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Needle Phobia in Children, Youth and Adults

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Summary: Fear of needles is very common. Most people are able to overcome their fears, and it does not stop them from getting necessary immunizations, injections or blood work. But in some people, the fear can be so great that it can prevent people from getting necessary immunizations, injections or blood work. The good news is that there are many strategies to help people overcome their fear of needles.

J's Story, Part 1

J. is a young adult who wants to get the COVID vaccine, because she wants to protect her elderly parents. And she needs to be vaccinated to keep her job working with medically ill people. But she has hated needles all her long and she just doesn't know what to do...

Introduction

On one hand, getting needles for immunizations, bloodwork or injections is part of the miracle of modern medicine, which helps people live healthier and longer than in the past. This includes getting needles for the COVID vaccine, which is necessary for herd immunity to overcome the COVID pandemic.
On the other hand, it is understandable that human beings might not want their skin pierced or hurt. This helps people be careful about avoiding cuts, bruises and injuries, and is helpful for survival. The need to keep our skin intact is strongly wired into us, and explains why needle fears and phobias are so common.

Terms: Needle Fear vs. Phobia

Fear of needles

- Fear of needles is very common in children and adults, and it is felt that it occurs in 25% of people. However, most people are able to overcome their fear so that it does not stop them from getting immunizations, injections or blood work.

Needle phobia

- In around 5-10% of people, the fear can be so great that it can prevent people from getting necessary immunizations, injections or blood work, at which point it is called a phobia (Craske, Antony, & Barlow, 1997; Kleinknecht, 1987; Mark, 1988).
- According to the DSM-5 (Diagnostic Statistical Manual of Mental Disorders), a tool used by professionals for diagnosis, needle phobia is a type of specific phobia. Its main features include:

- Marked and persistent fear of needles that is excessive or unreasonable, cued by the presence or anticipation of needles.
- Exposure to needles almost invariably provokes immediate anxiety.
- Situations involving needles are avoided or are endured with intense anxiety or distress.
- The avoidance, fear and distress around needles interfere significantly with the person's life.

The Problem with Needle Phobia

Needle phobia is a serious matter. It can affect a person's medical health because it leads people to avoid getting proper health care, such as being immunized against COVID. It can also cause significant social problems when immunizations or testing are needed for work, health insurance, travel, education, and marriage.

What Causes Needle Phobia?

Many factors can contribute to a person’s fear of needles (Hamilton, 1995; Willemsen, 2002):

- Genetics. Many people with needle phobia have relatives with needle phobia, which suggests a genetic basis.
- Life events. Having a negative experience with needles may make you more likely to be fearful in the future.

What Happens During Needle Phobia?

The person with needle phobia is exposed to a needle

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The body's alarm system (i.e. autonomic nervous system) is activated, which leads to an increased heart rate and blood pressure.

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The person may react in different ways to avoid the perceived danger:
• Fight: Getting angry, irritable or aggressive.
• Flight: Running away, anxiety or fear.
• ‘Shut down’: The vasovagal reflex is activated, which causes a lowering of the heart rate and blood pressure. In some individuals, this vasovagal reflex is so extreme that the person may faint. In nature, most predators avoid eating dead things. Many organisms use this strategy to avoid predators, e.g. “playing possum” comes from the fact that the Virginia opossum (aka possums) pretends to be dead when threatened.

What To Do About Needle Fears

Start with the CARD method, developed by Dr. Taddio in Toronto.
C)omfortable:

- Get comfortable before and during the vaccination.
- Practice self-compassion
  - Be nice to yourself, and say, “It’s okay to be anxious; everyone feels this way from time to time.”
- Treat yourself to a snack before getting the vaccine.
- Wear clothing so that it’s easy to let people reach your upper arm (e.g. for the vaccine).
- Bring something that gives you comfort, e.g. wear comfy clothes, bring a nice warm blanket, bring a favourite stuffie.
- Bring a friend or family member along with you.
- Consider numbing the skin beforehand so that it doesn’t hurt
  - EMLA Cream/ patches: You can purchase this at pharmacies. It should be put on at least 1-hr before and may be left on for up to 5-hrs. People also use them before tattoos or hair removal procedures.

    - Ask if the hospital or clinic offers this. If they do not, then you can just buy an EMLA patch from your pharmacy.
    - Apply an ice pack to the skin before the injection.

A)sk

- Knowing what to expect gives us a chance to feel in control and safer.
- Do watch public health videos about getting the vaccine ahead of time
- Ask questions to help you understand more.
    - “What will happen?” “What will it feel like?”

R)elax

- As needles can activate the body’s stress response, it helps to do things that help you feel relaxed.
- Consider
    - Deep breathing or mindfulness on your own or with the help of an app (e.g. Headspace, Calm) or your support person.

D)istract

- Talk to people around you while awaiting the injection.
- Read something: the posters on the wall, book, magazine.
- Listen to music, a favourite podcast (e.g. comedy)
- Play a video game on your cellphone.
- While getting the injection, talk with the nurse or doctor giving the injection.
    - “Thank you for doing the work you do… Any plans for the weekend?”

After the vaccine

- Reward yourself with a favourite activity, e.g. treating yourself to a special snack.
- Explain to your child why s/he needs a needle. Explain to your child why s/he needs needle(s).
- Read a children’s book or watch a video together with your child about needles. Many children’s hospitals have websites with such information.
- Is it a younger child? Get a doctor's play set. Demonstrate the process of getting a needle using a doll or toy animal. Then let your child feel in control by giving the doll and family members a needle.

What To Do About Simple Needle Fears: Advice for Parents

Before getting a needle

Is your child very anxious or upset?

