guideline you are using?

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9. Is the guideline **sufficient to** provide you with the precautions to handle pain treatment for children?

To a great extent	To some extent	To a lesser extent	Not at all
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fourth section –pain treatment

10. Do you use pain assessment for children?

Every time	Usually	Sometimes	Never
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Are you less inclined to give opioids to children with a dislocated fracture **than to an adult with the same kind of fracture?**

To a great extent	To some extent	To a lesser extent	Not at all
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Do you know of any non-pharmacological methods used in the department?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

13. Which are used?

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14. Who do you call when you need help treating pain in children?

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15. Are you competent to handle treating pain in children?

To a great extent	To some extent	To a lesser extent	Not at all
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other comments

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