

## IMMUNIZING CHILDREN WHO FEAR NEEDLES

Immunizing Children Who Fear and Resist Needles: Is it a Problem for Nurses?

## ABSTRACT

Despite increasing evidence that immunization procedures can be stressful for children, little is known about what the experience of immunizing frightened and needle resistant children can be like for nurses. This article presents findings from a qualitative research project designed to explore public health nurses' feelings towards immunizing needle resistant children. A constructivist theoretical perspective and an action research approach framed the study. Data sources included two survey questions and audio recorded transcribed data from three focus groups. Participants included 35 public health nurses from five different health units in one Canadian province. The data was analyzed for themes and confirmed with participants through ongoing member checking. The following four overarching themes were identified and are used to explain and describe significant features of the immunization experience that were stressful and problematic for nurses: 1) Nurses experience stress when immunizing children who fear and resist needle injection; 2) the strength of child resistance and some adult behaviour creates an ethical dilemma for nurses; 3) some adult responses make immunizing difficult and unsafe; 4) resources to help nurses cope with these situations are inconsistent.

**Keywords:** immunization, fear of needles, resistance to needles, nurse stress

This article describes findings from a qualitative research project that investigated the experiences, reflections and feelings of public health nurses who immunize fearful and needle resistant children. While the main purpose of the study was to explore nurses' ideas about the experience of immunizing children who are frightened of needles, a secondary purpose was to consider approaches that are helpful in decreasing nurse stress. The research was guided by the question: *What is it about immunizing children who strongly resist needle injection that is a problem for public health nurses?*

### **Literature Review**

A literature review revealed that a significant number of children and adults are frightened of procedures involving needle injections. Considerable research has been undertaken to investigate adult responses that are both non-helpful and helpful in easing children's distress during these procedures (Duff, 2003; Cohen, Manimala and Blount, 2000; Smalley, 1999; Milgrom, Coldwell, Getz, Weinstein and Ramsay, 1997; Frank, Blount, Smith, Manimala and Martin, 1995; French Painter and Coury, 1994; Schechter, N.L., Bernstein, B.A., Beck, A., Hart, L. & Scherzer, L. (1991). Yet few resources are available to help nurses understand their own responses or to cope with their feelings of stress. Ives (2007) emphasized how health care agencies can begin to address the problem by creating a culture of empathy and respect and outlining clear policies on the use of force during immunizations. There is a "gap," however, in our understanding of how nurses themselves perceive the experience of immunizing frightened and resistive children.

#### *Fear of Needles*

Literature from the fields of psychology, nursing, pharmacology, medicine, and dentistry reveal fear of needles as one of children's greatest fears with claims that up to 93% of some groups of children experience serious immunization associated stress (Gaskel, Binns, Heyhoe & Jackson,

2005; Uman, Chambers, McGrath & Kisely, 2005; Jacobson et al., 2001; Peretz & Efrat, 2000; Bowen & Dammeyer, 1999; Smalley, 1999; Polillio & Kiley, 1997; Marten, Ramsay, Whitney, Fiset & Weinstein, 1994). Research reflects that as many as 10% of adults experience needle phobia (Bowen and Dammeyer, 1999; Smalley, 1999; Polillo and Keley, 1997; Hamilton, 1995). Clearly, nurses can expect to encounter both children who are frightened and resistant to needles as well as parents or caregivers who are also fearful.

In his seminal work exploring needle phobia, Hamilton (1995) hypothesized that needle phobia is learned as well as inherited. He noted how negative experiences associated with immunization, lab work, dental visits and other medical procedures can condition children and even those who witness the events towards becoming fearful of needles. Physical restraint and verbal abuse by health care personnel during children's medical procedures can lead to life-long fears of situations associated with needles, such as physicians, nurses, examination rooms and even antiseptic smells (Hamilton, 1995). Later, Duff (2003) argued that needle fear centers on anticipatory and procedural stress and advocated for inclusion of psychological approaches to help children actively gain a sense of control over their reactions.

### *Non-helpful and Helpful Adult Responses*

Parent and caregiver responses, particularly anxiety related behaviors, influence how children can reduce stress, gain control and cope with immunization. Some adult responses have been found to be non-helpful. Parents or caregivers who overly reassured, overly empathized, apologized, criticized or gave children control of the procedure at the beginning increased children's stress (Cohen, Manimala & Blount, 2000; Frank, Blount, Smith, Manimala & Martin, 1995). Further, parents and caregivers who criticized or asked the child to indicate readiness to

receive the needle also increased children's stress (Devine, Benoit, Simons, Cheng, Seri & Blount, 2004). Children coped best when their mothers were present but 'watched only' and remained minimally involved. Most children found the presence of their parents during a needle procedure to be helpful (Duff, 2003; O'Laughlin & Ridley-Johnson, 1995).

