



Needle Anxiety and Covid Vaccinations

This handout has been written for those of you who have decided you want the Covid vaccination(s), but your anxiety around needles has got in the way.

It is intended to be a brief educational aide to help you make sense of your anxiety and hopefully feel more confident to get your Covid vaccination. For some of you, your Needle Phobia will necessitate seeing a therapist to undertake exposure therapy. Exposure Therapy is very well supported by research studies and can lead to marked improvements for most people.

The basics of needle anxiety:

Needle anxiety is reasonably common, studies tell us somewhere from 3-10% will have a significant fear of needles.

Sometimes there is a clear cause, like a negative experience in the past. Although often, there is not. We know it tends to run in families, which is likely a mix of both biological and learning experiences contributing to the problem. Needle phobias have a plausible evolutionary explanation, such as being stabbed with something and seeing your blood meant you were in grave danger. Those humans who feared those situations were more likely to survive.

With needle anxiety, there are a range of things people may fear when receiving a vaccination:

1. Some will fear the experience of pain
2. Some will feel disgusted or repulsed at the idea of something foreign entering their body
3. Some may fear things going wrong, like the needle breaking, hitting a bone or serious reactions to the vaccine
4. Some people can't identify what they fear, yet simply feel terrified
5. There is also a subgroup of people who may faint during these procedures & understandably fear that happening again. This group need slightly different treatment, so we will cover that a little later.

The psychology of needle anxiety:

One of the key issues in phobias (and needle phobia is no different) is we tend to:

Over-estimate the likelihood of our feared outcome happening

and

Underestimate our ability to cope with that outcome

We have catastrophic thoughts that something terrible will happen, like the needle will break inside our skin. We evaluate that thought as being accurate and decide that it is far more likely to happen than what research or rational thought tells us. We feel anxious in response, we fear we couldn't cope in that situation and understandably we decide to avoid that situation altogether.

Like all anxiety problems, we know for those with needle anxiety or needle phobia, **avoidance makes the fear worse**. Now that may seem a little counterintuitive, as in the short-term we feel better, so meet the anxiety curve...

The Anxiety Curve:

When we are in a situation where we are faced with something we fear, be that a needle, or a spider or even a presentation at work, our anxiety begins to rise across time. What most people don't realise is that anxiety or fear cannot continue to rise exponentially. Our body/brain will physiologically calm itself if you stay in that situation long-enough without needing to take any action. You can simply do nothing, ride it out and your body will calm!

Unfortunately, without this knowledge, people fear their anxiety will become unbearable and therefore decide to flee the situation. This is called "escape". When we escape the situation, our anxiety instantly reduces. We feel better almost instantly. Our anxious brain tells us we did the right thing – we are only safe because we fled. We also start to believe we cannot tolerate extreme anxiety. So next time we are in that situation, we want to escape earlier and earlier. Our anxiety worsens and our confidence in managing anxiety reduces.

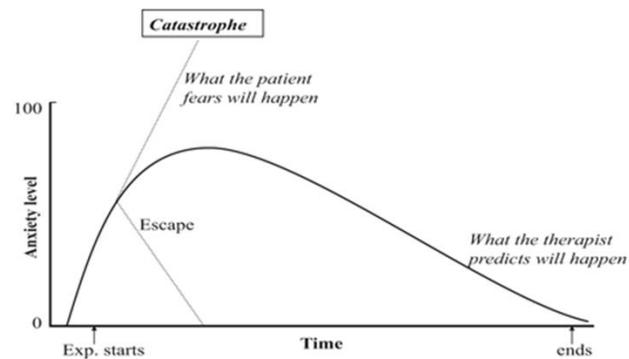


Fig. 4.2 The anxiety curve

This image was taken from Davis & Ollendick et al, 2012

When this happens, you also miss out on the crucial opportunity to stay in the feared situation and learn, nothing bad was going to happen. Or *even if it did*, that you could cope with it regardless.

