

## Review Article

# Minimizing Ambulatory Setting Pediatric Healthcare-Induced Anxiety: A Case Review

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**Abstract**

It is no longer a rare phenomenon for pediatric patients to experience moderate to high levels of emotional distress, including anxiety, during preventive care office visits with healthcare providers. This distress can be attributed to multiple factors, including being in an unfamiliar setting with unknown people, and unclear expectations. Further compounding the anguish, children are often aware of the potential for, or likelihood of, physical discomfort, or pain during the office visit. These combined variables often result in unwelcome behavioral demonstrations of protest to healthcare workers and the child's caregivers. Some children may scream, cry, pinch, bite, hit, or even refuse to engage in the examination or procedure. When these behavioral protests impede necessary care, expedient interventions must be considered. The following case review aims to demonstrate that attuning to a child's emotional needs and providing developmentally appropriate power and control during an outpatient office visit in a healthcare setting, can aid in offering emotional safety and reduce the potential for long-term psychological harm.

**Keywords**

- Medical trauma;
- Pediatric anxiety;
- Healthcare-induced anxiety;
- Patient experience;
- Medical anxiety;
- Play therapy;
- Ambulatory office visit

**PERTINENT MEDICAL AND PSYCHOLOGICAL HISTORY**

Norah is currently an eight-year-old female whom has had one surgical procedure with a psychologically adverse outcome. At age three, the patient underwent a routine tympanostomy tube replacement for recurrent ear infections. During the surgical episode of care, Norah experienced acute emergence delirium [1], during post anesthesia recovery (PACU) and was re-sedated for a length of forty-five minutes for her own personal safety. Per parental report, the patient pulled out her IV and bit both the nurse and mother. Although this response to anesthesia can be common in young children [1], it had an adverse effect on her psychological well-being.

During the at-home recovery process, Norah refused her pain medications and had a sudden onslaught of violent behavior, particularly toward her primary caregiver and herself. The violence escalated to the point where her mother removed all of the patient's belongings in her bedroom leaving simply a mattress on the floor for sleeping. Norah's behavior did not improve with time. Her mother subsequently enrolled her in play therapy [2], two months post-surgery. Norah's trauma symptoms resolved after four months of play therapy. Her psychological distress

continues to peak in regard to any and all medical related office visits.

**CASE STUDY**

Norah presents with her mother to the pediatrician's office for a scheduled preventative care wellness visit. The morning of the appointment, the patient was made aware that the office visit would include an exam by the physician, an injection by the medical assistant, and venipuncture by the phlebotomist. As the morning progressed the patient became increasingly irritable. She reportedly did not finish her breakfast, slammed her door, and had a difficult time completing the morning's routine. Being that Norah often behaved this way prior to medical appointments, her mother accepted it as par for the course.

Upon arrival at the pediatrician's office, Norah refused to get out of the car. She reported to her mother that her stomach ached and she requested to reschedule the appointment. Her mom opened the passenger car door and insisted that Norah attend the appointment. The patient followed behind her mother, reluctantly. As they walked up the stairs to the waiting room, her mother noticed that Norah's hands were shaking. With her mother's inquiry, Norah quickly shoved her hands into her hoodie pocket.

Norah's name was called and she rolled her eyes as the medical assistant asked her to step on the scale. She then walked into the exam room engaging gingerly in the completion of vitals. Her mother noticed that Norah's whole body was shaking. The physician entered and completed his exam and her shaking subsided due to his humor, gentleness, and warmth. He then stated that the medical assistant would be in soon with the injection followed by the phlebotomist for the venipuncture. In response to his words, Norah began to sob uncontrollably and slumped down into the chair hugging her knees to her chest. She begged her mother to postpone, but she was assured it would be over quickly.

Norah continued to sob when the medical assistant entered the room and during the preparation process. She kicked her legs and rapidly moved her body from side to side trying to avoid the needle's contact with her skin. Her mother laid over her on the exam table to pin her body down as Norah continued to sob and kick. The medical assistant was able to complete the injection process despite the flailing of Norah's limbs.

Upon completion of the injection, the phlebotomist entered the room for the venipuncture. Norah crumbled to the floor and began rocking herself. She sobbed and screamed out in fear. The phlebotomist stepped out and brought two other medical staff into the exam room to assist in collecting the lab work. Norah was unable to calm her body. As two staff braced Norah on the side of the exam table, another held her left arm down, and her mother held the right arm, immobilizing Norah's body, the blood draw was completed.

When the medical staff left the exam room, Norah crawled into her mother's lap and continued to cry. Her mother held her close, but Norah could not be consoled. Finally, after a few minutes, Norah was ready to leave the clinic with the promise that the worst was over. The office visit was clearly distressing to both the patient and her mother, causing unnecessary psychological distress.

## DEVELOPMENTAL CONSIDERATIONS

Norah's post-surgical healthcare-induced anxiety and trauma occurred at the chronological age of three years old. According to developmental theorist Erik Erikson, Norah's developmental stage would likely be at stage three, Play Age, where the child is navigating the developmental milestone of initiative vs. guilt [3, 4]. Preschoolers often desire power and control over their environment and have begun to assert their will at this stage. In a medical setting, offering choices to a child in this stage can offer empowerment to feel more in control of their environment.