Distraction strategies were consistently identified as helpful for short-lived pain (Gaskel, Binns, Heyhoe & Jackson, 2005; Duff, 2003; Lawton & Rose, 2003; Sparks, 2001). With infants, playing with an object, sucking, belly-to-belly contact and nonprocedural talk were helpful (Blount, Devine, Cheng, Simons, Hayutin, 2008). Similarly, with infants, adult verbalizations associated with better pain outcomes reduced crying (Bustos, Jaaniste, Salmon, Champion, 2008). With children ages 4 to 6, watching cartoons and being coached to attend to the movie helped (Cohen, Blount & Panopoulos, 1997). With children ages 5 to 18, bubbles, books, music table, virtual reality glasses, or handheld video games helped (Sjoberg, Dale, Eshelman & Guzzetta, 2007). With most children, preparing ahead (Duff, 2003), offering limited choices (Ellis, Sharp, Newhook & Cohen, 2004) and giving permission to cry (Cohen et al 2000) reduced stress. Deferring the procedure or referral to an alternate source such as play therapy helped to avoid conflict and coercion (Duff, 2003; Smalley, 1999; Milgrom, Coldwell, Getz, Weinstein and Ramsay, 1997; French, Painter and Coury, 1994). Distinguishing among adult responses that are helpful and those that are non-helpful offers important guidance to nurses when they work with children who resist needles. However, responses to nurse stress are not as clearly defined.

### *Nurse Stress*

Stress can be experienced when demands exceed the personal and social resources an individual is able to mobilize (Lazarus & Folkman, 1984). While it is beyond the scope of this article to

present a detailed literature review of nurse stress, a snapshot of current work in the area reveals limited attention to nurses immunizing frightened and resistant children. The apparent need to “force” an immunization has been identified as an ethical dilemma for nurses, even constituting “a human rights burden” (Hodges, Svoboda & Van Howe, 2002, p. 12). Nurses remembered moral dilemmas, when they were left to wonder ‘Could I have done anything else?’ even years later, continuing to justify and absolve themselves from blame (Gunther & Thomas, 2006). Nurses felt powerlessness, angry, exhausted and even burned out following their participation in situations they believed were ethical and moral dilemmas (Thomas, 2009). Coping with the emotional needs of patients and families has consistently been highly stressful for nurses (McVicar, 2003; Sherman, 2004). Avoiding coping rather than identifying that a problem exists and focusing on coping with it were found to be significant predictors of mood disturbance for nurses (Healy & McKay, 2000). Given our limited understanding of links that may exist between negative immunization experiences and nurse stress, it is essential to explore the problem.

### **The Research Approach**

This project was framed from a constructivist theoretical perspective (Appleton and King, 2002) and a naturalistic action research design (Kemmis & McTaggart, 1988; Kemmis & McTaggart, 1990; Stringer & Genat, 2004). Action research is a reflective, spiral process where nurses use research techniques to examine their own practice carefully, systematically and with the intention of applying their findings directly to their own and other nurses’ every day practice. Kemmis and McTaggart (1988) offered the seminal explanation that action research is deliberate,

solution-oriented investigation that is group or personally owned and conducted. It is characterized by spiralling cycles of problem identification, systematic data collection, reflection, analysis, data-driven action taken, and, finally, problem redefinition. The linking of the terms “action” and “research” highlights the essential features of this method: trying out ideas in practice as a means of increasing knowledge (Kemmis and McTaggart, 1988). Kemmis and McTaggart (1990) also suggested that the participatory nature of action research, where researchers collaborate with participants in order to understand and improve practice, can reduce the distance between researchers and participants and the “. . . problems they intend to solve, or the lived experience they intend to interpret” (p. 28).

Data sources included two survey questions and audio recorded transcribed data from three focus groups. The survey was distributed anonymously via employee e-mail to 58 nurses from five different health units in one Canadian province. Survey Question One: Does your practice involve immunizing children? Survey Question Two: “Sometimes children who present for immunization strongly resist needle injection. Based on your experience, what is it about this situation that is a problem for you?” This survey generated 35 (60%) responses, all of whom confirmed that their practice did include immunizing children.

