



THE EFFECT OF THE PARENT'S PRESENCE DURING THE DRESSING PROCESS ON THE SEVERITY OF THE CHILD'S PAIN

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Abstract: This research was carried out to determine the effect of the parent's presence near the child during the dressing process on the severity of pain caused by the dressing. The sample of the descriptive comparative study consisted of 60 children. Ethics committee and study permission were obtained from the relevant institutions. Data were collected by observation and face-to-face interviews using the "Individual Characteristics Form" and the YBATT (facial expression, legs, activity, crying, and being able to be consoled) pain assessment scale. In the examination of the way parents supported their children during the painful procedure, it was observed that 13 (43.4%) of them used remote monitoring approach. The mean dressing time of the children showed a significant difference according to the parent variable; it was determined that the dressing time of the children with a parent present (7.5 min) was higher than the dressing time of the children without a parent present (6.3 min). In this study, it was seen that the presence of the parent with the child during the dressing did not affect the severity of the pain, the presence of the parent extended the dressing time, and the parents were in the approach of remote monitoring as a way of supporting the child during the procedure.


Keywords: Dressing procedure, Pain severity, Child, Parent


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Received: April 05, 2024

Accepted: October 10, 2024

Published: November 15, 2024

Cite as: Alptekin D, Eti Arslan F, Şişman H, Akpolat R. 2024. The effect of the parent's presence during the dressing process on the severity of the child's pain. BSJ Health Sci, 7(6): 226-230.

1. Introduction

While post-operative pain was perceived as a natural process that patients who underwent surgical intervention had to endure in the recent past, it is pointed out that today post-operative pain is a problem that needs to be solved by revealing its negative effects in every aspect of the patient's life.

However, despite the developments in pain, postoperative pain in children continues to be both a medical and social problem, and children still suffer from pain in the postoperative period (Khan and Weisman, 2007). In the study conducted by ZiskRony et al. (2010), it was reported that 51% of children who underwent surgery experienced an average of sub-intensity pain on the first day after surgery. In another study, in which children were evaluated for pain after lower extremity surgery, it was determined that approximately 75% of children experienced pain in various degrees (Shrestha and Manias, 2010).

In the postoperative period, children not only experience pain due to surgery but also experience pain due to interventional practices during their hospital stay (Shrestha and Manias, 2010; Babl et al., 2012). In this context, the already traumatic disease process in children turns into an even more traumatic process with pain. For

this reason, it is important to use non-pharmacological methods and pharmacological methods to relieve pain in improving the process, especially to comply with atraumatic care principles in all applications, and to include parents in care in terms of family-centered care principles.

There are many non-drug methods used to reduce interventional pain in children based on these principles (Lago et al., 2009; Wente et al., 2013). In addition to these non-drug methods, one of the methods that help children cope with pain is the presence of the parent with the child during the procedure. However, although it is reported in the literature that the presence of the parent with the child is an important factor in increasing the child's pain tolerance in coping with pain, it has been found in some literature that this intervention does not affect the pain tolerance of children and that children are affected by the stress of their families and studies on this subject are quite limited (Wente et al., 2013). Pain management during procedures is among the important responsibilities of the health care team. The nurse has a very important place in this team (Çoçelli et al., 2008). Since many procedures performed on hospitalized children cause pain, the best method to reduce pain should be chosen. Data are needed to determine the



effectiveness of these methods. Since there are no adequate and comprehensive studies on the effect of parental presence on pain intensity during the procedure in our country, this study aimed to provide basic data. In line with this purpose, the study was conducted to determine the effect of parental presence on pain intensity during dressing. The main research questions sought to be answered within the scope of the study are as follows:

1. Does the presence of the parent with the child during the painful procedure reduce the severity of pain?
2. Does the presence of the parent with the child affect the duration of the procedure?
3. How was the parent's approach during the painful procedure?

2. Materials and Methods

The research was of descriptive type. The study population consisted of Çukurova University Balçalı Hospital and Adana Numune Hospital. Patients hospitalized in the Pediatric Surgery Clinic of Training and Research Hospital children. The sample size was determined by considering the data obtained from a similar study (Voepel et al., 2010). A total of 60 patients, 30 in at least two groups, all of whom had undergone surgery on abdominal organs.

Inclusion criteria:

- Abdominal surgery
- Dressing the child
- The child is between 3-6 years old
- The willingness of the child and his/her family to participate in the study
- The child and/or family does not have speech, hearing or perception problems.

2.1. Data

Individual characteristics form and Facial expression, Legs, Activity, Crying, Cons, and ability (FLACC) pain severity assessment form were collected. There were 12 questions in the form. Seven of these were open-ended questions. The questions in the data form; the child's name-surname, age, gender, medical diagnosis, type of surgery, dressing area, duration, and the number of times the dressing was applied. There was also a section where verbal and behavioral expressions of parents and their observations of support were recorded.

