

# Vaccine hesitancy and the art of family medicine

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*No passion so effectually robs the mind of all its powers of acting and reasoning as fear.*

Edmund Burke

In 2008 an unvaccinated 7-year-old American boy returned home from a trip to Switzerland with his family. A few days later he became febrile and developed a sore throat and a rash. A few days after that, he was diagnosed with measles, but only after infecting 11 other children, 3 of whom were less than a year old and especially vulnerable to the serious complications of the disease.<sup>1</sup>

Last week I was working alongside a family medicine colleague who delivers babies and who, as a result, has many children in her practice. Across the narrow hallway and through the clinic walls I could hear a school-aged child fervently pleading with his mother and our team nurse not to give him a vaccination. I could see the alarm on the face of the 78-year-old patient sitting across from me.

Today I woke up to this headline: “Toronto conference to feature prominent anti-vaccine activist Del Bigtree.”<sup>2</sup> Bigtree is a well-known outspoken opponent of vaccination who has produced a documentary featuring former physician and researcher Andrew Wakefield.<sup>3</sup> Although Wakefield’s work linking measles-mumps-rubella vaccine to autism has been discredited, as have Bigtree’s vaccine conspiracy theories, both continue to have a considerable public voice.

Recently the World Health Organization announced that vaccine hesitancy was one of the top 10 threats to global health.<sup>4</sup> They are concerned that reluctance or refusal to vaccinate despite the availability of vaccines threatens to reverse progress made in reducing vaccine-preventable disease. As they indicate, vaccination is one of the most cost-effective ways of avoiding disease—it currently prevents 2 to 3 million deaths a year, and a further 1.5 million could be avoided if global coverage improved.<sup>4</sup>

On the face of it, what unites these stories is both fear and ignorance of the enormous health benefits that the discovery and refinement of vaccination have brought to humanity globally. This fear can be hard to understand for most physicians; for example, in 2007 the *BMJ* held a competition to determine the top milestones in medical history. Among the top 10, nominated and advocated for by medical historian Michael Worboys, was vaccination.<sup>5</sup>

The child’s fear in the office is primal—the pain of the injection, the threat posed by the actions of the adults, both

the parent and the health care provider giving the “jab,” whose good intentions are less than obvious to a child. That kind of fear is easy to understand. But fear, ignorance, and other powerful and complex factors underlie vaccine hesitancy, not just among the affluent, educated, white parents we often think of as typically vaccine hesitant, but worldwide, as American writer and essayist Eula Biss explores so beautifully and sensitively in her book *On Immunity: An Inoculation*.<sup>1</sup> The story of the American boy returning home with measles occurs in the middle of the book in which she examines the very deep roots of vaccine hesitancy. One of the most compelling things about *On Immunity* is that Biss begins her journey with the birth of her son and admits that at that time she experienced many of the same fears opponents of vaccination express. Rather than giving in to her fears, she set out to discover the truth about vaccination—the history, the clinical science, the mythology, and the sociologic aspects—resulting in a rare and valuable book.

This issue of *Canadian Family Physician* focuses on children’s health and features a timely and practical clinical review to help FPs address vaccine hesitancy (page 175).<sup>6</sup> Family physicians and other primary care providers remain a highly trusted source of health information, as Shen and Dubey show.<sup>6</sup> Their practical tips will be helpful to FPs but perhaps not completely sufficient to change parents’ fearful minds. Sharing *On Immunity* with anxious parents and encouraging them to read it, as well as applying Shen and Dubey’s practical advice, could bring together the art and science of family medicine to overcome fear.<sup>7,8</sup> As British GP and writer Gavin Francis wrote in his review of *On Immunity*:

The book itself is an inoculation—it grafts and unites different traditions of the essay, and in doing so creates something stronger and more resilient. And its urgent message is an inoculation against ignorance and fearmongering: may it spread out through the world, bringing substance and common sense to the vaccination debate.<sup>9</sup>

## References

1. Biss E. *On immunity: an inoculation*. Minneapolis, MN: Graywolf Press; 2014.
2. Weeks C. Toronto conference to feature prominent anti-vaccine activist Del Bigtree. *The Globe and Mail* 2019 Feb 6. Available from: [www.theglobeandmail.com/canada/article-toronto-conference-to-feature-prominent-anti-vaccine-activist-del-bigtree](http://www.theglobeandmail.com/canada/article-toronto-conference-to-feature-prominent-anti-vaccine-activist-del-bigtree). Accessed 2019 Feb 7.
3. Wikipedia [encyclopedia online]. *Vaxxed*. Los Angeles, CA: Wikipedia Foundation Ltd; 2019. Available from: <https://en.wikipedia.org/wiki/Vaxxed>. Accessed 2019 Feb 7.
4. *Ten threats to global health in 2019*. Geneva, Switzerland: World Health Organization; 2019. Available from: [www.who.int/emergencies/ten-threats-to-global-health-in-2019](http://www.who.int/emergencies/ten-threats-to-global-health-in-2019). Accessed 2019 Feb 7.
5. Worboys M. Vaccines: conquering untreatable diseases. *BMJ* 2007;334(Suppl 1):s19.
6. Shen S, Dubey V. Addressing vaccine hesitancy. Clinical guidance for primary care physicians working with parents. *Can Fam Physician* 2019;65:175-81 (Eng), e91-8 (Fr).
7. Cameron IA. A family portrait. *Can Fam Physician* 2015;61:788-9.
8. Fraser S. Art for the sake of medicine. *Can Fam Physician* 2018;64:760.
9. Francis G. *On immunity: an inoculation* by Eula Biss review—an enthralling, deeply personal book. *The Guardian* 2015 Jul 24. Available from: [www.theguardian.com/books/2015/jul/24/on-immunity-an-inoculation-eula-biss-review](http://www.theguardian.com/books/2015/jul/24/on-immunity-an-inoculation-eula-biss-review). Accessed 2019 Feb 13.

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