The survey was followed by three audio taped and transcribed focus groups. The focus groups were two weeks apart, each with five to six female, English speaking, Caucasian and Indo Canadian nurses, from five different health units in one Canadian province. The participants were those who had responded to the survey and their experience ranged from novice (less than one year experience) to expert (up to 25 years experience) in two groups. The third group had no novice participants. Focus groups are flexible, cost efficient, generate rich data and tend to have

high face validity (Krueger & Casey, 2009; Morrison-Beedy, Cote-Arsenault, Feinstein, 2001; Speziale & Carpenter, 2001; Webb & Kevern, 2000). The following questions guided the discussion:

1. When you hear the phrase, “a child who is strongly resistant to needle injection,” what comes to mind?
2. What is it about these situations that is challenging for you?
3. What sorts of things have made it easier for you to immunize children who resist the needle injection?
4. What sorts of things have made it harder?
5. Do you have any thoughts on how these situations can be improved?

Content from these data sources were analyzed for themes. The transcripts were thoroughly read and re-read and a systematic process of content analysis was developed (Loiselle, Profetto-McGrath, Polit, & Beck, 2007; Speziale & Carpenter, 2003) to create the categorization and coding scheme that led to the themes. Trustworthiness was established through ongoing interaction and member checking with participants to confirm authenticity. Full ethical approval was granted by a university and a health authority.

The following four themes emerged from analyzing the survey and focus group data collected from and confirmed with nurses who routinely immunized children. The themes represent nurses’ perceptions of what it was about immunizing frightened and resistant children that was a problem for them. Verbatim comments are italicized. The themes are: 1) nurses experience stress when immunizing children who fear and resist needle injection; 2) the strength of child resistance and some adult behaviour creates an ethical dilemma for nurses; 3) some adult



responses make immunizing difficult and unsafe; and 4) resources to help nurses cope with these situations are inconsistent.

**Theme One: Nurses experience stress when immunizing children who fear and resist needle injection.**

Nurses used the word “*dread*” in all three focus groups to describe their apprehension about immunizing needle resistant children, especially as a new practitioner. They described the situations as awkward, difficult and complex, with “*too many pieces*” or variables. Nurses frequently recounted actual experiences to illustrate specific points. Feeling “*flustered*” and fearful of making a medication error or harming the child, as well as fear for the nurses’ own safety was reported in the survey and across all groups. Empathy for the child’s “*incredible panic and fear*” was articulated, noting the child’s “*terror*” and “*screaming, kicking, and biting*” behaviours as very disturbing. “*I think of how hard it is to be scared. Like that’s so much work on the child’s part. It takes so much energy.*”

Crying was not seen as particularly difficult, but “*acting out*” behaviours, “*struggling to get away, to get out of the room*” were problems. “*The child’s terror, that’s what gets to me.*” “*I feel really badly for the child because they’re embarrassed...and they’re kind of shamed.*” The nurses felt “*torn*” about the process. They found it “*very disturbing*” to witness the child’s distress and felt “*complicit in an assault.*” They described feelings of helplessness and uncertainty, wondering how “*it might have been done differently.*” One nurse wrote, “*I don’t know how to make these situations more comfortable.*” Nurses felt “*...pressured to just finish the job, no matter how much the child resists.*” Novice practitioners were more likely to feel

pressured. *“Throughout my orientation it was very heavily implied, it does not matter the situation, you always vaccinate children for as many vaccines as they’re eligible for. And I just feel a lot of pressure to do that during that clinic visit.”* Sometimes, the pressure comes from parents. *“I’ve had two, three different scenarios where...the anger from the parents like, “Whaddya mean... And they’re going to argue with you. “I (parent) will hold them down and you will do it.”*

The nurses reported feeling drained, emotionally exhausted, fatigued and unsupported. A sense of failure, guilt, *“heavy heartedness”* and frustration was expressed, as well as a *“scary”* feeling of being *“out of control.”* One group likened the situation to *“a circus”* with *“moms chasing (children) around to try to get them in and there is a waiting room full of people.”* Nurses described feeling hurt and annoyed when parents blamed and labelled them *“the mean nurse”* or *“the stabber”*. Nurses were troubled by the potential for *“emotional scarring”* and serious erosion of trust in the child’s relationship with health professionals. They suspected that past experiences strongly influenced the present and believed children deserve to be better prepared for immunization.

