

The Work for Distractions during the Procedures of Blood Sampling and Securing Vascular Access

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1. Introduction

For children, hospital experiences are often associated with painful, fearful and unknown events and they tend to feel anxieties and distresses. I have been working for children as a children's nurse in a pediatric ward for four years. Since my occupation was seen as a type of children's nurse that was nothing to do with medicine, I was not able to involve in situations where children underwent medical treatments.

Last year, I took training courses for Hospital Play Specialist (hereinafter referred to as HPS) in order to learn the methods and the importance of preparations and distractions in the pediatric environment.

After I completed the courses, I set my goal to create an environment where children can take medical treatments positively. To achieve that goal, I would like to work together with doctors, nurses and other children's nurses in the ward to become a representative of children. I would like to work as a bridge between children and healthcare professionals especially in cases where children underwent possible fearful treatments such as taking blood and securing vascular access. In this article, distractions practiced based on the philosophy above were reported and reviewed. The further issues were also discussed.

2. Method

1) The contents of the HPS training courses were reported to other healthcare staffs.

- I asked for their cooperation at the time when distractions were practiced. Initially distractions would be held during blood sampling and securing vascular access.

2) A shift schedule was made among children's nurses at the time of blood sampling

- As one of their duties, a children's nurse would attend and practice distractions during blood sampling. The duty rotated on a weekly basis.

- A children's nurse in charge would check the name of a child and of an attending nurse. Because the blood sampling had often been taken already when a children's nurse entered the treatment room, the name of an attending children's nurse was placed in the treatment room in order to get HPS work entrenched in practice. Nurses in the treatment room were asked to call an attending children's nurse before the treatment.

3) Learning sessions on preparation and distraction were held in the ward.

4) Through practicing preparations, we elicited cooperation from doctors and nurses

- Practicing a blood sampling without restraining a child and allowing a parent to accompany during the practice were requested to an attending doctor
- Presentations on preparation and distraction were provided to healthcare staffs to elicit their understanding and interest in those practices. We asked staff to work together.

3. Result

1) Distraction from the perspective of the number of intervention

The number of distraction interventions practiced between April 2014 and November 2014 was 518 cases in total (Figure 1); 101 out of 283 children in total received distraction several times. The breakdown of ages shows that infants received distraction the most. Since behaviors of infants vary from showing no interest to crying loud, it tends to be considered that infants who seem indifferent do not need distractions. It has been seen, however, that infants change their facial expressions when they are given distractions and some stop crying. Accordingly it is important to provide distraction even to infants showing no interest since distraction may work as a prevention of possible trauma from pain/fear associated medical treatments.

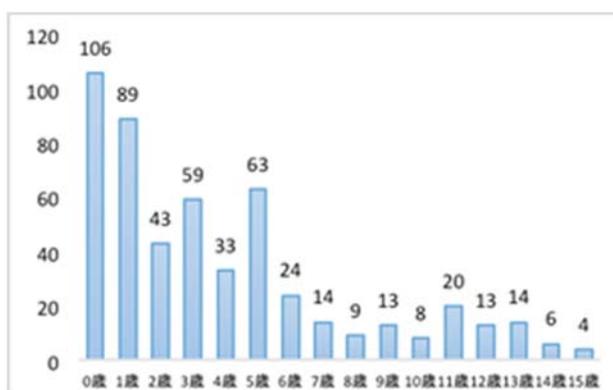


Figure 1. Age distribution of the number of distraction intervention

Ages of toddlers are the second most in the figure. Though toddlers start showing their wills and wishes, it is still difficult to communicate with others precisely during those years. Toddler years are also times when anxiety and fear are increasing in one’s mind. HPS has a role representing children’s will so that HPS must pay constant efforts to apprehend children in order to alleviate their anxiety and distress. Our everyday mission is, therefore, to understand one’s favorite types of play through close communication with the child, and eventually to build a trusting relationship.

2) The method of selection of distraction tools

To practice distraction, we prepared toys and playthings grouped in accordance with age. Those toys and playthings included popular character goods and sensory toys. Table 1 indicates toys that drew a lot of attention from children during blood sampling practice. During blood sampling, we also prepared some short movies such as ANPANMAN and Tom and Jerry. We asked parents what kind

of toys and cartoon characters their children liked beforehand. Parents and children were then able to select what they wanted to play before the treatment.