So how do we break this cycle?

We need to learn ways to **ride out** that anxiety curve. To stay in the situation until we calm or achieve what we wanted to do (like jumping out of that plane or getting the Covid vaccination). We do the very thing we fear, we test out our fears and let our anxiety naturally reduce.

And ideally, we do it over and over again (that's repeated exposure). We know repeated exposure is the gold-standard treatment for Needle Phobia. The more success experiences we have with receiving a needle or vaccine, the more our anxiety will reduce. However, unless we have a chronic illness requiring regular injections, we don't naturally get these opportunities. So, it can be tricky to overcome a true Needle Phobia without specialist treatment.

Practical Tips:

So, let's give you some ideas about what you can do to maximise the chance you can ride out your anxiety and get the vaccination done.

- (1) Book an appointment for early in the morning, so you have less time to fret
- (2) Wait in your car or outside the clinic until the time of your appointment, your anxiety is likely to rise once you are in the vaccination area, so keep it to a minimum.
- (3) Take a support person, someone calm, sensible, and ideally with a sense of humour
- (4) Take this handout with you and review at the clinic

- (5) Use skills you already know work for you. You may know a breathing technique or that watching your favourite tv show on your phone helps you focus on something other than your anxiety. Crossword or sudoku? Ideally, the more complex the task, the better chance it has of holding your focus.
- (6) Try a grounding technique – if you aren't familiar with these, google the 54321 techniques. Or count backwards from 100 in 7s.
- (7) Remind yourself that your anxiety is expected (“I knew I would feel anxious”) and logically, the situation is not dangerous (“I know of many, many people who have successfully gotten their Covid vaccinations” or “I know my fear is irrational”).
- (8) Get your digestive system going – drink water or a hot drink, think of a lemon to increase saliva. Swallowing tricks our brains that we are in a safer situation.
- (9) Use a short, sharp positive statement to remind yourself that you can do it like “I have done this before, I can do it again” or if you can't quite stretch to that, how about “It will be over quickly!”
- (10) Let the vaccination person know you're feeling anxious and take some slow breaths.
- (11) Once over, celebrate your success!

For some of you, particularly if you have attended a clinic and tried but not quite been able to get the vaccination done, you may also wish to discuss with your GP if a one-off dose of a benzodiazepine may be appropriate to reduce your anxiety when you try again.

Fainting and Needle Phobia:

As mentioned above, there are a subgroup of people who faint when faced with a needle. If this is you, what is likely to be happening is a vasovagal response where an initial increase in blood pressure is followed by a rapid decrease in blood pressure and heart rate resulting in fainting. If this has happened for you in previous situations with needles, it's possible that it will happen again. So, your fear of fainting, may be rational! However, there is a well evidenced technique you can use.

It's called **Applied Tension**, where you deliberately increase your blood pressure to decrease the chances of fainting. To do that, you simply need to tense all your main muscles at once (that's your arms, legs and torso) for 15 seconds before releasing for 30 seconds and then repeat, repeat. Practice at home first, doing reps of 5 twice a day.

If you're feeling eager, you could also practice inducing similar feelings to fainting, such as making yourself dizzy spinning on a chair or sitting with your head below your knees for 30 seconds before sitting up quickly. Then practice the Applied Tension exercise (CCI website). This will increase your confidence the technique can help when you are feeling anxious/faint.

Research suggests that Applied Tension is just as good as exposure treatment alone for those people with Blood Injury Illness Phobia with fainting, and it can even be helpful for those without a history of fainting.

**People with needle anxiety are successfully getting Covid Vaccination(s).
You can be one of them too!**

Authored by:

Aimee Hanson, Clinical Psychologist

References:

Davis & Ollendick (2012) Intensive One-Session Treatment of Specific Phobias, Springer Science.

Overcoming Needle Phobia, Centre for Clinical Interventions, www.cci.health.wa.gov.au