# Feels Not Right Stabbing a Child

*Zhong Ning Leonard Goh, MBBS; Erwin Jiayuan Khoo, MRCPCH*

From the International Medical University, Kuala Lumpur, Malaysia
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Address correspondence to Erwin Jiayuan Khoo, MRCPCH, International Medical University, No. 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia (e-mail: erwinkhoo@gmail.com or jiayuan_khoo@imu.edu.my).

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I WALKED DOWN the corridors, past the cubicles of patients and their parents who were settling down for the night. It had been a long day. I was just about to exit the ward when the sight of a teary-eyed mother stopped me. She looked familiar, I thought. As I approached her, I realized that she was the mother of a child who had presented earlier in the day with seizures; we had discussed this case with our lecturer, learning about the differential diagnoses of seizures and their corresponding management.

"Selamat petang Puan, dah lama ke tunggu kat sini?" *Good evening, ma'am, have you been waiting out here for a while now?*

"Lama sangat lah, dah tunggu lima belas minit ni." *Yes, it has been a long 15 minutes.*

I could hear hushed voices coming from inside the treatment room—urgent tones occasionally punctuated by the opening and closing of drawers. My curiosity was piqued. My weariness now forgotten, I reassured the mother before slipping quietly into the room, narrowly entering through the rapidly closing door. It slammed shut behind me, almost catching the stethoscope hung around my neck.

The room immediately fell silent. I looked around quickly, searching for someone I knew. By the storage shelves, a harried-looking house officer with beads of sweat trickling down his face busied himself with readying equipment in a steel dish in preparation for what seemed to be a venipuncture. In the corner of the room, another house officer looked on dejectedly. In Malaysia, house officers—known as interns in the United States—are identified by their white coats. After successful completion of their house officer program, they shed their white coats to become fully fledged medical officers. House officers report to their medical officers, who are then accountable to the specialists and consultants.

Neither spoke a word. Noting that the house officer in the corner seemed close to tears, I guessed she must have failed in her attempt of the procedure and had asked her senior house officer for help. I felt uneasy. Perhaps I should not have entered.

It was my first night in the rotation. Being a fourth-year medical student, I had observed my fair share of venipunctures and had even performed a few myself. The sight of thick, bulging veins excited me, rather like a vampire lusting for blood.

"How different could it be?" I wondered. This encounter came hours after my lecturer had told us it was not uncommon for a single successful venipuncture to take up to 30 minutes in a small child. I had taken this information with a pinch of salt, believing it was an overstatement.

The victim—an infant slightly less than a year old—lay on the treatment couch swathed in hospital garb, the nurse cooing and fussing over him. He had an exhausted but serene expression. The poor child must have thought that it was all over, not suspecting the impending assault on his body. Again.

"Doctor, may I observe?" I ventured, breaking the silence. He grunted a quick affirmative before continuing with the assembly of the syringe and the butterfly needle, pumping the plunger up and down to smooth its motion. I receded to the corner of the room next to the other house officer, making sure I was not in the way.

Equipment prepared, the house officer gestured to the nurse to unwrap the infant and hold out his left leg. He studied the foot intently, searching for a superficial vein along its dorsum as his point of entry. The doctor localized it within moments, applied the tourniquet, and instructed the nurse to brace the leg. He cleaned the identified area with an alcohol swab. Steadying his hand against the side of couch, he slid the needle into the foot in one fluid, well-practiced movement.

Shrieks rent the air as the infant writhed against the nurse's restraining hand. The doctor seemed oblivious, focused on inspecting the needle for flashback while advancing it millimeter by millimeter. He frowned. There was no blood to be seen in the hub of the needle or the catheter tubing. He withdrew the needle slightly, angled it in a different direction, and advanced it again. Still no luck. He made a third adjustment, to no avail, before releasing the tourniquet and removing the needle, dropping it into the sharps bin beside him.

My thoughts turned to the mother waiting outside. No wonder she was in such distress! I could not even begin to imagine her nightmare—the agony of her child being admitted for meningitis, and now this.

"Staff nurse, *satu lagi*," the house officer sighed, patting the infant's back in a bid to comfort him. *Another needle, please*. He freed the infant's right leg from the tangle of cloth and applied the tourniquet for the second time, then proceeded to hunt again for a viable point of entry. He swabbed the area and was handed a fresh needle by the nurse. At this juncture, the atmosphere in the room was palpably tense. The doctor wiped the sweat off his forehead with the corner of his shirt before commencing yet another attempt.