Table 1. List of Distraction Tools

0ヶ月～6ヶ月	6ヶ月～1歳	1歳～1歳6か月	1歳6ヶ月～2歳	2歳～3歳	3歳～4歳	4歳～5歳	5歳～6歳	小学校低学年	小学校高学年～
	←  →			←  →					
		←  →			←  →	←  →		←  →	
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A. During blood sampling procedures



Picture 1: (5 year-old)
5~10 minutes prior to blood sampling, the child came into the treatment room and started playing games.



Picture 2 : (5 year-old)
Placed toys in front of a child and let him/her choose what to play.



Picture 3 : Blood sampling while being held in arms (2 year-old). The child seemed comfortable and was watching a movie



Picture 4: (5year-old)

The child was so focused on playing that she was no longer disturbed with blood sampling. She took the treatment at peace.



Picture 5: Medical Play (5year-old)

She was interested in a syringe toy that was closely resembled to the real apparatus. She expressed her feelings by repeating her medical experience with the syringe. She seemed relieved

3) Case example of distraction

Case 1: A-kun, 3-year-old male (delay in development, Down's syndrome)

A nurse was carrying A-kun when they entered the treatment room. In the treatment room, I offered to hold him in my arms. Considering the boy's characteristics and his mood at that moment, I found it was better that he continued to be held while he took blood sampling. After having received permission from his doctor, A-kun underwent blood sampling while being held gently in my arms. As a result, he completed the treatment without crying. A nurse who came into the room talked to me that A-kun had experienced forcefully taken blood sampling in the previous day since he cried hard and resisted aggressively.

Some days later, another blood sampling was scheduled for A-kun. A nurse carried him to the treatment room. He was then crying intensively on a bed where he was placed in the spine posture. I explained to a doctor and attending nurses about how his previous blood sampling went. I, then, suggested holding K-kun in my arms again during his blood sampling. After having received permission from the doctor, I held K-kun gently in my arm. Soon he stopped crying and started watching movies and observing toys. Eventually he took the treatment while he was held. He went through the treatment without crying or refusing the procedure.

Case 2: B-chan, 5-year old female (eating disorder)

B-chan had disturbed eating behavior and was smaller than children in her age. There were some family problems in her family. Her linguistic development seemed delayed but had never been diagnosed as any delay in development. Her behaviors indicated a lack of sociability with some egocentric attitudes.

Before our intervention, B-chan was often crying on a bed where she was placed in the spine posture during blood sampling. She had mood-swings. Once she said "no", she would refuse everything after that. Because of such characteristics and through our everyday observation on her,

we thought it was important to make her mentally prepared for the forthcoming event. We decided that I would be involved in the treatment procedure by letting her choose her favorite way to take the treatment. Though she changed her “favorite way” depending on a day, often she chose to take blood sampling in a sitting position. Eventually she told to a doctor “I would like to do it in a sitting position” and showed her arm by herself. The doctor and nurses started to respect B-chan’s will and naturally let her undergo blood sampling in a sitting position. B-chan was then no longer disturbed with the treatment and took it positively while playing.

Case 3: C-chan, 3 year-old female

C-chan was held in her mother’s arm and came in front of the treatment room. Once she heard “blood sampling” she started crying and exclaimed that “I hate the treatment room” “I want to be with my mum”. Such her behaviors were not seen during her playtime. From her behavior at the treatment room, we thought that it would be better if her mother accompanied C-chan during blood sampling procedure. After having received permission from a doctor, we talked to C-chan that she would be able to stay with her mother during blood sampling. She stopped crying. Though she said “it hurts”, she completed blood sampling on her mother’s lap.

When C-chan was crying loud, we asked her mother about the behaviors of C-chan during the previous blood sampling. The mother told us that C-chan couldn’t tolerate even just hearing words “blood sampling” and “the treatment room” and she started crying. It was considered that C-chan associated those words with a separation from her mother and the feeling of fear. When we received information that securing vascular access for intravenous drip would be practiced in two days, we had a talk with C-chan and her mother. At that point, we had not received permission from a doctor that the mother was able to accompany C-chan during the treatment, we asked C-chan if we could accompany her; “Can we hold you in the treatment room?” “Let’s play together there”. C-chan replied to us “I prefer mum”. When we explained that her mother would take her to the treatment room and we would stay with C-chan in the room, she understood.