In Norah's most recent office visit, although she was chronologically eight years old, due to the previous medical trauma, she presented at a much younger developmental stage. For children that have experienced trauma, and specifically medical trauma, it is important to note that chronological age does not always match developmental stage [5-7]. Norah's presentation of crying loudly, kicking, rocking, and crawling

into her mother's lap for comfort are all indicators of a much younger developmental stage. Curiously, it matches with the developmental stage of her earlier medical trauma. Regardless of her chronological age, due to Norah's presentation, medical staff and caregivers should attune to her as a young child, meeting her emotional needs for power and control [5-7].

## RECOMMENDATIONS FOR RESPONDING TO BEHAVIORAL PROTESTS

Knowing that Norah had previously experienced an adverse psychological response to medical care at age three, her medical staff and caregivers had the opportunity to prevent further psychological harm to her during the recent office visit. Quickly assessing that Norah was presenting as a young child could indicate immediate attunement to her as a three-year-old, regardless of her chronological age [5-7]. Knowing that young children often need containment for their big emotions, offering accurate age-appropriate information and limited choices would allow Norah's office visit to be a positive experience for her. The following are clinical recommendations for responding to a child's behavioral protests before and during a scheduled office visit.

### Knowledge of upcoming appointment

Advising the child in an age-appropriate manner of the upcoming office visit is an important way to prepare. A good rule of thumb is one day for every year they are old. For example, a three year old would have three days notice of the appointment. At this time, share with the child the purpose of the office visit, what to expect, and what the outcome may be [8]. It is good to be honest with children about potential discomfort if indicated, such as injections or venipunctures. Discussing and rehearsing ways to accept the pain is also important [8]. For example, "We will be seeing the doctor next week. The appointment will include some shots that will sting for a few seconds. We can try something new like blowing out when you feel the poke."

### Refusal

If a child refuses to attend the appointment or refuses to get out of the car once at the clinic, simply attune to the feeling being expressed. Identify signs of anxiety or fear, such as shaking, biting the lower lip, rapid eye movement, or wringing of the hands. When indications of anxiety are present, allowing time to process the emotion is important. Sitting with the child and allowing them to mark the pace of the emotional processing will empower them. To allow for this, the caregiver will want to create a buffer of time between arrival and scheduled appointment in order to allow the processing of emotion. With children, observations can be more powerful than questions. For example, "I notice you are shaking. Let's sit here for a moment and take some breaths together. It's okay to feel nervous."

### Shaking

Shaking is a sympathetic flight or fight response to fear,

anxiety and stress [9-11]. An effective way to attune to the body's natural response is to slow down the thoughts that are increasing the anxiety and calm the body, allowing the parasympathetic system to override the flight or fight response [9-11]. The body responds well to slow breathing, distraction of conversation, sensory stimulation such as pressure or light touch, or placing hands on the belly noticing the rise and fall with each breath.

### Crying

When a child is crying during, or in preparation for, an office visit there is likely an emotion of fear attached. Adults can quickly attune to this demonstration of emotion by creating a calm environment, slowing down the pace of conversation, and calming their own body so that the child's body can take cues that the situation is safe [5-7].

### Screaming

In general, a child is screaming or yelling as a means of asserting power and needing a form of control [12-18]. By giving the child a task to assist with in the process, it may distract them from using their voice to communicate the need for power [7-9]. Some children respond well to having time-limited permission for screaming, such as 10 seconds, as a way to expel emotional energy.

### Physical Aggression

Physical aggression can be a way that a child communicates protest to an event or interaction. Limit setting and redirecting are important skills in working with children. Stating to a child, "I am not for hitting" and then redirecting, "But you can kick into the air," is a way to affirm the child's sensory need to release energy while maintaining safety [2]. By setting a limit and providing choices, a child feels empowered.

### Restraints

It is never recommended to have a child held down by adults or restraints during a medical procedure. Holding a child down can have lifelong adverse effects on their sense of safety in the healthcare setting [7-9]. The goal with any child is empowerment, not disempowerment [19,20]. By holding a child down, their power is completely stripped away and leaves them no measure of security in the moment. This action can have tragic, life-long impact on a child.

For non-emergent situations requiring a child to be still, it is recommended that the child be told the expectations and the reason their cooperation is needed. Choice giving is also an empowering intervention that can aid in a child's cooperation [2,7-9]. For example, "Would you like me to hold one of your hands or both of your hands while you hold your body still?"

### Seeking Comfort

When a child seeks nurture and comfort, it is always appropriate to offer it, regardless of the child's chronological

age. Taking deep breaths as you embrace the child, or hold them in your lap, will activate their parasympathetic nervous system, slowing the fight or flight response, and model to the child that they are safe [9-11.]

### FINAL THOUGHTS

This case analysis demonstrates that psychological safety is possible for children in medical settings. By implementing the recommendations, healthcare-induced anxiety in the ambulatory setting can be minimized, and even prevented. If the message, "I'm here. I hear you. I understand. I care." [2], is communicated, a child can truly be psychologically safe. Thus, the potential for life-long fear of medical care, as well as medical trauma, can be reduced significantly [7-9].

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