Before long, the doctor was again discarding the used needle and asking for a fresh one, the syringe still painfully empty. The furrows in his brow deepened with each needle; the cries of the infant grew louder with each assault. I felt frustrated, helpless. How different could venipuncture be in children? I now had my answer now—and I didn't like it.

After the third failed attempt, the house officer let out an exasperated sigh. "Damn it, this is getting nowhere!" He picked up his mobile phone from the trolley and speed-dialed someone. "Ya, ya, kes ni sangat susah. Tadi seorang HO cuba dah, tapi tak dapat juga." *Yes, this case is particularly difficult. Another house officer and I have already tried our hand but were not successful.* From his deferential tone, I guessed that the recipient of this call was his superior.

"Wow, venipuncture is especially difficult in babies, huh," I remarked to the house officer, trying to defuse the situation.

"Yeah, it is. I actually tried 5 times before I gave up and called him," she replied, gesturing to her colleague.

Five times.

My heart went out to the infant. Five times? That meant that the baby had now been stabbed 8 times! What did these doctors think they were doing? No patient in their right mind would have allowed a doctor to assault them with a needle so many times! In fact, the widely accepted practice among house officers in Malaysia allows a maximum of two attempts before sending for someone more experienced. Were they practicing on the infant just because he was incapable of objecting? Shouldn't they have called in their medical officer to take over sooner?

I recalled my lecture on nonmaleficence that morning. We had a heated debate over whether house officers should be allowed to perform invasive procedures on pediatric patients. Our lecturer pointed out that no parent would ever willingly offer up a beloved child as a guinea pig for freshly minted, unseasoned doctors to practice procedures on. Because children, particularly infants, are unable to voice their objections, it makes them especially vulnerable to harm, even if the original intent was good. Thus, he concluded, it was imperative that, as their health care providers, we impose certain restrictions to preemptively shield them from such harm.

I had argued that it was a necessary evil. Experience is something one does not get until just after one needs it. By disallowing house officers from performing invasive procedures, the outcome would inevitably be pediatric medical officers who are just as inexperienced as the current house officers. Now, however, I reconsidered my stance. Sure, logic dictates that training house officers is necessary for ensuring a continuous supply of competent medical officers. But perhaps this issue was not one that could be decided purely on cold, hard logic.

A half hour must have gone by when a senior-looking lady burst into the room while putting on a white plastic apron. "A 24G please," the new doctor requested, opting for more light from the standing lamp. From her demeanor, I figured that she was the senior medical officer. By now the infant had fallen mostly silent, probably exhausted from the continuous wailing and struggling.

The medical officer punctured the infant's skin and was immediately rewarded with a flash of crimson that crept, slowly but surely, along the transparent tubing. Everyone heaved a collective sigh of relief. A flurry of activity ensued as the doctors and nurse collected blood samples, flushed the tubing with heparinized saline, and secured the hard-earned intravenous access with a splint. Soon the infant was returned to the arms of his visibly tense mother, once again densely swathed, no hint evident of the trauma he had just gone through save for the drying tears on his face. I thanked the doctors and left the room, deciding to call it a night.

As I drove home, I reflected on the events I had witnessed in the past hour. I realized that learning and medical education do not cease after graduation. Regardless of experience, there will definitely be a moment when we find ourselves in a novel situation. While it can be justified in the case of state-of-the-art, newly invented procedures that there is no one more qualified than the senior consultant performing it, this line of reasoning simply does not hold true when it comes to basic procedures with an abundance of doctors competent in performing them, such as venipuncture.

The question thus remains: is it ethical to prioritize our training requirements over maximizing our patients' comfort by allowing only experienced doctors to perform procedures? If it is not, how, then, do we ensure the adequate development of procedural competence in our junior doctors?

"See one, do one, teach one" is a time-honored medical adage; observing a procedure qualifies the doctor to attempt the next one. More recently, with the introduction of simulation systems into the field of medical education and with the increased emphasis on patient safety, this saying has evolved into "see one, practice many, do one." Despite this, a chasm must be bridged between a simulated robot model that produces preprogrammed feedback to the doctor and a real human patient who will flail, scream, and break down in tears in response to pain.

I walked past the infant's cubicle the next morning and saw him gurgling cheerfully on his mother's lap. He had seemingly forgotten the previous night's ordeal, the only remaining evidence of it an intravenous syringe pump attached to the cannula inserted the night before. In contrast, I came away vowing never to forget this incident and the insights it afforded me.

Will I be like those house officers one day? Probably. I still needed practice to attain competence. What, then, was my takeaway from this episode? It was a humbling reminder of the trust placed in me as a doctor, and of the true cost of a doctor's experience—his patients' blood, sweat, and tears.