On the day of the treatment, C-chan came to the treatment room with her mother. Though she started crying, she came to be held to HPS when HPS stretched her arms toward C-chan. C-chan requested to a doctor for a puncture site by saying “It hurts here, so put the needle there instead”. During the procedure of securing vascular access, C-chan showed some interest in DVD and children’s books even though she was crying and calling her mother. Though with tears C-chan bravely completed the treatment. Later, though C-chan still cried when she heard the term “blood sampling” “examination”, she became able to undergo medical treatments on someone’s lap or in someone’s arms while playing and talking about what she was interested in.

Case 4: D-kun, 5 year-old male

Previously D-kun was placed on bed forcefully in a spine posture while taking a medical treatment since he refused to take it with tears and tried to resist it. The intervention of HPS was

provided when D-kun was about to take blood sampling for the 3rd time. While he was watching his favorite DVD, he was saying to him “I’ll give it a try!” Then he was entering the treatment room. Though he showed his arm to a doctor, he pulled it back and said to the doctor “Wait a second”. Soon after he started refusing by saying “I don’t want to do it!” and we decided to take a break for a while. When HPS asked him what he did not want to do, he replied to us “I’m afraid of needles”. We indicated our understanding to him and praised him for facing it bravely by showing his arm by himself. He was smiling. After a while he was saying “I’ll give it a try again”.

Later HPS visited to his room and suggested a treatment where D-kun did not see the needle in order for him to reduce the fear against needles. D-kun still preferred to see and he even decided when to take blood sampling based on his other schedule of the day. He entered the treatment room and sat in a chair in a positive manner though he seemed nervous. When his doctor said to D-kun that he would start the blood sampling on the count of three, D-kun disagreed by saying “that is too fast”. I suggested to him that we slowly count ten so that there will be enough time for him to get ready. He, then, completed the treatment without pulling back his arm.

On the following day, securing vascular access was scheduled. D-kun tried to divert his attention by talking about DVD with children’s nurses that he chose beforehand. When he started feeling anxious, we asked if he wanted to count ten. Though talking in a low voice, he started counting to ten and made himself ready for the procedure. Once the blood sampling was complete, the doctor thanked him and praised him for his courage and efforts. D-kun seemed to acquire some confidence in the situation.

4. Discussion

It seemed that the child gained a certain confidence to go through the next treatment after participating in the medical procedure on his own initiative through distractions. Having seen the effects of distraction interventions “a child did not cry” or “blood sampling and securing vascular access went rather smoothly”, healthcare staffs began to request HPS to practice interventions. That indicates that distraction intervention is becoming recognized in our ward. Further, doctors now try not to hold a child forcefully when they practice blood sampling and other treatments. For some cases however, children are still restricted during medical treatments for “safety reasons”. Nurses who attended our seminar once told us that they weren’t able to press firmly to a doctor even they felt there were some unnecessary restrictions imposed on children. We would like to improve such situation by telling doctors “children were able when they were given appropriate conditions”.

Though the number of cases where parents can accompany during their child’s medical treatment such as blood sampling and securing vascular access are increasing, such procedure is not yet acknowledged enough and children are still forcefully separated from their parents in some cases and some get really upset and cry. When children are upset, they do not show any interest in toys. When children are with their parents whom they have an established trusting relationship with, they come to gain courage to go through medical treatments along with distraction intervention. One

of our future tasks shall be, therefore, by becoming children's representative to convey their voice to healthcare professionals, to establish an environment where children can undergo medical treatments without having unnecessary distresses.

5. Conclusion

The total number of distraction interventions that was practiced between April 2014 and November 2014 was 518 cases. To achieve the number of interventions, not only HPS but also doctors and nurses had worked together. By studying the cases, we realized that many children went through blood sampling and securing vascular access repeatedly. In this study, we reviewed these cases by reflecting regular procedures of medical treatments. The fundamental changes made through our distraction interventions seemed to encourage children to go through the medical treatments and to alleviate anxieties and fear. It is however, that issues to be resolved were revealed through our study at the same time and our harder work with other healthcare professionals toward children in order to reduce their distresses is surely required.

<References>

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