Pain is assessed according to the child's age and cooperation using personal expression, behavioral observation, or physiological measurements. It is more difficult to define pain especially in children aged 0-7 years and in the post-operative care unit in the intensive care unit. There are many methods for assessing pain.

These are based on an observer's assessment or measurement of some characteristics or changes in the patient, or the patient's self-assessment of pain. Method selection should be made according to the child's general condition, age, and, level of pain recognition (Şenaylı et

al., 2006).

With the FLACC (Face, Legs, Activity, Crying, Consolability) pain assessment scale developed by Merkel et al. in 1997, five behavioral categories (Face, Legs, Activity, Crying, Consolability) evaluation is done (Güdücü Tüfekci and Erci, 2007).

In this study, the effect of the parent's presence with the child during the dressing process on the severity of pain was investigated; dressing area, dressing time and pain intensity are dependent variables. The independent variables are the child's age, gender, length of hospital stay, medical diagnosis, type and duration of the surgical procedure, how many times the dressing was performed, and the presence of a parent during the dressing.

2.2. Data Collection Stages

While collecting data; two groups were created. During the dressing process, the parent was asked whether he wanted to stay with the child and it was determined which group he would be in. In this direction, pain severity was evaluated in those whose parents were present or not during the dressing application. Data were completed for each child after obtaining the consent of the legal guardian with the Informed Consent Form.

1. Group

The first group included children who underwent postoperative abdominal surgery and received their first dressing. The dressing was performed by the surgeon who performed the surgery at the child's bedside. The parent was allowed to be with the child during the dressing, but where and how to stand was not intervened. In the first part, individual characteristics of the child and the family were questioned. In the second part, pain intensity was measured using the Face, Leg Mobility, Activity, Crying, Consolation (FLACC) pain scale. The obtained pain intensity score was summarized. Verbal and behavioral support (such as holding the hand, hugging) of the parent during the procedure was recorded.

2. Group

It was randomized that the parent was not present with the child during the dressing procedure. The dressing was performed at the child's bedside and by the surgeon who performed the surgery. In the first part, individual characteristics of the child were questioned. In the second part, pain intensity was measured using the Face, Leg Mobility, Activity, Crying, Consolation (FBAAT) pain scale.

2.3. Data Analysis

While evaluating the findings obtained in the study, Statistical Package for the Social Science (SPSS) 21 statistical package program was used. Pearson Chi Square test and Fisher Exact test was used. In the case of two groups in the comparison of quantitative data, Mann-Whitney U test was used for comparison of parameters between groups.

3. Results

The findings of the research are discussed in two parts below. In the section; on individual characteristics and medical data of 60 children included in the study. In the section; Data on the assessment of pain severity of children and parental support were included.

Between children with and without accompanying parents, significant differences in terms of age and gender, respectively ($\chi^2=6.133$; $P=0.105>0.05$; $\chi^2=0.071$; $P=0.500>0.05$) were not found (Table 1). In both groups, appendectomy was performed in the majority of children in parallel with their medical diagnosis (Table 2). The

difference between the mean dressing times of children is statistically significant. (Mann Whitney $U=316.000$; $P=0.043<0.05$). Dressing time for children with a parent (7.5 min), and children without a parent was higher than the dressing time of children (6.3 min) (Table 3).

Children's mean pain intensity according to whether they have a parent or not there was no statistically significant difference (Table 4). Of the parents who were with their child, 13 (43.4%) received dressing during the study, it was determined that they preferred remote monitoring (Table 5).

Table 1. Distribution of individual characteristics (n=60)

Feature	With Parent (n=30)		Non-Parent (n=30)		P
	n	%	n	%	
Age	3	4	13.3	0	$\chi^2=6.133$ P=0.105
	4	6	20	3	
	5	8	26.7	12	
	6	12	40	15	
Gender	Female	12	40	11	$\chi^2=0.071$ P=0.791
	Male	18	60	19	

Table 2. Distribution of surgical treatment types applied to children (n=60)

Type of Surgical Treatment	With Parent (n=30)		Non-Parent (n=30)	
	n	%	n	%
Apendektomi	20	66.8	20	66.8
Abscess	1	3.3	0	0
Excision	0	0	1	3.3
Cholecystectomy	1	3.3	1	3.3
Stoma	0	0	2	6.7
Laparoscopy	4	13.3	2	6.7
Nephrectomy	1	3.3	0	0
Primary repair	1	3.3	2	6.7
Pyeloplasty	2	6.7	0	0
Splenectomy	0	0	2	6.7

Table 3. Comparison of the mean dressing duration of children (n=60)