**Theme Two: The strength of child resistance as well as some adult behaviour creates an ethical dilemma for nurses.**

A major theme that emerged was the conflict around the child’s right to refuse versus the right to be protected from preventable disease. *“I think as a nurse, the challenge is combining that gentle persuasion but with letting them make their own decision.”* *“And we’re taught in our profession you know, do no harm. So you feel like you’re doing harm when you encounter situations where there’s such strong resistance.”* A nurse wanted to find *“a balance between*

helping the child find courage and protecting him from very dangerous diseases.” Another stated the problem as:

*“...the lack of respect it demonstrates to a child. In deciding on their behalf what is best for them I don’t understand what makes that okay and at what age we give the child the control to make that decision. A problem for me is the subjectivity of deciding what’s in the child’s best interest; subjectivity in assessing potential harm to child versus benefit of vaccine.”*

Within each group, two or more nurses recounted stories of especially challenging situations they thought had been handled poorly and felt regret about their involvement in the process. *“There’s some where you’re going - oh that was awful! That didn’t feel right. I don’t feel good about that.”* Children kindergarten age and older were viewed as the most challenging although some nurses also identified *“strong toddlers”* as difficult.

Nurses wondered, *“How much restraint is too much?”* A survey responder stated: *“The problem becomes one of the child’s right to object and refuse... some parents like to talk their children into shots; this takes quite a bit of time. Others are quite physical in their restraint methods and I don’t know exactly when to step in and say - that’s enough!”*

One nurse remarked:

*“I don’t think the end always justifies the means. Because I had a father who came in with a son and he was really quite brutal with him. And we were really part of that because, you know, it was our end that we wanted to go to and that was the reason why. And I thought, I’m never doing that again. I’m just going to say, “I’m sorry, I can’t do this. This is beyond what I can be part of.”*

Another recalled *“... a mother actually physically sat on her child and restrained him and slapped his face and told him how much she loved him and told him to just do it. Okay, and that’s always going to come to my mind. It was like an assault, us actually harassing him.”*

A colleague added:

*Right, and then being torn between, Do I follow through, give it to him, get it over with for him? Will he have to go through this again? Or do I hold back and say, “Not under these circumstances.” ...It was a very awkward situation. And we...you had said, “What do I do?” And I thought, “Let’s get it over with for him. He’ll have to go through that all over again or be bullied at home.” But somehow we were then part of that.*

*“It almost kind of reminds you, you know, of **One Flew over the Cuckoo’s Nest**, where they have to bind them down and they give them the electrical shock treatments and they don’t want it.”*

A survey responder commented: *“Immunization of children is recommended, not mandatory, therefore children may have the right to refuse.”* Another wrote:

*“The problem I have is with the three to five year olds who clearly verbalize they don’t want the shot. We hold them down and do it anyways. From a young age we teach children to use their words. We teach them to say “no” to a stranger who offers candy, rides etc. We teach them to kick, scream, and run when a stranger touches them or they feel threatened by them, yet I am a stranger to this child who is saying “no” to me and I proceed and hurt the child. What message are we sending these children?”*

Children with developmental delays were particularly challenging. A nurse recalled immunizing a grade six boy with developmental delays, *“It was really hard, because he wasn’t going to sit still on his own. So we had a lot of hard decisions to make with that and mom held him down. It was awful.”*

In one group, a few of the more experienced nurses initially seemed somewhat dismissive of the issue as a sort of necessary evil; yet even these nurses acknowledged with some surprise after the group *“how much there was to talk about”* on the topic. Challenging variables included: *“sheer number”* of vaccines, complexities of vaccine administration, language barriers, lack of privacy in mass immunization clinics, circulating myths about needles getting stuck or breaking

off in people's arms, unpredictability of some resistance, noise levels, too many people involved, and lack of time.

**Theme Three: Some adult responses make immunizing more difficult and unsafe.**

Non-helpful responses by adults such as parents, school staff or other caregivers were defined across all data sources as a burden to nurses. *“So often what I find makes it really difficult, because I don't know so much that I lose patience, but I'm not quite sure where to go with it when the parenting responses are so inappropriate.”*

Most frequently cited non-helpful responses were: either inadequate or overly forceful restraint by the parent; shaming, threatening, yelling, slapping, lying; or alternatively, pitying, placating, bribing, wishy-washy, and helpless parental behaviours. Nurses complained of getting kicked and hit by a struggling child and expressed frustration with parents who have not explained the purpose of the visit to the child.