- Do’s
    - Start with empathy, validation and acceptance.
    - Empathy: “You look a bit worried about getting a needle.”
    - Validation: “It’s okay -- You’re not alone. Lots of people have worries about needles too.”
    - Acceptance: “It’s okay to feel this way. We’ll get through this -- we’re a team!”
- Don’ts
    - Don’t get upset at your child for getting upset!
- Give your child a sense of control.
    - "Do you want me (or someone else) with you when you have the injection?"
    - "Do you want to lie down/stand up/sit down?"
    - "Do you want to know what is happening or would you rather not?”, i.e. some people find it easy to distract themselves and look away at a video; others find it easier to look.

Problem-solving

- Knowing their worst fear can help you address it: “What is the worst part about getting a needle?”
    - If your child says it’s the pain, then you might consider an ELMA patch or ice to numb their skin.

Here is a kid-friendly video 'for kids by kids' from CHEO:

The Hour Before the Needle

Do numb the skin to reduce or eliminate the pain of the needle prick. Ways to do this include:

- Use an anesthetic patch (like the EMLA [eutectic mixture of local anesthetics]TM Patch) or cream. Many clinics and hospitals will offer this. If they do not, you can still buy an EMLA patch from your pharmacy; just follow the instructions in the package.
- Apply an ice pack to the skin before the injection.

Is the child an infant? Studies show that allowing the child to breastfeed before the needle or giving them sugar solution to help reduce the pain of bloodwork.

During the needle

C)omfort

- Keep your child comfortable.
- Reassure: “We’ll get through this together. I’m here.”
- Stay calm and model calmness for your child.
- "I can see it’s not easy. It’s okay if you need to cry. Here's a Kleenex. Let me hold your hand. Let's take some deep breaths.

R)elax

- Have you practiced deep breathing or yoga as a calming strategy beforehand?
- If so, try deep breathing with your child, "We’ll get through this… Come on, let's take a few deep breathes together. In through the nose, out with the mouth."

D)istract

- Offer your child to hold and squeeze your hand, e.g. “Want to hold my hand? Here, you can squeeze my hand.”
- Offer your child your cellphone, video or video game during the procedure.
- Ask the nurse to let you know before the injection so you can distract your child by looking them in the face, rubbing their hands / head while telling them you love them.

Don’ts

- Don’t get angry or upset.
- Don't tease them, insult them or call them a crybaby.

After the Needle

Positive reinforcement:

- Express gratitude, "Thank you for getting the needle. I'm so happy that you were able to do that!”
- Consider doing something fun together, e.g. “Now let’s go out for hot chocolate, ice cream, etc.”

Is There Fainting with Needles?

In some people, needles can trigger their vasovagal reflex, which leads them to faint.
Try the following for people who faint from their vasovagal reflex:

- Let the doctor or nurse know ahead of time;
- While the needle is being given

    - Lie down
    - Keep your legs up.
    - Relax the needle arm
    - Tense the opposite arm, torso and legs. Flexing large muscle groups will raise blood pressure and heart rate. Do this until your face feels warmer and then back to normal.
- After the needle
    - Stay lying or sitting;
    - Stand up gradually and slowly (as opposed to getting up suddenly).

What CARDS will you play?

How can you comfort yourself? How can we make things comfortable?

What would you like to ask the nurses or doctors?

What will you do to relax? What can others do to help you feel relaxed?

How will you distract yourself? What can others do to help with distraction?

When and Where to Find Help

Are there problems with needle fears despite trying the strategies above? If so, then consider:

- Looking for a needle fear clinic. Needle fears are so common, there are often groups offered to help those with needle phobias.
- Ask your doctor, nurse or diagnostic lab (the place where you go to get bloodwork) for advice;
- Speak to a mental health professional such as a psychologist or psychotherapist for more in-depth therapy.

Treatments and Strategies for Needle Phobia

You can try the following strategies on your own, or with the help of a professional.

Relaxation training

Learning and practicing strategies that help keep one relaxed. Getting a needle can trigger the body's fight/flight response. Learning relaxation counters this.
Examples include:

- Imagery: This is all about closing your eyes and imagining yourself in a soothing place and being successful at getting a needle.
- Breathing exercises / Relaxation. When people get nervous, they may start breathing faster. You can help your loved one relax by breathing calmly with them, e.g. "in through the nose, out through the mouth."
- Hypnosis: Hypnosis is a way of achieving a state of extremely deep relaxation. You can learn how to do self-hypnosis or work with a professional trained in hypnosis.

Exposure / Desensitization / Rehearsal

Is the challenge of getting a needle too overwhelming and too big a step?
Solution: Break down the whole process into a series of smaller steps. Go through one step at a time. Use coping strategies whenever any step is stressful.
With an adult, this might involve

- Looking at a needle

- Holding the needle
- Putting a needle next to one's skin, but without the injection -- note that this is not recommended for most children and youth and is only done with close supervision by a professional.
- Go to the doctor's office and just wait in the waiting room
- Go to the doctor's office, stay in the waiting room, and see the doctor, without getting any needle.
- Go to the doctor's office, wait in the waiting room, see the doctor, and get the needle.

J’s Story, Part 2 : “Every time I get a needle, I freak out!”

J. is a young adult who wants to get the COVID vaccine because she wants to protect her elderly parents and be vaccinated in order to keep her job.
Unfortunately, her fear of needles is so severe that it has prevented her from getting the COVID vaccine.
After learning about CARD, she comes to the clinic all ready on how to keep herself C)omfortable, knowing what questions to A)sk, how to R)elax and how to D)istract herself.
“In the end, I just ended up playing a video game on my phone and I didn’t even realize until it was over!”

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For More Information

Immunize.ca has some great information on the CARD System.
https://immunize.ca/card-adults

About this Document

Written by the eMentalHealth Team and Partners.

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