Type of Surgical Treatment	With Parent (n=30)		Non-Parent (n=30)		MW	Statistical Analysis
	Mean	SD	Mean	SD		
Dressing Time (Minute)	7.500	3.330	6.300	4.542	316	0.043

Table 4. Comparison of children's pain severity (n=60)

	With Parent (n=30)		Non-Parent (n=30)		MW	Statistical Analysis
	Mean	SD	Mean	SD		
Pain Intensity	3.300	2.984	2.970	2.553	431.000	0.775

Table 5. Maternal approach (n=30)

Parents Approach	n	%
Hug	7	23.3
Don't Hold Your Hand	6	20
Verbal Suggestion	4	13.3
Remote Monitoring	13	43.4
Total	30	100

4. Discussion

The individual characteristics of both groups of children examined in this study were similar. These Results showed that the groups were homogeneous. This was also observed in pain studies. Pain is a subjective perception and age, gender, and past can be influenced by many factors such as experiences and the environment. These results are also important for the reliability of the results obtained.

The subjective nature of pain is an important factor that makes it difficult to assess and treat. Therefore, despite the advances in pain management today, 85% of patients with pain are pain-free, while 15% of patients with other types of pain continue to suffer from pain. These results suggest that non-pharmacologic methods for pain relief should be examined in depth. Family-centered care is care that best meets the needs and expectations of parents and children model. Family-centered care practices, the benefits and importance of which have been determined by research, painful procedures the parent should be there for the child during the supporting the child. Parents can be with their children during painful procedures is extremely important (Boztepe, 2012). Based on this necessity, this study aims to create a safe environment for children. The mother/parent, who is considered as the mother/parent, is with the child during the painful application. Was found to not affect perceived pain intensity. These results were found to be compatible with the literature. Because Güdücü Tüfekci and Erci (2007) the presence of the parent in the child's presence during the child's pain tolerance in the child did not affect the pain. Again, Broome and Endsley (1989) and Doctor (1994) the presence of parents with the children during the procedures to prevent pain in children reported that it had little effect on tolerance alone. On the other hand, some studies have shown that parental presence plays an important role in coping with pain. This increases children's pain tolerance, calms and children tolerate procedural pain better (Merritt et al., 1990; Naber et al., 2001). The importance of parental presence, as well as parental behavior in the presence of the child, among non-drug methods, is still under investigation. Accordingly, this study analyzed how parents supported their children; parents preferred to watch their children remotely during dressing. This result was inconsistent with the literature. Because O'Keefe argues that children's coping with pain is influenced by parents' behavior, parents sometimes try to comfort their children and distract them, reported that they used diversion methods (O'Keefe, 2001). Studies have shown that children are more likely to hear their parents' verbal or physical reactions during painful procedures. Parents should try to help their children during painful procedures by talking to them in a soft voice, holding their hands while supporting them, patting their heads and making eye contact with them (Naber et al., 2001). In this study, it was found that parents preferred to watch from a distance during dressing.

5. Conclusion

When the answers to the research questions were analyzed; It was observed that the presence of a parent during a painful procedure did not affect the intensity of pain, that there was a difference in the duration of the procedure between children with and without their parents present, and that the children with their parents present appeared to have a longer procedure time, and that the parent preferred remote suggestion as a form of support during the procedure. Based on the results from the study; Pain tolerance in painful procedures, parental presence, procedure duration and work to support the child's development in other childhood years. It is recommended to be comprehensive.

Limitations

The limitations of the study are that it was conducted in one region and two centers, and that it was limited in number.

Author Contributions

The percentage of the author(s) contributions is presented below. All authors reviewed and approved the final version of the manuscript.

	D.A.	F.E.A.	H.Ş.	R.A.
C	30	30	10	30
D	100			
S		100		
DCP	60		20	20
DAI	60		20	20
L	80	20		
W	40	20	20	20
CR	40	20	20	20
SR	40	20	20	20
PM	40	20	20	20
FA	40	20	20	20

C=Concept, D= design, S= supervision, DCP= data collection and/or processing, DAI= data analysis and/or interpretation, L= literature search, W= writing, CR= critical review, SR= submission and revision, PM= project management, FA= funding acquisition.

Conflict of Interest

The authors declared that there is no conflict of interest.

Ethical Approval/Informed Consent

This study was approved by Ethics Committee of Çukurova University (approval date: May 08, 2015, protocol code: 24). Cukurova University Balcalı hospital management and the Ministry of Health, Public Hospitals Authority of Türkiye Permission to work from Adana Public Hospitals Union General Secretariat. Academic Board decisions were taken from all departments where the research was conducted. The research was conducted according to the principles of the Declaration of Helsinki, revised in 2008.

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