In school situations, nurses felt frustrated when well-meaning adults interfered with the process by attempting to take control.

*It isn't suddenly about being poked anymore. There's a bunch of family dynamics there as well and they get the power stuff going, and you put the child in the school situations, sometimes it's with the classroom teacher, you know, that's involved as well, and you think, 'Oh boy, how many do we need involved in this really?' We sort of bring in all the skills you have, not just the needle part, but the kind of group skills too.*

*“It’s tough for the nurse because, ultimately... we are in charge.”* Nurses reported that adults sometimes tease students in a way that increases anxiety, and that students often *“rile up”* each other.

Nurses disliked having competitive elements introduced into the situation. For example, parents may complain if the nurse chooses not to proceed with the immunization with comments such as: *“She couldn’t do it so I need another nurse.”* One nurse described her dismay if a parent would tell her, *“‘my baby didn’t cry at all last time... with the other nurse she didn’t cry at all.’ I don’t know why they say that to me because it hurts, it jinxes me.”* And finally, nurses were frustrated with parents who project their own fears onto the child or communicate to the child expectations of resistant behaviour thus generating a self-fulfilling prophecy.

**Theme Four: Resources to help nurses cope effectively with these situations are inconsistent and inadequate.**

Nurses voiced how existing strategies and resources to consistently support a positive immunization outcome were inadequate, inconsistently available and poorly disseminated.

Nurses described strategies they used to help in these situations with mixed results. Most of the strategies were learned through trial and error or direct observation. A nurse with more than ten years of immunization experience stated: *“In a school setting, I see it as a learning opportunity of just sitting back and seeing how somebody else handles it. I’m thinking, Thank God, I’m not the one who has to deal with it.”*

Nurses reported that crude forcible restraint is no longer as common as it once was. Linda related: *“I remember a principal holding a kid against the wall actually, believe that?”*

*“I think we’re better at saying we can’t do it than, let’s say, fifteen years ago. I think we used to sit on kids more than we do now. I certainly, more now than I used to, just will say, ‘I can’t do this’...whereas before... we used to get a couple of us in there and really, with the parent’s permission of course, but were more forceful.”*

Several nurses described how they learned, sometimes through bitter experience, where to set boundaries.

*“And also, the holding down or the forcing, I think... I do not have to give that, force that on that child. So I think that’s something I’ve come to in my practice is that the child does not have to have it. We will not force this child to have it... and so that, yes, it is in your best interest to have this. So let’s work together with parents and help them to do this. But as far as the forcing, I will not be a party to this.”*

*“We sort of learn like where we draw the line too, and that’s hard sometimes.”* A nurse with less than two years experience said: *“It’s different in different places... like its okay for me here, to say we don’t do that and I’m comfortable with that. But in another environment there might be more pressure I think, to get the thing done in a time frame.”*

The nurses described being supported in choosing to defer a vaccine as very important. A novice practitioner, stated, *“I don’t think it’s made clear to us that we can say no, that we don’t have to do it.”* One survey response stated:

*“Trying to put the child at ease who has become very anxious. This can be very draining and it can be difficult to know when to call it off. If you call it off, then the parent (if a kindergarten immunization) is then quite often angry. Sometimes it seems like there should be a policy or a sign that backs this up. The sign or policy stating we will not use force to immunize.”*

Collaborating with colleagues and being able to debrief were highly valued. Occasionally nurses recruited each other to assist with restraint, yet as one nurse pointed out, *“It’s the same thing again, like if you’re getting another nurse. And then there are two of you holding the kid down.”*

Another agreed, *“Yeah, it makes it like a gang mentality.” You know, we’re all ganging up on him.”*

The nurses discussed what sorts of things could make it easier for them to effectively manage situations with resistant children. They recommended combination vaccines, labelled trays to hold pre-filled syringes, well-ventilated, soundproof clinic rooms, separate waiting rooms for before and after, and time to debrief after a difficult session. Strategies identified as helpful included: giving limited choices, using a calm voice, preparing parents for crying and giving children permission to cry, remaining firm but not threatening, using stickers to celebrate effort and having distraction and calming tools such as puppets, bubbles, comfort dolls and cartoon videos in waiting areas. Giving children time to express themselves but without engaging in endless negotiation is also important. Anaesthesia was not discussed except in one survey response suggesting pre-procedural child sedation.

