



Swearing as a non-prescription drug

I read with interest the article *Swearing as a Response to Pain* recently published in *NeuroReport*.¹ In the study, subjects immersed their hands in very cold water, and it was observed that swearing increased pain tolerance, increased heart rate and decreased their perception of pain in comparison to those not swearing. Swearing is assumed to be a maladaptive pain response,¹ but the study showed that it allowed people to withstand moderate to strong pain for significantly longer periods than those repeating non-swear words. It produced a hypoalgesic (pain lessening) effect, apparently inducing a fight or flight response (via increased aggression).¹

As I was growing up in Brazil we were never allowed to swear at home, and transgressors would be subjected to extensive parental lecturing. There was only one place where I could swear in my father's presence: the football stadium. My father was a fanatic supporter of a traditional team in Rio de Janeiro, and regularly took me along to the stadium. There, I happily joined the crowd, chanting all the possible bad names at the referee. I guess many New Zealanders ignore the importance of football to world order, but before I discuss pain, I can assure you that swearing does wonders for any self-respecting football fan. It improves self-esteem as the referee certainly hears you (despite the laws of physics and probabilities indicating otherwise), so you know you are influencing his decisions.

If you follow the *beautiful game*, then you are aware that football referees are as puzzling as MC Escher's drawings. Paradoxical as it seems, referees are always biased in favour of the opposition, irrespective of which side of the stand you are in. Now, imagine real football fans silently 'swallowing' all those unfair calls made by the referee. Without the emotional outburst through swearing, one will experience extreme levels of stress so that the incidence of angina, strokes, and heart attacks would skyrocket in a football crowd. Any study examining a cohort of football fans would surely find a highly significant and inverse association between swearing frequency and the likelihood of such cardiovascular events.

As I said, I could never swear at home. However, pain allowed me to make exceptions to this rule. At 13, I clipped my little toe on the corner of the sofa's leg as I ran past it, breaking it. Following that familiar wave of pain, I threw myself on the floor as Cristiano Ronaldo would, and let out a barrage of obscenities until I ran out of breath. Another incident happened when I was maybe 18. I struck a match to turn on the gas heater, but the already ignited head of the matchstick broke off, hitting me straight in the eye, burning my cornea. When my mother came over to find out what the fuss was about, I couldn't talk but only swear at the top of my voice. From personal experience therefore, swearing seems a helpful and efficient tool to deal with pain. I'm sure millions of women undergoing child labour would attest to its hypoalgesic effects.

Actually, the negative effects of not swearing can be illustrated from another event in my life. When I was 15, I had my thumbnail 'surgically' removed (i.e. using fancy pliers) by the doctor. Days later when I returned to hospital to change the bandages, I was faced by a sturdy mean-faced nurse who appeared to have escaped from *Land of*

the Lost. After rinsing my finger with saline, she dried it by wrapping gauze dressing around my nailless thumb and mercilessly squeezing it. It surely felt like bamboo sticks being driven under fingernails.

As a well-raised teenager, I couldn't swear my head off at the nurse as my mother would be horrified, but I felt I couldn't cry either (you know, "boys don't cry"). So I just squeezed my eyes shut and endured the torture. I walked out of the infirmary with a new bandage on my finger, but apparently looking like a corpse from a George A. Romero zombie movie, as I was helped to a chair so that I wouldn't faint. Clearly, as shown by Stephen et al.'s study,¹ if I had ignored social niceties and swore my head off, I would probably have walked out of there feeling just fine.

I would like to stress that I am not making an ode to swearing, which I agree is inappropriate in many (probably most) circumstances. I once lived in a rough neighbourhood, where I had to listen to dreadful swearing battles between partners or teenage gangs.

Just recently, I heard a teenager in the street trying to enter the *Guinness World Records* with the greatest number of F-words spoken per minute, which made me cringe. You may think I am a hypocrite, but I am just suggesting that, like medicine, swearing at an adequate dosage and in appropriate circumstances may be healthy after all.

According to Professor Timothy Jay "swearing can be advantageous, cathartic, or an acceptable substitute for physical aggression",² as no other language can convey emotion as effectively. Obviously, the appropriateness of swearing is highly contextual,³ so that most people I know wouldn't hesitate to swear at a football stadium, but would never do so in a kindergarten. In addition, just as it happens with many drugs, swearing too frequently, would probably lead to resistance, and the cathartic and hypoalgesic effects of swearing would likely diminish...

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References:

1. Stephens R, Atkins J, Kingston A. Swearing as a response to pain. *Neuroreport* 2009;20:1056–60.
2. Jay T. Do offensive words harm people? *Psychol Public Policy Law* 2009;15:81–101.
3. Jay T, Janschewitz K. The pragmatics of swearing. *J Politeness Res* 2008;4:267–288.