

Veterinary Medical Writing

SECTION EDITOR



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The placebo-by-proxy effect – another argument against homeopathy

Chances are you know about the placebo effect. There are many variables to study,¹ but in general, the placebo effect means that if you believe in a positive outcome of a drug, you will think the drug worked. It still won't act like a regular drug, but that might be fine if you just stubbed your toe and are looking for light pain relief. Ibuprofen would help you more with your pain, but a placebo will still let you feel the pain a little less simply because you believe in it.

But have you heard about the placebo-by-proxy effect? This is the more sinister, ugly relative to our regular placebo effect. As a veterinarian, I am in contact with it every single day. Now, some of you may be thinking, "well, I don't own a pet anyway". But perhaps you have children, so keep on reading to learn how placebo-by-proxy can affect all kinds of parents, including "pet-parents".

Three is a party

The usual setting for a doctor's visit is two adults talking to each other, with both parties (more or less) understanding what is being said. The challenge with pets and small children, however, is they cannot speak. This is why the vet must ask you about the last time your dachshund defecated rather than asking Sausage herself. Parents act as proxies for their child and need to "parent-splain" symptoms and medical records. This comes with quite a few problems.

"Whisper down the lane" but with drugs

The healthcare professional needs to rely on the proxy's knowledge of the patient's problem at first. Like in the children's game variously known as "whisper down the lane" or "telephone", a lot of information is lost in this process. This is why vets love objectively measurable tests. With objective data on top of the proxy's subjective information, it may be quite possible to properly analyse an ailment. The problems come with the treatment.



The placebo-by-proxy effect means that if the healthcare professional prescribes a drug and believes it to be effective, so will the proxy, and both will rate the drug as effective when asked even if it is not. This, of course, leads to massive problems if the people in charge believe the drug is working but the actual patient does not and cannot adequately communicate that he is still not feeling better.

Secretin cures autism?

Let's have a look at a prominent example of the placebo-by-proxy effect. Children with autism used to be "treated" with secretin, a hormone that regulates water homeostasis. Why? Because paediatricians and parents unanimously reported a decline in autistic symptoms after secretin administration.

We now know that secretin does not alter autism, and in fact, autism doesn't need to be "cured" but instead calls for strategies to help individuals adapt to a neurotypical world. These strategies were not, however, offered to children treated with secretin because people around them thought "they are fine now".^{2,3}

Other examples of the horrific consequences

of the placebo-by-proxy effect include cats with joint disease who regularly were administered too low a dose of analgesics. Again, the vets and the pet-parents thought "they are fine now", while the cat was still in pain. We only found out about this problem after using objective measurements of limb weight distribution in treated and untreated cats.⁴

So, how does this affect you?

Of course, you know that as medical writers, we need to be careful with data and knowing about the placebo-by-proxy effect is another hammer in your toolbox to get rid of those biases. In my opinion, this is an important one and mostly an argument against homeopathy. Especially the "but you know, it doesn't hurt you, why should we

not prescribe it" argument. You have heard it, right? We all have. Here's the answer: placebo-by-proxy. That's why.

References

1. Colloca L. The placebo effect in pain therapies. *Annu Rev Pharmacol Toxicol.* 2019;59(1):191-211.
2. Enck P, Klosterhalfen S. Of kids and cats: Placebo by proxy. Available at: <https://sciencetrends.com/of-kids-and-cats-placebo-by-proxy/>
3. Czerniak E, Oberlander TF, Weimer K, Kossowsky J, Enck P. "Placebo by proxy" and "nocebo by proxy" in children: A review of parents' role in treatment outcomes. *Front Psychiatry.* 2020;11:169.
4. Gruen ME, Dorman DC, Lascelles BD. Caregiver placebo effect in analgesic clinical trials for cats with naturally occurring degenerative joint disease-associated pain. *Vet Rec.* 2017;180(19):473.