Nurses desire skills to effectively manage immunization procedures. *“I don’t have enough skills to know what the best response or techniques are to get the immunization done in a way that is most positive for everyone involved.”*

*“I must admit, I’m better... more compassionate with kids that I perceive as being truly afraid (than with) those that I think are... just being smart alecks. Sometimes you get a child where you think, ‘Oh, you’re just trying to pull my chain and get things riled up here. Or you see a child that is truly just terrified and I’m better with the kids that are (truly terrified), and maybe I might not even be reading it right.”*

*“(I)... would like to learn about more techniques for self-calming;”* Another wrote, *“Parents are often unaware of their child’s ability to learn some of these skills and at how young an age it can be taught.”* Nurses viewed the clinic visit as an opportunity for children to acquire adaptive coping skills and experience mastery in an honest, respectful, supportive environment.



Having enough time to prepare and also to debrief with parent and child was seen as important.

*“There has been no time to prepare them in anticipation of them being that way (so wound up, not being able to focus and calm down). We have nothing to offer these families. No opportunity to teach the parents... we’re rushed and the parents are in a hurry and there’s nothing else in place in another time to prepare them. We wind up being a part of it.”*

They identified a need to provide parents with clear direction about positioning, secure hold and what not to say to their child, e.g., limit bribes and threats, and avoid projecting parent fears onto the child. Referral to parent education sessions was a strategy employed where available. One nurse identified the focus group session itself as a useful opportunity to “troubleshoot” and “brainstorm ideas.” Another talked about “building up your repertoire of tools” and explained how she benefited by learning strategies from other nurses that would have “never occurred to me.” The nurses expressed strong interest in educational materials that could be used by parents and children to better prepare for an immunization appointment.

### **Discussion**

These four themes, developed from discussions with nurses who routinely immunize children who fear and resist needles, illustrate how this procedure is problematic and stressful for nurses. The intensity of nurse stress is reflected in the language participants used to describe their experiences and the vividness of their memories. The words “*dread*,” “*awful*,” “*traumatizing*,” “*failure*,” “*assault*,” “*terror*,” “*fear*,” and “*shame*” appeared frequently in the data. Casting this response against Lazarus and Folkman’s (1984) classic explanation that stress results when ‘demands exceed the personal and social resources an individual is able to mobilize’ - study findings lead us to question whether other nurses are also feeling that the demands of immunizing needle resistant children exceed their ability to cope.

The comments reflect how the experience of forcing compliance from children generates ethical and moral dilemmas for nurses. Bioethicists Hodges, Svoboda & Van Howe (2002) emphasized how heightened scrutiny is essential in situations where children, who are unlikely to be able to provide meaningful consent, are subjected to prophylactic interventions such as immunization. And yet, the issue may not be formally addressed with explicit policies and procedures in the practice arena. With the exception of the present study, the literature has not yet begun to acknowledge that a problem exists.

Nurses' descriptions of their memories of immunizing needle resistant children were consistent with the moral distress Gunther and Thomas (2006) described in their exploration of patient care events that were unforgettable to nurses. In both studies, nurses wondered whether they could or should have done things differently even years later. Descriptions of their memories in the present study also reflected a sense of powerlessness. Feelings of moral distress, powerlessness, anxiety and anger all contribute to the stress and burnout Thomas (2009) identified as a persistent issue among nurses. However, nurses' stress related to immunizing needle resistant children has not previously been included in discussions of moral distress.

### **Conclusion**

This article presented findings from a naturalistic action research study that explored nurses' perceptions of immunizing frightened and resistant children. In contrast to other studies that focused mainly on recipients of vaccines, this project extends existing knowledge by describing nurses' reflections on their own experiences with immunizing by identifying four overarching

themes. This research found nurses experience stress when immunizing children who fear and resist needle injection, the strength of child resistance and some adult behaviour creates an ethical dilemma for nurses, some adult responses make immunizing difficult and unsafe and resources to help nurses cope with these situations are inconsistent. This article calls for the creation of more opportunities to explore whether or not immunizing needle resistant children is a problem for other nurses. Articulating that a problem exists, that needle procedures are often stressful and that the experience can leave nurses feeling morally and ethically conflicted is an important first step. Further study could lead to more consistent support for nurses who are responsible for immunizing children and to more positive outcomes for all.

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